



CITY PLANNING, DEVELOPMENT AND BUSINESS AFFAIRS COMMITTEE

Agenda and Reports

for the meeting on

Tuesday, 4 August 2026

at 7.30 pm

in the Colonel Light Room, Adelaide Town Hall

Our Adelaide.
Bold.
Aspirational.
Innovative.

CITY PLANNING, DEVELOPMENT AND BUSINESS AFFAIRS COMMITTEE
Meeting Agenda, Tuesday, 4 August 2026, at 7.30 pm

Members – The Right Honourable the Lord Mayor, Dr Jane Lomax-Smith

Deputy Lord Mayor, Councillor Noon (Chair)

Councillor Martin (Deputy Chair)

Councillors Abrahamzadeh, Cabada, Couros, Freeman, Giles, Maher, Dr Siebentritt and Snape

Agenda

Item		Pages
1.	Acknowledgement of Country At the opening of the City Planning, Development and Business Affairs Committee meeting, the Chair will state: ‘The City of Adelaide acknowledges the Kaurna People of the Adelaide Plains as the Traditional Custodians of the land on which we meet today. We acknowledge and honour their spiritual and cultural stewardship of this Country and recognise their deep and enduring relationship with its lands, waters, the sky, and all living things. We pay our respects to Kaurna Elders past and present and recognise the important role of emerging leaders in sustaining and strengthening culture.’	
2.	Apologies and Leave of Absence Nil	
3.	Confirmation of Minutes That the Minutes of the meeting of the City Planning, Development and Business Affairs held on 7 July 2026, be taken as read and be confirmed as an accurate record of proceedings. View public 7 July 2026 Minutes here .	
4.	Declaration of Conflict of Interest	
5.	Deputations	
6.	Workshops Nil	
7.	Reports for Recommendation to Council	
7.1	Tree Martin Management 2025-2026 End of Season Report	3 - 76
7.2	Tree Martin Management Plan	77 - 148
7.3	State-wide Flood Hazards Code Amendment - Submission	149 - 171
7.4	The Economic Value of the Adelaide Park Lands	172 - 263
8.	Reports for Noting Nil	
9.	Closure	

Tree Martin Management 2025-2026 End of Season Report

Strategic Alignment - Our Environment

Public

Tuesday, 4 August 2026

City Planning, Development and Business Affairs Committee

Program Contact:

Sarah Gilmour, Associate Director Park Lands, Policy & Sustainability

Approving Officer:

Ilia Houridis, Director City Shaping

EXECUTIVE SUMMARY

This report provides an end of season report on the 2025-26 Tree Martin roosting season (**Attachment A**), covering the period from December 2025 to June 2026, in response to Council's decision of 2 December 2025 ([Link 1](#)).

On 4 November 2025 the City Planning, Development and Business Affairs (CPDBA) Committee received an overview of the proposed management actions, across two concurrent phases, for the 2025-26 Tree Martin roosting season:

- Phase 1 – A coordinated approach to community amenity, public safety, business vitality and the welfare of wildlife for the 2026 roosting season (operational response).
- Phase 2 – A Tree Martin Management Plan that looks at operational, medium and longer-term strategies for managing the annual tree martin roosting season.

This report addresses the operational response (Phase 1) covering monitoring data, stakeholder engagement, mitigation measures and their effectiveness, incident outcomes, costs, impacts and challenges, and recommendations to inform the 2026–27 season and the finalisation of the Tree Martin Management Plan.

Phase 2 – Tree Martin Management Plan is the subject of a separate report in this Agenda (Item 7.2).

Tree Martins (*Petrochelidon nigricans*) are protected under a combination of Federal and State legislation, as well as international agreements. Under the *National Parks and Wildlife Act 1972* (SA), they are classified as a "protected animal," meaning it is an offence to interfere with, harass or molest them unless acting under a legislative provision or a permit granted by the Minister for Climate, Environment and Water or their delegate. The *Animal Welfare Act 1985* (SA) further requires that all reasonable measures be taken to prevent unnecessary harm, injury or distress to wildlife.

Taken together, this legislative framework requires that Tree Martin management activities be conducted by appropriately permitted and trained personnel, that disturbance to roosting birds be minimised, and that any handling or management be conducted humanely.

The 2025-26 season marked the first year in which the City of Adelaide deployed a structured, resourced on-ground response at Rundle Mall for the management of Tree Martins. The operational response incorporated specialist environmental consultants, dedicated security and customer service staff, formal Wildlife Management (Controller) permits, veterinary care, and coordinated stakeholder engagement.

The City of Adelaide's 2025-26 roosting season operational response represented a significant increase in operational scale and complexity compared to prior seasons, delivering improved bird welfare outcomes and greater operational consistency.

Mitigation measures to reduce bird injuries were implemented throughout the season. While there is evidence of their effectiveness, incidents were not eliminated entirely. The specific urban environment in Rundle Mall continues to present challenges for Tree Martins, with bird strikes and building entrapments occurring throughout the season.

Tree Martin management also required responses by nearby businesses, including increased cleaning requirements, odour and amenity issues, business disruptions, customer complaints and impacts on trading environments. Engagement with affected businesses was maintained throughout the season to provide updates, share mitigation advice and respond to concerns and incidents.

A small number of businesses invested in additional measures to support the response which included window decals, additional security, and internal cleaning.

Businesses closest to the roosting trees received regular updates and support throughout the season, with an evening on-ground presence also facilitating engagement with members of the public seeking information or wishing to provide feedback.

At the time of writing, the majority of the Tree Martin population that peaked at 20,540 had migrated. There does however remain a small population of up to 1,500 birds roosting in Rundle Mall. While migration was anticipated by end of May 2026, higher minimum temperatures compared with 2025 has delayed this and may be a contributing factor to a small number of birds still roosting.

RECOMMENDATION

The following recommendation will be presented to Council on 11 August 2026 for consideration

THAT THE CITY PLANNING, DEVELOPMENT AND BUSINESS AFFAIRS COMMITTEE RECOMMENDS TO COUNCIL

THAT COUNCIL

1. Receives the Tree Martin Management 2025-26 End of Season Report, as contained in Attachment A of Item 7.1 on the Agenda of the City Planning, Development and Business Affairs Committee held on 4 August 2026.
 2. Notes the outcomes of the 2025-2026 Tree Martin roosting season and the End of Season Report (December 2025 to June 2026), including total operational and capital costs incurred of \$362,205.
 3. Authorises the Chief Executive Officer, or delegate, to make minor amendments to the Tree Martin Management 2025-26 End of Season Report, as contained in Attachment A of Item 7.1 on the Agenda of the City Planning, Development and Business Affairs Committee held on 4 August 2026.
-

IMPLICATIONS AND FINANCIALS

City of Adelaide 2024-2028 Strategic Plan	Strategic Alignment – Our Environment Lead and advocate for the environmental value, productivity, quality and biodiversity of the Park Lands, squares, open space and streetscapes. Protect and restore native habitat in our city.
Policy	Management of Tree Martins aligns with the Adelaide Park Lands Management Strategy – Towards 2036, the City of Adelaide's Integrated Climate Strategy 2030, and the 2024-2028 Strategic Plan's commitments to biodiversity protection, city amenity, business vitality and community wellbeing. It supports the Council's objectives for a sustainable, liveable, and biodiverse capital city where people and wildlife coexist harmoniously. Management of the Tree Martins has been undertaken with regard to implications for businesses and Council's Economic Development Strategy 2024-2028. The State Biodiversity Plan is yet to be developed following the assent of the <i>Biodiversity Act 2025</i> (SA).
Consultation	The Administration has continued to consult with the Department for Environment and Water (DEW) and Green Adelaide to align approaches to Tree Martin management and protection. During the roosting season Administration has maintained contact with businesses in Rundle Mall and representatives from the Adelaide Economic Development Agency (AEDA) who also form part of the internal Working Group overseeing the operational response. A briefing will be provided to the AEDA Board in September 2026.
Resource	The Tree Martin operational response used a combination of internal and external resources, including specialist consultancy services. Guidance and advice on operational responses have been provided by AEDA, business stakeholders, State Government agencies (inc. Green Adelaide and the Department for Environment and Water (DEW)) and other stakeholders.
Risk / Legal / Legislative	Tree Martins are listed as a marine species under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act). Under ss 254–254E of the EPBC Act, offences apply to actions that harm, take, trade, keep, or move listed marine species; however, these provisions only apply within a designated "Commonwealth area" as defined in s 525. Based on current review, this definition has little to no application within the Council area, and neither Leigh Street nor Rundle Mall fall within Commonwealth land. Consequently, these EPBC Act provisions do not apply to Council actions. Tree Martins are a "protected animal" under the <i>National Parks and Wildlife Act 1972</i> (SA). Under ss 68(1) a person must not interfere with, harass or molest a protected animal unless he or she acts in pursuance of a legislative provision or a permit granted by the responsible Minister (the Minister for Climate, Environment and Water) or their delegate. Advice from DEW is that a permit is not required outside of a roosting season for the netting of trees if this action does not lead to any protected animal being caught, restrained or trapped and subsequently relocated and the trees are netted prior to being used by the protected animal (i.e. outside of the Tree Martin roosting season). The <i>Animal Welfare Act 1985</i> (SA) requires that all reasonable measures are taken to prevent unnecessary harm, injury, or distress to wildlife. This includes monitoring for impacts of netting. The <i>Biodiversity Act 2025</i> (SA), which has not yet come into operation, introduces a general duty of care, requiring reasonable practical measures to prevent harm to biodiversity in any acts or actions undertaken. The City of Adelaide considers public health and safety risks in the public realm, noting responses actioned at previous roosting sites to address conflicts for public health at outdoor dining venues.

Opportunities	In 2025/26 the City of Adelaide took a planned and measured approach to managing the Tree Martin roosting season and planning for future roosting seasons. This approach enabled data and evidence to be collected to inform future management actions.
26/27 Budget Allocation	The total cost of the operational response for the 2025–26 roosting season was \$362,205, with \$150,000 allocated at the first quarter budget review and a further quarterly allocation for the balance reallocated from existing operational budgets. Pending a Council decision on the Tree Martin Management Plan, a budget allocation was not sought as part of the 2026/27 Business Plan and Budget. As the season occurs across financial years, Administration indicated it would seek allocation for the 2026-27 season following the end of the first full season as part of the 2026/27 Quarter 1 budget review.
Proposed 27/28 Budget Allocation	Not as a result of this report
Life of Project, Service, Initiative or (Expectancy of) Asset	Tree Martins typically migrate annually between November/December and April/May. While the roosting season was anticipated to conclude by end of May 2026 based on the previous season, at the time of writing this report, a small population of up to 1,500 birds remains roosting in Rundle Mall.
26/27 Budget Reconsideration (if applicable)	A budget review in Quarter 1 is foreshadowed in this report.
Ongoing Costs (eg maintenance cost)	Operating costs for delivery of the response and additional cleansing as part of the 2025-26 Tree Martin roosting season were managed within existing resources. Ongoing operating costs will be assessed as part of future Tree Martin management decisions.
Other Funding Sources	DEW and Green Adelaide provided in kind advice for the 2025-2026 Tree Martin roosting season management response. Administration has raised the potential for external funding support from the State Government but no eligible grant funding stream has been identified.

DISCUSSION

Purpose

1. The purpose of this report is to provide an end of season report on the 2025-26 Tree Martin roosting season, which occurred from December 2025 to June 2026 (See **Attachment A**).

Background

2. At its meeting on 22 April 2025, Council noted a range of Tree Martin management actions undertaken by the Administration in collaboration with Green Adelaide and requested further advice in relation to Tree Martin management support measures ([Link 2](#)).
3. At its meeting on 13 May 2025, Administration provided further background information on when the Tree Martins were first identified as a significant problem ([Link 3](#)).
4. At its meeting on 14 October 2025, Council received an update on the matter in response to Council's decision on 22 April 2025 ([Link 4](#)).
5. A workshop ([Link 5](#)) and report ([Link 6](#)) were presented to the City Planning, Development and Business Affairs (CPDBA) Committee on 4 November 2025 where an overview of the proposed management actions, across two concurrent phases, for the upcoming Tree Martin roosting season was provided.
 - 5.1. Phase 1 – A coordinated approach to community amenity, public safety, business vitality and the welfare of wildlife for the 2026 migratory season (operational response).
 - 5.2. Phase 2 – A Tree Martin Management Plan that looks at operational, medium and longer-term strategies for managing the annual tree martin roosting season.
6. At its meeting on 11 November 2025 ([Link 7](#)), Council noted the report and resolved in part 3 of its decision, that it:
 3. *Requests administration provide preliminary advice regarding the feasibility, benefits and disbenefits of netting trees in Rundle Mall at a special meeting of Council to be held on Tuesday 2 December 2025.*
7. At its meeting on 2 December 2025, Council resolved it:
 1. *Receives the preliminary advice provided regarding the feasibility, benefits and disbenefits of netting trees in Rundle Mall as contained in Attachment A to Item 6.1 on the Agenda of the Special Council meeting held on 2 December 2025.*
 2. *Notes that while netting is technically feasible, it poses operational, welfare and reputational risks, and therefore is not recommended for implementation in Rundle Mall during the 2025/26 Tree Martin migratory season.*
 3. *Approves the continued mitigation and monitoring strategies for the 2025/26 Tree Martin migratory season and reviews the data collected and options developed through this season for implementation ahead of the 2026/27 season in partnership with the Department for Environment and Water and Green Adelaide.*

Legislative Framework

8. The management of Tree Martins (*Petrochelidon nigricans*) in South Australia is governed by a combination of Federal Government and State Government legislation, as well as obligations arising from international agreements.
9. Taken together, the legislative framework requires that Tree Martin management activities be conducted by appropriately permitted and trained personnel, that disturbance to roosting birds be minimised, and that any handling or management of birds be conducted humanely.
10. The Department for Environment and Water (DEW) has confirmed that activities to deter, exclude or scare native animals do not require a permit under the *National Parks and Wildlife Act 1972* (SA), provided no harm results. Actions to catch, move or kill a protected animal, require a permit and decision from DEW.

2025-2026 Tree Martin roosting season

11. The 2025-26 Tree Martin roosting season was the first year in which the City of Adelaide deployed a structured and resourced on-ground operational response at Rundle Mall.
12. The operational response incorporated specialist environmental consultants, dedicated security, customer service staff, and formal Wildlife Management (Controller) permits, alongside veterinary care and coordinated engagement with key stakeholders.

13. The roosting season commenced on 15 December 2025, when Tree Martins were first seen roosting in Rundle Mall. Based on records from the 2024-25 season, the Tree Martins were expected to migrate at the end of May 2026, however, at the time of writing this report, a small population of up to 1,500 birds remains roosting in Rundle Mall.
14. Management of the Tree Martin colony in the 2025-26 roosting season was guided by three key objectives:
 - 14.1. Ensure bird welfare and compliance with wildlife protection and animal welfare legislation.
 - 14.2. Maintain business operation, public amenity and safety in high-use areas, including Rundle Mall and adjacent laneways.
 - 14.3. Enhance community understanding of the species and the City of Adelaide's role in managing urban wildlife responsibly.

On-ground response

15. To undertake data collection and triage of injured birds, local wildlife management specialists Avisure were engaged and supported by Administration, a Rundle Mall security guard and a customer service officer.
16. An additional 35 City of Adelaide staff from across the Park Lands Planning, City Cleansing, City Operations and City Library teams received Tree Martin response training and were listed on the Wildlife Controller permit to allow for a rapid response to Tree Martin incidents as required.
17. Administration engaged with local wildlife volunteer organisations in October 2025 to understand their interest and capacity to support the care of injured Tree Martins during the season.
 - 17.1. Given their existing capacity limitations, a rostering solution was explored but ultimately not employed with the on-ground resourcing provided by Avisure and the Administration.
 - 17.2. On occasion, several volunteers attended Rundle Mall on Friday evenings during the season to observe the Tree Martins and were available to provide additional support if needed.

Monitoring and Observations

18. Monitoring of previous roosting sites (Leigh Street and Rundle Mall) and other locations with similar characteristics (Ebenezer Place and Vardon Avenue) commenced in October 2025.
19. Tree Martins were first observed roosting in Rundle Mall on 15 December 2025, with an initial count of approximately 30 birds, prompting the commencement of on-ground evening monitoring from that date.
20. Tree Martin numbers grew from an initial 30 birds to a peak of approximately 20,540 on 28 February 2026. Average roost numbers were highest during March 2026.
21. As at 30 June 2026, triage for stunned, injured and deceased birds was highest during the evening (5pm – 9pm) monitoring (1,511 birds) and lower during the daytime (262 birds).
22. To 30 June 2026, of the triaged birds, 670 were deceased, 256 injured and provided with veterinary care and 847 were stunned and were successfully released.
23. The majority of incidents were due to building/window strikes, wire strikes and birds flying into shops and being unable to find their way out.
24. Over the course of the season, the on-ground team responded to requests from businesses to capture birds that had entered private buildings.
 - 24.1. This was undertaken with the permission and support of the business premise.
 - 24.2. Conditions were often challenging due to high ceilings and limited access to elevated areas.
 - 24.3. Tree Martin survival rates declined the longer birds remained in buildings.
 - 24.4. Birds left indoors overnight increased cleaning requirements for products and interiors.
25. At the time of writing this report, up to 1,500 Tree Martins were continuing to roost in Rundle Mall. Migration was anticipated by end of May 2026; however, minimum temperatures have been higher than in 2025 and may be contributing to an extended roosting season.

Veterinary care

26. Whilst there are several veterinarians across metropolitan Adelaide that provide care for injured wildlife, options for this level of specialised avian care are limited within Adelaide.

27. To ensure bird welfare and compliance with wildlife protection and animal welfare legislation, injured Tree Martins unable to be released after observation on-site and / or found in the morning or during the day were taken to the Adelaide Bird and Exotics Vet Centre for assessment and treatment.
28. The Adelaide Bird and Exotics Vet Centre provided a regular day service as well as an on-call evening service, as most incidents occurred outside standard business hours.

Mitigation measures

29. In December 2025, specialist Environmental Consultants, Ecosure were engaged to review and provide recommendations on mitigation measures for businesses to consider that would reduce Tree Martin injuries and entry into businesses. The review also identified measures the City of Adelaide could implement to reduce the likelihood of bird injury or death.
30. Prevention and mitigation measures were shared with businesses, including:
 - 30.1. Closing doors or reducing the width of storefront entry points
 - 30.2. Hanging visual deterrents (such as Owl / Falcon cutouts provided by the City of Adelaide)
 - 30.3. Dimming of store lighting and visual displays
 - 30.4. Application of window film / decals.
31. Of these treatments, window film / decals applied to glazed shop fronts proved to be the most effective mitigation for bird strike and resulted in a significant reduction in window strikes.
32. Closing doors or reducing the width of storefront entry points were effective at reducing building ingress by birds as they descended into the roosting trees at dusk or because of flushing (when birds fly rapidly out of the trees as they try and settle for the night).
33. The City of Adelaide trialled two products on the catenary lighting system in Rundle Mall to reduce wire strike incidents: wire markers (small round discs) and silicone protective coverings.
34. The wire markers proved insufficient on their own, leading to the exploration of alternative measures and the adoption of protective tubing known as 'Possum Tails'.
 - 34.1. Wire strikes decreased following installation of the 'Possum Tails', though a reduction in roosting numbers may also have contributed to this decline.
35. Day and evening monitoring throughout the roosting season served as the primary data collection mechanism and enabled timely triage response, proving highly effective for both bird welfare outcomes and data quality.
36. While there is evidence that mitigation measures were effective in reducing bird injuries, they did not eliminate all incidents.
37. The Rundle Mall urban environment presented unique challenges for Tree Martin management and birds strikes with building entrapments continued throughout the season.

Communication and engagement

38. Pre-season consultation was undertaken with key stakeholders including the DEW, Green Adelaide, RSPCA, wildlife volunteer organisations, AEDA and priority businesses impacted during the 2024-25 roosting season.
39. Information postcards to raise awareness about the roosting season and how to prepare for changes due to end of daylight savings were distributed to the wider Rundle Mall business precinct.
40. Signage was installed in Rundle Mall to raise awareness about the Tree Martin colony and to provide direction for responding to injured Tree Martins, including a QR code that linked to the City of Adelaide Tree Martin webpage.
41. Members of the public contacted the City of Adelaide to report Tree Martins needing assistance. Assistance from the City of Adelaide was available from 6am to 9pm prior to the end of daylight savings and to 8pm post the end of daylight savings.
42. The City of Adelaide and the on-ground response team communicated with businesses surrounding the roosting area to provide mitigation recommendations and project updates.
43. The on-ground response team communicated with businesses surrounding the roosting area as needed with a Friday night focus (late night shopping) to ensure business staff were able to request assistance if needed.

44. The on-ground response team engaged with members of the public who were interested in finding out more or who wanted to provide feedback.

Business and event impacts

45. The presence of Tree Martins roosting in Rundle Mall generated a range of impacts for nearby businesses throughout the season, including increased cleaning requirements, odour and amenity issues, business disruptions, customer complaints and impacts on trading environments.
46. The accumulation of bird droppings was the most consistent issue, creating odour and amenity concerns at times for businesses, customers and the broader public. This was more prominent later in the season when larger numbers of birds had used the roosting site and due to wetter weather conditions.
47. Several businesses noted cleaning requirements increased significantly, particularly those with outdoor areas, shopfronts and product displays directly beneath or near the roosting trees.
48. To support affected businesses, the City of Adelaide implemented additional cleaning and deodorising of outdoor furniture, paved surfaces and the stormwater system in proximity to the roosting trees.
49. On occasions, birds entering business premises required intervention from the on-ground response team to safely remove and triage birds found inside. In one instance, an incursion of approximately 100 birds resulted in a business being closed for two days and partially closed on a third day while the situation was resolved and cleaning was undertaken. It should be noted that mitigation strategies for businesses put forward by Administration had not been adopted in this location.
50. The evening peak in roosting activity coincided with trading hours for businesses, meaning customer-facing impacts, including odour, noise and the presence of distressed or injured birds, occurred during periods of high foot traffic in Rundle Mall.
51. Multiple events were held in Rundle Mall during the roosting season, including major State-supported events and activations that contribute to visitation and economic activity. The on-ground Tree Martin response team, the Rundle Mall Team (AEDA), and event organisers communicated closely to reduce impacts near the roosting trees, with the primary risks to birds relating to vehicles brushing roosting trees and loud noises; and conversely to the community from bird faeces. In general, these activities had minimal impact on the Tree Martin management response.
52. The presence of the roost created limitations for events and activations, including restricting zones available for activation and revenue generation, the need to minimise disruption to the roost site, health considerations associated with bird droppings and odour, and additional operational requirements for event organisers. It should be noted that the roosting location is not a high activity zone.
53. Odour was identified as an issue during several events, including Colours of Asia and AFL Gather Round activations conducted within Rundle Mall. Additional daily high-pressure cleaning, deodorising and stormwater drain cleansing were implemented to manage these impacts during event periods.
54. Additional mitigation measures were required for contractors undertaking tenancy fit-outs and maintenance works within proximity of the roosting trees. These measures included timing adjustments, modified work practices and increased monitoring to minimise disturbance to the birds. In some instances, these requirements impacted work schedules, access arrangements and the ability to undertake certain activities as planned during peak roosting periods.
55. The accumulation of bird droppings within pedestrian areas also presented a potential broader public amenity concern for Rundle Mall visitors. While routine cleaning and additional cleansing measures were implemented throughout the season, exposure to bird droppings had the potential to reduce visitor comfort, particularly in areas directly beneath or adjacent to roosting sites.
56. These impacts underscore the need for effective mitigation measures, including early-season business engagement and consideration of longer-term management, dispersal and mitigation approaches in future roosting seasons.

Other challenges

57. The on-ground team encountered anti-social behaviour on several occasions and the morning cleansing team on one occasion.
58. There were 11 observed instances of a member of the public deliberately disturbing roosting trees causing birds to flush resulting in Tree Martin incidents that included injury and fatality.

H5 Bird Flu

59. At the commencement of the 2025-26 roosting season there were no known cases of H5 Bird Flu in Australia.
60. Notwithstanding this, given the migratory nature of Tree Martins, Administration met with the Department for Environment and Water (DEW) and Primary Industries and Regions SA (PIRSA) in February 2026 to discuss the implications and reporting obligations for Council in the event H5 Bird Flu was detected while Tree Martins were roosting in Rundle Mall.
61. Several confirmed cases of H5 Bird Flu have now been announced in South Australia since the first announcement on 24 June 2026. No cases have been identified in the City of Adelaide.
62. PIRSA is the lead agency for H5 Bird Flu. In terms of Council's role and obligations, no additional statutory responsibilities arise beyond standard public health and biosecurity cooperation, with the State Government via PIRSA.
63. Administration is maintaining a heightened awareness and precautionary approach in line with current State Government guidance, including appropriate PPE protocols when handling deceased birds or cleaning droppings.

Costs

64. The total cost of the operational response for the 2025–26 roosting season was \$362,205, with \$150,000 allocated at the first quarter budget review and a further quarterly allocation for the balance reallocated from existing operational budgets.
65. Of the \$362,205 total expenditure, \$344,108 was for strategic and operational items, with the remaining \$18,097 representing capital expenditure for the purchase of equipment available for reuse in future.
66. The above costs are exclusive of internal City of Adelaide staffing and additional cleansing which were managed within existing operating budgets.

Next Steps

67. The following next steps are proposed:
 - 67.1. Update the dedicated Tree Martin project webpage on the City of Adelaide website with advice about the 2025-26 season.
 - 67.2. Communicate with State Government Agencies, businesses, wildlife organisations and key stakeholders on the outcomes of the 2025-2026 season.
 - 67.3. Review and update the City of Adelaide's Tree Martin Operating Guidelines, established for the 2025-26 season to reflect the experience and outcomes of the season for Chief Executive Officer approval.

DATA AND SUPPORTING INFORMATION

Link 1 – [Minutes – Council – Tuesday, 2 December 2025](#)

Link 2 – [Minutes – Council – Tuesday, 22 April 2025](#)

Link 3 – [Council - Question on Notice Reply – Tuesday, 13 May 2025](#)

Link 3 – [Agenda – Council – Tuesday, 14 October 2025](#)

Link 4 – [Agenda – Workshop – City Planning, Development and Business Affairs Committee, Tuesday, 4 November 2025](#)

Link 5 – [Agenda – City Planning, Development and Business Affairs Committee, Tuesday, 4 November 2025](#)

Link 6 – [Council - Minutes – Tuesday, 11 November 2025](#)

ATTACHMENTS

Attachment A – Tree Martin Management End of Season Report, July 2026

- END OF REPORT -

Tree Martin – End of Season Report

Final

Prepared for: City of Adelaide

Season: 2025-2026

July 2026



Acronyms and Abbreviations

AEDA	Adelaide Economic Development Agency
AW Act	Animal Welfare Act 1985 (SA) (note, this Act will be repealed by the Animal Welfare Act 2025 (SA) on a date to be fixed by proclamation)
CoA	City of Adelaide
DEW	Department for Environment and Water (SA)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)
H5 Bird Flu	High Pathogenic Avian Influenza (strain)
NPW Act	National Parks and Wildlife Act 1972 (SA)
PIRSA	Primary Industries and Regions South Australia
SA	South Australia
SAPOL	South Australian Police
TMMP	Tree Martin Management Plan

Item	Detail
Site	Rundle Mall, Adelaide
Season period	15 December 2025 – 30 June 2026
Species	Tree Martin (<i>Petrochelidon nigricans</i>)
Client	City of Adelaide
Contractor	Ecosure / Avisure

Table of Contents

Acronyms and Abbreviations	i
Table of Contents	ii
1. Executive Summary	1
2. Introduction	4
2.1 Overview	4
2.2 Program Purpose and Objective	4
2.3 Legislative and Policy Context	5
2.4 Tree Martin Species and Historical Roosts	5
2.5 Roost Site Description 2025-26	8
3. Operational Response	9
3.1 Overview	9
3.2 Governance Group	9
3.3 Operating Guidelines	9
3.4 Training and Permits	9
3.5 On-ground Response Team	10
3.6 After-hours Response	10
3.7 Veterinary Care	10
3.8 Tree Martin Management Plan (TMMP)	11
4. Stakeholder Engagement	12
4.1 Overview	12
4.2 Key Stakeholders	12
4.2.1 Priority Businesses	13
4.2.2 Government Stakeholders	14
4.2.3 Animal Welfare Organisations	15
4.2.4 Rundle Mall Businesses	15
5. Communication and Notification	16
5.1 Overview	16
5.2 Pre-season Communication	17
5.3 In-season Communication	17
5.4 On-ground Communication	18
5.5 Business Communication	19
5.6 Animal Welfare Organisations Communication	20
6. Tree Martin Observations	21
6.1 Overview	21
6.2 Pre-arrival monitoring	21
6.3 In-season Monitoring	21
6.4 Survey Methods	22

6.5	Roosting Activity	22
6.6	Population and Activity Trends	24
6.6.1	Rundle Mall Population	24
6.6.2	Injuries and deaths during the roost fly-in	25
6.6.3	Injuries and deaths at other times	27
6.7	Notable Observations	29
6.7.1	Migration	30
7.	Mitigation Measures and Effectiveness	31
7.1	Overview	31
7.2	Summary of Measures Implemented	31
7.3	Adaptive Measures to Manage Tree Martins	33
7.4	Effectiveness Assessment	35
7.5	Incidents	36
7.5.1	Roosting Birds Disturbance	36
8.	Conclusions and Recommendations	38
8.1	Key Issues	38
8.1.1	Businesses	38
8.1.2	Events	38
8.1.3	Odour and Droppings	38
8.1.4	Water Quality	39
8.1.5	Damage to Trees/Vegetation	39
8.1.6	Rundle Mall Operations	39
8.1.7	On-ground Incidents	40
8.1.8	Highly Pathogenic Avian Influenza	40
8.2	Conclusions	41
8.3	Recommendations for Future Seasons	43
9.	References	44
	Appendices	45
	Appendix A: Species Identification Criteria	46
	Appendix B: Photographic Record	47
	Appendix C: Communications	49
	Appendix D: Survey Data Sheets	55
	Appendix E: Mitigation Measures	59

1. Executive Summary

This report presents the outcomes of the Tree Martin (*Petrochelidon nigricans*) operational response and management program (on-ground operational response) undertaken in Rundle Mall, Adelaide, for the 2025 – 26 roosting season until 30 June 2026. It covers the approach, communications and stakeholder engagement, issues and resolutions, Tree Martin observations, mitigation measures and their effectiveness, and future recommendations.

The City of Adelaide (CoA) adopted a two-phase approach to Tree Martin Management for the 2025-26 roosting season:

Phase 1 – A coordinated approach to community amenity, public safety, business vitality and the welfare of wildlife for the 2025-26 roosting season (on-ground operational response).

Phase 2 – A Tree Martin Management Plan (TMMP) that looks at operational, medium and longer-term strategies for managing the annual Tree Martin roosting season.

The on-ground operational response was guided by the City of Adelaide's Tree Martin Operating Guidelines. During the on-ground operational response data and information on bird behaviour and management measures was collected and assessed to inform the operational response and inform medium to longer-term management strategies.

Tree Martin outcomes for the roosting season in Rundle Mall include:

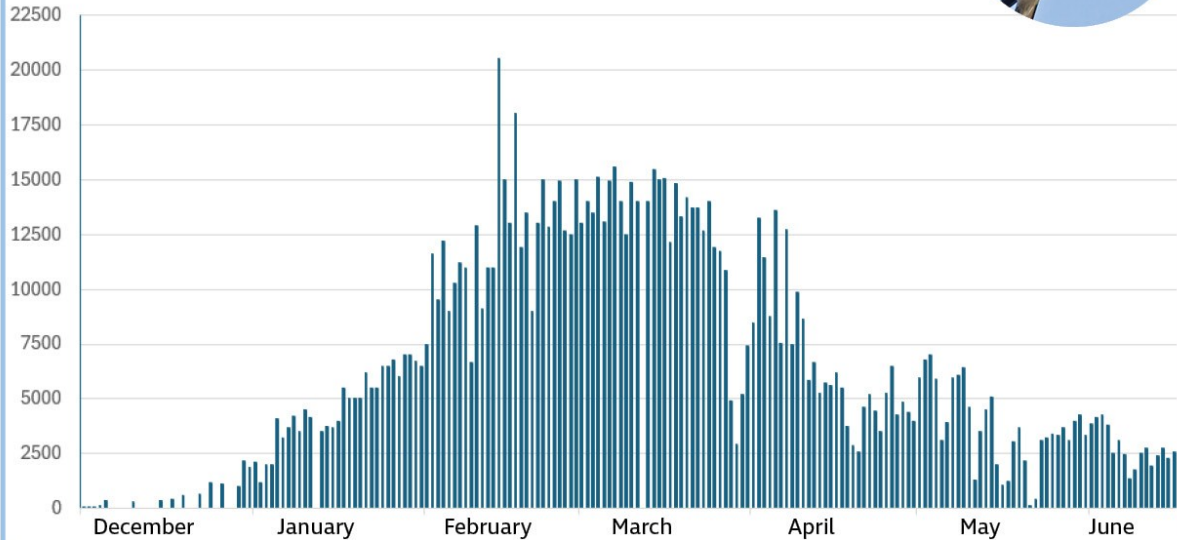
- The 2025-26 roosting season began in December 2025 and continues through July 2026. It is possible that a portion of the roosting population will remain for the winter. This has not previously been observed in the City of Adelaide.
- Tree Martins were first observed roosting in Rundle Mall on 15 December 2025, with an initial count of approximately 30 birds. The colony peaked in February 2026 at ~20,540 birds (see Figure 1).
- The average roost numbers were highest in the month of March 2026 before gradually declining in the following months to 30 June 2026.
- 1,773 birds were triaged during the roosting season (see Figure 1): 847 birds were stunned and released; 256 birds were injured and received veterinary care; and 670 birds died. This mortality rate is 3% of the colony at its peak.

Tree Martin End of Season Report - Rundle Mall

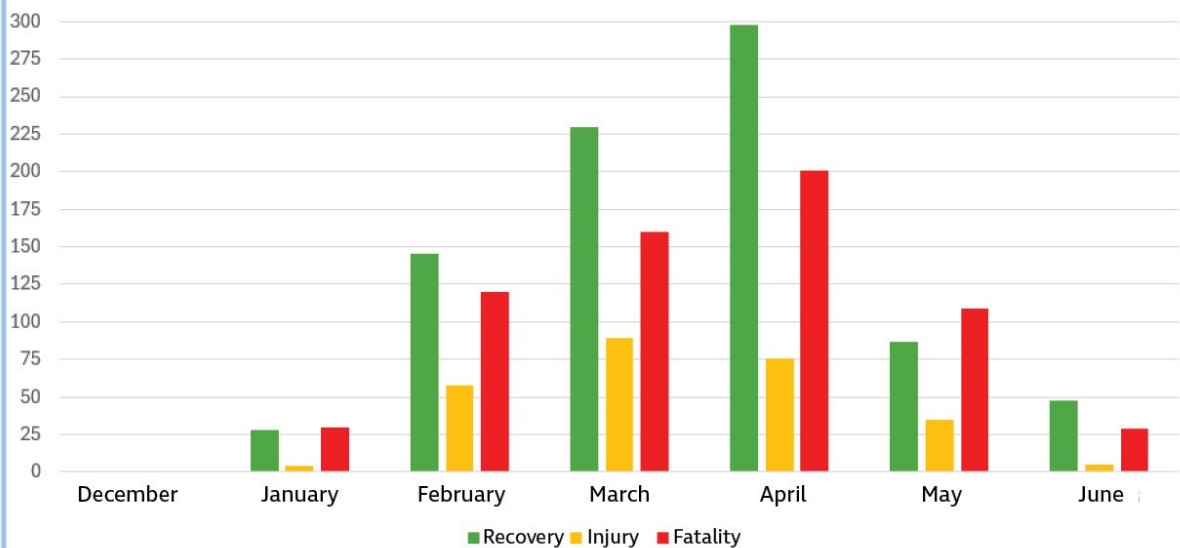
15 December 2025 - 30 June 2026



Tree Martin Roosting Numbers



Tree Martin Incidents



Incidents (15/12/25 - 30/6/26)

Recover + Release	Injury	Fatality
847	256	670

Figure 1. Tree Martin population and triage for 2025-26 roosting season

Tree Martins roosting in Rundle Mall presented complications and challenges for their management. This included:

- Risks to the birds arising from the physical environment such as overhead wires and large glazed shop-fronts, resulting in building entrapments, and strikes with buildings, windows and wires, resulting in bird injury and mortality.
- Implications for businesses and retailers operating in Rundle Mall which may have experienced business-related expenses and disruption due to Tree Martin mitigation measures and/or behaviour.
- Limitations for events and activations in Rundle Mall including additional operational requirements for event organisers and health considerations associated with bird droppings and odour.
- Amenity impacts associated with odour and bird faeces for visitors and businesses using Rundle Mall.

Tree Martin roosting in Rundle Mall also presented opportunities for visitors to experience and appreciate the arrival of the birds each evening and raise awareness about wildlife in the city and living with nature.

Alongside the 2025-26 operational response, the CoA adopted a scientific and evidence-based approach to preparing a management plan to assist in managing future Tree Martin roosting seasons. This report should be read in conjunction with the CoA TMMP.

2. Introduction

2.1 Overview

The City of Adelaide (CoA) adopted a two-phase approach to Tree Martin Management for the 2025-26 roosting season:

- Phase 1 – A coordinated approach to community amenity, public safety, business vitality and the welfare of wildlife for the 2025-26 roosting season (on-ground operational response).
- Phase 2 – A Tree Martin Management Plan (TMMP) that looks at operational, medium and longer-term strategies for managing the annual Tree Martin roosting season.

This report addresses the on-ground operational response (Phase 1) covering the approach, communications and stakeholder engagement, issues and resolutions, Tree Martin observations, mitigation measures and their effectiveness, and future recommendations.

Alongside the 2025-26 operational response, the CoA adopted a scientific and evidence-based approach to preparing a management plan to assist in managing future Tree Martin roosting seasons. The End of Season report should be read in conjunction with the CoA Tree Martin Management Plan (TMMP).

2.2 Program Purpose and Objective

The 2025-26 roosting season was the first year in which the CoA deployed a structured and resourced on-ground operational response in Rundle Mall.

Management of the Tree Martin colony in the 2025-26 roosting season was guided by three key objectives:

1. Ensure bird welfare and compliance with relevant wildlife protection and animal welfare legislation
2. Maintain business operation, public amenity and safety in high-use areas, including Rundle Mall and adjacent laneways
3. Enhance community understanding of the species and the City of Adelaide's role in managing urban wildlife responsibly.

2.3 Legislative and Policy Context

Management activities were conducted in accordance with the following legislative framework:

- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *National Parks and Wildlife Act 1972* (SA)
- *Animal Welfare Act 1985* (SA)
- *Biodiversity Act 2025* (SA)
- *South Australian Public Health Act 2011* (SA)
- *Local Government Act 1999* (SA)
- Wildlife Management (Controller) Permit (DEW).

The CoA developed the following documents to guide and direct works for the roosting season:

- CoA Tree Martin Operating Guidelines
- CoA Tree Martin Management Plan (TMMP)

2.4 Tree Martin Species and Historical Roosts

The Tree Martin (*Petrochelidon nigricans*) is a native migratory bird (see Appendix A) listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and protected under the *National Parks and Wildlife Act 1972* (SA) (NPW Act).

The species commonly nests in tree hollows, rock crevices, and built structures including buildings and infrastructure. Nesting activity in urban environments can create conflict with building maintenance, construction, and development activities. The location of nesting sites is currently unconfirmed but is believed to occur outside of the City of Adelaide local government area.

After the breeding season, a colony of Tree Martins has roosted in the City of Adelaide, a natural behaviour that has been observed since approximately 2015. Tree Martin roosts have been recorded in Leigh Street and Rundle Mall (see Table 1 and Figure 2).

Table 1. Known roosting location site types

Site ID	Location/Address	Site Type	Previous History
S01	Rundle Mall	[Building/ Tree/ Infrastructure]	Yes
S02	Leigh Street	[Building/ Tree/ Infrastructure]	Yes

Roosting aggregations were originally reported in 2015 in Callery Pear street trees in Leigh Street in the city centre. After netting nine Callery Pear trees to exclude Tree Martins from roosting in August 2024 (see Appendix B, Figure 3), the roosting flock moved to Rundle Mall. In December 2024 the Tree Martins began roosting in six Chinese Elm trees located adjacent to Rundle Place in Rundle Mall (see Appendix B, Figure 4).

Roosting in large numbers may present a tension in the urban realm between the public health and amenity considerations of hospitality and retail businesses, and their customers, and the Council's strategic commitments to promote urban biodiversity and legislative obligations to protect the welfare of wildlife. This tension was reported in 2020-21 in Leigh Street (a key food and beverage zone) and most recently in 2025-26 in Rundle Mall (the city's premier retail precinct).

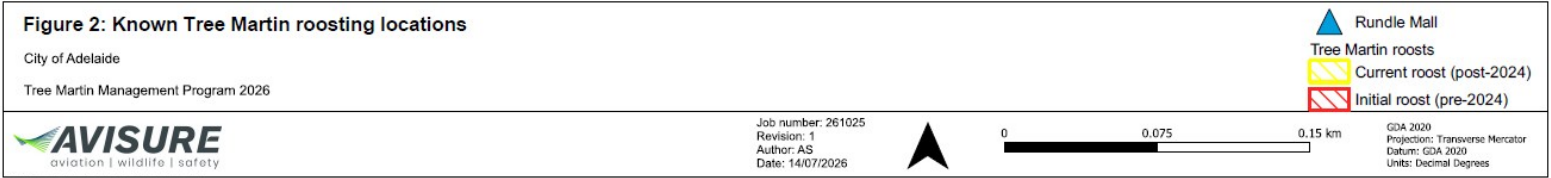
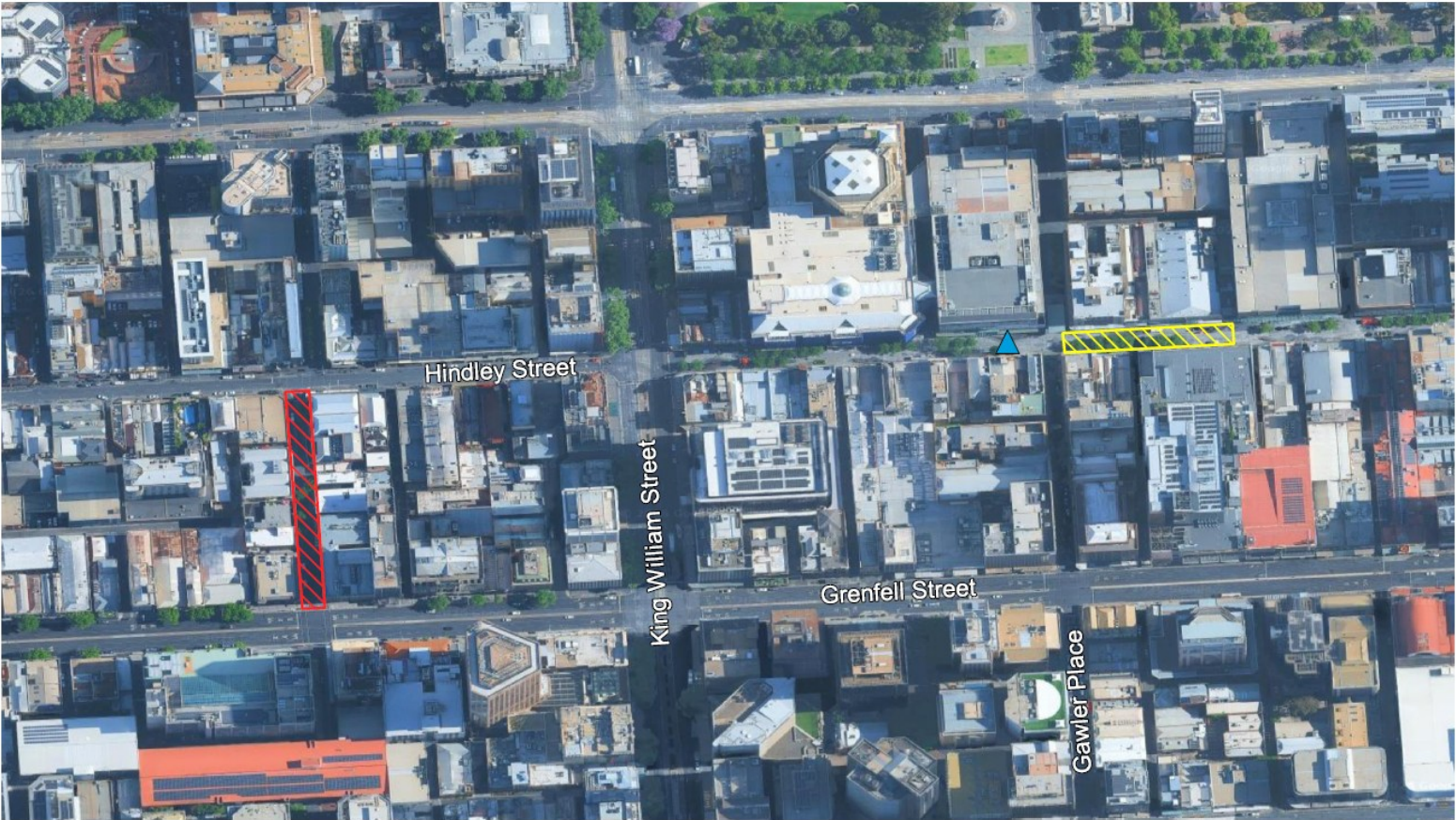


Figure 2. Known Roosting locations

2.5 Roost Site Description 2025-26

In the 2025-26 roosting season, the Tree Martins established a roost site in Rundle Mall concentrated in six Chinese Elm tree species. This was the same roost site as the previous season.

The six Chinese Elm trees extend west near the Gawler Place Canopy to near the Rundle Place entry, a distance of ~54 metres. The site provides attractive roosting conditions for the Tree Martins, as it is well lit, fairly sheltered with low predator activity and includes trees that have branches suitable for large roosting flocks.

The densely built environment of Rundle Mall, however, presents risks to the roosting flock as well as to the commercial stores and the public. In particular, the clear reflective glass windows on lower and upper shop fronts and catenary wires cause bird strikes when flocks arrive at the site or flush from the trees. Birds also enter stores and find it very difficult to exit, and it can be difficult to recover and remove them.

3. Operational Response

3.1 Overview

The 2025-26 Tree Martin season marked the first year in which the CoA deployed a structured, resourced on-ground response at Rundle Mall for the management of Tree Martins.

The on-ground operational response was focused on preparedness, employee training, operational consistency, data collection, and collaborative partnerships to ensure the effective management of bird welfare, business operation and city amenity.

The on-ground operational response incorporated specialist environmental consultants, dedicated security and customer service employees, formal Wildlife Management (Controller) permits, veterinary care, coordinated stakeholder engagement and communications approach.

During the on-ground operational response, data and information on bird behaviour and management measures was collected and assessed to continue to inform the response and medium to longer-term management strategies. This work has informed the development of the TMMP in 2025-26.

3.2 Governance Group

A Governance Group providing oversight of the delivery of the on-ground operational response was in place throughout the 2025-26 Tree Martin season. There was ongoing engagement with key stakeholders and representation from the Department of Environment and Water (DEW), Green Adelaide, the CoA and the Adelaide Economic Development Agency (AEDA).

3.3 Operating Guidelines

The on-ground operational response for the 2025-26 season was guided by the CoA's Tree Martin Management Operating Guidelines introduced in 2025.

3.4 Training and Permits

The management of Tree Martins in South Australia is governed by a combination of Federal Government and State Government legislation, as well as obligations arising from international agreements.

Taken together, the legislative framework requires that Tree Martin management activities be carried out by appropriately permitted and trained personnel, that disturbance to roosting birds be minimised, and that any handling or management of birds be conducted humanely.

3.5 On-ground Response Team

A dedicated on-ground operational response team was established to test different mitigation approaches, undertake data collection and triage bird incidents. The CoA lead the on-ground operational response with the support of local wildlife management specialists Avisure.

During daylight saving¹ the on-ground operational response was predominantly from 6pm to 9pm and from 5pm to 8pm after daylight saving ended. On Friday nights this was extended to 9pm to ensure that the on-ground operational response team was present during late night trading and increased activity in Rundle Mall to provide a response to incidents if they occurred. CoA was available to respond to reports of injured Tree Martins from members of the public from 6am to 9pm during daylight saving and until 8pm post the end of daylight saving.

3.6 After-hours Response

During the roosting season most of the Tree Martin monitoring, triage and engagement with businesses near the roosting trees and Rundle Mall visitors occurred after business hours. An after-hours response was provided via the CoA website and phone line which was notified on signage in Rundle Mall and on the CoA website. A key component of the after-hours response was the availability of on-call veterinary assistance.

A separate Tree Martin response phone was activated for CoA employees to contact and seek response after-hours, including weekends.

3.7 Veterinary Care

Whilst there are several veterinarians across metropolitan Adelaide that provide care for injured wildlife, options for this level of specialised avian care are limited within Adelaide.

To ensure bird welfare and compliance with wildlife protection and animal welfare legislation, injured Tree Martins unable to be released after observation on-site and / or found in the morning or during the day were taken to the partner veterinarian for the on-ground operational response for assessment and treatment.

The partner veterinarian provided a regular day service as well as an on-call evening service, as most incidents occurred outside standard business hours.

¹ Daylight saving was from 5 October 2025 to 5 April 2026

3.8 Tree Martin Management Plan (TMMP)

The CoA has prepared a TMMP with the support of Ecosure Environmental Consultancy, and Avisure Consulting. The TMMP looks at operational, medium and longer-term strategies for managing the annual Tree Martin roosting season.

The TMMP was refined throughout the 2025-26 migratory season, integrating operational learnings, ecological monitoring data, and key stakeholder feedback to guide future Tree Martin roosting seasons across the city.

4. Stakeholder Engagement

4.1 Overview

CoA delivered a collaborative approach to Tree Martin management that aimed to minimise bird fatalities and ensure business operations, customer amenity and public spaces remained clean, safe and attractive.

The engagement approach with key stakeholders aimed to provide support and mitigation suggestions for key businesses impacted during the 2024-25 roosting season and engage with animal welfare organisations to help shape the approach for the 2025-26 roosting season. Engagement with government stakeholders informed management measures, on-ground training, permit requirements and Highly Pathogenic Avian Influenza (H5 Bird Flu) guidance. This engagement and interest from stakeholders assisted with delivering a coordinated response during the 2025-26 roosting season.

4.2 Key Stakeholders

Pre-season consultation was undertaken with the following priority businesses impacted by the 2024-25 roosting season and key stakeholders:

Priority businesses

- Apple Store
- Michael Hill Jewellers
- OPSM
- Optus
- Rundle Place
- Sunglass Hut

Government stakeholders

- Adelaide Economic Development Agency - Rundle Mall Management
- Department for Environment and Water (DEW)
- Green Adelaide
- Primary Industries and Regions SA (PIRSA)

Animal welfare organisations

- Wildlife rescue and care volunteers
- RSPCA
- Veterinarians

Business and community

- Rundle Mall businesses and general community including visitors.

4.2.1 Priority Businesses

Prior to the commencement of the season, Ecosure completed in-person consultation with CoA and the six priority businesses to discuss impacts from roosting Tree Martins. These discussions aimed to initiate a working relationship, document Tree Martin behaviour and incidents from each business' perspective, discuss potential CoA on-ground responses during 2025-26, and discuss the actions each business could implement.

Each business received tailored advice as to mitigation measures that they could undertake as part of the Tree Martin season.

Follow up conversations occurred during November and December 2025, both in person and online with each business. A range of management actions were suggested to each stakeholder including the installation of decals on windows, closing doors and switching off window lighting at high-conflict times (sunset).

During the roosting season the businesses were sent project updates via email and in-person. There was also ongoing communication with the on-ground team, including to alert businesses of the evening arrival of the birds for businesses to activate any of their preferred measures to prevent birds entering stores and to provide assistance if needed.

4.2.2 Government Stakeholders

The Adelaide Economic Development Agency – Rundle Mall Management were represented on the Governance Group providing oversight of the delivery of the operational response throughout the 2025-26 Tree Martin season. This included communicating with businesses about the roosting season, coordinating with contractors and event organisers and the on-ground operational response team for delivery of activations and works, and reporting to the AEDA Board.

DEW provided advice prior to and during the roosting season including on processes for Tree Martin triage and training material developed by CoA with the support of Ecosure and Avisure. DEW also provided advice on wildlife permits and mitigation measures and Green Adelaide provided advice and input prior to and during the roosting season including the Tree Martin Management Plan, communications support and mitigation measures.

PIRSA provided advice on the implications and reporting obligations in the event that H5 Bird Flu was detected while Tree Martins were roosting in Rundle Mall.

Table 2. Government engagement during season

Organisation	Nature of Engagement
Adelaide Economic Development Agency - Rundle Mall Management	Site access and notifications Business communications AEDA Board reporting
Green Adelaide	Provided advice for the 2025-26 Tree Martin roosting season management response
DEW	Regulatory/ permit authority Provided advice for the 2025-26 Tree Martin roosting season management response
PIRSA	Provided direction on implications and reporting obligations if H5 Bird Flu was suspected in the Tree Martins roosting in Rundle Mall

4.2.3 Animal Welfare Organisations

Veterinary care options were investigated for assessment and care of injured Tree Martins, which identified that veterinary services for this specialist care are limited.

The Adelaide Bird and Exotics Vet Centre was the partner vet for the 2025-26 roosting season and provided a regular day service and tailored on-call evening service. Part of the tailored care included an after-hours on-call service for birds injured as they arrived and settled for the evening roost, and hand feeding of birds in care (as Tree Martins are insect eaters and require hand feeding).

Most vet centre admissions occurred after hours (68%) with approximately 32% occurring during the day (business hours).

In October 2025, engagement with wildlife volunteer organisations commenced to understand their interest and capacity to support the care of injured Tree Martins during the 2025-26 roosting season.

As with veterinary care for Tree Martins, care availability by volunteers is specialised and limited to volunteers with the relevant training and permits. A rostering solution for volunteer assistance for on-ground response, feeding and care was explored but was not employed in 2025-26. This was due to the veterinary, Avisure and CoA capacity being adequate for the number of incidents.

On a number of occasions wildlife rescue volunteers attended Rundle Mall during the on-ground evening shift to observe the Tree Martins and were available to provide additional support to the on-ground team, if needed, such as monitoring for bird incidents and handing stunned or injured birds to the on-ground team (if permitted).

4.2.4 Rundle Mall Businesses

Additional to direct communications with priority businesses, the CoA and Adelaide Economic Development Agency - Rundle Mall Management distributed communications to businesses in Rundle Mall via in person postcard drop at the start of the roosting season and at the end of daylight saving. These communications are detailed in the following section. The on-ground operational response team were available and in instances responded to business requests for assistance outside of the roosting area.

5. Communication and Notification

5.1 Overview

A coordinated communications approach was delivered to inform the community, businesses, and key stakeholders about the Tree Martin management response. Feedback from stakeholders is included in this section.

Key communication and reporting included:

- A dedicated webpage was hosted on the CoA website as the central source of information on Tree Martin management and the 2025-26 on-ground operational response.
- An after-hours response was provided via the CoA website and phone line which was notified on signage in Rundle Mall and on the CoA website. A key component of the after-hours response was the availability of on-call veterinary assistance.
- A separate Tree Martin response phone was activated for CoA employees to contact and seek response after-hours, including weekend from 6am to 9pm during daylight saving and until 8pm post the end of daylight saving.
- The CoA's Place Coordinators, in collaboration with the Adelaide Economic Development Agency – Rundle Mall Management, supported with the distribution of information across business precincts.
- Meetings with priority businesses occurred prior to the start of the roosting season and email updates were provided during the roosting season. CoA and the on-ground operational response team communicated with priority businesses throughout the season as needed, including to prepare for the end of daylight saving and to assist with recovering birds from within buildings .
- Council Members and the AEDA Board were kept abreast of the operational response throughout the 2025-26 roosting season.

5.2 Pre-season Communication

Prior to the season commencing, the following communications were undertaken:

- Site occupants and building managers in Leigh Street and Rundle Mall were notified of anticipated Tree Martin activity and planned management measures.
- Pre-season meeting conducted between Ecosure, Avisure and DEW to discuss relevant materials, requirements and restrictions regarding the on-ground operational response.
- To help raise awareness, postcards were distributed in early November 2025 to businesses in Leigh Street and Rundle Mall, later supported by public signage in Rundle Mall highlighting the presence of the birds and featuring a QR code linking directly to the website for more details.

5.3 In-season Communication

Communications material was developed to assist with response during the roosting season as outlined in the table below.

Table 3. Communication materials provided during the roosting season

Date	Stakeholder	Communication Type	Summary
November 2025	Rundle Mall and Leigh Street businesses	Postcards	To raise awareness about the upcoming roosting season (see Appendix C, Figure 5).
December 2025	Rundle Mall visitors	Bench decals	To raise awareness about the upcoming roosting season (see Appendix C, Figure 6).
December 2025	Rundle Mall businesses	Mitigation assistance	Birds-of-prey cut-outs available to businesses to deter Tree Martins from entering stores (see Appendix C, Figure 7).
January 2026	Rundle Mall visitors	Bench decals	To raise awareness of the presence of Tree Martins in the roosting area (see Appendix C, Figure 8).
January 2026	Rundle Mall visitors	Digital screens in Rundle Mall	Direction and contact for responding to injured birds (see Appendix C, Figure 9).
January 2026	Rundle Mall visitors	Onsite signage	Direction and contact for responding to injured birds (see Appendix C, Figure 10).
March 2026	Rundle Mall visitors	Onsite signage	Raising awareness about food health and safety around roosting trees (see Appendix C, Figure 11).

Date	Stakeholder	Communication Type	Summary
April 2026	Rundle Mall businesses	Postcards	Information on how to deter birds from flying indoors and into windows and how to respond to an injured bird in preparation for end of daylight saving (see Appendix C, Figure 12).
April 2026	Rundle Mall businesses	Window decals	To notify shoppers that stores are still open even if doors are closed (to encourage doors to be closed during Tree Martin evening arrival) in preparation for end of daylight saving (see Appendix C, Figure 13).
June 2026	CoA permit holders	Email	Email about H5 Bird Flu, heightened awareness and precautionary approach due to confirmed case in South Australia.
June 2026	On-ground operational team and permit holders	Verbal briefing	Briefing about H5 Bird Flu, heightened awareness and precautionary approach due to confirmed case in South Australia.

5.4 On-ground Communication

The evening on-ground operational response included responding to queries and informing interested members of the public about the Tree Martins.

Themes that emerged from engagement with the on-ground team, enquiries and social media follow:

Biodiversity

- Nature appreciation including acrobatics and beauty of the arrival of the birds each evening
- Curiosity about the species and their behaviour
- Curiosity about the species migration and when and why they migrate to South Australia
- Interest in seeing the birds up-close.

Welfare

- Outcomes for stunned and injured birds
- Concern about trapped, injured and deceased birds and challenges of the urban environment
- Impact of Leigh Street netting on birds shifting to Rundle Mall
- Inquiring if the birds will be dispersed.
- Appreciation of presence of on-ground team

Amenity

- Impact of odour, droppings and cleansing regime
- Appropriateness of location
- Support for relocating the birds as well as maintaining current roost site.

Resourcing

- Cost and effectiveness of on-ground response.

5.5 Business Communication

The presence of Tree Martins roosting in Rundle Mall generated a range of impacts for nearby businesses throughout the season and key impacts communicated by businesses follow:

Amenity and odour

- Accumulation of bird droppings creating odour and amenity concerns for the businesses, customers and the broader public, including customer complaints and impacts on the trading environment
- Significant increase in cleaning requirements, particularly those with outdoor areas, shopfronts and internal areas and for product displays when birds entered stores.

Business disruption

- Disruption and impacts to branding when birds entered stores and from intervention from on-ground response team to recover the birds
- Disruption and impact to tenants when birds entered buildings
- Loss of trade or extra expense when birds entered stores
- In one instance an incursion of approximately 100 birds resulted in a business closing over two days and partially closing on a third day while the situation was resolved and cleaning was undertaken
- In a number of instances, a business had to employ a security guard overnight when a bird(s) remained in the store as the alarm could not be activated
- Closing store doors during the arrival of the evening flock was disruptive and required the addition of a door person in one instance and when doors were not open could signal to customers that the store was closed

- The evening peak in roosting activity coincided with trading hours for businesses. This had customer facing impacts, including odour, noise and the presence of distressed or injured birds, occurring during periods of high foot traffic in Rundle Mall.

Expenses

- Extra expenses incurred from mitigation measures, extra cleaning, additional security.

5.6 Animal Welfare Organisations Communication

Volunteers from animal welfare organisations visited the roosting site during the on-ground response and communicated feedback as follows:

Biodiversity

- Nature appreciation including acrobatics and beauty of the arrival of the birds each evening.

Welfare

- Interest in triage and assessment process and different approach to holding time for stunned birds
- Concern about trapped, injured and deceased birds and challenges of the urban environment
- Interest in veterinary care of injured birds
- Impact of Leigh Street netting and concern with potential dispersal/roosting prevention.

Mitigation measures

- Concern with potential impact of wire markers on bird flight behaviour
- Support for possum tails installation.

Communications

- Concern that communications material did not include options for injured birds found by members of the public outside the hours of CoA's on-ground operational response
- Concern that communications material noting that Tree Martins should not be handled by those who were not trained and permitted could result in lack of assistance for injured birds found by members of the public.

6. Tree Martin Observations

6.1 Overview

In 2025-26 the CoA undertook a planned and measured approach to managing the Tree Martin migratory season. This approach enabled data and evidence to be collected in 2025-26 to inform future management actions.

During the 2025-26 on-ground operational response, data and information on bird behaviour and management measures was collected and assessed to inform the on-ground operational response and medium to longer-term management strategies.

This section summarises the survey methods used, roosting activity, bird behaviours, observations and comments on migration.

6.2 Pre-arrival monitoring

Monitoring of previous roosting sites (Leigh Street and Rundle Mall) and other locations with similar characteristics (Ebenezer Place and Vardon Avenue) commenced in October 2025.

Tree Martins were first observed roosting in Rundle Mall on 15 December 2025, with an initial count of approximately 30 birds, prompting the commencement of on-ground evening monitoring from that date.

Potential roost sites in other locations continued to be monitored in 2025 until the end of January 2026 when the colony was established in Rundle Mall. There was no evidence that birds sought to use trees in the other locations monitored.

6.3 In-season Monitoring

The roosting season commenced on 15 December 2025, when Tree Martins were first seen roosting in Rundle Mall.

6.4 Survey Methods

Observations were conducted in accordance with the monitoring protocol established prior to the season and the CoA Tree Martin Management Operating Guideline. Surveys involved counts of the evening flock and monitoring activity and triage during morning departure and evening arrivals.

Table 4. Tree Martin surveys

Parameter	Detail
Survey frequency	Daily
Survey dates	19 December 2025 (when Avisure started collecting survey data) until 30 June 2026
Observer(s)	Avisure wildlife biologists, ecologists and management officers CoA on-ground operational response team Wildlife volunteer organisations (on occasion)
Survey method	Visual monitoring and roosting counts
Equipment used	Binoculars and multispectral binoculars (with night vision capabilities)

6.5 Roosting Activity

Roosting activity during daylight saving was frequently recorded between 7.00pm and 9.30pm, following daylight saving ending roosting was frequently recorded between 5.45pm and 7.30pm. Outliers were sporadically recorded throughout the season due to late night flushes.

Roosting time was recorded when all birds had entered the trees, vocalisation had decreased and the birds were observed settling for the night.

See Table 5 for roost count summary data.

Table 5. Monthly roost summary data per day, December 2025 to June 2026. Recorded at the Rundle Mall roosting location – S01.

Date:	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026	May 2026	Jun 2026
1	-	-	5000	15000	14830	5500	3030
2	-	-	5000	13000	13300	3750	3600
3	-	-	5025	18000	14150	2860	2200
4	-	-	6200	11900	13700	2600	150
5	-	-	5500	13500	13700	4610	400
6	-	-	6000	9630	12670	5200	3100
7	-	250	2000	13000	6500	4470	3200
8	-	-	6500	15000	12890	3500	3400
9	-	211	6750	12860	11750	5290	3350
10	-	-	6000	14000	10850	6500	3700
11	-	-	7000	14930	4890	4250	3120
12	-	1000	7500	12640	2950	4850	4000
13	-	2350	6700	12500	5200	4400	4250
14	-	1862	6500	15000	7440	4000	3350
15	-	2130	7500	13000	13980	5970	3850
16	-	1200	11640	14000	13250	6800	4140
17	-	2000	10000	13500	11425	7000	4250
18	-	-	12200	15100	8740	5920	3800
19	50	4140	9000	13080	13600	3090	2500
20	-	3200	10280	14950	7510	3920	3100
21	-	3700	11180	15600	17225	5420	2450
22	-	4200	11000	14010	7500	6100	1350
23	-	3400	6680	12500	9850	6400	1750
24	-	4500	12890	14860	8650	4600	2500
25	-	4130	9080	14000	5820	1270	2750
26	-	-	11000	-	6650	3500	1950
27	-	4300	11000	14000	5250	4500	2400
28	-	4200	20540	15450	5750	5110	2750
29	405	3725	-	15000	5600	2000	2300
30	330	4000	-	15250	6200	1060	2580
31	-	5500	-	12110	-	1250	-

6.6 Population and Activity Trends

Between 15 December 2025 and 30 June 2026, Avisure has attended the Rundle Mall roost most nights alongside the CoA on-ground operational response team and contracted security officers. The objectives were to:

1. Monitor bird activity and the overall roost size of Tree Martins each evening by estimating the numbers in each flock as they arrived at the site (noting bird counts are indicative due to very large flocks arriving in quick succession along with regular flushing of the flocks already onsite making it difficult to obtain accurate estimates).
2. Triage individual Tree Martins that had been stunned, injured or entered into buildings, remove deceased birds and transport injured birds to veterinary care.
3. Respond to queries from members of the public, visitors and provide an on-site contact point for businesses in Rundle Mall.

6.6.1 Rundle Mall Population

The initial count by Avisure on 19 December 2025 was around 50 birds. The numbers grew to a peak of approximately 20,540 recorded on the 28 February 2026. The average roost numbers were highest in the month of March 2026 before gradually declining in the following months to 30 June 2026 (Figure 14).

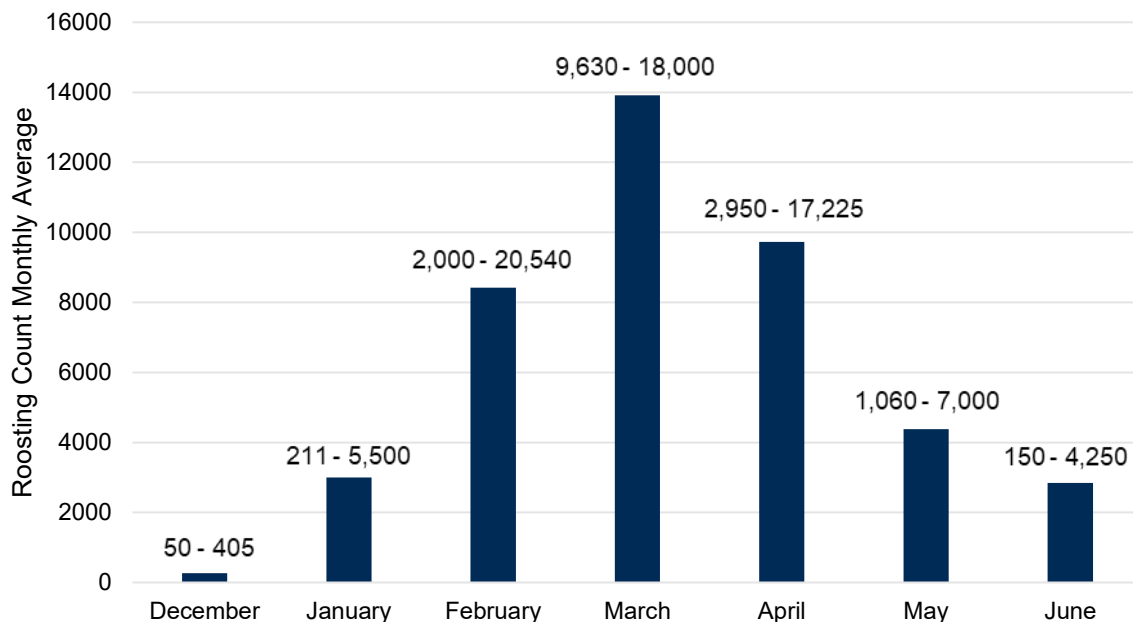


Figure 14. Tree Martin roosting count monthly average December 2025² through to June 2026.
(Numbers above each bar represent the lowest to highest range for that month)

² Data collected in December and March does not account for all days of the month, as roosting was not recorded on some public holidays and weekends.

6.6.2 Injuries and deaths during the roost fly-in

During the 2025-26 roosting season, for the evening roost fly-in period, there were 1,511 individual birds triaged including deceased, injured and stunned birds (Figure 15).

There were 555 bird deaths recorded with most dying on impact or during triage. Of the bird deaths, 221 died due to building/window strikes; 160 wire strikes; and 162 due to entering buildings. 12 birds died due to other causes (stress, strikes with signage, tree strikes, and unknown cause of strike).

Of the triaged birds, 173 were injured to the extent that they were unable to be released onsite and were transported for veterinary care. Adults accounted for 87 birds and 86 were juveniles and adolescents. Of these injured birds, 72 resulted from collisions with building/windows; 59 from wire strikes; 35 from entering buildings; and 7 injuries had unknown causes.

Just over half (52%) of the triaged birds were stunned and successfully released back to the roost. Of the 783 stunned birds, 386 birds struck buildings/windows; 126 struck wires; 261 entered buildings; and ten birds were stunned due to other causes (heat stress, strikes with signage, tree strikes, and unknown strike). Adults accounted for 51% (401 individuals), whilst juveniles/adolescents accounted for 45% (355 individuals), 27 triaged birds were unknown ages.

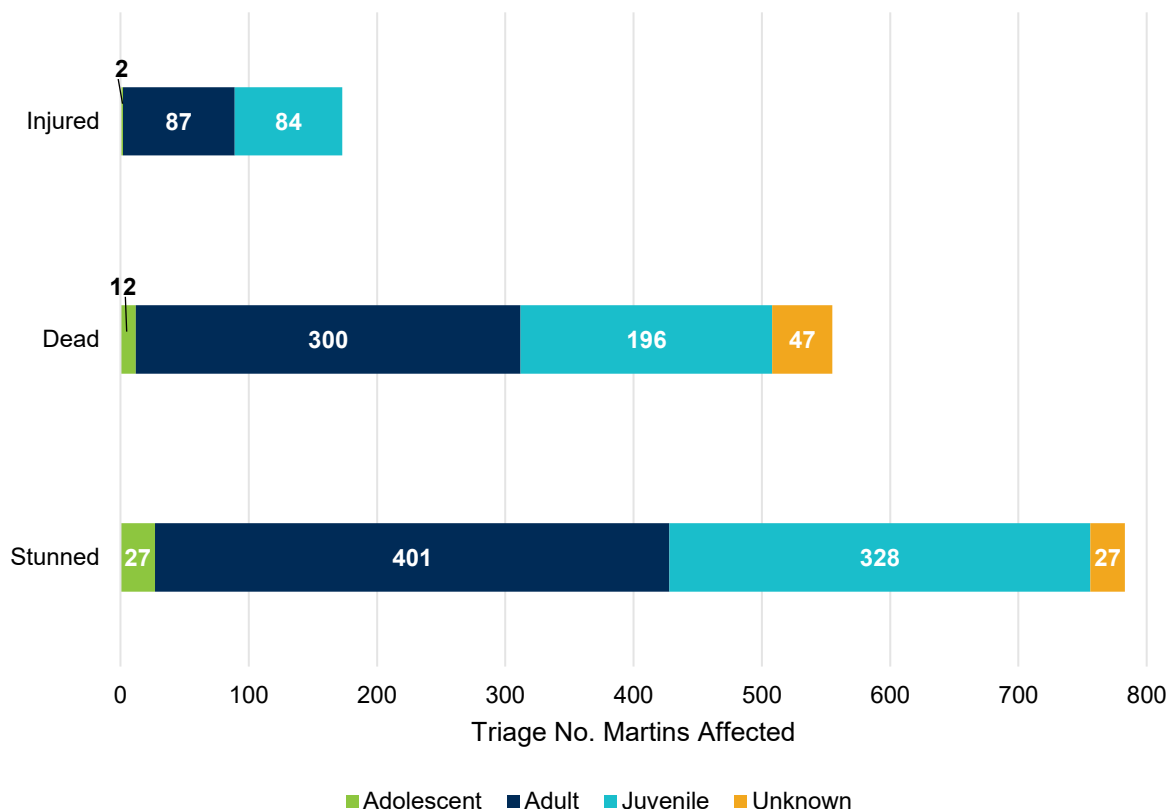


Figure 15. Outcomes for all incidents, categorised by age December 2025 to June 2026 (PM) (excludes nine individuals that were unable to be captured)

Building/window strikes accounted for 45% of triages (679 individuals), with both adults (315 individuals) and juveniles/adolescents (327 individuals) accounted for³ (Figure 16). Most of the building/window strikes occurred when roost numbers were greatest, with 485 strikes in February and March 2026. A priority business installed window decals to the ground floor windows which were effective in reducing window strikes. The upper storey window of the same business was prone to strikes and following the installation of window decals on the upper storey, collisions declined significantly to less than half the number during April 2026. Fewer birds roosting may also have contributed to this.

Wire strikes accounted for 23% of triages (345 individuals) with adults (219 individuals) accounting for 64% of all wire strikes and juveniles/adolescents (125 individuals) accounting for 36%. Most of the strikes were recorded in two high risk locations, close to the main roosting trees. Following the removal of wire markers above the roosting trees at the beginning of February 2026, wire strikes continued to increase peaking in March 2026 with 135 strikes. Following the installation of protective tubing on the catenary wires in May 2026, wire strikes in the high-risk areas declined. Fewer birds roosting may also have contributed to this.

Building entry accounted for 31% (467 individuals) of all triages with 250 adults and 184 juveniles/adolescents impacted. Large flushes recorded in April 2026 accounted for 69% (266 individuals) of all flushes during the season. A single significant incidence occurred on 24 April 2026 resulting in small flocks of over 200 birds being recorded in a building and resulting in triage over multiple days. A business operator closed their premises for trading as part of this incident. The majority of birds were successfully retrieved and released after monitoring.

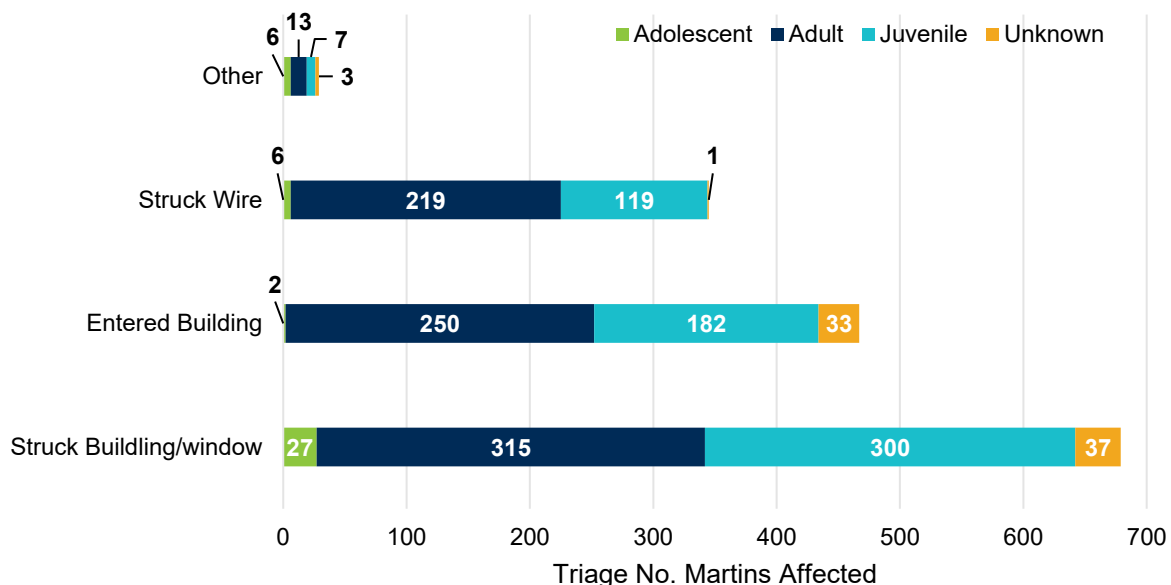


Figure 16. Cause of triages, categorised by age December 2025 to June 2026 (PM) (Other include: struck eve, struck tree, struck sign, heat stress and unknown)

³ Note that the life stage of each Tree Martin that was triaged was not recorded, therefore the life stage break down will not always equal total number triaged.

6.6.3 Injuries and deaths at other times

During the roosting season, the CoA on-ground operational response team monitored Tree Martins departing the Rundle Mall roost in the mornings and responded to daytime incidents. The objectives were to:

- Monitor bird activity.
- Triage individual Tree Martins that had been stunned, injured or entered buildings, remove deceased birds and transport injured birds to veterinary care.
- Support businesses and traders in Rundle Mall.

During the 2025-26 roosting season to 30 June 2026, the majority of incidents occurred during the evening arrival and roosting compared with 262 birds triaged during the day including deceased, injured and stunned birds (Figure 17).

There were 115 fatalities recorded with most dying on impact. Of the bird deaths, 32 died due to building/window strikes; 32 wire strikes; and 22 due to building entry. 29 birds died due to other causes (possibly heat stress, unknown cause of strike).

83 were injured to the extent that they were unable to be released onsite and were transferred for veterinary care. Of these injured birds, 14 resulted from collisions with building/windows; 15 from wire strikes; 19 from being in buildings; and 35 injuries had unknown causes.

64 of the triaged birds were stunned and were successfully released. 29 birds struck buildings/windows; 12 struck wires; 18 entered buildings; and five birds due to unknown causes.

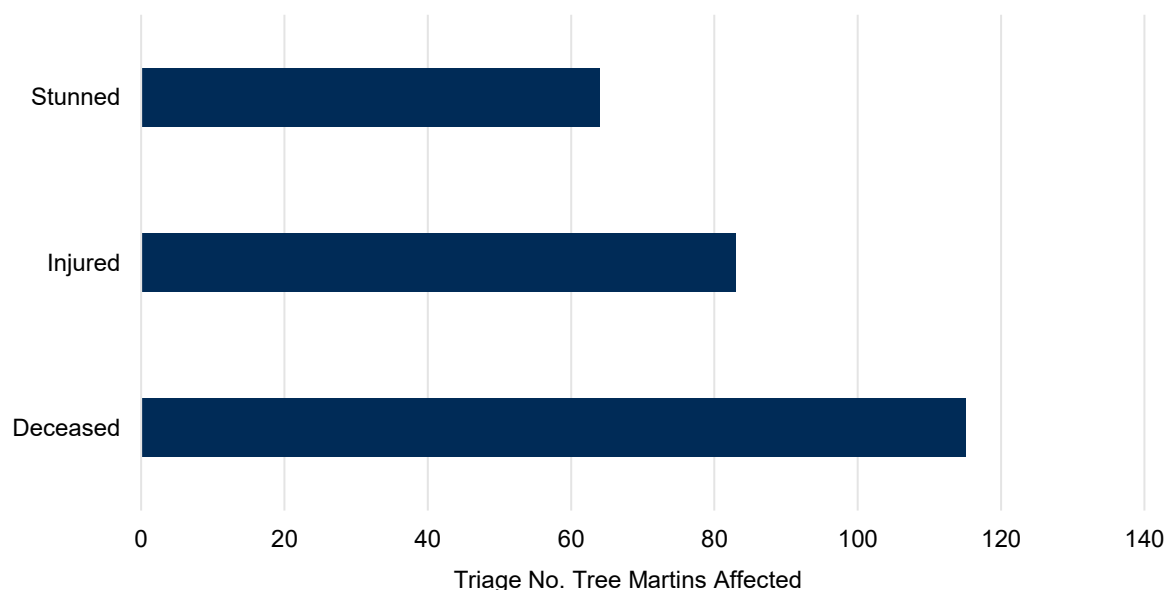


Figure 17. Outcomes for all morning and daytime incidents, December 2025 to June 2026 (AM).

Building/window strikes accounted for 30% of triages (79 individuals). Over half of the building/window strikes occurred when roost numbers were greatest, with 47 in February and March 2026. Strikes occurred most often in No Fixed Address Lane and close to the roosting trees. Following the installation of scaffolding in No Fixed Address Lane, collisions stopped in this area. Fewer birds roosting may also have contributed to this. Building/window strikes for all times of day was equal to 3.7% of the colony at its peak.

Wire strikes accounted for 23% of triages (59 individuals). Most of the strikes (46) were recorded close to the main roosting trees. Following the removal of wire markers at the beginning of February 2026, wire strikes continued to increase peaking in March 2026 with 22 strikes. Following the installation of protective tubing on the catenary wires in May 2026, wire strikes in the high-risk area declined to two. Fewer birds roosting may also have contributed to this. Wire strikes for all times of day was equal to 2% of the colony at its peak.

Building entry accounted for 23% (59 individuals). Birds who were trapped in buildings during the day were mostly from evening flushes or flight behaviour as they flew in to roost. 25% of birds were released, with 37% deceased and 30% injured (Figure 18). Building entry for all times of day was equal to 2.6% of the colony at its peak.

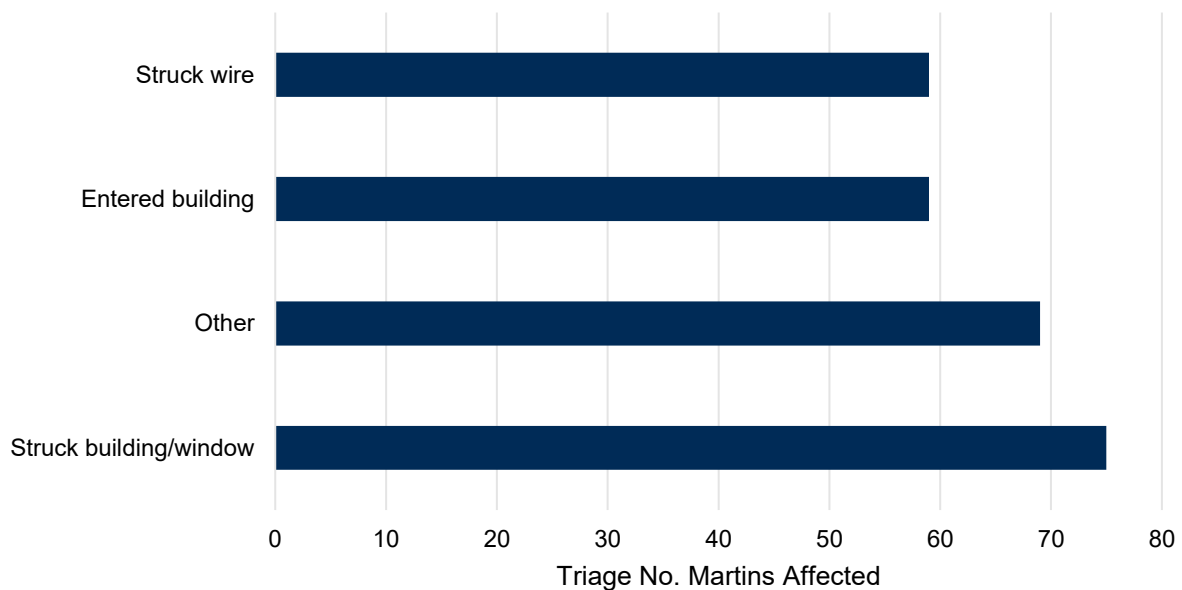


Figure 18. Causes of triages, December 2025 to June 2026 (Day).

6.7 Notable Observations

The following key observations and learnings are made at the Rundle Mall roost over the 2025-26 roosting season:

1. Closing doors during the Tree Martins' evening arrival was an effective measure that was implemented. In some instances, due to door design, it was not possible to close doors.
2. Members of the public collected dead and injured birds with their hands which presented a hygiene risk. Hand sanitiser was made available. Tree Martin signage in Rundle Mall and verbal advice provided by the on-ground operational response team advised members of the public not to handle the birds.
3. Friday evenings required additional staffing during the evening on-ground shift for part of the season due to late night shopping when bird arrival coincided with store opening hours, resulting in birds entering buildings more readily. Fridays also presented significantly more foot traffic and interactions of the on-ground operational response team with members of the public.
4. Events such as the Adelaide Fringe Festival increased foot traffic causing more interactions between the roosting flock and people.
5. The birds appeared to be affected more on windy days, with flush events increasing and birds taking longer to settle, probably because their manoeuvrability was impeded.
6. Removing birds from buildings once they entered was difficult, due to tall ceilings and large spaces making it difficult to use handheld nets. Birds often did not survive if they remained in a building for more than a few days.
7. Odour around the roost trees increased after rain events.

6.7.1 Migration

Tree Martins roosting in Rundle Mall during the 2024-25 roosting season migrated by the end of May 2025. Migration during the 2025-26 roosting season has been observed, however a small group of birds remain in Rundle Mall at 30 June 2026. It is possible that a portion of the roosting population will remain for the winter. This has not previously been observed in Adelaide.

There may be a correlation between temperature and migration times (Figure 19). Minimum temperatures from 17 to 31 May 2025 were below 10 degrees except for three nights. In 2026 during this same time minimum temperatures were above 10 degrees, except for two nights. During this same time maximum temperatures were higher in 2026 than in 2025 except for five days.

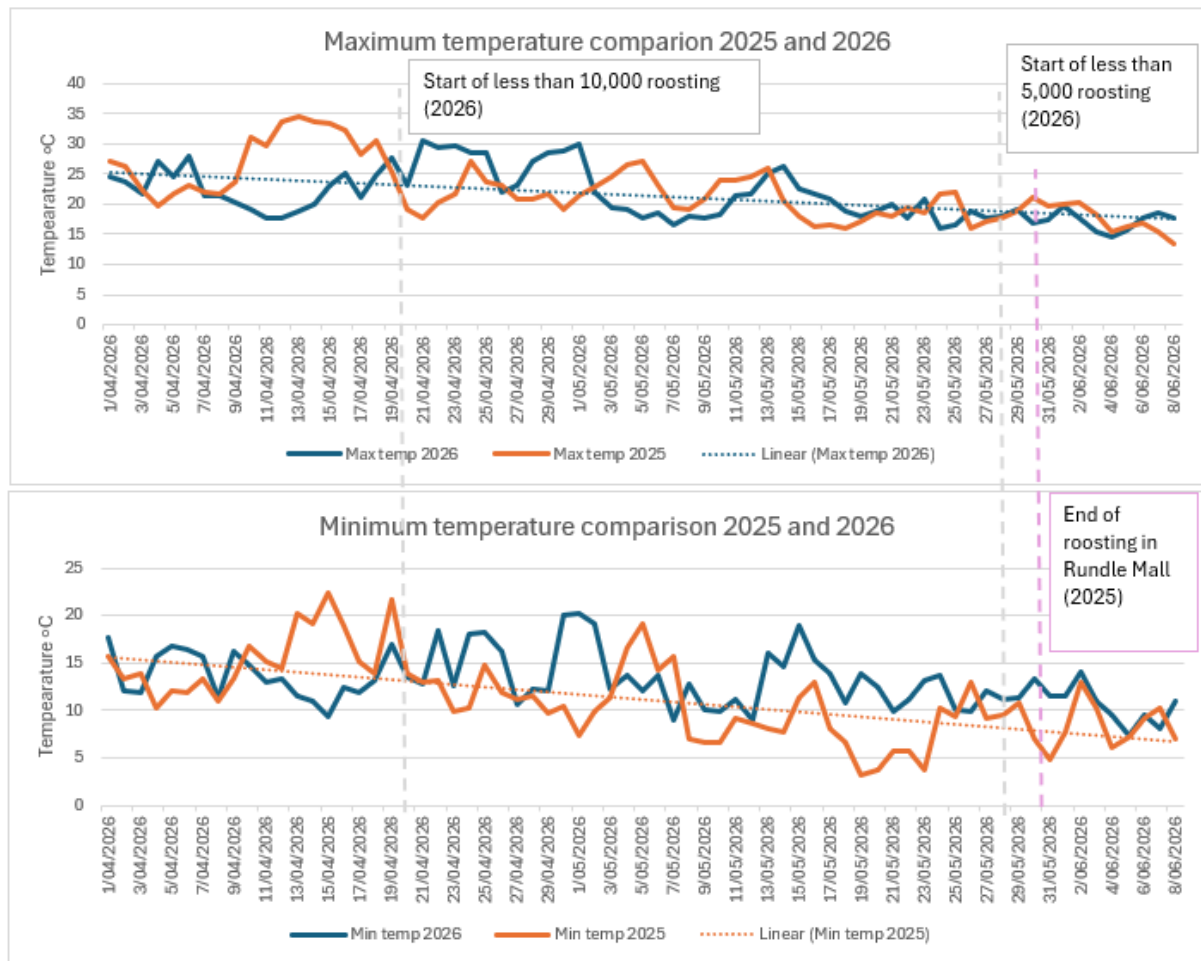


Figure 19. Comparison of maximum and minimum temperatures April to May 2025 and 2026.

7. Mitigation Measures and Effectiveness

7.1 Overview

Ecosure developed tailored advice as to mitigation measures that CoA and businesses could undertake as part of the Tree Martin season. The approach for the 2025-26 roosting season was to test mitigation measures for their effectiveness in Rundle Mall and whether their effectiveness and refinement could provide a suitable location for the colony of roosting birds.

7.2 Summary of Measures Implemented

Table 6. Measures implemented by the City of Adelaide

Measure	Description	Target Site(s)	Period Applied	Comments
Wire Markers	Discs that absorb sunlight during the day and emit ultraviolet light at night to make overhead wires more visible	Top structural wires of the catenary system and building anchor wires from Charles Street to Stephens Place in Rundle Mall (see Appendix E, Figure 20)	Installed 8/01/2026 Removed from section over roosting trees 5/02/2026	Unknown baseline for effectiveness as markers were installed before incidents began, however effectiveness was insufficient as a single mitigation measure.
Possum Tails	Silicon rubber covers to increase overhead wires visibility, thickness and cushioning	Top structural wires of the catenary system and building anchor wires above the roosting trees (see Appendix E, figure 21)	Installed 7/05/2026 - 28/05/2026	Wire strikes declined after installation. Fewer birds roosting may have also contributed to this. Effectiveness could be increased by extending coverage on anchor wires and top of juncture wires and other strike hot spot areas (subject to engineering assessment).
Roost monitoring	On-ground presence during morning departure and evening arrival for monitoring, triage and engagement	Rundle Mall	Commenced at start of roosting season 15/12/2025	Evening on-ground operational response team from Avisure, CoA and Wilson Security, 3 evenings per week from 15/12/2025 and 7 evenings per week from 12/01/2026. Effective at responding to incidents, engagement and understanding bird behaviour and effectiveness of mitigation measures.

Measure	Description	Target Site(s)	Period Applied	Comments
Permit	Wildlife (Management) Controller Permit	Adelaide Metropolitan Area	From 24/12/2025	6 Avisure team members authorised under the permit to deliver on-ground monitoring and triage support.
			From 3/02/2026	35 CoA employees authorised under the permit to deliver on-ground monitoring and triage support.
Training	Tree Martin Response Training	City Library CoA teams responsible	From the 4/11/2025	Tree Martin response training delivered by Avisure and CoA for employees to assist with on-ground monitoring and triage.

7.3 Adaptive Measures to Manage Tree Martins

Table 7. Timeline of adaptive measures to manage seasonal Tree Martin roosting undertaken by CoA

Date	Action	Outcome
September 2025	Engaged wildlife management specialists.	Development of operational response plan, including operating guidelines, and delivery of on-ground response.
October 2025	Began engagement with RSPCA, wildlife care volunteers and veterinarians for upcoming season.	Increased CoA's understanding of Tree Martin behaviour and sector capacity to shape approach for upcoming season.
November 2025	Began engagement with businesses close to roosting trees for upcoming season.	Increased CoA's understanding of potential mitigation measures and helped shape approach for upcoming season.
November 2025	Postcards in preparation for roosting season distributed to Rundle Mall facing stores.	Raise awareness about upcoming roosting season.
December 2025	Tree Martin mitigation options report developed.	Options shared with key businesses near roosting trees.
December 2025	Tree Martin bench decals installed near roosting trees in preparation for season.	Raise awareness about roosting season.
December 2025	Birds-of-prey cut-outs available to businesses around roosting trees.	Limited data to measure effectiveness.
December 2025	On-ground response commenced.	Monitoring to strengthen understanding and inform the management plan.
December 2025	Tree Martin response phone activated.	Direct contact with project team for incident response.
January 2026	Wire marker installation on overhead wires in Rundle Mall completed.	No wire strikes recorded this season before installation to compare outcomes.
January 2026	On-ground response increased from 3 to 7 days.	Increased presence to monitor and respond to incidents.
January 2026	On-site signage installed around trees.	Increased prominence of information and contact number for incidents.
January 2026	Updated bench decals installed.	Raise awareness about roosting season.
January 2026	Digital screens in Rundle Mall.	Provided direction and contact number for responding to injured Tree Martins.
February 2026	Wire markers removed from central section above roosting trees but retained from	Observations for any changes to bird flight behaviour.

Date	Action	Outcome
	Gawler Place to Stephens Place and east of the roosting trees to Charles Street.	
March 2026	Professional clean of drain in front of roosting trees.	Reduced odour.
April 2026	Tree Martin Operating Guidelines finalised based on 2025-26 season.	Guidance for 2025-26 roosting season
April 2026	Updated postcards distributed to Rundle Mall facing stores.	Remind businesses of earlier arrival due to end of daylight saving and how to reduce bird incidents.
April 2026	Professional clean of drain in front of roosting trees.	Reduced odour.
April 2026	Window decals for store windows produced.	Offered to businesses near roosting trees in preparation for end of daylight saving to encourage doors to be closed during evening roost arrival.
May 2026	Installation of possum tail coverings on catenary wires surrounding roosting trees.	Reduced the numbers of fatalities caused by wire strikes.

7.4 Effectiveness Assessment

The effectiveness of each mitigation measure was assessed against the program objectives using the following criteria: (1) degree of compliance with legislation, (2) minimisation of disturbance to nesting birds, and (3) facilitation of necessary works.

Table 8. Mitigation effectiveness assessment

Measure	Description	Effectiveness Rating	Comments
Window film/decals	Window films/decals were highly effective in reducing bird collisions with shopfront glazing by increasing the visibility of reflective glass surfaces and reducing the likelihood of birds misinterpreting windows as open flight paths or habitat. The treatment provided an immediate and practical mitigation measure at identified high-risk collision locations. This measure was a business action and not implemented by the City of Adelaide.	High	If roosting continues, window film/decals are recommended for high strike areas within close proximity of the roosting area.
Wire markers	Wire markers were installed on catenary wires prior to documented strike incidents occurring and removed in early February 2026 above the roosting trees but retained from Gawler Place to Stephens Place and from east of the roosting trees to Charles Street. This was to identify if there was any difference in Tree Martin flight behaviour. Due to the absence of pre- and post-installation monitoring data, the effectiveness of this measure could not be quantitatively assessed. No evidence was recorded to confirm whether markers reduced collisions or influenced bird flight behaviour by causing avoidance or flushing responses.	Low	Additional monitoring data would be required if wire marker effectiveness is to be trialled during future roosting.

Measure	Description	Effectiveness Rating	Comments
Possum Tails	Installation of possum tails above the roosting trees in Rundle Mall contributed to a reduction in bird strike frequency and mortality. However, effectiveness varied along the treatment area, suggesting that outcomes may be influenced by site-specific factors including roost proximity, bird movement patterns, and treatment coverage.	Medium	Increased effectiveness may be achieved through broader deployment in high strike areas and continued monitoring of those treated areas.
Roost monitoring and on-ground triage	Routine monitoring during key fly-out and roosting periods provided valuable information on roost behaviour, movement patterns, and strike risk locations. On-ground triage enabled rapid response to injured or stunned birds, improving the ability to assess, manage, and record individual incidents on a case-by-case basis.	High	Ongoing monitoring is recommended to capture data to support future management decisions and evaluate the effectiveness of mitigation measures and to provide rapid response to incidents.

7.5 Incidents

7.5.1 Roosting Birds Disturbance

Tree Martins regularly leave the roosting trees quickly (flush) during the evening settling time. Causes of the flush are disturbance by other birds, human activity and truck movements, and the presence of predators, with the majority due to unknown causes.

Flushes frighten the birds and can result in stunned, injured and deceased birds as they collide with buildings/windows and wires, or enter buildings as they quickly try and leave the roosting trees.

During the roosting season there were 11 observed incidents when members of the public caused the birds to flush by kicking, shaking or disturbing the roosting trees. Bunting around the roosting trees was trialled, however use was not continued as it was not deemed effective at being able to stop shaking of branches or throwing objects into the trees. The evening on-ground operational response team monitored for risks to tree disturbance and actively discouraged undesirable behaviours where practicable.

Other triggers that disturbed the roosting flock causing them to flush from the roost:

- Renovations and construction noise from a nearby business fit-out would often cause the flock to become unsettled and occasionally would cause birds to flush.
- Activation of the Gawler Place canopied area, such as contractors installing lighting and decorations for events such as Adelaide Fringe festival causing noise and disturbance to the roosting flock.
- Street performers and loud music, including fire twirlers emitting fumes into the air sometimes causing disturbance to the Tree Martins.
- Rundle Mall is a busy area where activation and foot traffic is encouraged. During times of high activity and late-night events monitoring and triage was sometimes more difficult, as birds were more prone to flushing with increased noise and pedestrian movement.
- Other bird species including Peregrine Falcon, Australian Hobby, Magpie Lark, Owl and perhaps Crimson Rosella appeared to disturb the Tree Martins on various occasions. On other occasions pigeons and Hobby caused the flock to go silent but not to flush.
- On one occasion a member of the public placing bird seed under a roost tree to feed pigeons caused more than 25 pigeons to descend as Tree Martins were arriving, causing a large group to flush.

8. Conclusions and Recommendations

8.1 Key Issues

Outside of bird welfare impacts, the 2025-26 highlighted a range of common issues associated with the Tree Martin roost in Rundle Mall. These are summarised in this section.

8.1.1 Businesses

The presence of Tree Martins roosting in Rundle Mall generated a range of impacts for nearby businesses throughout the season, including increased cleaning requirements, odour and amenity issues, business disruptions, additional expenses, including for mitigation measures, customer complaints and impacts on the trading environment.

8.1.2 Events

During the roosting season multiple events were held in Rundle Mall including major State-supported events and activations that contribute to visitation and economic activity. Events included the larger LIV Golf, Adelaide Fringe, Colours of Asia Street Food Festival and AFL Gather Round mini site activations/events.

Primary concerns with Tree Martin roosting are restricted zones available for activations and revenue generation, health considerations from droppings for food and beverage events, odour, disturbance of roosting birds from trucks / some loud sounds from event set up and pack down and additional operational requirements for event organisers.

8.1.3 Odour and Droppings

Odour from bird droppings was stronger after rain which intensifies the smell by wetting dried and built-up droppings on the trees and paved surfaces.

Dry spells also intensified the odour as the drain did not receive additional natural flushing throughout the day.

The area and benches under and around the roosting trees was pressure cleaned each morning. Drain flushing, deodorising and professionally drain cleaning was used during the roosting season to minimise odour impacts.

The CoA received three pieces of written correspondence about the odour and verbal feedback received from members of the public, businesses and the on-ground operational team. Odour was more likely to be reported by businesses immediately adjacent the roosting trees than other retailers and traders in Rundle Mall. Comments about the odour were also posted by members of the public on social media and featured on radio (ABC and FIVEAA).

The accumulation of droppings within pedestrian areas presented a broader public amenity concern for Rundle Mall visitors. While routine cleaning and additional cleansing measures were implemented, exposure to bird droppings had the potential to create hygiene risks and reduce visitor comfort, particularly in areas directly beneath or adjacent the roosting trees.

8.1.4 Water Quality

The runoff from pressure cleaning the area and benches under and around the roosting trees enters the drain and stormwater system in Rundle Mall and drains to the River Torrens/Karrawirra Pari. Bird droppings are a recognised source of bacteria and viruses in urban runoff, and faecal coliform bacteria counts in urban runoff can be significantly elevated above recreational health standards as a result. The presence and numbers of roosting bird species have been correlated with seasonal changes in water quality, including nitrogen and phosphorous loading. In an urban catchment context, this nutrient and pathogen loading has the potential to contribute to degraded water quality in receiving waterways, though the scale of impact from Tree Martin roosting specifically is likely to be modest relative to other urban stormwater pollutant sources.

8.1.5 Damage to Trees/Vegetation

Plants under active bird roosts often develop discoloured, withered leaves and damaged growth due to nitrogen overload and chemical contamination from droppings. Where large numbers of birds roost in the same trees season after season, the cumulative effect of faecal deposition can progressively stress the host trees, potentially affecting their long-term health and structural integrity.

8.1.6 Rundle Mall Operations

General Rundle Mall Operations experienced disruption at times during the roosting season. Additional mitigation measures were required for contractors undertaking tenancy fit-outs and maintenance works within proximity of the roosting trees. These measures included timing adjustments, modified work practices and increased monitoring to minimise disturbance to the birds.

In some instances, these requirements impacted work schedules, access arrangements and the ability to undertake certain activities as planned during peak roosting season.

The presence of Tree Martins in Rundle Mall generated a range of impacts for Rundle Mall businesses including increased cleaning, odour and amenity issues, business disruption, customer complaints and impact on trading environments.

8.1.7 On-ground Incidents

The on-ground operational response team was positioned in Rundle Mall each evening and encountered anti-social behaviour on seven occasions. These were managed by the on-ground security officer and South Australia Police (SAPOL) was notified on three occasions. One occasion was directly related to the roosting birds.

The cleansing team who pressure cleaned the area around the roosting trees each morning encountered anti-social behaviour on one occasion which was directly related to the roosting birds.

On-ground reports of members of the public shaking, kicking and throwing items into the roosting tree were observed though the roosting season, resulting in numerous flushes and triage incidents.

8.1.8 Highly Pathogenic Avian Influenza

At the commencement of the 2025-26 roosting season there were no known cases of H5 Bird Flu in Australia. Notwithstanding, given the migratory nature of Tree Martins, CoA met with DEW and Primary Industries and Regions SA (PIRSA) in February 2026 to discuss the implications and reporting obligations for the CoA in the event H5 Bird Flu was detected while Tree Martins were roosting in Rundle Mall. PIRSA is the lead agency in South Australia for H5 Bird Flu.

Emergency preparedness activities were undertaken by the City of Adelaide in the event of H5 Bird Flu being detected in South Australia.

Several confirmed cases of H5 Bird Flu were subsequently confirmed in South Australia since the first announcement on 24 June 2026. No cases have been identified in the City of Adelaide.

CoA and the on-ground operational response team maintained a heightened awareness and precautionary approach in line with State Government guidance, including appropriate Personal Protective Equipment protocols when handling deceased birds or cleaning droppings.

8.2 Conclusions

The 2025-26 Tree Martin on-ground operational response and management program successfully established a structured monitoring response, and mitigation framework for managing the Tree Martin roost in Rundle Mall. The program provided valuable baseline information on Tree Martin roosting behaviour, seasonal movements, migration timing, conflict points, and incident patterns within an urban environment.

Tree Martin numbers increased substantially throughout the season, with the roost expanding from the originally observed 30 individuals in December 2025 and peaking at approximately 20,540 individuals recorded in February 2026. The roost remained established within the Chinese Elm trees in Rundle Mall past June 2026, extending beyond the migration period recorded during the previous season.

Implementation of mitigation measures achieved varying levels of success. Window film was effective in reducing bird collisions with high-risk reflective glass. Modifications to overhead infrastructure, including the installation of possum tails, contributed to a reduction in wire strike incidents within treated areas, although effectiveness was influenced by flock size, bird movement patterns, and the extent of infrastructure coverage. Wire markers provided a proactive visibility treatment; however, insufficient pre- and post-installation monitoring prevented a definitive assessment of its effectiveness.

The implementation of daily monitoring and on-ground triage was a significant component of the program and achieved a high level of success. Regular presence during peak arrival and roosting periods enabled rapid response to injured and stunned birds, improved animal welfare outcomes, which was supported by stakeholder communication. The on-going monitoring program provided further information on Tree Martin behaviour and collision risks around Rundle Mall. The information collected has improved understanding of the relationship between roost size, bird movement, infrastructure hazards, and incident frequency, and will support future adaptive management decisions through the CoA TMMP.

Management activities were undertaken in accordance with relevant legislative requirements, including the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), *National Parks and Wildlife Act 1972* (SA), *Animal Welfare Act 1985* (SA), and the Wildlife Management (Controller) Permit issued by DEW. Appropriate approvals, training, stakeholder engagement, and reporting processes were implemented to ensure activities involving protected wildlife were undertaken lawfully and with consideration of animal welfare obligations.

Despite successful implementation of the management program, several significant challenges were encountered. These included managing a large communal roost within a high-conflict retail precinct, preventing birds entering buildings during disturbance events, responding to public interactions with roosting trees, managing odour and amenity concerns, and reducing strike risks associated with reflective glass, catenary wires, and complex building structures.

The presence of Tree Martins roosting in Rundle Mall generated a range of impacts for nearby businesses throughout the season, including increased cleaning requirements, odour and amenity issues, business disruptions, additional expenses, customer complaints and impacts on the trading environment.

The presence of the roost created limitations for multiple events that were held in Rundle Mall during the roosting season that contribute to visitation and economic activity.

These include odour and public health and amenity considerations associated with bird droppings and odour and restricting zones available for activation, due to the need to minimise disruption to the roost site and additional operational requirements for event organisers.

The season demonstrated that management of Tree Martins within an urban environment requires a combination of early intervention, infrastructure modification, stakeholder cooperation, ongoing monitoring, and adaptive decision-making. While mitigation measures reduced some risks, preventing impacts in a high-conflict location such as Rundle Mall remains challenging once a large communal roost has become established.

8.3 Recommendations for Future Seasons

Based on the findings of this season, the following recommendations are made for future management programs:

1. Continue to monitor Tree Martins daily while they occupy the roost. If they leave the roost, ensure monitoring commences prior to the expected arrival of the Tree Martins to identify potential roost establishment areas, assess emerging risks, and implement mitigation measures before large communal roosts become established.
2. Continue early engagement with DEW regarding permit requirements, and approval pathways for management options and ensure permits fit those requirements.
3. If the Tree Martins continue to roost within Rundle Mall, mitigation measures should be encouraged. This includes window decals/films on high strike windows near the roosting trees, and the installation of netting in high ceiling areas. Priority should be given to high-risk areas, and locations where birds regularly flush from the roost.
4. Further assessment of possum tails should be undertaken, with consideration given to extending coverage beyond the initial installation areas, pending engineering assessment. Future installations should target all identified strike pathways, including anchor wires and infrastructure adjacent to the primary roosting trees.
5. Per the 2025-26 on-ground operational response, if Tree Martins roost near private buildings, building-specific solutions should be investigated and discussed with business owners to encourage businesses to reduce internal access points, improve escape pathways, and minimise bird mortality during flush events.
6. Continue stakeholder engagement prior to and throughout the roosting season. Encourage businesses within high-risk areas to implement agreed measures, including managing door access during peak arrival periods, applying window treatments, and maintaining clear response procedures for birds that enter buildings.
7. Continue on-ground roost monitoring to establish long-term population, movement, and triage trends. Continued data collection will improve understanding of migration timing, population fluctuations, roost persistence, and the effectiveness of mitigation measures implemented during each season. Extend information capture to include the outcome for birds entering veterinary care.
8. Implement management actions in accordance with PIRSA protocols and directions associated with H5 Bird Flu. Consult Wildlife Health Australia and/or the [Australian Government Department of Agriculture, Fisheries and Forestry](#) to obtain updated information and advisories, if necessary.
9. Prepare an integrated information and education program for residents and commercial operators. Look to improve understanding of the Tree Martin population, its ecological importance and understanding of how the community can coexist with nature.

9. References

Birds in Backyards 2025, Tree Martin, Available

at: <https://www.birdsinbackyards.net/species/Petrochelidon-nigricans>

BirdLife Australia (2023). Tree Martin (*Petrochelidon nigricans*) species profile. BirdLife Australia, Melbourne.

Department for Environment and Water - General Guidelines for the Management of Protected Wildlife in Captivity in South Australia

Department of Environment and Heritage 2008, Adelaide and Mount Lofty Ranges South Australia Threatened Species Profile: Tree Martin, *Petrochelidon nigricans*, Available

at: <https://cdn.environment.sa.gov.au/landscape/docs/statewide/pa-fact-treemartin.pdf>

ebird.org 2025, Tree Martin, Available at: https://ebird.org/species/tremar2?siteLanguage=en_AU

Green Adelaide 2025, Tree Martin update, Available

at: <https://www.greenadelaide.sa.gov.au/discover/native-animals/tree-martins>

Appendices

Appendix A – Species Identification Criteria

Appendix B – Photographic Record

Appendix C – Communications

Appendix D – Survey Data Sheets

Appendix E – Mitigation Measures

Appendix A: Species Identification Criteria

Table 10. Tree Martin species profile

Category	Description
Name	<i>Petrochelidon nigricans</i>
Size	Length: 12 cm, wingspan: 28 cm, weight: 15 g
Identification	Small bird with glossy blue-black feathers on the neck, back and crown, and cream feathers on the breast and belly. Wings and notched tail are brownish-grey, with a darker grey underneath and reddish-brown markings on the head. Males and females look very similar. Young are browner and paler. (Image: www.ebird.org [Ged Tranter]) 
Distribution	Widespread throughout Australia, between January and May, before heading north to Papua New Guinea and Indonesia from May to July (Green Adelaide 2025). Some individuals do not migrate.
Preferred habitat	Generally, occur in airspace above open spaces such as grassland through to forests and wetlands, and cities and suburban areas. Observed roosting nocturnally in Adelaide in Callery pear (<i>Pyrus calleryana</i>) and Chinese elm (<i>Ulmus parvifolia</i>) trees, particularly those with fairy lights, where noise, light, and people are thought to assist in keeping predators away (Green Adelaide 2025).
Behaviour	Individuals and populations can be migratory. They will fly in an erratic but skilled way in pursuit of flying insects. May fly in large flocks as they approach their roosting site near sunset, that rise en-masse and then dive down together into the vegetation, avoiding predators such as peregrine falcons (Birds in Backyards 2025).
Breeding	Tree Martins have been recorded nesting in all months, but most commonly in spring and summer from August to December (DEH 2008). Nest in horizontal hollows of gum trees, and vertical banks of eroded creek lines. Can use artificial structures for nesting, such as steel tubing and vent holes in buildings (Green Adelaide 2025). Nest hollow lined with grass and leaves (Department of Environment and Heritage 2008). Clutch 2-5 eggs with brown and mauve spots. Incubation for 14-16 days. Both parents incubate the eggs and feed the young.
Conservation status	Listed as a migratory species under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>; migratory species are listed as a 'matter of national environmental significance'. Protected under the <i>National Parks and Wildlife Act 1972</i> (NPW Act).

Appendix B: Photographic Record



Figure 3. Bird exclusion netting Leigh Street trees.



Figure 4. Roosting Tree Martins in Chinese Elm – Rundle Mall.

Appendix C: Communications



Figure 5. Postcards for businesses to prepare for the roosting season.

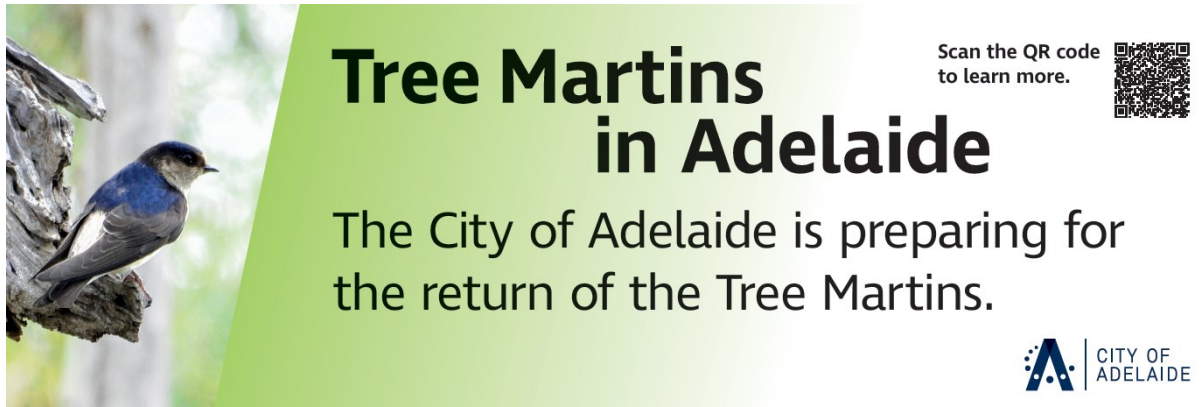


Figure 6. Bench decals in the lead up to the start of the roosting season.



Figure 7. Bird of prey visual deterrent.



Figure 8. Bench decals to raise awareness of Tree Martin presence.



Tree Martins Roosting Area

Tree Martins roost here between dusk and dawn. They are acrobatic fliers, often flying low.

Tree Martins are a protected species. If they are on the ground, please do not touch or remove the birds. Only trained, authorised persons may handle them.

If you see an injured bird or need assistance, approach the on-ground team or call 8203 7203.




Figure 9. Digital screens in Rundle Mall.



Tree Martins in Rundle Mall

Tree Martins roost here between dusk and dawn. They are acrobatic fliers, often flying low.

Tree Martins are a protected species. If they are on the ground, please do not touch or remove the birds. Only trained, authorised persons may handle them.

If you see an injured bird or need assistance, approach the on-ground team or call (08) 8203 7203.

Scan the QR code to learn more.



Tree Martins in Adelaide

Tree Martins are migratory, native, swallow-like birds. Around dusk, between December and May, large numbers descend into Adelaide to roost overnight in trees across the city. Wildlife specialists believe the birds see city trees as safe havens with noise and light helping deter their predators.

Once winter arrives, the birds return to warmer climates as far as Papua New Guinea and Indonesia.

We are working with the community to ensure that Adelaide is a city for nature – a liveable, green city, where nature thrives.

Scan to learn more about Tree Martins



Figure 10. Signage in roosting area.

Food Health & Safety Notice

Please be aware that large numbers of Tree Martins roost in the trees above this seating area between dusk and dawn. While the space is cleaned regularly, bird droppings may occasionally fall.

We recommend covering food and drinks, or choosing an alternative seating area if preferred.



Figure 11. Signage on roosting trees with podium seating.



Tree Martins in Rundle Mall – What you need to know

As the days get shorter, Tree Martins will begin arriving earlier in Rundle Mall each evening. Potentially from as early as 4:00pm, while businesses are still open. This increases the chance of birds entering stores or colliding with windows.

Here's how you can help to deter birds from flying indoors or into windows. Where possible:

- Close or lower doors before birds arrive*
- Install temporary rope curtain or similar
- Trial owl-shaped cardboard cut-outs*
- Apply anti-collision bird window decals or stickers
- Install temporary window screens
- Dim lights at dusk to reduce reflections
- Switch off lights when your store is closed

*Contact the City of Adelaide for materials.
Call 0403 253 403



If a bird enters your store

Stay calm, reduce lighting, and gently guide it towards the exit.

Please do not chase or handle the bird.

If you find an injured bird

Notify the on-ground team or contact the City of Adelaide. Trained, permitted personnel will assist.

Please do not touch the birds or take them home.

Need support or materials?

Speak to the evening on-ground team (identifiable by their Avisure uniform or City of Adelaide high-vis vest), or call 0403 253 403

We're trialling a range of initiatives this season. If something works well in your store, please let us know! Your feedback will help shape future approaches.

Thank you for helping to protect the Tree Martins!

Figure 12. Postcards for businesses to prepare for end of daylight saving.



Figure 13. Window decal.

Appendix D: Survey Data Sheets

Triage Monitoring Data Sheet – Tree Martin

Date: _____

#	Time:	No. and Life stage:	Situation:	Capture Technique:	Condition:	Action Taken:	Time in Care:	Triage Comments:	Photo #	Complete
		- Adult - Adolescent - Juvenile - Unknown	- Struck building/window - Struck sign - Struck wire - Trapped in building - Struck eave - Struck wall - Other	- Handheld net - Mist net - Passive trap - Picked up - Other	- Deceased - Injured - Stressed - Stunned - Other	- Disposed of - Taken to vet - Monitored in car - Monitored in container - Released - Other				
1										☐
2										☐
3										☐
4										☐
5										☐
6										☐
7										☐
8										☐
9										☐

#	Time:	No. and Life stage:	Situation:	Capture Technique:	Condition:	Action Taken:	Time in Care:	Triage Comments:	Photo #	Complete
10										☐
11										☐
12										☐
13										☐
14										☐
15										☐
16										☐
17										☐
18										☐
19										☐
20										☐
21										☐
22										☐
23										☐

Triage Monitoring Actions Breakdown:

Situation: • Stuck building/window • Struck sign • Struck wire • Trapped in building • Struck eve • Struck wall • Other	Capture Technique: • Handheld net • Mist net • Passive trap • Picked up • Other
Condition: • Dead • Injured • Stressed • Stunned • Other	Action Taken: • Disposed of • Taken to vet • Monitored in car • Monitored in container • Released • Other
Life stage: • Adult • Adolescent • Juvenile • Unknown	

Appendix E: Mitigation Measures



Figure 20: Wire markers on Rundle Mall catenary wires



Figure 21. Possum tail covering on Rundle Mall catenary wire

© Avisure Proprietary Limited 2026

Important Notice. The information contained in this document produced by Avisure Pty Ltd is solely for the use of the Client identified on the cover sheet for the purpose for which it has been prepared and Avisure Pty Ltd undertakes no duty to or accepts any responsibility to any third party who may rely upon this document. This document contains the most recent information available and supersedes previous reports, audits or plans. All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored, or transmitted in any form without the written permission of Avisure Pty Ltd.

Tree Martin Management Plan

Strategic Alignment - Our Environment

Public

Tuesday, 4 August 2026

**City Planning, Development
and Business Affairs
Committee**

Program Contact:

Sarah Gilmour, Associate
Director Park Lands, Policy &
Sustainability

Approving Officer:

Ilia Houridis, Director City
Shaping

EXECUTIVE SUMMARY

This report presents the Tree Martin Management Plan (**Attachment A**) as part of a two-phase response to Tree Martin management:

- Phase 1 – A coordinated approach to community amenity, public safety, business vitality and the welfare of wildlife for the 2025-26 roosting season (operational response).
- Phase 2 – A Tree Martin Management Plan that looks at operational, medium and longer-term strategies for managing the annual Tree Martin roosting season.

Phase 1 – 2025-26 operational response, is the subject of a separate report in this Agenda (Item 7.1).

Tree Martins (*Petrochelidon nigricans*) are a “protected animal” under the *National Parks and Wildlife Act 1972* (SA), and under this legislation a person must not interfere with, harass or molest a protected animal unless they act in pursuance of a legislative provision or a permit granted by the Minister for Climate, Environment and Water or their delegate. Similarly, the *Animal Welfare Act 1985* (SA) requires that all reasonable measures are taken to prevent unnecessary harm, injury, or distress to wildlife.

This legislative structure places obligations on the City of Adelaide to avoid harming Tree Martins when they roost in the public realm managed by Council, and the City of Adelaide must also ensure that public health obligations included in the *South Australian Public Health Act 2011* (SA) are upheld and public amenity in retail and hospitality precincts is supported.

The Tree Martin Management Plan (the Management Plan) has been developed within this regulatory context by the City of Adelaide with the support of wildlife management specialists Avisure Consulting (with initial scoping contributions from Ecosure Environmental Consultancy).

2025-26 represents the first year where a daily and comprehensive Tree Martin count and operational response was in place, in effect representing a base year data collection. The findings and recommendations contained in the Management Plan are informed by the monitoring data, stakeholder engagement, incident records, mitigation effectiveness assessments, and operational experience accumulated during the 2025–26 roosting season at Rundle Mall.

The Management Plan has been prepared to provide the City of Adelaide with an overarching strategic framework for the ongoing and coordinated management of Tree Martins roosting across its local government area.

A central feature of the Management Plan is a structured Decision Support Framework, including a Primary Decision Tree and Roost Assessment Matrix designed to guide consistent, transparent and evidence-based responses to Tree Martin roosting activity wherever it occurs across the City of Adelaide.

At the time of writing, the majority of the Tree Martin population that peaked at 20,540 had migrated. There does however remain a small population of up to 1,500 birds roosting in Rundle Mall. While migration was anticipated by end of May 2026, higher minimum temperatures compared with 2025 delayed this and may be a contributing factor to a small number of birds still roosting. Advice from DEW is that it is not possible to conduct dispersal of the Tree Martins while they are roosting.

It is not proposed to net trees in Rundle Mall for the 2026/27 season but continue the operational responses currently in place. Minimum intervention and / or in-situ management is the recommended approach to all Tree Martin management issues in the City of Adelaide, except in cases of high human/Tree Martin conflict, where roosts become established in proximity to food and beverage businesses or other sensitive sites where public health must be prioritised. Communications will be sent to Rundle Mall businesses to advise them of the planned approach for the 2026-27 season.

It is not proposed to make changes to netting in Leigh Street. Tree netting in Leigh Street will remain in place on the basis of public health issues in a high food and beverage environment. Replacement of nets with wildlife friendly netting is being scheduled for the end of seasonal winter leaf fall. Communications will be sent to businesses in Leigh Street prior to the works commencing.

RECOMMENDATION

The following recommendation will be presented to Council on 11 August 2026 for consideration

THAT THE CITY PLANNING, DEVELOPMENT AND BUSINESS AFFAIRS COMMITTEE RECOMMENDS TO COUNCIL

THAT COUNCIL

1. Receives the Tree Martin Management Plan as contained in Attachment A of Item 7.2 on the Agenda of the City Planning, Development and Business Affairs Committee held on 4 August 2026, for the ongoing management of Tree Martins in the City of Adelaide.
 2. Authorises the Chief Executive Officer, or delegate, to amend the Tree Martin Management Plan as contained in Attachment A of Item 7.2 on the Agenda of the City Planning, Development and Business Affairs Committee held on 4 August 2026, for the purposes of finalising the document.
 3. Notes the City of Adelaide must consider its legislative obligations and has limited controls available to influence the selection of alternative roosting sites by the migratory Tree Martin population.
 4. Notes that the Tree Martin colony will be managed in accordance with the Tree Martin Management Plan, including the Management Decision Matrix and associated roost management strategies for the 2026–27 roosting season.
 5. Notes that communications will be sent to Rundle Mall businesses to advise them of the planned approach for the 2026-27 season.
 6. Notes the existing tree netting in Leigh Street will remain in place and is scheduled for replacement at the end of seasonal winter leaf fall 2026, with new netting to be in place prior to the 2026-27 roosting season. Communications will be sent to businesses in Leigh Street prior to the works commencing.
 7. Notes the Department of Environment and Water and Green Adelaide provided in kind advice for the 2025-26 Tree Martin roosting season management response and that Administration will approach the State Government for direct funding support and/or via any eligible grant funding streams.
-

IMPLICATIONS AND FINANCIALS

City of Adelaide 2024-2028 Strategic Plan	Strategic Alignment – Our Environment Lead and advocate for the environmental value, productivity, quality and biodiversity of the Park Lands, squares, open space and streetscapes. Protect and restore native habitat in our city.
Policy	Management of Tree Martins aligns with the Adelaide Park Lands Management Strategy – Towards 2036, the City of Adelaide's Integrated Climate Strategy 2030, and the 2024-2028 Strategic Plan's commitments to biodiversity protection, city amenity, business vitality and community wellbeing. It supports the Council's objectives for a sustainable, liveable, and biodiverse capital city where people and wildlife coexist harmoniously. Management of the Tree Martins has been undertaken with regard to implications for businesses and Council's Economic Development Strategy 2024-2028. The State Biodiversity Plan is yet to be developed following the assent of the <i>Biodiversity Act 2025</i> (SA).
Consultation	The Administration has continued to consult with Department for Environment and Water (DEW) and Green Adelaide to align approaches to Tree Martin management and protection. During the roosting season Administration has maintained contact with businesses in Rundle Mall and representatives from the Adelaide Economic Development Agency (AEDA) who also form part of the internal Working Group overseeing the operational response. A briefing will be provided to the AEDA Board in September 2026.
Resource	The Tree Martin Management Plan was prepared using a combination of internal and external resources, including specialist consultancy services from Ecosure Environmental Consultancy and Avisure Consulting. Guidance and advice was provided by DEW, Green Adelaide, AEDA, and business stakeholders.
Risk / Legal / Legislative	Tree Martins are listed as a marine species under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act). Under ss 254–254E of the EPBC Act, offences apply to actions that harm, take, trade, keep, or move listed marine species; however, these provisions only apply within a designated "Commonwealth area" as defined in s 525. Based on current review, this definition has little to no application within the Council area, and neither Leigh Street nor Rundle Mall fall within Commonwealth land. Consequently, these EPBC Act provisions do not apply to Council actions. Tree Martins are a "protected animal" under the <i>National Parks and Wildlife Act 1972</i> (SA). Under ss 68(1) a person must not interfere with, harass or molest a protected animal unless he or she acts in pursuance of a legislative provision or a permit granted by the responsible Minister (the Minister for Climate, Environment and Water) or their delegate. Advice from DEW is that a permit is not required for the netting of trees if this action does not lead to any protected animal being caught, restrained or trapped and subsequently relocated and the trees are netted prior to being used by the protected animal (i.e. outside of the Tree Martin roosting season). The <i>Animal Welfare Act 1985</i> (SA) requires that all reasonable measures are taken to prevent unnecessary harm, injury, or distress to wildlife. This includes monitoring for impacts of netting. The <i>Biodiversity Act 2025</i> (SA), which has not yet come into operation, introduces a general duty of care, requiring reasonable practical measures to prevent harm to biodiversity in any acts or actions undertaken. The City of Adelaide considers public health and safety risks in the public realm, noting responses actioned at previous roosting sites to address conflicts for public health at outdoor dining venues.

Opportunities	In 2025/26 the City of Adelaide took a planned and measured approach to managing the Tree Martin roosting season and planning for future roosting seasons. This approach enabled data and evidence to be collected to inform future management actions.
26/27 Budget Allocation	Pending a Council decision on the Tree Martin Management Plan, a budget allocation was not sought as part of the 2026/27 Business Plan and Budget. As the season occurs across financial years, Administration indicated it would seek allocation for the 2026-27 season following the end of the first full season as part of the 2026/27 Quarter 1 budget review.
Proposed 27/28 Budget Allocation	Not as a result of this report
Life of Project, Service, Initiative or (Expectancy of) Asset	Tree Martins typically migrate annually between November/December and April/May. While the roosting season was anticipated to conclude by end of May 2026 based on the previous season, at the time of writing this report, a small population of up to 1,500 birds remains roosting in Rundle Mall.
26/27 Budget Reconsideration (if applicable)	A budget review in Quarter 1 is foreshadowed in this report.
Ongoing Costs (eg maintenance cost)	Operating costs for delivery of the response and additional cleansing as part of the 2025-26 Tree Martin roosting season were managed within existing resources. Ongoing operating costs will be assessed as part of future Tree Martin management decisions.
Other Funding Sources	DEW and Green Adelaide provided in kind advice for the 2025-2026 Tree Martin roosting season management response. Administration has raised the potential for external funding support from the State Government, but no eligible grant funding stream has been identified.

DISCUSSION

Purpose

1. This report presents the Tree Martin Management Plan (**Attachment A**) as a two-phase response:
 - 1.1. Phase 1 – A coordinated approach to community amenity, public safety, business vitality and the welfare of wildlife for the 2025-26 roosting season (operational response).
 - 1.2. Phase 2 – A Tree Martin Management Plan that looks at operational, medium and longer-term strategies for managing the annual Tree Martin roosting season.
2. Phase 1 of the 2025-26 operational response, is the subject of a separate report in this Agenda (Item 7.1).
3. Tree Martins are a “protected animal” under the *National Parks and Wildlife Act 1972* (SA), and under this legislation a person must not interfere with, harass or molest a protected animal unless they act in pursuance of a legislative provision or a permit granted by the Minister for Climate, Environment and Water or delegate.
4. Similarly, the *Animal Welfare Act 1985* (SA) requires that all reasonable measures are taken to prevent unnecessary harm, injury, or distress to wildlife.
5. This legislative structure places obligations on the City of Adelaide to avoid harming Tree Martins when they roost in the public realm managed by Council, and the City of Adelaide must also ensure that public health obligations included in the *South Australian Public Health Act 2011* (SA) are upheld and public amenity in retail and hospitality precincts is supported.
6. The Tree Martin Management Plan (the Management Plan) has been developed within this regulatory context by the City of Adelaide with the support of wildlife management specialists Avisure Consulting (with initial scoping contributions from Ecosure Environmental Consultancy).
7. Crucial to the findings and recommendations contained in the Management Plan is the monitoring data, stakeholder engagement, incident records, mitigation effectiveness assessments, and operational experience accumulated during the 2025–26 roosting season at Rundle Mall.

Background

8. Tree Martins (*Petrochelidon nigricans*) are a native migratory bird species that seasonally roost in large numbers within the Adelaide CBD, previously understood to occur between December and May each year.
9. Roosting activity in high-use precincts creates tensions between the City of Adelaide's obligations to protect native wildlife under the *National Parks and Wildlife Act 1972* (SA) and the *Animal Welfare Act 1985* (SA) and public health and business amenity.
10. Known roosting of Tree Martins in the City of Adelaide dates from approximately 2015, with issues of cleanliness and odour in Leigh Street raised in 2020 and 2021.
11. Tree Martin roosting was first identified as a significant management challenge in Leigh Street in 2023. In August 2024, netting was installed on Callery Pears in Leigh Street to exclude Tree Martins from that location to address public health issues related to the interface with food and beverage establishments.
12. Tree Martins first established a roosting colony in six Chinese Elm trees in Rundle Mall, adjacent to Rundle Place, in December 2024; which continued in December 2025 (Figure 1).



Figure 1 – Historical and existing Tree Martin roost locations (Avisure)

13. Council and the City Planning, Development and Business Affairs Committee considered Tree Martin management in April, May, October, November and December 2025.
14. Further background information is provided in the separate report on Tree Martin Management 2025-26 End of Season Report, in this Agenda (Item 7.1).

Tree Martin Management Plan

14. The Management Plan has been prepared to provide the City of Adelaide with an overarching strategic framework for the ongoing and coordinated management of Tree Martins roosting across its local government area.
15. The Management Plan:
 - 15.1. Draws on the experience, data and operational learnings of the 2025–26 roosting season, the first year in which the City of Adelaide delivered a structured, resourced on-ground response at Rundle Mall, which included the rigorous collection of Tree Martin roosting and casualty data, and regular observations of Tree Martin behaviour.
 - 15.2. The data set provides a new and unique evidence base from which to guide monitoring, operational responses, mitigation actions, stakeholder engagement and communications across future roosting seasons.
 - 15.3. Complements the Tree Martin Management Operating Guidelines ([Link 1](#)) developed to support the operational response in 2025-26.
16. The objectives of the Management Plan are to:
 - 16.1. Guide the management of Tree Martin roosts within the City of Adelaide local government area.
 - 16.2. Inform the assessment of, and responses to, newly established Tree Martin roosts.
 - 16.3. Minimise community and business impacts and reduce the potential for future conflict.
 - 16.4. Improve community understanding and appreciation of Tree Martins, including their ecological role and conservation significance.
 - 16.5. Support the community and businesses in co-existing with Tree Martins in the urban environment, where it is considered manageable.
 - 16.6. Clearly define roles and responsibilities for management actions across all relevant stakeholders.
 - 16.7. Ensure all management activities are undertaken in accordance with relevant legislation, including the *National Parks and Wildlife Act 1972* (SA) and the *Animal Welfare Act 1985* (SA).
15. The Management Plan provides a structured approach to addressing obligations for bird welfare and assessing business, public health and amenity impacts that may require mitigation or intervention. It provides:
 - 15.1. A review of past issues and challenges associated with the Tree Martin roosting aggregation, including a timeline of actions taken since 2015.
 - 15.2. A Tree Martin species profile and cultural significance assessment.
 - 15.3. Site assessments of Leigh Street, Rundle Mall, Vardon Avenue and Ebenezer Place, including assessment of roost suitability and entrapment risk at each location.
 - 15.4. A comprehensive review of the 2025–26 Tree Martin roosting season monitoring data, triage outcomes, and observations from the Rundle Mall roost.
 - 15.5. A management options analysis evaluating passive management, landscape modification, deterrents, physical barriers, infrastructure modifications, population management, and active dispersal options, each assessed for effectiveness, feasibility and estimated cost.
 - 15.6. A Decision Support Framework, including a Primary Decision Tree and assessment matrix, to guide the City of Adelaide's response to Tree Martin roosts depending on roost size, proximity to sensitive uses, setting, welfare impacts, and cost and likelihood of management success.
 - 15.7. Roost-specific management recommendations, including strategies for Rundle Mall, Leigh Street and any other potential roost locations.
 - 15.8. A structured monitoring program to evaluate mitigation effectiveness on an ongoing basis.

Decision Support Framework

16. The management of Tree Martins is a complex undertaking, requiring careful consideration of a range legal obligations and management options to achieve a realistic balance between economic factors, public health and safety, animal welfare and ecological sustainability.
17. A central feature of the Management Plan is a structured Decision Support Framework (the Framework), designed to guide consistent, transparent and evidence-based responses to Tree Martin roosting activity wherever it occurs across the City of Adelaide.
18. The Framework recognises that roosting locations, colony sizes, and the nature and severity of associated impacts will vary from season to season and site to site, and that management responses must be proportionate, adaptive and informed by the best available evidence. Not all Tree Martin roosts will require active management, and the level of intervention should be proportionate to the assessed conflict level.
19. The Framework comprises the following integrated components:
 - 19.1. Primary Decision Tree, supported by a Roost Assessment Matrix used to assess the severity of conflict and determine the appropriate management pathway.
 - 19.2. Minimum intervention strategies, applied where the Roost Assessment Matrix returns a low to moderate score, focused on monitoring, community education and stakeholder engagement.
 - 19.3. In situ management strategies, applied where the Roost Assessment Matrix score indicates that active management is warranted but dispersal is not yet appropriate, or where dispersal carries unacceptable risk of displacement to a higher-conflict location, to reduce impacts while the colony remains at the roost site.
 - 19.4. Roost dispersal strategies, applied where the Roost Assessment Matrix score indicates that preventing roosting or dispersing an established colony is warranted. Dispersal is only pursued where in situ management has been exhausted or is assessed as insufficient, and where there is reasonable confidence that displacement will not result in greater conflict or harm at an alternative location.
20. Minimum intervention and / or in-situ management is the recommended approach to all Tree Martin management issues in the City of Adelaide, except in cases of high human/Tree Martin conflict, where roosts become established in proximity to food and beverage businesses or other sensitive sites where public health must be prioritised.
21. An outline of management strategies available for each roost management category is summarised in Appendix C of the Management Plan.

Next Steps

22. Pending Council decision, the following next steps are planned:
 - 22.1. Finalisation of the Tree Martin Management Plan by the Chief Executive Officer.
 - 22.2. Communications with State Government Agencies, businesses, wildlife organisations and key stakeholders on the Management Plan and approach to the 2026-27 Tree Martin roosting season.
 - 22.3. Preparations for the 2026-27 roosting season including, renewing existing Wildlife Management (Controller) Permits, and preparation of a community and business engagement program.
 - 22.4. Replacement of netting on trees in Leigh Street following the end of seasonal winter leaf fall.
 - 22.5. As the season occurs across financial years, Administration indicated it would seek allocation for the 2026-27 season following the end of the first full season as part of the 2026/27 Quarter 1 budget review.

DATA AND SUPPORTING INFORMATION

Link 1 –Tree Martin Management Operating Guidelines

ATTACHMENTS

Attachment A –Tree Martin Management Plan

- END OF REPORT -



City of Adelaide

Tree Martin Management Plan

July 2026



Acronyms and Abbreviations

AW Act	Animal Welfare Act 1985 (SA) (note, this Act will be repealed by the new Animal Welfare Act 2025 (SA) on a date to be fixed by proclamation)
CAMBA	China-Australia Migratory Bird Agreement
CASA	Civil Aviation Safety Authority
CBD	Central Business District
CoA	City of Adelaide
DEW	Department for Environment and Water (SA)
H5 Bird Flu	Highly Pathogenic Avian Influenza
JAMBA	Japan-Australia Migratory Bird Agreement
LGA	Local Government Area
MOP	Member of public
NPW Act	National Parks and Wildlife Act 1972 (SA)
PIRSA	Department of Primary Industries and Regions South Australia
ROKAMBA	Republic of Korea-Australia Migratory Bird Agreement
RSPCA	Royal Society for the Prevention of Cruelty to Animals
SA	South Australia
SANAR	South Australia Native Animal Rescue
SOWFI	Save our Wildlife Foundation

Table of Contents

Acronyms and Abbreviations	i
Table of Contents	ii
1. Introduction	1
1.1 Background	1
1.2 Purpose	4
1.3 Objectives of the Tree Martin Management Plan	4
1.4 Legislative Overview	4
1.4.1 Australian Law	5
1.4.2 South Australian Law	6
2. Tree Martin Ecology	7
2.1 Ecological Significance of the Tree Martin	7
2.2 Species Overview and Migratory Behaviour	7
2.3 Role as an Aerial Insectivore	8
2.4 Habitat Requirements and Hollow Dependency	9
2.5 Conservation Status and Population Trends	9
2.6 Significance of Urban Roosting in Adelaide	9
2.7 Cultural Significance of the Tree Martin in Adelaide	10
2.7.1 Traditional Owner Perspectives	10
2.7.2 Post-European Experience	11
2.8 Roost Preferences	12
3. Stakeholders	13
3.1 City of Adelaide	13
3.2 Green Adelaide	13
3.3 Department for Environment and Water	13
3.4 SA Health	14
3.5 Department of Primary Industry and Regions South Australia	14
3.6 Affected Businesses, Residents and the Public Realm	14
3.7 Special Interest / Volunteer Groups	14
3.8 Other Community Members	14
4. Potential Impacts from Tree Martins	15
4.1 Human and Animal Health Concerns	15
4.2 Faecal Droppings	15
4.3 Odour	16
4.4 Noise	16
4.5 Water Quality	16
4.6 Damage to Trees / Vegetation	16
5. Tree Martin Management in the City of Adelaide	17

5.1	Known Roost Sites in the City of Adelaide	17
5.2	Potential Roost Sites Where Conflict May Arise.....	21
5.2.1	Probability of a Roost Forming.....	21
5.2.2	Roost Site Conflict Assessment.....	22
6.	Tree Martin Roost Management Options	23
6.1	Minimal Intervention.....	23
6.2	In-Situ Management	23
6.3	Prevention of Roost Establishment	25
6.4	Dispersal of Roosting Birds	25
7.	Decision Support Framework.....	26
7.1	Primary Decision Tree	26
7.2	Identifying Council Responsibility	26
7.3	Assessing Potential for Human/Tree Martin Conflict.....	26
7.4	Determining the Management Approach.....	27
7.4.1	Step 1 - Scoring	27
7.4.2	Step 2 – Assessing actions and costs	30
8.	Management Strategy	31
8.1	Minimum Intervention	31
8.1.1	Roosts on Non-Council Land, Not Warranting Council Involvement	31
8.1.2	Roosts on Council-Managed Land with Low Likelihood of Conflict	31
8.2	In-situ Management.....	31
8.3	Roost Prevention and Dispersal	32
8.3.1	Existing Roosts	32
8.3.2	New Roosts.....	32
8.4	Research and Development	33
9.	References and Further Reading	34
10.	Glossary	36
11.	Appendices	39
	Appendix A: Primary Decision Tree for Managing Human/Tree Martin Conflict.....	40
	Appendix B: Potential Roost Sites Where Conflict May Arise and Their Categories.....	41
	Appendix C: Management Options	47

1. Introduction

1.1 Background

Tree Martins (*Petrochelidon nigricans*) are small, migratory birds that travel annually to South Australia (SA) from northern Australia, Papua New Guinea and Indonesia. They have visited the Adelaide Central Business District (CBD) for approximately ten years, arriving in late spring and roosting communally from dusk to dawn at sites within the city centre, typically between December and May. During daylight hours, they feed on small flying insects before returning to roost at dusk in large, concentrated flocks.

The Adelaide CBD presents both opportunities and challenges for Tree Martin management. The urban tree canopy and built infrastructure of the city provides sheltered roosting habitats, and the Tree Martin phenomenon has come to be regarded as a distinctive feature of Adelaide's urban ecology. At the same time, large roosting colonies in high-use precincts cause community concerns and tangible impacts to business, including faecal drop creating amenity and hygiene issues, odour, noise, and the risk of bird injury or death through entering buildings and collision with windows, overhead wires and other urban structures. See Section 4 for detail.

Leigh Street and Rundle Mall have been identified as primary roosting locations within the CBD (Figure 1), though Tree Martins may establish or shift roosts to other locations across the City of Adelaide (CoA) from season to season. The unpredictable nature of roost site selection, combined with the scale of annual aggregations, requires an adaptive management approach. It will require monitoring of actions and processes to ensure improvements can be made for future management.

Tree Martins are a protected native species. The CoA acknowledges its responsibilities under the *National Parks and Wildlife Act 1972* (SA), the *Animal Welfare Act 1985* (SA) (AW ACT), the *Biodiversity Act 2025* (SA), the *South Australian Public Health Act 2011* (SA), and the *Local Government Act 1999* (SA). Management activities, including the handling, transport and care of birds, must be undertaken in accordance with these legislative requirements and with permits issued to authorised individuals under the *National Parks and Wildlife Act 1972* (SA).

Effective management of Tree Martin roosting requires balancing a range of sometimes competing interests: the welfare of the birds, public health and safety, amenity for residents and visitors, the trading environment for CBD businesses, and the ecological value of the species' continued presence in the city. The CoA works collaboratively with the Department for Environment and Water (DEW), Green Adelaide, Primary Industries and Regions SA (PIRSA), SA Health, veterinary services, and accredited wildlife rescue organisations to deliver a coordinated, evidence-based response.

This Tree Martin Management Plan (The Plan) has been developed to provide the overarching framework for this coordinated approach, complementing the CoA's Tree Martin Management Operating Guidelines. The Plan guides monitoring, operational response, mitigation, stakeholder engagement and communications across the roosting season, and is intended to be reviewed and refined annually as knowledge of Tree Martin behaviour and the effectiveness of management measures continues to develop.

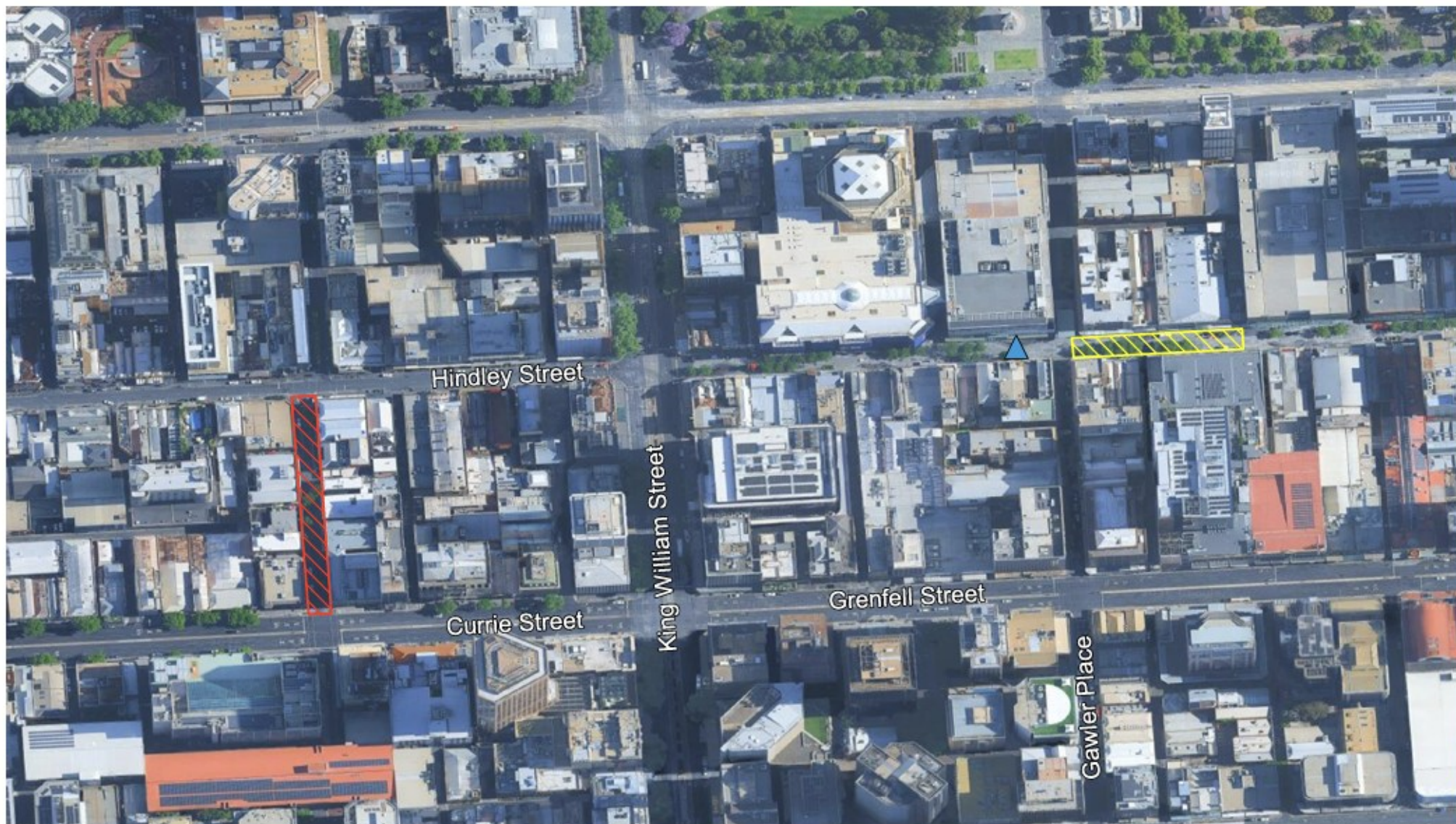


Figure 1: Historical and existing Tree Martin roost locations

City of Adelaide

Tree Martin Management Program 2026



Job number: 261025
Revision: 1
Author: AS
Date: 14/07/2026



0 0.075 0.15 km

- Rundle Mall
- Tree Martin roosts
- Current roost (post-2024)
- Initial roost (pre-2024)

GDA 2020
Projection: Transverse Mercator
Datum: GDA 2020
Units: Decimal Degrees

Data Sources: © Google Satellite, 2026; © Avisure 2026
AVISURE does not warrant the accuracy or completeness of information displayed in this map. Any person using this map does so at their own risk, and should consider the context of the report that this map supports. AVISURE shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.

1.2 Purpose

The purpose of this Plan is to provide the CoA with an overarching strategic framework for the ongoing and coordinated management of Tree Martins roosting across its local government area.

1.3 Objectives of the Tree Martin Management Plan

Objectives of this Plan are to:

- Guide the management of Tree Martin roosting sites within the CoA Local Government Area (LGA)
- Inform the assessment of, and response to, newly formed Tree Martin roosts
- Minimise community and business impacts and reduce the potential for future conflict
- Improve community understanding and appreciation of Tree Martins, including their ecological role and conservation significance
- Support the community and businesses in co-existing with Tree Martins in the urban environment
- Clearly define roles and responsibilities for management actions across all relevant stakeholders
- Ensure all management activities are undertaken in accordance with relevant legislation, including the *National Parks and Wildlife Act 1972* (SA) and the AW Act.

1.4 Legislative Overview

The management of Tree Martins (*Petrochelidon nigricans*) in SA is governed by a combination of Federal and State legislation, as well as obligations arising from international agreements. All management activities associated with this program must be undertaken in compliance with the following instruments (see Figure 2).

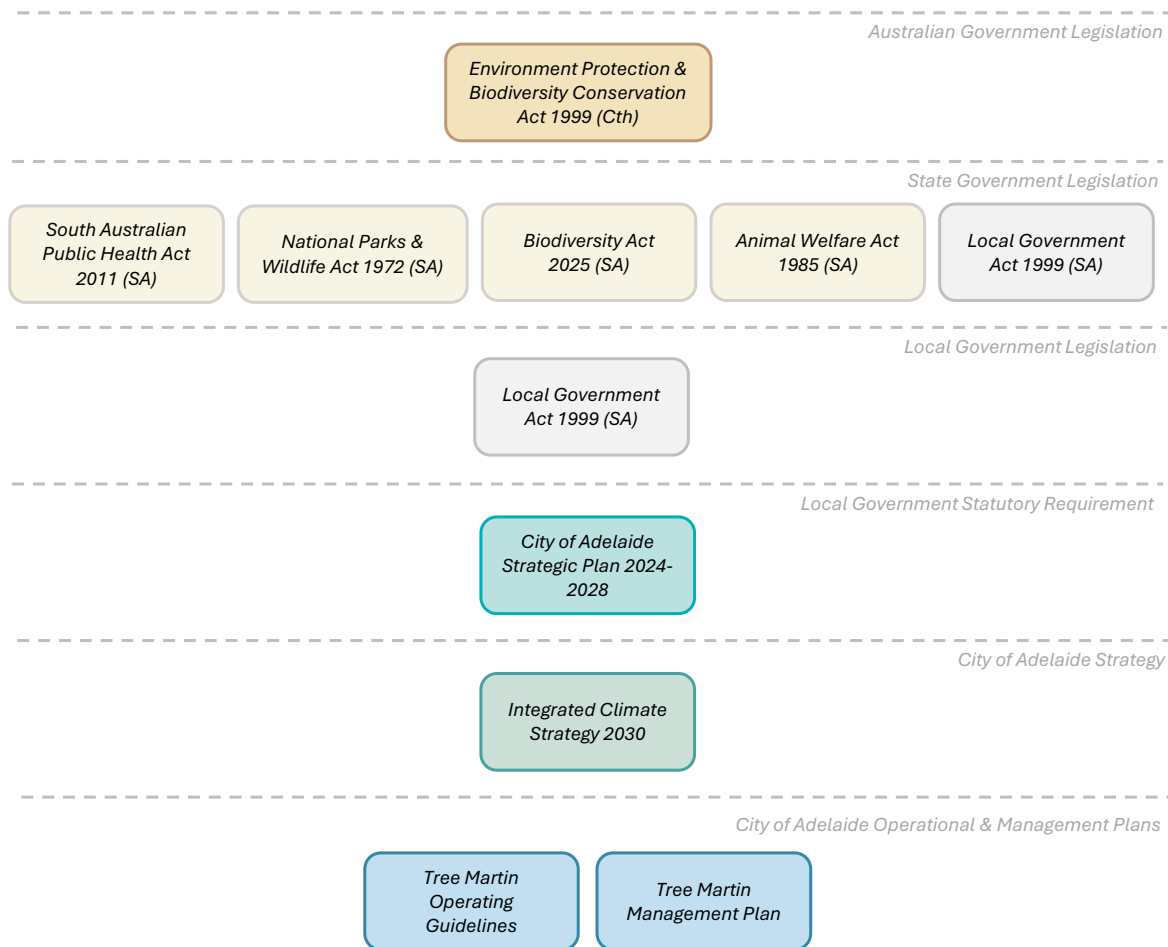


Figure 2. Legislative & Strategic Framework relating to Tree Martin

1.4.1 Australian Law

Where State and Federal legislation conflict, national law prevails.

The primary Federal instrument is the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). The EPBC Act provides for the protection of the environment, particularly matters of national environmental significance, and retains the ability to regulate migratory bird species even where State Governments hold primary responsibility for land use and planning. Under the EPBC Act, any action likely to have a significant impact on a matter of national environmental significance, including listed migratory species, must undergo an assessment and approval process.

The Tree Martin is a listed marine species under the EPBC Act by virtue of Australia's obligations under international migratory bird agreements. Australia participates in the Japan-Australia Migratory Bird Agreement (JAMBA), the China-Australia Migratory Bird Agreement (CAMBA), and the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA), as well as the Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention).

CoA has been advised that under subsections 254-254E of the EPBC Act, various offences are created with respect to certain actions in relation to a listed marine species, including actions resulting in death or injury. However, in each case, the relevant conduct is only unlawful in or on a Commonwealth area, which has limited, if any, application in the CoA area.

1.4.2 South Australian Law

At the state level, the most relevant legislative instrument is the *National Parks and Wildlife Act 1972* (SA) (NPW Act) and the *National Parks and Wildlife (Wildlife) Regulations 2019* (SA). The Tree Martin is listed as a protected animal (migratory bird) under the NPW Act. Under subsection 68(1) a person must not interfere with, harass or molest a protected animal unless he or she acts in pursuance of a legislative provision or a permit granted by the responsible Minister (the Minister for Climate, Environment and Water) or their delegate. This means that only approved individuals, who have undertaken training in line with the NPW Act, may handle the birds, and penalties apply if unqualified persons handle protected species.

In addition, advice from DEW clarifies that a permit is not required for the netting of trees if this action does not lead to any protected animal being caught, restrained or trapped and subsequently relocated and the trees are netted prior to being used by the protected animal (i.e. outside of the Tree Martin roosting season).

The welfare of Tree Martins during any management activities is further governed by the AW Act and *Animal Welfare Regulations 2012* (SA), which apply to all animals regardless of status and require that any handling or management be conducted humanely and in accordance with relevant codes of practice. The AW Act 1985 (SA) is due to be repealed and replaced by the AW Act 2025 (SA).

The *Landscape South Australia Act 2019* (SA) also provides relevant context, underpinning the role of the South Australia Government Agency Green Adelaide, in coordinating urban biodiversity outcomes across the metropolitan area, including the management of native fauna in the urban environment.

2. Tree Martin Ecology

2.1 Ecological Significance of the Tree Martin

The Tree Martin performs an ecologically beneficial role in the metropolitan Adelaide area, feeding on insects in the air while flying. Along with other martins, swallows and swifts, they are important for keeping flying insect numbers in check, particularly in the spring, summer and autumn when insect numbers are at their greatest.

Tree Martins are an excellent indicator of ecosystem health. Where Tree Martins are abundant, so are insects, collectively indicating that the ecosystem is functioning well. As high-speed aerial predators, they link terrestrial and aquatic ecosystems, transferring energy between flying insect swarms and the broader food web.

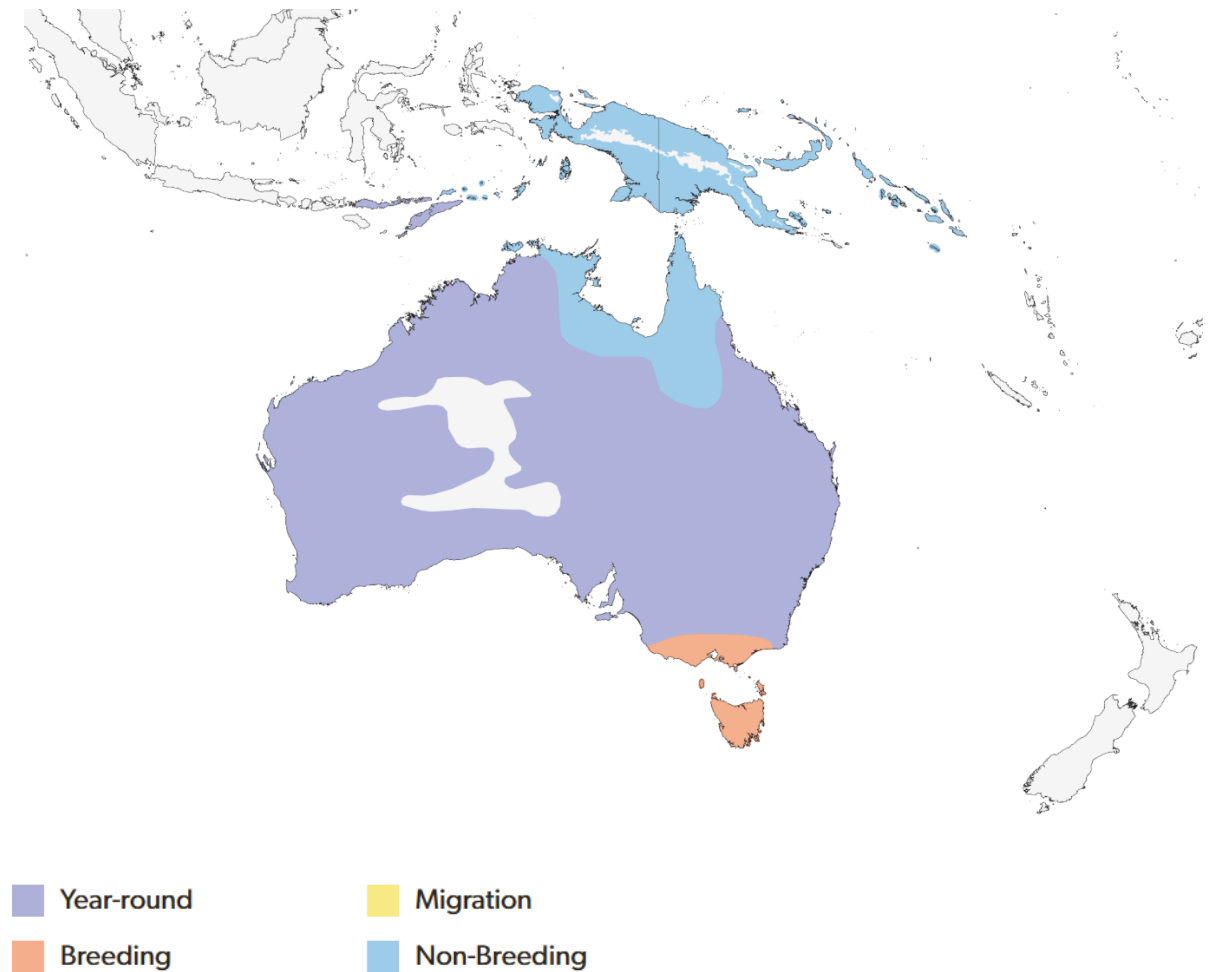
As they require tree hollows for breeding, the presence of Tree Martins during the breeding season typically indicates an environment with mature, healthy trees (such as Eucalyptus) and nearby water sources.

2.2 Species Overview and Migratory Behaviour

The Tree Martin is a member of the swallow family. It is a small bird weighing around 15 grams and has glossy blue-black feathers on the neck, back and crown, and cream feathers on the breast and belly. Its wings and notched tail are brownish grey, with a darker grey underneath and reddish-brown markings on the head. Males and females look very similar. Young are browner and paler.



Tree Martins are largely migratory, spending winter in northern Australia, New Guinea, the Solomon Islands and Timor, before heading south for the spring, summer and autumn (see Figure 3). Some populations are resident and some part-migratory: the population of a few wintering birds can be augmented by visitors in spring.



Distribution of the Tree Martin

Figure 3. Distribution of Tree Martin

Source: *Birds of the World*

2.3 Role as an Aerial Insectivore

Tree Martins feed aerially on insects including ants, beetles, bugs, flies and wasps. They tend to screen for insects by continually foraging while flying at the height of the tree canopy or higher, or low over open areas. They also sally for insects, which involves perching, flying out and capturing an insect then returning to the same or another perch to consume the prey. They usually forage in flocks comprising 30 to 60 birds (Semmens 1993 in HANZAB 2023).

Tree Martins are known to sometimes drink in flight, skimming over water (Blyth 1917 in HANZAB 2023).

2.4 Habitat Requirements and Hollow Dependency

Tree Martins breed in the southern two thirds of Australia mostly in tree hollows of large trees in woodlands. Accordingly, they require mature woodlands with trees old enough to contain hollows. Tree clearing and the associated loss of hollows is considered one of the greatest threats to Tree Martin populations (Turner 2001). They are also known to use artificial structures for nesting, such as steel tubing and vent holes in buildings (Green Adelaide 2025).

Tree Martins have been recorded nesting in all months, but most commonly in spring and summer from August to December (DEH 2008). The nest hollow is lined with grass and leaves, and the same hollow may be re-used year after year. Clutch size is usually three to five eggs. The sexes share nest building, and incubation is for 14 to 16 days (Morcombe, 2000). Where and precisely when Tree Martins breed in South Australia is unknown.

2.5 Conservation Status and Population Trends

The Tree Martin is listed as a species of Least Concern globally (Birds of the World 2020) and is widespread throughout South Australia. However, in the Greater Adelaide and Mount Lofty Ranges Region, they are locally recognised as a probably declining species (DEH 2008).

Populations of Tree Martins have decreased in Victoria due to logging of hollow-bearing trees (Birds in Backyards 2026). The numbers in the southern Western Australian Wheatbelt have decreased probably because of woodland clearing. Some populations in south-east Australia have declined potentially due to the expansion in range of the Common Starling (*Sturnus vulgaris*) which takes over nesting hollows. Insect biomass collapse is also a threat to populations (Hallmann *et al* 2017).

In recent years, members of the public (MOP) have recorded Tree Martin counts within the CoA on five occasions and submitted records to eBird between April 2023 and April 2024. Numbers ranged from 1,000 to 12,500 individuals, with some birds roosting in trees and others circling overhead. Recent counts (Avisure 2026) indicate that the roost numbers in the CoA LGA reach more than 20,000 individuals.

2.6 Significance of Urban Roosting in Adelaide

Tree Martins have been recorded in the CoA and surrounds from 1923, indicating a long-term presence in the area (Atlas of Living Australia 2026). They are increasingly common in urban and suburban areas with Perth and Adelaide the two Australian cities that record most Tree Martin activity (HANZAB, 2023). The roost in the CoA LGA is the largest recorded, reinforcing its significance.

2.7 Cultural Significance of the Tree Martin in Adelaide

Tree Martins have developed a unique cultural significance in the CoA, particularly due to the large seasonal roost in the city centre. Since approximately 2015, thousands of Tree Martins have gathered each summer and autumn in CBD locations such as Leigh Street and, more recently, Rundle Mall. These roosts have become a distinctive urban wildlife phenomenon, attracting the attention of residents, visitors, photographers, birdwatchers and the media.

They have become part of Adelaide's contemporary urban identity demonstrating how native wildlife can coexist with people in a highly developed environment and how roosting flocks serve as a visible reminder that cities can provide habitat for native species. The nightly arrival of thousands of birds at dusk has been described as a wildlife spectacle that allows residents to experience a natural phenomenon that would otherwise be associated only with rural landscapes.

Conflicts between conservation values and business concerns emerge when large numbers of Tree Martin's roost above outdoor dining and within shopping precincts. The exclusion of birds from Leigh Street and the subsequent establishment by the Tree Martins of a roosting site in Rundle Mall in late 2024, prompted extensive media coverage and community debate about how best to balance wildlife protection with commercial activity and public amenity. These discussions have increased public awareness of native bird conservation and the challenges of managing biodiversity in urban environments.

From a broader cultural perspective, the Tree Martins have become a symbol of Adelaide's reputation as a city that values its native wildlife. Green Adelaide has referred to the roost as a "shining case" of how urban landscapes can contribute to wildlife conservation, while local community discussions often describe the Tree Martins as an iconic seasonal feature of the city. Their annual arrival has become a recognised sign of seasonal change, linking Adelaide's urban environment with natural ecological cycles and reinforcing public appreciation of local biodiversity.

2.7.1 Traditional Owner Perspectives

The Kaurna people (Miyurna) are the traditional owners of the Adelaide Plains. The Adelaide Plains, including the area now defined as the City of Adelaide, were cared for and managed by Kaurna Miyurna for tens of thousands of years. The forced separation of Aboriginal and Torres Strait Islander peoples from their traditional lands, as well as European colonisation has drastically altered the Australian landscape, its care and management (City of Adelaide 2025).

No published Kaurna cultural traditions relating specifically to Tree Martins have been identified.

Any assessment of cultural significance will be undertaken in consultation with Kaurna representatives.

2.7.2 Post-European Experience

Since European settlement, Tree Martins have been valued primarily for their ecological role as aerial insectivores and their ability to adapt to modified Australian landscapes (Higgins et al. 2006). Their use of both natural and artificial nesting sites has enabled them to persist in agricultural and urban environments, making them an important example of native wildlife adaptation (Bell 1979). Tree Martins are also recognised as indicators of environmental health and contribute to scientific understanding of migration, urban ecology, and biodiversity conservation.

One of the most notable aspects of Tree Martin ecology since European settlement is their ability to adapt to human-altered environments. Historically, Tree Martin habitats were associated with open woodland containing large hollow-bearing trees, however, Tree Martins have begun to use bridges, culverts, buildings, and other artificial structures for nesting (Higgins et al. 2006). This adaptability has allowed them to persist in agricultural districts, towns, and cities despite extensive landscape modification.

Across Australia, communal roosts can involve thousands of birds and are often considered notable wildlife spectacles. These gatherings contribute to public awareness of native biodiversity and seasonal bird movements.

Australia's largest known urban Tree Martin roost is within the Adelaide CBD, accounting for its cultural significance within South Australia's capital. The annual gathering of approximately 20,000 birds within the city has become a distinctive seasonal event, contributing to Adelaide's identity. It supports public engagement with urban biodiversity and allows for community discussions about wildlife conservation and coexistence in urban environments.

2.8 Roost Preferences

Tree Martins tend to fly in large flocks as they approach their roosting site near sunset, they rise en-masse and then dive down together into the vegetation, avoiding predators such as Peregrine Falcons (*Falco peregrinus*) (Birds in Backyards 2026).

Research suggests that large communal roosts of aerial insectivores, like Tree Martins, provide multiple adaptive benefits, including predator avoidance, thermoregulation and information sharing about food resources (Beauchamp 1999; Ward & Zahavi 1973). Historical accounts by Serventy (1937) indicate that early roosts occurred in dense vegetation or crops, likely offering concealment from predators.

The narrow boulevards, flanked by three to four storey buildings, with noise, people and lighting to ward off predators and lack of vehicle traffic appear to have attracted Tree Martins to roost in the CBD. Callery Pear (*Pyrus calleryana*) and Chinese Elm (*Ulmus parvifolia*) trees have been preferred, particularly those with fairy lights which may assist in keeping predators away (Green Adelaide 2025).

These factors, combined with the species' strong site familiarity and social behaviour, suggest that Adelaide's urban environment offers perceived safety and suitable microhabitats, reinforcing the persistence of large seasonal roosts.

3. Stakeholders

3.1 City of Adelaide

The CoA is the local government authority responsible for managing the Adelaide CBD and its surrounds, including streets, and public infrastructure. 598 hectares of the Adelaide Park Lands (including the Squares) are under the care, control and management of the City of Adelaide with a further 334 hectares under the care and control and management of the Government of South Australia. The CoA holds strategic commitments to promote urban biodiversity and protect the welfare of wildlife, balanced against its obligations as a land manager for public health and amenity. In the context of this program, the CoA is the primary decision-maker regarding tree management, works and operational activities, and the implementation of mitigation measures within its boundaries, working in partnership with DEW and Green Adelaide to achieve positive wildlife outcomes.

3.2 Green Adelaide

Green Adelaide is a State Government Agency established under the *Landscape South Australia Act 2019* (SA). Working in partnership with Adelaide's 17 metropolitan councils, and the Kaurua Miyurna, Green Adelaide coordinates regional activities, provides funding, and educates the community on the importance of urban greening and biodiversity. Its priorities include controlling invasive pest plants and animals, increasing tree canopy cover, and creating urban spaces for flora and fauna to thrive. In the context of Tree Martin management, Green Adelaide's role is in supporting urban wildlife outcomes across the metropolitan area.

3.3 Department for Environment and Water

DEW is the State Government Agency responsible for managing and protecting the state's wildlife and natural resources. Operating through the National Parks and Wildlife Service SA (NPWSSA), DEW administers the NPW Act, which affords protection to most native mammal, bird, and reptile species and their eggs.

Under this framework, DEW issues permits for activities involving protected wildlife, including capturing, relocating, or destroying native animals, as well as for wildlife rehabilitation and interstate movement of native species. Where conflict arises between wildlife and human activity, DEW provides guidance on appropriate management options and enforces compliance with relevant codes of practice. In the context of urban wildlife management, such as Tree Martin roosting activity, DEW serves as the primary regulatory authority from which approvals and permits must be obtained prior to undertaking any works that may interfere with a protected animal.

3.4 SA Health

SA Health is responsible for protecting and improving the health of all people in South Australia. Its primary roles include managing public hospitals, delivering emergency medical care, preventing illness, and developing state-wide health policy and medical research. SA Health is responsible for the *South Australian Public Health Act 2011* (SA).

3.5 Department of Primary Industry and Regions South Australia

As the lead agency for animal and plant biosecurity in SA, PIRSA leads cross-agency collaboration with DEW, SA Health and other partner agencies, including the Local Government Association of SA, to prepare for biosecurity. The Biosecurity division of PIRSA works with the National Avian Influenza Wild Bird Surveillance Program, which is coordinated by Wildlife Health Australia. This program monitors avian influenza virus presence in wild birds to understand the risks and prevent infection in poultry flocks. Disease investigations are also performed in poultry and wild bird and wildlife mortalities, testing for avian influenza.

3.6 Affected Businesses, Residents and the Public Realm

The primary impacts reported by affected businesses relate to human and animal health concerns, odour, faecal drop and potential loss of trade, additional operational costs (employing additional security; implementing mitigation measures, and increased cleaning) and damage to stock arising from Tree Martins entering their buildings. Additional concerns include the risk of disease transmission, potential damage to trees, and the effects of droppings on the surrounding environment, including staining, odour, and damage to other surfaces.

3.7 Special Interest / Volunteer Groups

These groups may include those that share a common goal for the conservation and management of native wildlife (e.g. Royal Society for the Prevention of Cruelty to Animals (RSPCA), SA Native Animal Rescue (SANAR), Save our Wildlife (SOWFI), SA Fauna Rescue).

3.8 Other Community Members

Public interest in the Tree Martins roosting activity in the Adelaide CBD means that people not directly affected by their presence feel nonetheless invested in the wellbeing of the Tree Martins or are concerned about the impacts of their roosting behaviour.

4. Potential Impacts from Tree Martins

4.1 Human and Animal Health Concerns

The accumulation of bird droppings during the Tree Martin roosting season is the primary public health concern associated with large urban roosts. High volumes of droppings on footpaths, outdoor dining furniture, building facades and urban public realm infrastructure can create slip hazards for pedestrians and raise hygiene concerns for businesses, particularly food and beverage operators in affected precincts such as Leigh Street and Rundle Mall.

Birds can carry a range of diseases including respiratory, fungal, bacterial, parasitic and viral diseases. It is unknown what specific risks are posed by Tree Martins. However, precautions must be taken when handling birds and carcasses and dealing with their droppings.

Tree Martins are known as a synanthropic species, meaning they live in close association with humans and habitats created by human settlements. In combination with their migratory nature, which could allow them to spread disease over considerable distances, and their feeding association over and around waterbodies where waterfowl and shorebirds are present, there is potential for Tree Martins to act as a spillover or bridge host for diseases such as Avian Influenza.

The Highly Pathogenic Avian Influenza (H5 Bird Flu) was first detected in Australia in June 2026. In the event of a confirmed or suspected H5 Bird Flu outbreak in the Adelaide area, CoA would implement additional cleaning, public signage and staff safety measures in affected roosting areas, guided by PIRSA as the lead State Government Agency.

Tree Martins are agile flyers that naturally dart and circle in large numbers at dusk, making collision with windows, overhead wires and other urban structures, and entering buildings an inherent risk of urban roosting. Birds may be stunned, injured or killed as a result. Under the AW Act, a general duty of care applies to any person in charge of an animal, requiring reasonable steps to safeguard its welfare.

4.2 Faecal Droppings

The volume of faecal material deposited by large roosts is considerable. An estimated 20,000 birds regularly roosting within semi-mature street trees from dusk has been found to deposit large amounts of droppings presenting a serious risk to public hygiene. Faecal drop affects footpaths, outdoor dining furniture, vehicles, building facades and adjacent properties, creating both aesthetic and hygiene issues. In food service areas, contamination of outdoor dining surfaces presents a direct food safety concern under the *South Australian Public Health Act 2011* (SA). The physical properties of dried droppings, including their adhesive and corrosive nature due to the uric acid content, also make clean-up labour-intensive and may cause surface damage over time if not addressed promptly.

4.3 Odour

The accumulation of faecal matter beneath active roost sites generates noticeable odour, particularly following rain. In high-density urban precincts, this can create an unpleasant environment for pedestrians, diners, and retail customers. Odour intensity is closely related to roost size, the duration of roosting activity at a given location and the frequency of rain and cleaning. Where roost sites coincide with enclosed or semi-enclosed spaces such as alleyways or canopied retail precincts, odour is likely to be more pronounced and persistent.

4.4 Noise

Tree Martins are highly vocal, particularly at dawn and dusk when flocks are arriving at or departing from roost sites. The twittering calls of large congregations, numbering in the thousands, can generate significant noise, particularly in the early morning hours. This can be disruptive to nearby residents, hotel guests and workers. It may also affect the amenity of outdoor dining and retail precincts during peak roosting periods between January and May.

4.5 Water Quality

Faecal material deposited by roosting birds in urban areas can be transported via stormwater runoff into the broader drainage network. Bird droppings are a recognised source of bacteria and viruses in urban runoff, and faecal coliform bacteria counts in urban runoff can be significantly elevated above recreational health standards as a result. The presence and numbers of roosting bird species have been correlated with seasonal changes in water quality, including increased nitrogen and phosphorus loading. In an urban catchment context, this nutrient and pathogen loading has the potential to contribute to degraded water quality in receiving waterways, though the scale of impact from Tree Martin roosting specifically is likely to be modest relative to other urban stormwater pollutant sources.

4.6 Damage to Trees / Vegetation

While small amounts of bird droppings typically pose little threat to vegetation and may even act as a mild fertiliser due to their nitrogen content, excessive accumulation can lead to leaf burn, obstruction of sunlight absorption and promotion of fungal growth, all of which may harm sensitive vegetation. Plants under active bird roosts often develop discoloured, withered leaves and damaged growth due to nitrogen overload and chemical contamination from droppings. Where large numbers of birds roost in the same trees season after season, the cumulative effect of faecal deposition can progressively stress the host trees, potentially affecting their long-term health and structural integrity. This is a particular consideration given that the CoA's urban tree canopy represents a significant asset and the very habitat that attracts Tree Martin roosts in the first instance.

5. Tree Martin Management in the City of Adelaide

5.1 Known Roost Sites in the City of Adelaide

Roosting aggregations were originally reported in 2015 in Callery Pear street trees in Leigh Street in the city centre (Figure 4 and 5). The nine Callery Pear trees were netted in August 2024 to exclude Tree Martins from roosting. In December 2024, the Tree Martins began roosting in the six Chinese Elm trees located adjacent to Rundle Place in Rundle Mall (Figure 6 and 7).



Figure 4. Callery pear trees in Leigh Street.

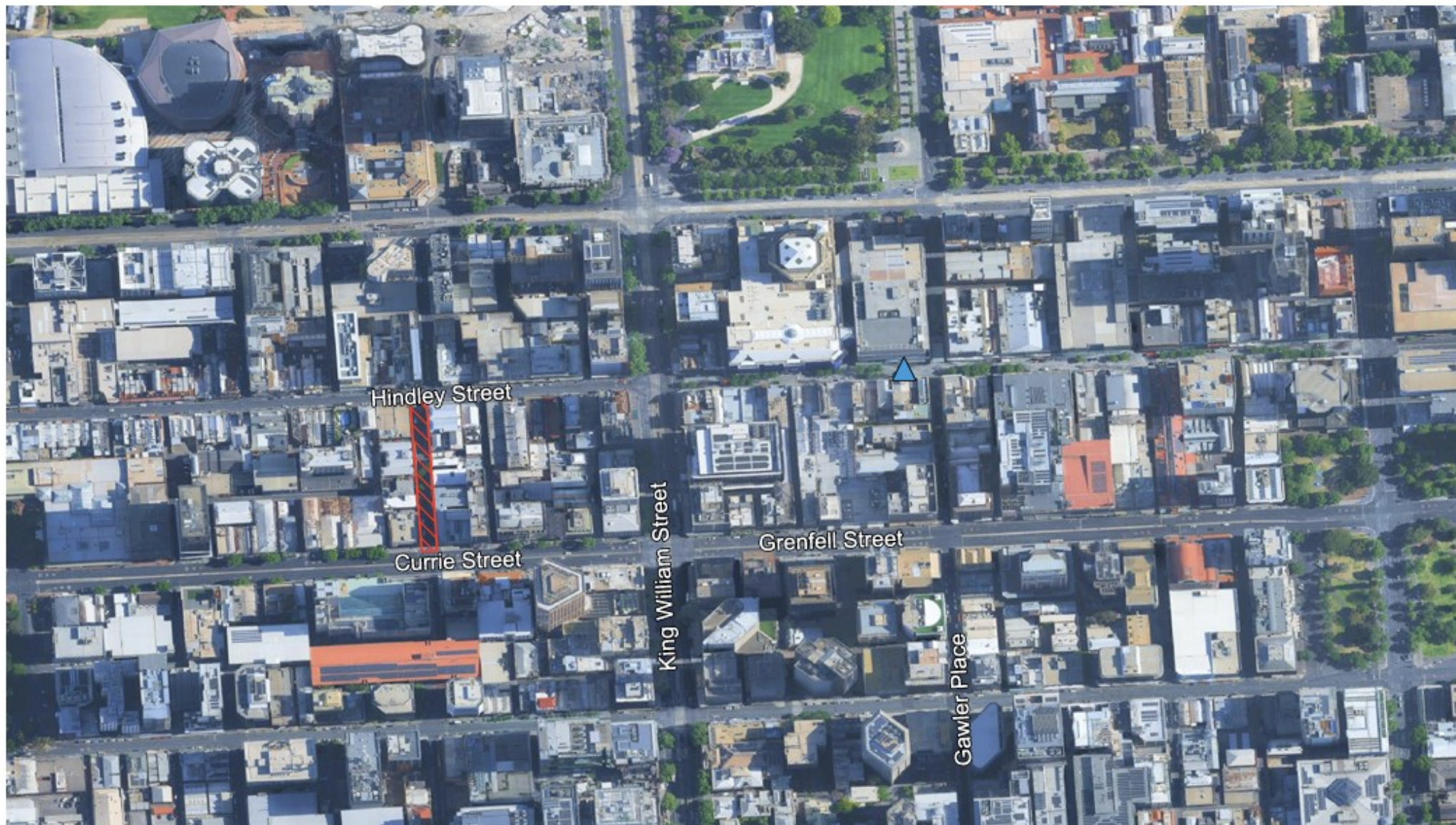


Figure 5: Leigh Street Tree Martin roost

City of Adelaide

Tree Martin Management Program 2026

 Leigh Street roost
 Rundle Mall

AVISURE
 aviation | wildlife | safety

Job number: 261025
 Revision: 1
 Author: AS
 Date: 17/07/2026



0 0.05 0.1 km

GDA 2020
 Projection: Transverse Mercator
 Datum: GDA 2020
 Units: Decimal Degrees

Data Sources: © Google Satellite, 2026; © Avisure 2026
 AVISURE does not warrant the accuracy or completeness of information displayed in this map. Any person using this map does so at their own risk, and should consider the context of the report that this map supports. AVISURE shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



Figure 6: Chinese Elm trees in Rundle Mall

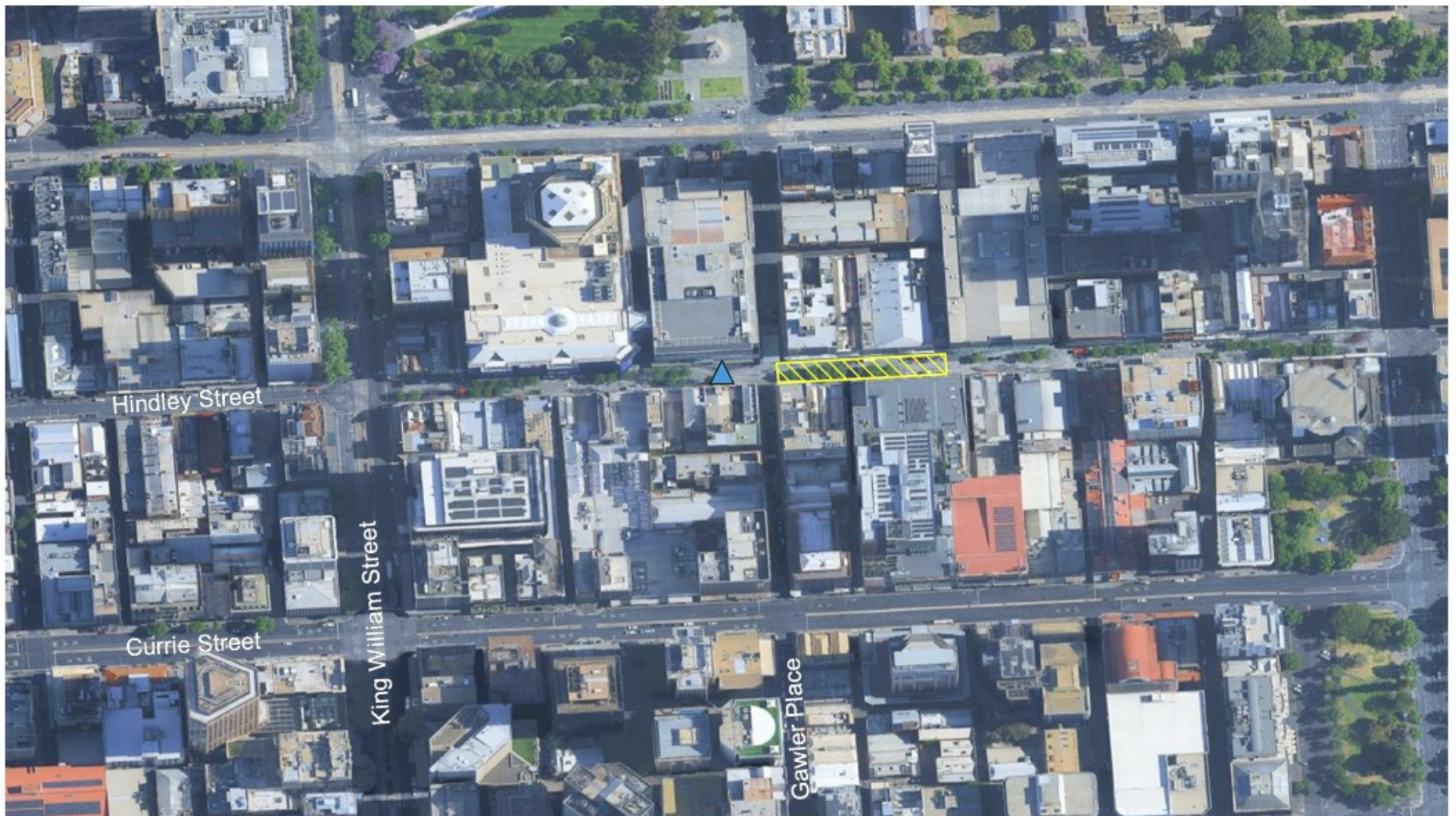


Figure 7: Rundle Mall Tree Martin roost

City of Adelaide

Tree Martin Management Program 2026

 Rundle Mall roost
 Rundle Mall

AVISURE
 aviation | wildlife | safety

Job number: 261025
 Revision: 1
 Author: AS
 Date: 14/07/2026



0 0.75 1.5 m

GDA 2020
 Datum: GDA 2020
 Units: Decimal Degrees

Data Source: © Google Satellite, 2026; © Avisure 2026
 AVISURE does not warrant the accuracy or completeness of information displayed in this map. Any person using this map does so at their own risk, and should consider the context of the report that this map supports. AVISURE shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.

5.2 Potential Roost Sites Where Conflict May Arise

There is a high probability that Tree Martins may move to new or previously undocumented roost sites in response to existing roost sites being abandoned either because of deliberate preventative measures, disturbance or some other reason. By identifying potential roost sites on Council-managed land, especially those in proximity to sensitive areas where conflict is likely to arise, the CoA can plan for and initiate more timely and appropriate roost management responses. Potential roosting areas were assessed in radius up to 2km from the existing Rundle Mall roost.

Assessing potential roost sites serves two purposes:

1. If actions are to be considered that would lead to the abandonment of an existing roost, the assessment provides an indication of where Tree Martins might move to and the level of conflict that may arise as a consequence. This information will be vital for determining the risks of undertaking dispersal, alternative management options, and the level of resources required to prevent Tree Martins moving to other high-conflict sites.
2. It provides a better understanding of the location of potential roost sites and assists the CoA to plan for and implement pro-active management to reduce the likelihood of sites becoming a “problem roost” in the future.

In classifying potential roosts, the probability of a site supporting a large number of Tree Martins and the potential negative impacts that may have on community, residents, commercial operators and Tree Martins have been considered.

Although potential roost sites have been identified, it is uncertain where Tree Martins may relocate.

5.2.1 Probability of a Roost Forming

Potential Tree Martin roost sites were identified by assessing the canopy and environmental features of vegetation patches around the CBD. Each location was either rated as high or low likelihood. Roost potential was considered high in areas that had extensive mature canopies with similar clusters of trees as known roost sites and met some or all of the following criteria:

1. **Tree suitability:** tall dense tree canopies with suitable perches, including Chinese Elm and Callery Pear tree species known to support roosting populations as well as similarly structured tree species (see below).
2. **Size:** tree canopies large enough to accommodate thousands of birds together.
3. **Location:** confined built-up areas with lights and low vehicle traffic that include nearby wide boulevards that allow for large flocks to gather and circle before coming to roost.
4. **Predator protection:** areas and tree structures that are interconnected and relatively safe from predators, with minimal human disturbance.

Chinese Elms typically grow 10m to 20m tall, with a broad, spreading canopy and fine textured foliage. Callery Pears typically grow 8m to 15m tall, with a dense rounded canopy. Potential other suitable tree species include, but are not limited to:

- All Platanus species: known for its broad canopies and its fast growth.
- Japanese Zelkova (*Zelkova serrata*): similar vase-shaped form, and canopy structure.
- All Celtis species: broad canopy and tough urban tree that handles drought and poor soils well.
- Crepe Myrtle (*Lagerstroemia indica*): smaller in height but normally develops a broad canopy.
- Chinese Pistache (*Pistacia chinensis*): rounded canopy that is similar to a mature Callery Pear.

5.2.2 Roost Site Conflict Assessment

In areas where a roost could form, the likelihood of conflict was rated as high, moderate or low based on an assessment of conflict factors (see Section 7.3).

Roost Site Risk Classification

The risk presented by potential roosts were rated:

- **High risk (undesirable):** high roost potential with high to moderate likelihood of conflict. These sites would be considered sub optimal for Tree Martins to establish a roost.
- **Moderate risk (undesirable):** low roost potential with high to moderate likelihood of conflict. These sites do not appear to be likely to sustain a roost, but if one formed, it would be considered a sub-optimal location.
- **Moderate risk (acceptable):** high roost potential with low likelihood of conflict. These sites appear to be suitable for a roost, and while some impacts could be expected, they would be relatively minor compared to other sites.
- **Low risk (acceptable):** low roost potential with low likelihood of conflict. These sites do not appear to be highly likely to sustain a roost, but if one formed, impacts would be expected to be relatively minor compared to other sites.

Locations were classified, see Appendix B.

6. Tree Martin Roost Management Options

Roost management options for the Tree Martin roosting colony must meet Council's legal obligations and be agreed upon under the relevant legislation and permit requirements issued by the DEW. These options range from minimal intervention, through to in-situ management and dispersal. When more intervention is required, financial costs and resource effort increase, as does the level of disruption experienced by the roosting flock.

For a full list of management options, please see Appendix C.

6.1 Minimal Intervention

Minimal intervention means that there will be little to no interference with the roosting flock. This may include a 'do nothing' approach, or a monitor only approach, and may involve:

- **Monitoring:** monitoring of the roosting flock, either nightly or weekly, to enable forward-planning or management responses in case additional triage is required. This involves estimating the flock size as it arrives at the roost. Skilled biologists count flocks which come in waves rather than all at once, making it possible to obtain an estimated number. Occasionally, birds are flushed from the roost. These birds are counted and subtracted from the overall total so that they are not double counted and accuracy is maintained.
- **Awareness raising:** for affected residents/commercial operators, CoA and other stakeholders, to continue to improve community knowledge on Tree Martin ecology, associated risks and management options. Signage at roosting site and information provided through communication channels.
- **Alternate roost sites:** enhancing alternative roosting sites that could attract Tree Martins to roost away from high conflict areas. This would require further research but could involve planting known suitable tree species in areas that would suit Tree Martins but limit conflict.

6.2 In-Situ Management

In-situ management refers to management activities that can be undertaken at an active Tree Martin roost site to reduce undesirable impacts to businesses and members of the community, whilst retaining the roost and minimising any impacts to the roosting flock. These management actions may include:

- Monitoring and awareness raising (see above). Population counts and observations are recorded where possible before, during and after and management action occurs.
- Modifications to windows (e.g. by adding decals), wires (e.g. by installing plastic covers (possum tails) to increase visibility and cushioning of overhead wires), and entrances to buildings (e.g. by closing doors at dusk), installing visual and audio deterrents to discourage birds from entering buildings, or netting structures.

- Cleaning faecal mess on a regular basis.
- Limiting disturbance to birds by having exclusion zones, limiting noisy work at dusk and at night, and limiting noisy/smokey street performances near the roost.
- Ensuring suitably trained professionals are available to respond to and triage stunned, injured and deceased birds and transport injured birds to veterinary care.
- Maintaining or enhancing the roost site for tree health, hygiene and bird welfare.

6.3 Prevention of Roost Establishment

Where a roost has previously formed or where a site is a likely alternative roost (see section 5.2.2) and these sites are deemed undesirable because of the high conflict risk, measures can be taken to prevent roosting prior to the next season. This could include:

- Modifying the roost by removing trees from the connected canopy structure, to minimise the attraction. It is unknown how much of a vegetation structure will need to be removed to successfully deter roosting.
- Temporarily or permanently netting trees with appropriately sized, wildlife friendly netting to deter roosting. A combination of maintenance of tree canopies and netting may be required.

Such modifications must be monitored to ensure Tree Martin welfare and assess where new roosts may form.

Installation of audio or visual deterrents to neighbouring buildings could be considered but are unlikely to prevent roosting and would incur a significant cost and require regular maintenance, with the potential of only working as a short-term solution.

6.4 Dispersal of Roosting Birds

Dispersal can be a resource and cost intensive, requiring experienced, qualified and licenced staff. Due to permit requirements under the NPW Act, dispersal activities and tools must be approved by DEW, and all staff carrying out active dispersal must have appropriate permits.

Noise, pyrotechnics, falconry or any range of deterrents could be used to disperse a roost with the aim that Tree Martins vacate the roost and roost elsewhere. Ideally the deterrent actions are adopted at dusk as the flock is attempting to roost and continues into the evening until they find an alternative location. The birds are likely to attempt to return to the roost each night, hence this approach requires monitoring and regular maintenance dispersal, which may be required over several months.

This approach comes with risks:

- The noise and disturbance could cause the flock to erupt from the site erratically, potentially leading to window and wire strikes or entry into buildings. This could result in increased Tree Martin death or injury and external impacts.
- Noise and disturbance could affect the public, residents and commercial operators nearby. There could be community members who view this approach as too invasive and object to it.
- There is potential for new roosts to establish in other non-desirable, high conflict areas.

7. Decision Support Framework

7.1 Primary Decision Tree

The actions CoA will take in response to roosting Tree Martins is dependent on a range of factors:

1. If the Tree Martins are causing or likely to cause conflict
2. If the roost is on Council managed land or not
3. The level of conflict
4. Whether the roost is existing or newly established
5. If roost prevention or dispersal strategies are suitable for the site.

The process for evaluating these factors is described in the Primary Decision Tree (Appendix A).

7.2 Identifying Council Responsibility

Although Council only has direct responsibility for wildlife issues that occur on Council managed/owned properties and land, it has taken a pro-active approach to understanding Tree Martin populations across the city. Where roosts form on private or State managed land, CoA will assist with information and provide community with educative materials. In certain circumstances CoA may decide to assist with monitoring the roost which will enhance understanding of the city-wide Tree Martin population.

Where roosts form on Council owned or managed land, the decision tree will guide how the roost will be evaluated and managed.

7.3 Assessing Potential for Human/Tree Martin Conflict

The likelihood of conflict is considered high if several of the following attributes are met:

- The area is within 50m of residential and/or commercial properties
- The number of affected properties is likely to be five or greater
- The sensitivity of the setting. Factors that increase sensitivity and therefore conflict potential include:
 - Density of the residential/commercial setting
 - Type of land use (open air dining, schools, hospitals, childcare centres, residential care housing, high volume foot traffic)
 - Presence of large clear glass windows, wires or other structures that could cause Tree Martin strikes and result in death or injury.
- Faecal drop, odour, noise and potential impacts on human health are likely to be high.

7.4 Determining the Management Approach

Each site, whether existing or newly established, will require an assessment and consideration given to the range of management options available to CoA. The process requires two steps:

Step 1: The scoring system will guide where monitoring and education alone will be sufficient to mitigate conflict, if in-situ management can be considered, or if roost prevention / dispersal strategies need to be considered.

Step 2: Consideration of the management actions required to achieve the desired outcome and the cost of such actions.

7.4.1 Step 1 - Scoring

The following decision matrix and associated information tables will guide the general response CoA will take for roosting Tree Martins, depending on where they roost and in what numbers.

	1	2	3	4	5	Score
No. tree martins	<1000	1,000-5,000	5,000-10,000	10,000-50,000	>50,000	
Distance from Residences/Commercial properties	>200m	100-200m	50-100m	10-50m	<10m	
No. Residences/Commercial properties impacted	1	2	2-5	5-10	>10	
Sensitivity of Setting	Very Low	Low	Medium	High	Very High	
Economic Impact	Very Low	Low	Medium	High	Very High	
Noise/Smell/Mess	Very Low	Low	Medium	High	Very High	
Peak No. Tree Martin deaths per day	0	1	2-10	11-20	>20	
Peak No. Tree Martin incidents excluding deaths per day	0	1-20	21-50	51-100	>100	
Total						

Total Score	Monitoring frequency	Actions
8-13	Once per month	Provide information, education, and community liaison
14-20	Once per week	Provide information, education, and community liaison Consider in-situ management options
21-30	Daily	Provide information, education, and community liaison Implement in-situ management options
31-40	Daily	Provide information, education, and community liaison Implement in-situ management options Prevent roosting prior to the season and/or disperse from site at commencement of new season

Attribute	Rationale	Assessment criteria
No. Tree Martins	Influences the potential impacts - higher numbers increase the impacts of all attributes	Peak count is used to determine the roost size for scoring purposes
Distance from Residences/Commercial properties	Influences the potential impacts – closer to buildings the greater impact of noise, smell, health and impact on assets and greater collision risk for birds	Measured from the nearest roost tree to the nearest property
No. Residences/Commercial properties impacted	Influences the potential impacts – more buildings the greater impact of noise, smell, health and impact on assets and greater collision risk for birds	Properties included must be directly impacted with bird collisions or entrapment, and/or affected directly by noise, smell and significant mess.
Sensitivity of Setting	The type of land use and the sensitivity of that land use around the roost will determine the likely impact	A roost in a natural area away from sensitive land uses scores very low. However, if that natural area is near a sensitive area the sensitivity increases significantly and may indicate a very high score. Other criteria that elevate the score include: density of the residential/commercial setting; type of land use (open air dining, school, hospital, childcare, residential care housing, amount of foot traffic); and large clear glass windows, wires or other structures that could cause Tree Martin strikes and result in death or injury.
Economic Impact	The impact on businesses from roosting Tree Martins could arise from	The economic impact will be linked to the number of properties affected, the sensitivity

Attribute	Rationale	Assessment criteria
	cleaning costs, loss of trade, mitigation costs, product contamination and reputation. If public amenity and visitor experience is impacted, this could have flow on economic implications to businesses and the CoA.	of the setting and the noise, smell and mess, but should be assessed in its own right.
Noise/Smell/Mess	These attributes affect the liveability of the area and disease risk as well as cost to maintain hygiene	If the noise is minor, score very low; somewhat annoying, medium; above acceptable noise levels, very high. If the smell is not offensive, very low; somewhat offensive, medium; very offensive, very high. If the amount of mess requires no clean up, score very low; weekly clean up, medium; daily clean up, very high. In assessing noise/smell/mess, the duration of the exposure will be a deciding factor.
Peak No. Tree Martin deaths per day	Indicator of impact on this protected species as well as the public concern for welfare	Peak number of deaths scores very low if there are zero deaths ranging up to very high for above 20 deaths per day. 20 deaths in a day on a regular basis could have a population level impact and it is likely to cause concern from numerous members of the community ¹ .
Peak No. Tree Martin incidents excluding deaths per day	Indicator of impact on this protected species as well as the public concern for welfare	Peak number of incidents scores very low if there are zero incidents excluding deaths, ranging up to very high for above 50 incidents in a day.

¹ Mortality events causing a sustained population decline of 1-2% is considered biologically significant, while losses exceeding 5-10% can trigger rapid population collapse. There are, however, many factors that influence population models, including the proportion of juveniles versus adults that die and how many successful fledglings are recruited to the population each breeding season. No population studies are available for Tree Martins.

7.4.2 Step 2 – Assessing actions and costs

Depending on the score, CoA will assess which management actions should be considered for implementation. Appendix C will guide the options to be selected from. Determining if actions should proceed will depend on an assessment of:

1. Probability of success. For instance, if preventing Tree Martins from roost using nets in trees, consideration must be given to where the roost may shift to. Will the action shift the problem somewhere else, potentially in a location that causes more impact to the species and the community. The greater the chance of success from the management initiative, the greater the drive to implement the action.
2. Cost of implementation to achieve success. The actions selected will have a range in cost implications from relatively low costs to extremely high costs associated with habitat modification, triaging injured birds, and extensive staff resourcing. CoA will consider budget requirements before proceeding with any actions.

8. Management Strategy

8.1 Minimum Intervention

Minimal intervention is the preferred approach for Tree Martin management in the City of Adelaide, except in cases of high human/Tree Martin conflict, or where Tree Martins are suffering from urban impacts. Minimum intervention strategies for low conflict roosts and for roosts that may form on non-council-managed land are discussed below.

8.1.1 Roosts on Non-Council Land, Not Warranting Council Involvement

Where a Tree Martin roost is:

1. Not on Council-managed land; and
2. Determined by CoA discretion to not warrant Council involvement,

CoA will provide relevant information and educative material to residents or commercial operators and will refer them to CoA Park Lands and Sustainability or DEW for further guidance or advice if roost management is required.

Where CoA sees benefit from understanding the local Tree Martin population, it may support monitoring on non-council owned or managed properties.

8.1.2 Roosts on Council-Managed Land with Low Likelihood of Conflict

In areas where there is a low likelihood of conflict on Council-managed lands, a minimal intervention approach will be taken that will involve:

1. Monitoring the roost to enable forward planning or management responses in case triage is required; and/or
2. Provide relevant information and education to residents or commercial operators; and/or
3. Discourage disturbance of the Tree Martin roost.

8.2 In-situ Management

In-situ management will occur at a roost where minimal intervention fails to resolve impacts to surrounding business, residents or members of the community, or on the Tree Martin population itself. In-situ management options are outlined in Section 6.2.

8.3 Roost Prevention and Dispersal

8.3.1 Existing Roosts

Where roosting occurs on Council-managed land that constitutes a high conflict area CoA will await the end of the roosting season and may adopt strategies to prevent roosting in future seasons. CoA may net trees that have been previous roosting sites, to prevent re-establishment of the roost in the following spring/summer. Advice from DEW is that a permit is not required for the netting of trees outside of the roosting season if this action does not lead to any protected animal being caught, restrained or trapped and subsequently relocated and the trees are netted prior to being used by the protected animal (i.e. outside of the Tree Martin roosting season).

In the longer term, following targeted investigations the CoA may consider alternative landscapes or tree species that are unlikely to support roosting populations of Tree Martins.

8.3.2 New Roosts

If Tree Martins attempt to roost in a new area of likely high conflict, CoA may initiate actions to prevent the roost from forming. It is important to ensure early intervention to identify sites and a wide-ranging monitoring program will be initiated from spring.

When a newly established roost is identified, the site will be assessed using the decision management tool (Section 7). If a score of greater than 35 is recorded, CoA may consider and adopt preventative measures such as:

- Extensive pruning, lopping or removal of roost trees to reduce the connected canopy structure.
- Temporarily or permanently netting trees with appropriately sized netting to deter roosting.
- In extreme cases, the complete removal of all trees or, if viable, the replacement with an alternative species in a high conflict area to prevent roosting.

If birds are already on site in a high conflict area early-intervention dispersal may be considered to prevent the colony from establishing a roost subject to support from DEW and Green Adelaide. Dispersal will only be undertaken by qualified and licenced staff, and dispersal activities and tools must be approved by DEW. In accordance with the NPW Act, all staff carrying out active dispersal must have appropriate permits. Dispersal will only be undertaken if the associated risks and likelihood of dispersal success is deemed acceptable. Strike risks and minimising harm to Tree Martins will be very important whenever dispersal is considered.

8.4 Research and Development

CoA is committed to fostering and participating in research that may be useful in better understanding Tree Martin ecology and developing management strategies, including partnerships with the university sector. The monitoring undertaken during the 2025-26 roosting season will contribute to this understanding.

Priority areas for research include:

Monitoring

1. Investigate the use of thermal cameras and AI to assist with detection, identification and automated counts of roosting Tree Martins.
2. Consider if transmitters can be fitted to several individuals to provide information on Tree Martin movements. This could assist in detecting new or unknown roosts, inform where nesting and foraging areas are, and indicate daily and seasonal movement patterns.

Ecology

3. Identify where Tree Martins that roost in the CoA nest and forage.
4. Determine the diet of the local Tree Martin population via eDNA or other method.

Management

5. Investigate landscapes that are suited to high density city areas that are non-attractive to Tree Martin roosting with a view to adopting these in likely high conflict areas.
6. Trial equipment and different in-situ approaches to develop a suite of tools that assist with managing Tree Martin conflict and reduce adverse impact to their populations.

Awareness Raising and Engagement

7. Prepare an integrated information and education program for residents or commercial operators. Look to improve understanding of the Tree Martin population, its ecological importance and understanding of how the community can coexist with nature.

9. References and Further Reading

Atlas of Living Australia 2026, <https://www.ala.org.au/> accessed 15/06/26.

Avisure 2026, Tree Martin 2025/26 End of Season Report, Unpublished report to City of Adelaide Council.

Beauchamp G 1999, The evolution of communal roosting in birds: origin and secondary losses, *Behavioural Ecology*, 10, pp. 675-687.

Bell, B. D. (1979). Tree Martins nesting in buildings. *Australian Bird Watcher*, 8, 102.

Birds in Backyards 2026, Tree Martin, Available at: <https://www.birdsinbackyards.net/species/Petrochelidon-nigricans>

City of Adelaide 2025, Adelaide Park Lands Management Strategy, Towards 2023. Available at: [Adelaide Park Lands Management Strategy \(APLMS\) | City of Adelaide](#)

Department of Environment and Heritage (DEH - now DEW) 2008, Adelaide and Mount Lofty Ranges South Australia Threatened Species Profile: Tree Martin, *Petrochelidon nigricans*, Available at: <https://cdn.environment.sa.gov.au/landscape/docs/statewide/pa-fact-treemartin.pdf>

Department for Environment and Water 2026. Aboriginal culture and heritage. National Parks and Wildlife Services, South Australia. Available at: <https://www.parks.sa.gov.au/understanding-parks/aboriginal-culture-and-heritage>

ebird.org 2025, Tree Martin, Available at: https://ebird.org/species/tremar2?siteLanguage=en_AU

Green Adelaide 2025, Tree martin update, Available at: <https://www.greenadelaide.sa.gov.au/discover/native-animals/tree-martins>

Hallmann CA, Sorg M, Jongejans E, Siepel H, Hofland N, Schwan H, et al. 2017, More than 75 percent decline over 27 years in total flying insect biomass in protected areas. *PLoS ONE* 12(10): e0185809.

Higgins, P. J., Peter, J. M., & Cowling, S. J. (Eds.). (2006). *Handbook of Australian, New Zealand and Antarctic Birds* (Vol. 7: Boatbill to Starlings). Melbourne: Oxford University Press.

Morcombe, M. 2000, Field Guide to Australian Birds. Steve Parish Publishing Pty Ltd, Queensland.

Serventy DL 1937, A Roosting Habit of the Tree-Martin, *Emu*, 37, pp. 158-158.

Turner, M. S. 2001, Conserving Adelaide's Biodiversity: Resources. Urban Forest Biodiversity Program, Adelaide.

Ward P and Zahavi A 1973, The importance of certain assemblages of birds as 'information centres' for food-finding, Ibis, 115 (4), pp. 517-534.

10. Glossary

Adaptive Management	A structured, iterative learning by doing approach. It requires monitoring of actions and processes to ensure improvements can be made for future management.
Aerial Insectivore	A bird that captures and consumes insects while flying.
Aggregation	Where birds gather in large numbers.
Biodiversity	The variety of plant and animal life within an ecosystem and the ecological processes that support them.
Canopy	The upper layer of tree foliage formed by branches and leaves.
Clutch size	Total number of eggs laid in a nest.
Communal Roost	A location where large numbers of birds gather together to rest or spend the night.
Conflict (Human/Wildlife Conflict)	A situation where wildlife behaviour negatively affects people, businesses, infrastructure, public health, or amenity, creating a need for management action.
Council-managed Land	Land owned or leased by Council; land under Council control such as reserves with Council as trustee; and local government roads.
Dispersal	The deliberate use of approved management techniques to encourage birds to abandon a roost and establish elsewhere.
Ecological Indicator Species	A species whose presence, abundance, or behaviour provides information about ecosystem health.
Existing Roost	A roost that has been recorded at the same location over multiple seasons or years and is considered an established component of the local urban environment.
Faecal Droppings	Bird excrement deposited beneath roost sites, which may create hygiene, amenity, odour and cleaning issues in urban areas.
Habitat	The natural or modified environment in which a species lives, feeds, breeds, or roosts.
High-Conflict Site	A location where a roost is likely to result in significant adverse impacts on people, businesses, infrastructure, public safety, public health, amenity, or the birds themselves, requiring active management intervention.

In-situ Management	Management actions undertaken at an active roost site to reduce impacts while allowing birds to remain at the site. Examples include cleaning, exclusion measures, and building modifications.
Low-Conflict Site	A location where a roost is unlikely to result in significant adverse impacts on people, businesses, infrastructure, public safety, public health, amenity, or the birds themselves, and where minimal management intervention is generally required.
Migratory Species	A species that regularly moves between regions or countries as part of its annual life cycle.
Minimal Intervention	A management approach involving little or no direct interference with a roosting flock, focusing instead on monitoring, education and planning.
New Roost	A roost that has recently become established at a location where communal roosting has not previously been recorded or has not occurred for an extended period.
Overwinter	When a proportion of the population of a largely migratory species such as Tree Martins stay at the roost year-round.
Protected Species	A species protected under legislation, making it unlawful to harm, capture, or interfere with individuals without appropriate authorisation.
Risk	The chance of something happening that will have an impact on objectives. It is measured in terms of consequences and probability.
Roost	The place where birds repeatedly return to in numbers to perch loaf or spend the night.
Roosting	When birds repeatedly return to a particular place in numbers to loaf or spend the night.
Roost Site Conflict	The likelihood that a roost will create adverse impacts for nearby residents, businesses, visitors, infrastructure, or the birds themselves.
Seasonal Roost	A communal roost occupied during parts of the year, typically outside the breeding season, which may vary in size, duration, and location between years.
Strike Risk	The risk of birds colliding with windows, overhead wires, buildings or other structures, potentially causing injury or death.
Synanthropic Species	A species that lives in close association with humans and human-modified environments.
Tree Martin	A small migratory swallow native to Australia that feeds on flying insects and forms large communal roosts outside the breeding season.

Urban Biodiversity	The diversity of plants, animals and ecological processes occurring within cities and urban environments.
Urban Ecology	The study of ecological processes and interactions between people, wildlife and the built environment in urban areas.

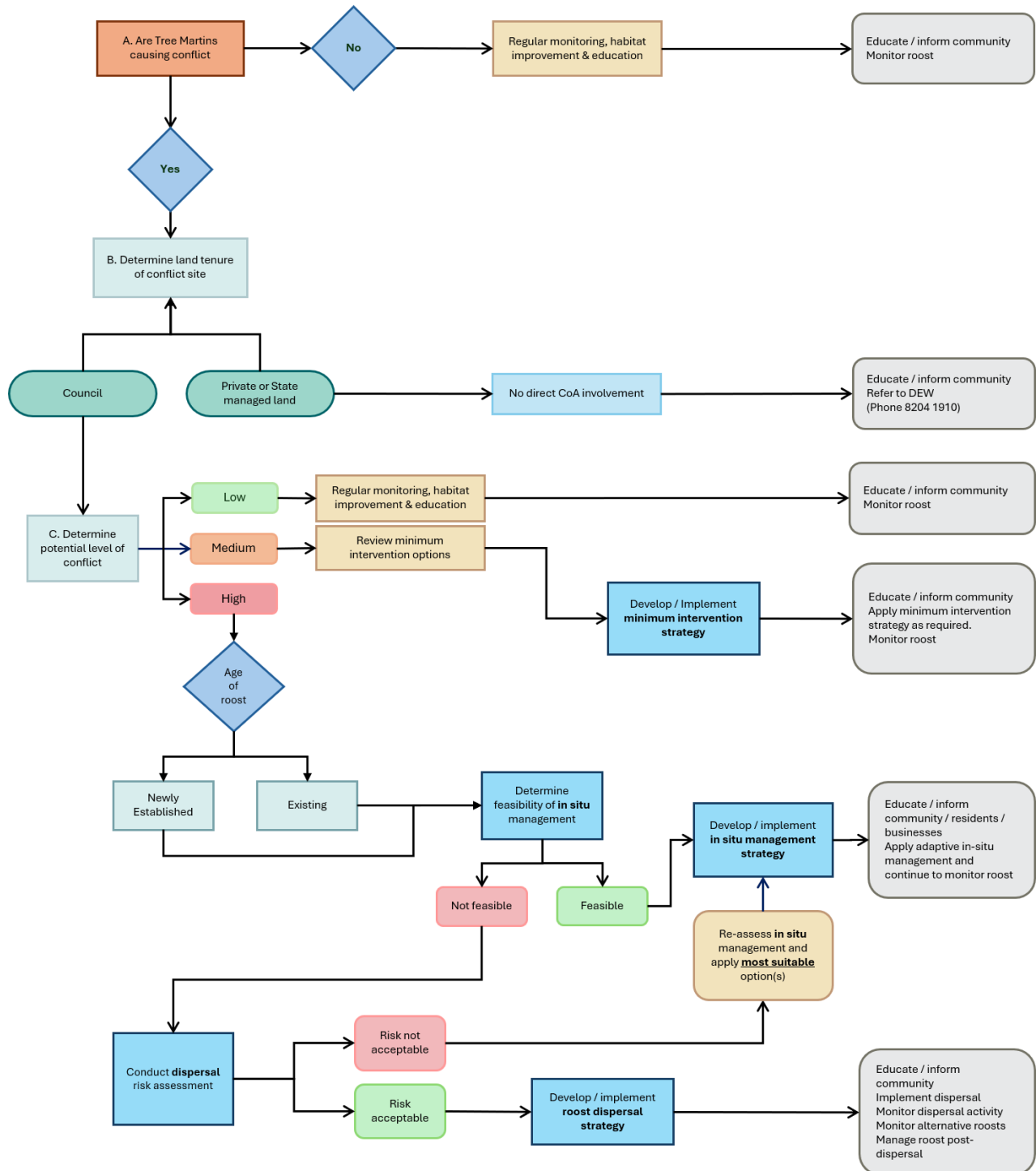
11. Appendices

Appendix A: Primary decision tree for managing human/Tree Martin conflict

Appendix B: Potential roost sites where conflict may arise and their categories

Appendix C: Management options

Appendix A: Primary Decision Tree for Managing Human/Tree Martin Conflict



Appendix B: Potential Roost Sites Where Conflict May Arise and Their Categories

Risk	Location	Roost Potential	Likelihood of Conflict	Comments
High (Undesirable)	Hutt Street	High	High	Mature avenue trees with good canopy development. The outdoor dining precinct in this area could increase its conflict despite the suitable canopy, depending on trees selected for the roost.
High (Undesirable)	Grenfell Street	High	High	More fragmented canopy than Rundle Mall but mature trees occur along much of the street. High pedestrian, vehicle and commercial activity which would cause increased conflict.
High (Undesirable)	Leigh Street	High	High	Previous Tree Martin roosting activity has been recorded within this area. Its hospitality-focused laneway design with outdoor dining and significant evening activity would continue to cause conflict despite its previous habitat usage, if roosting was to be re-established.
High (Undesirable)	Rundle Mall	High	High	Existing roost demonstrates ideal canopy characteristics preferred by the species. Conflict arises from high pedestrian activity, retailers, outdoor dining, and open planned building entrances.
High (Undesirable)	Gawler Place	High	High	Street trees provide continuity with the existing Rundle Mall roost. Heavy pedestrian use, retail activity and constrained streetscape make establishment undesirable.
High (Undesirable)	Vardon Avenue	High	High	Mature street trees provide suitable canopy structure. Extensive outdoor dining and hospitality uses could result in unacceptable amenity impacts if roosting occurred.

Risk	Location	Roost Potential	Likelihood of Conflict	Comments
High (Undesirable)	Ebenezer Place	High	High	Sheltered streetscape with suitable lighting and mature trees. High evening dining activity and limited ability to manage droppings or noise make the site unsuitable for long-term occupation.
High (Undesirable)	Victoria Square / Tarntanyangga	High	Moderate	Large open grassed area bordered by mature trees canopies. Highly activated space from December to May with evening activation, including food and beverage. Infrastructure and lighting for events may increase attractiveness as a roost location.
High (Undesirable)	Charlick Circuit	High	Moderate	Adjacent to the Adelaide Park Lands with broad mature streetscape trees and good flight corridors. Slightly lower pedestrian use than the CBD, with limited vehicle movements, making it a suitable alternative roost location. Nearby residential interfaces increase the likelihood of conflict.
Moderate (Undesirable)	Veale Gardens	High	Moderate	Dense mature vegetation, irrigation, water features and sheltered canopy create potential roost habitat. Although quieter than the CBD, regular recreational use and nearby residential interfaces increase the likelihood of conflict.
Moderate (Undesirable)	Wellington Square/Kudnartu	High	Moderate	Large mature canopy with open space suitable for a large flock. Lower commercial activity than the CBD but nearby residential interfaces and surrounding traffic increase the likelihood of conflict depending on trees selected for the roost.
Moderate (Undesirable)	Hindmarsh Square/Mukata	High	Moderate	Large mature canopy capable of supporting a substantial roost. Surrounded by offices, hotels, restaurants, traffic and public gathering areas, making conflict with people and infrastructure likely.

Risk	Location	Roost Potential	Likelihood of Conflict	Comments
Moderate (Undesirable)	Pirie Street	Low	High	Moderate canopy with strong commercial frontage. Conflict could arise due to potential high weekday pedestrian, increased vehicle activity and public transport.
Moderate (Undesirable)	Frome Road	Low	High	Mature avenue planting with connectivity to Botanic Park. Continuous vehicle traffic and pedestrian movement reduce its long-term roost potential.
Moderate (Undesirable)	Light Square/Wauwi	Low	Moderate	Continuous urban canopy with sufficient tree maturity to support communal roosting. Although habitat quality is moderate, high pedestrian activity, nearby residences, surrounding vehicle traffic and nighttime Fringe venue from January to April make this a sub-optimal location with potential conflict.
Moderate (Undesirable)	O'Connell Street	Low	High	Mature avenue planting with continuous canopy in sections. Hospitality, retail activity and high vehicle activity increases conflict in this location.
Moderate (Undesirable)	Melbourne Street	Low	High	Attractive streetscape with mature trees. Good canopy but has increased café, pedestrian and vehicle activity which could increase conflict.
Moderate (Undesirable)	Gouger Street	Low	High	Tree structure is generally less suitable than preferred roosting habitat with high vehicle activity. If a roost is formed, the restaurant precinct could experience significant amenity impacts.
Moderate (Undesirable)	Vaughan Place	Low	High	Sparse mature canopy with limited habitat value which would reduce the likelihood of roost establishment. Existing hospitality activity means any roost would be highly undesirable.

Risk	Location	Roost Potential	Likelihood of Conflict	Comments
Moderate (Undesirable)	Alfred Street	Low	High	Limited canopy continuity and relatively poor habitat quality. Its proximity to commercial activity, pedestrian movement and high vehicle activity means even a small roost could generate conflict.
Moderate (Undesirable)	Rymill Park / Murlawirrapurka (Park 14)	Low	Moderate	Large lake, mature canopy and open grassed areas provide excellent conditions for communal roosting. Has moderate vehicle activity. The highest frequented arts hubs during the Adelaide Fringe Festival with approximately 750,000 movements with food and beverage components means any roost would be highly undesirable.
Moderate (Undesirable)	Rundle Park / Kadlitpina (Park 13)	Low	Moderate	Sparse canopies made up of mature mixed-species canopies with strong connectivity to Botanic Park and the River Torrens/Karrawirra Pari. The highest frequented arts hubs during the Adelaide Fringe Festival with approximately 750,000 movements with food and beverage components means any roost would be highly undesirable.
Moderate (Undesirable)	Tarntanya Wama (Park 26) - Elder Park	Low	Moderate	In proximity to the River Torrens/Karrawirra Pari, its frequent events, tourism and public recreation usage substantially increase its conflict potential.
Moderate (Undesirable)	Hurtle Square/ Tangkaira	Low	Moderate	Mature trees and open lawn areas provide attractive roosting conditions. Close to the South Terrace Park Lands which increases its ecological connectivity, but surrounding residential land use makes the site undesirable from a conflict perspective.
Moderate (Undesirable)	Whitmore Square/lparriyi	Low	Moderate	Open Square with mature trees with less attractive canopy than other city Square locations. Nearby residents would likely be affected by noise and droppings if roosting occurred. Used as a venue for Fringe events.

Risk	Location	Roost Potential	Likelihood of Conflict	Comments
Moderate (Acceptable)	Frome Park/ Nellie Raminyemmerin Park	High	Low	Mature trees with good connectivity to the eastern Park Lands and River Torrens/ Karrawirra Pari corridor. Suitable canopy structure and lower commercial activity than the CBD.
Moderate (Acceptable)	War Memorial Drive	High	Low	Continuous avenue canopy adjacent to the River Torrens provides good landscape connectivity. Limited evening disturbance, with moderate vehicle activity makes this a suitable alternative roost location.
Moderate (Acceptable)	King Rodney Park / Ityamai- itpina	High	Low	Mature trees connected to eastern Park Lands provide suitable roosting opportunities while maintaining separation from commercial activity.
Moderate (Acceptable)	Botanic Road	High	Low	Broad avenue planting links Botanic Park and the eastern Park Lands, creating an attractive movement corridor for Tree Martins while avoiding high conflict areas.
Moderate (Acceptable)	Red Gum Park / Karrawirra (Park 12) – Riverbank north of Adelaide University	High	Low	Mature canopy and good connectivity to surrounding Park Land areas. Suitable for communal roosting with limited conflict.
Moderate (Acceptable)	Mistletoe Park / Tainmuntilla (Park 11) – Karrawirra Pari riverbank (northern side)	High	Low	Excellent riparian corridor with mature native trees and minimal evening disturbance. Suitable for long-term communal roost establishment.
Moderate (Acceptable)	Mistletoe Park / Tainmuntilla (Park 11) Adelaide Zoo perimeter	High	Low	Mature vegetation adjoining Botanic Park and the River Torrens/Karrawirra Pari provides strong habitat continuity. Evening visitor numbers are generally low, with limited conflict.
Moderate (Acceptable)	Northern section of Tamtanya Wama (Park 26)	High	Low	Mature avenue trees and open landscape structure provide good shelter. Moderate visitor usage and low evening conflict.

Risk	Location	Roost Potential	Likelihood of Conflict	Comments
Moderate (Acceptable)	Victoria Drive	High	Low	Mature avenue trees bordering Botanic Park and the River Torrens/Karrawirra Pari provide high-quality roost habitat with moderate vehicle activity.
Moderate (Acceptable)	Red Gum Park / Karrawirra (Park 12) - Torrens Parade Ground surrounds	High	Low	Mature trees adjacent to the River Torrens/Karrawirra Pari. Periodic events occur but evening conflict is generally low compared with CBD locations.
Low (Acceptable)	Brougham Gardens / Tantutittingga (Park 29)	Low	Low	Small garden reserve with scattered mature trees and low evening visitation. The canopy is discontinuous and unlikely to support a large communal roost, but any roost that forms is expected to have minimal impacts.

Appendix C: Management Options

The management options presented below were evaluated based on three key criteria: (1) Likely effectiveness in reducing Tree Martin impacts, (2) Feasibility of implementation including technical and operational considerations, and (3) Estimated cost, expressed as \$ (low), \$\$ (medium), and \$\$\$ (high). These criteria provide a transparent basis for comparing options and prioritising actions.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Passive management						
Monitoring roosts.	CoA or contracted biologists monitor, observe and record flocks and their roosting behaviours around Adelaide during the southward migration season.	Yes (only if triage for stunned, injured and deceased birds is to occur)	\$\$	Build knowledge on Tree Martin behaviour and helps to determine where alternative roosts may develop.	Monitoring could miss alternative roosts and is subject to availability of team members.	High – very effective in recording roost areas, numbers and behaviours. Early detection allows for mitigation methods to be implemented more quickly if required.
Signage for roosting trees.	Signage to deter MOP from shaking, kicking or disturbing roosting trees. Informs public that the species is protected.	No	\$	Informs MOP about potential health risks if they disturb the roosting flock and can potentially deter people from undesirable action.	Signage can be ignored, and disturbance caused by the MOPs shaking or kicking roosting trees may still occur.	Moderate – may deter MOPs disturbing the flock; however, signage may not stop incidents of shaking or kicking.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Public education	Continuation of public education through forums, workshops, social media, and online information.	No	\$	Assists the public's understanding as to Tree Martins roosting and the ways in which they can assist.	Different views and perspectives on how Tree Martins should be managed.	Moderate to high—public education is important to ensure people understand the species and management response.
Landscape modifications						
Removing roosting trees and replacing with a less appealing species.	Remove the Chinese Elms down Rundle Mall and replace them with a less dense species, that provides a less appealing roosting spot.	No	\$\$\$	Removes the roosting trees completely from Rundle Mall and forces the flock to roost elsewhere.	Not very cost effective or visually appealing, would require time for newly planted trees to mature to determine if suitable. Reduces shaded areas for MOP, diminishing both the aesthetic amenity and cooling effect in the precinct. Future trees may still encourage roosting.	Low to moderate – may be effective if appropriate tree species are chosen, however this may not be cost effective or desired as the site would be bare for some time. Using mature trees as replacements could speed the process.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Trimming of roosting trees.	Trimming of preferred roosting trees can be used to eliminate the dense canopy that connects roosting trees, making it less appealing to roost.	No	\$	Trimming of current roosting trees may reduce perching spots for roosting Tree Martins. Pruning away thick connecting canopy also exposes the flock to more elements potentially making it unappealing to roost.	Trimming trees may only offer temporary solutions, as branches may grow back or birds may relocate to neighbouring trees. May reduce the aesthetic appeal and cooling effect of the streetscape.	Low to moderate – may be effective if branches are trimmed before the roosting flock has established. Could be used for some trees in Rundle Mall.
Removing targeted trees to break canopies of roosting birds.	Removing connecting trees creates canopy gaps, which can disrupt the pathways used to shelter and travel between connecting trees.	No	\$\$	Separating tree canopies may cause the flock to seek denser, more interconnected trees elsewhere.	Birds may continue to perch on suitable trees in Rundle Mall (or other locations).	Low to moderate – may be effective if trees no longer provide a safe canopy for roosting.
Deterrent						
Visual deterrents e.g. owls, disco balls, reflective tape, etc.	Static or moving visual devices discourage roosting or perching. Birds habituate quickly if overused or left static.	No	\$	Triggers their natural fear of predation, and acts as a psychological barrier to make birds feel unsafe.	Short term options, as birds either become habituated to recognise the object to be non-threatening.	Low – not recommended for independent use. May assist in a varied deterrence toolkit.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Install spikes on surfaces to deter birds from landing/perching.	Spikes may deter landing/perching. Small birds may nest within spikes, and Tree Martins may perch on/between spikes if the correct width and configuration is not used.	Yes (if roosting site impacted)	\$	Generally humane and low maintenance, when installed correctly can deter birds from landing or perching.	Smaller birds such as Tree Martins may view wider-spaced spikes as an optimal shelter from predators.	Low to moderate – likely to be partially effective if designed and installed correctly. Not a complete solution.
Bright lights installed in roosting areas.	Floodlights reduce attractiveness of roost sites. Lights must cover all areas and be installed before birds return from migration for highest effectiveness. Only effective at night. Birds often relocate nearby.	No	\$	Bright artificial lighting acts as a strong ecological disruptor, potentially disorientating their natural nighttime migration.	Birds can become trapped in large brightly illuminated zones, causing them to circle endlessly. This could lead to exhaustion, habitat avoidance and increased risk of strikes.	Low – not recommended for independent use. May assist in a varied deterrence toolkit.
Birds of prey calls.	Emit bird of prey calls such as hawk and owl cries which can act as a bioacoustics deterrent, by exploiting natural survival instincts.	No	\$	Can be used to cover a large area, requires minimal installation. May be effective in deterring new roosting flocks.	Birds become habituated to the calls, ignoring the noise and continuing to roost.	Low to moderate – provides a short-term option and may clear out newly roosting birds, however birds may become habituated.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Increase lighting (gradually) within roost trees and/or along overhead wiring.	Fairy lights (or similar) can be installed along the branches of the roost trees on a gradual basis to slowly encourage the birds to move to more suitable locations. Lighting running along the lighting wires may increase visibility, reducing collisions.	No	\$	Increased lighting, particularly if very strong, may deter birds by disrupting their natural biological clocks and altering their perception to predation risk.	Fairy lights on current roosting trees proved ineffective in deterring Tree Martins. In fact, lighting may be enhancing the suitability of the area as it may keep predators away.	Very Low – Not currently effective. Not recommended.
Ultrasonic/audible deterrents.	Emit audible noises/high-frequency ultrasonic sound waves to confuse and disorient birds. Birds habituate quickly.	No	\$	Chemical free and admit frequencies outside of the human hearing range.	Not suitable for large spaces. Many studies have also indicated that a bird's hearing may be comparable to a human's range, making this device potentially ineffective to deter birds. Not suited to a some public spaces such as Rundle Mall.	Low – not recommended.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Visual deterrents e.g. lasers.	Non-lethal method used to deter birds, as birds perceive the moving light as an approaching threat.	Yes	\$	Birds generally do not habituate to the laser if not overused, often triggers flight response.	Can be quite costly, and effectiveness can vary depending on the species. Potential for laser beams to cause problems with human eyesight, including from reflection off surfaces.	Low – not recommended.
Physical barriers and infrastructure modifications						
Rundle Mall lighting upgrades and removal of overhead lighting/wires.	Upgrade the lighting infrastructure throughout Rundle Mall to reduce the need for overhead wires, reducing strikes.	No	\$\$\$	Reduces the risk of wire strikes down Rundle Mall by removing overhead catenary wiring.	Initial costs are high and may be unappealing to stakeholders.	Low – not recommended to reduce strikes. Initial outlay likely to be cost prohibitive. May cause unintended consequences for safety, and operation of Rundle Mall. Feasibility is questionable.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Wire strands/rolling perch.	Wiring must be at correct height and distance apart for Tree Martins and professionally installed. Polyurethane pipe can be added to the wire in 50 mm lengths to create a “rolling perch”, preventing perching and roosting.	No	\$\$	More aesthetic than installing bird spikes. Rolling perches provide a humane way to discourage birds from roosting on ledges.	Incorrect sizing can be less effective to smaller birds, that may squeeze between or underneath the wiring. Requires complex and precise installation.	Moderate to high – effective if correctly spaced and tensioned. Professional installation and maintenance required.
Bird slide.	Sloped ledges under eaves prevent nest building and perching.	No	\$	Low maintenance, permanent exclusion barrier. Creates a surface in which birds slide off and cannot perch.	Require knowledge to be properly installed, and they do not work on vertical or rounded surfaces.	Low to moderate – limited effectiveness and feasibility.
Application of decal/window film (e.g. Solyx SX-1975) to window exteriors within high-collision areas.	Window film applied to the exterior of windows deters birds from flying into reflective glass, preventing potential injuries or fatality. The film allows birds to see the glass, which helps reduce the risk of collisions.	No	\$\$	Placing film on store windows helps birds to see where the glass is and reduces the risk of collisions, as surfaces become less reflective.	May be unappealing to stakeholders as it may detract from the visual appeal and layout of their storefront.	High – easy to apply to shop windows and effective at reducing collisions.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Bird shock track or flex track.	Electrified track emits an irritating pulse to deter perching. This could be installed on perching points around the affected areas. Appropriate voltage must be used to ensure shocks do not cause significant pain or injury (including in wet weather). Flex track can be installed on flat and curved hard surfaces.	Yes	\$\$	Made from flexible PVC that can easily bend around corners and conform to different architectural shapes. Produces an intermittent static pulse that startles birds without harming them.	Prolonged exposure to elements or debris can cause it to short circuit, requires regular inspection and maintenance. Higher upfront cost for installation.	Moderate to high – effective for persistent perching. Professional installation and maintenance required.
Installing possum tail coverings over catenary wiring.	A grey silicon rubber that can be used to cover catenary wires down Rundle Mall, providing cushioning to minimise fatal wire strikes, and to make wires more visible to roosting birds.	No	\$	Adds increased visibility, due to colouring and wires appearing thicker. Offers some cushioning benefit to a degree to prevent fatal strikes.	Will degrade over time and require maintenance due to continuous elemental exposure.	High – easy to setup and install. May minimise the risk of fatal strikes occurring in Rundle Mall.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Obscured entry/door.	Consider temporary installations that deter birds from flying into buildings while maintaining visitor access. The focal period is 30-minutes prior to sunset to 1-hour after sunset (to be assessed and revised). For example: - streamers or paracord (e.g. plastic streamers or paracord curtains such as the Acopian Bird Savers, which people can part to walk through) - artwork or curtains (as above) - smoke machines (i.e. create a visual barrier to deter the birds, people can walk through) - light laser wall. The aim is to create a visual/physical deterrent that will deter/prevent the birds entering but does not impede people – and may attract people (e.g. an art installation).	No	\$	Creates a visual and physical deterrent to birds entering large opening, still allows people to enter.	May be prone to vandalism and could be potentially unappealing – businesses may be reluctant to install. Birds may still enter buildings.	Moderate to high – effective if setup correctly. Could be time-consuming to setup. May be prone to vandalism. Could be interpreted by businesses to reduce the amenity of their shopfronts / entrances, and potentially distract customers from entering.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Population management						
Food restriction	Coordination required by all stakeholders to implement food resource restriction strategies. May be complemented by dispersal at food resource sites.	No	\$	Restricting food resources may encourage the flock to move further out to find a more reliable source of food. This approach disrupts their habits without relying on harmful deterrents.	Requires precise knowledge on where the Tree Martins are going throughout the day to forage. Currently there is no accurate information available. If one food resource is restricted, birds may also travel elsewhere to find food. Very likely that Tree Martins are feeding on predominantly natural food sources that would be impossible to manage.	Low – not recommended.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Translocation	Capture and translocate Tree Martins. For multiple birds at an established roost site, birds are likely to either return or be replaced quickly.	Yes	\$\$	Sometimes translocation works well with establishing new and secure habitats for species.	Capturing, handling and releasing birds into an unfamiliar area may cause stress to birds, potentially leading to increased mortality. In most cases many translocated birds may return or be replaced by other birds.	Low – not recommended.
Active dispersal						
Falconry to disburse birds from roosting trees.	The use of trained raptors to exploit a species natural survival instinct. Effective in open areas and can be useful in preventing habituation.	Yes	\$\$	Highly effective for open areas, with the ability to patrol large areas quickly. Due to birds natural 'fight or flight response' there is no risk of habituation.	Raptors generally cannot be flown during heavy rain, strong winds or extreme temperatures. As they are diurnal hunters, they are generally ineffective at night to disperse roosting flocks.	Moderate – may assist with active dispersal as flocks begin to enter the tree canopy, if used in combination with other options, like netting trees. Requires trained personnel and birds.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Drones to monitor/disperse birds	Used to mimic predators and actively disperse birds. Can be paired with cameras for monitoring.	No (provided dispersal does not harm animals)	\$\$	Drones can be used to mimic the auditory and visual presence of predators using biomimicry. They can also be effectively used for real-time populations surveys in areas that are hard to reach or are inaccessible.	Birds may become habituated to the use of the drone, limiting its effectiveness as a tool for dispersal. Operational limits also include low light, weather and poor visibility. Flight plans require Civil Aviation Safety Authority (CASA) approval. Risks to public safety need to be considered.	Low – may assist in a varied deterrence toolkit. Flight plans will require CASA approval. Public safety and nuisance impacts will need to be considered.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Active dispersal by trained staff	May be used at nocturnal roost sites. More effective for nomadic species compared with sedentary species. Tools could include handheld visual deterrents, auditory devices lasers, pyrotechnics, etc. Interactions with the public will need to be carefully considered for any active dispersal activities. Types of dispersal must be target to the specific roosting location to prevent the risks of increased strikes.	No (provided dispersal does not harm animals)	\$\$	Utilising an array of active dispersal tools can discourage birds from establishing a permanent roosting site, encouraging them to relocate to a new area to roost. Unlike passive or static deterrents such as effigies, dynamic active dispersal tools may prevent habituation.	Types of dispersal must be targeted to the specific roosting location, as using the wrong dispersal tool may increase the likelihood of flushes and mortalities. Interactions with the public will need to be carefully considered for any active dispersal activities.	Moderate to high – provided sufficient frequency and variation in deterrence tools to avoid habituation.

Management option	Description	Permit required? Yes/No	Cost	Advantages	Disadvantages	Likely effectiveness and feasibility
Robird®	Similar to standard drones but designed to imitate raptors for greater dispersal effect.	No (provided dispersal does not harm animals)	\$\$	Prevents habituation by mimicking the appearance and flight pattern of a live bird of prey, triggering a birds 'fight or flight response'.	Flight plans require CASA approval and require trained personnel to operate. Robirds have short flight times per charge, therefore continuous coverage requires numerous batteries. Robirds cannot fly safely in heavy rain, extreme winds or at night.	Low – may assist in a varied deterrence toolkit. Flight plans will require CASA approval. Public safety and nuisance impacts will need to be considered. Interactions with the public will need to be carefully considered for any active dispersal activities.

Note: Breeding restrictions and/or culling birds is not considered suitable.

© Avisure Proprietary Limited 2026

Important Notice. The information contained in this document produced by Avisure Pty Ltd is solely for the use of the Client identified on the cover sheet for the purpose for which it has been prepared and Avisure Pty Ltd undertakes no duty to or accepts any responsibility to any third party who may rely upon this document. This document contains the most recent information available and supersedes previous reports, audits or plans. All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored, or transmitted in any form without the written permission of Avisure Pty Ltd.

State-wide Flood Hazard Code Amendment - Submission

Strategic Alignment - Our Places

Public

Tuesday, 4 August 2026

City Planning, Development
and Business Affairs
Committee

Program Contact:

Sarah Gilmour, Associate
Director Park Lands, Policy &
Sustainability

Approving Officer:

Ilia Houridis, Director City
Shaping

EXECUTIVE SUMMARY

The purpose of this report is to seek endorsement of a submission to the State Planning Commission on the State-wide Flood Hazard Code Amendment (the Code Amendment) (**Attachment A**), open for consultation from 21 May 2026 until 13 August 2026 ([Link 1](#)).

The Code Amendment updates flood hazard planning rules and mapping across the state, based on new and updated flood studies and modelling completed by the State Government.

The strategic intent of the Code Amendment is to provide a more consistent planning framework that incorporates projected climate change impacts into development assessment.

The effectiveness of the Code Amendment will ultimately depend on ensuring that the amended Planning and Design Code remains transparent, evidence-based and practical to administer.

Several aspects of the new flood mapping and policy require further refinement before implementation to ensure the amendments do not result in increased complexity and reduced transparency for applicants.

The proposed submission (**Attachment A**) outlines key positions which the Administration considers need to be refined and changed before the Code Amendment comes into effect including recognising contemporary flood studies undertaken by councils, and improved implementation and assessment guidance.

The key positions are supported by detailed technical comments as provided in **Attachment A**.

Administration is currently undertaking a comprehensive council-wide flood mapping study utilising improved drainage information. The study is due to be completed in early 2027. The draft submission seeks to use this mapping to replace the State's flood maps for future development assessment.

RECOMMENDATION

The following recommendation will be presented to Council on 11 August 2026 for consideration

THAT THE CITY PLANNING, DEVELOPMENT AND BUSINESS AFFAIRS COMMITTEE RECOMMENDS TO COUNCIL

THAT COUNCIL

1. Endorses the submission to the State Planning Commission on the State-wide Flood Hazard Code Amendment consultation as contained in Attachment A of Item 7.3 on the Agenda for the meeting of the City Planning, Development and Business Affairs Committee held on 4 August 2026.
2. Authorises the Chief Executive Officer, or delegate, to make minor technical or typographical amendments to the submission on the State-wide Flood Hazard Code Amendment consultation as contained in Attachment A of Item 7.3 on the Agenda for the meeting of the City Planning, Development and Business Affairs Committee held on 4 August 2026 for the purposes of finalising and lodging the submission.

IMPLICATIONS AND FINANCIALS

City of Adelaide 2024-2028 Strategic Plan	Strategic Alignment – Our Environment Be climate conscious and resilient
Policy	The recommendation proposed in this report aligns with the City Plan - Adelaide 2036 and Integrated Climate Strategy 2030
Consultation	This report responds to a consultation process being undertaken by the State Planning Commission in relation to a State Government led amendment to the Planning and Design Code (Code Amendment).
Resource	Not as a result of this report
Risk / Legal / Legislative	Not as a result of this report
Opportunities	The Code Amendment aligns with the strategic ambitions of the City of Adelaide Integrated Climate Strategy 2030, to be a climate resilient city by preparing our infrastructure and assets to withstand change, and ensuring our community is prepared.
26/27 Budget Allocation	Not as a result of this report
Proposed 27/28 Budget Allocation	Not as a result of this report
Life of Project, Service, Initiative or (Expectancy of) Asset	Not as a result of this report
26/27 Budget Reconsideration (if applicable)	Not as a result of this report
Ongoing Costs (eg maintenance cost)	Not as a result of this report
Other Funding Sources	Not as a result of this report

DISCUSSION

Purpose

1. The purpose of this report is to seek endorsement of a submission to the State Planning Commission on the State-wide Flood Hazard Code Amendment (the Code Amendment) (**Attachment A**), open for consultation from 21 May 2026 until 13 August 2026 ([Link 1](#)).
2. The Code Amendment updates flood hazard planning rules across the state, based on new and updated flood studies and modelling completed by the State Government.
3. It focuses on addressing flood hazards along watercourses (riverine flooding) and due to surface water (pluvial flooding).

About the Code Amendment

4. The Planning and Design Code contains three 'Overlays that set the planning rules to guide development in areas with flooding hazard:
 - 4.1. Hazards (Flooding) Overlay, which applies to areas that can be subject to an intolerable flood risk, where development should generally be avoided.
 - 4.2. Hazards (Flooding – General) Overlay, which applies to areas with tolerable flood risk and seeks actions such as raising floor levels to mitigate flood risk.
 - 4.3. Hazards (Flooding – Evidence Required) Overlay, which applies to areas where there are no suitable flood study data so precautionary actions are required, such as ensuring the floor levels of new homes are raised above the kerb.
5. The Code Amendment proposes to update these overlays focusing on:
 - 5.1. More consistent and updated mapping across the state using the latest flood studies and data which are modelled based on projected growth and climatic changes to 2050.
 - 5.2. Improving planning definitions and policies for consistency across the state, greater certainty, and to align with national guidance.
 - 5.3. Providing a more streamlined process to update flood hazard overlay mapping as new flood studies and data become available.
6. The State Government's fact sheet summarising the Code Amendment is available in [Link 2](#).

Hazards Overlays in the City of Adelaide

7. Most of the City of Adelaide is currently subject to the Hazards (Flooding Evidence Required) Overlay with the River Torrens / Karrawirra Pari and its banks subject to the Hazards (Flooding) Overlay (see Figure 1).
8. For the City of Adelaide, the Code Amendment proposes to:
 - 8.1. Increase areas where the Hazards (Flooding) Overlay applies to include watercourses on the Adelaide Park Lands and some residential streets.
 - 8.2. Apply the Hazards (Flooding – General) Overlay in the Adelaide Park Lands and city streets.
 - 8.3. Remove the Hazards (Flooding – Evidence Required) Overlay from applying in the City of Adelaide excepting a small portion of the south-east corner of the Adelaide Park Lands associated with the Pakapakanthi Wetlands (See Figure 2).
9. The result is more location specific identification of flood risk across the City of Adelaide.
10. In some instances, properties will be subject to multiple Overlays, and the submission seeks clarification of how this will be applied in practice through the development assessment process.
11. The proposed changes to the Overlays can be viewed using the State Government's Consultation Map Viewer Tool ([Link 3](#)).
12. The State Government has released a series of Frequently Asked Questions relating to the details of the Code Amendment ([Link 4](#)).

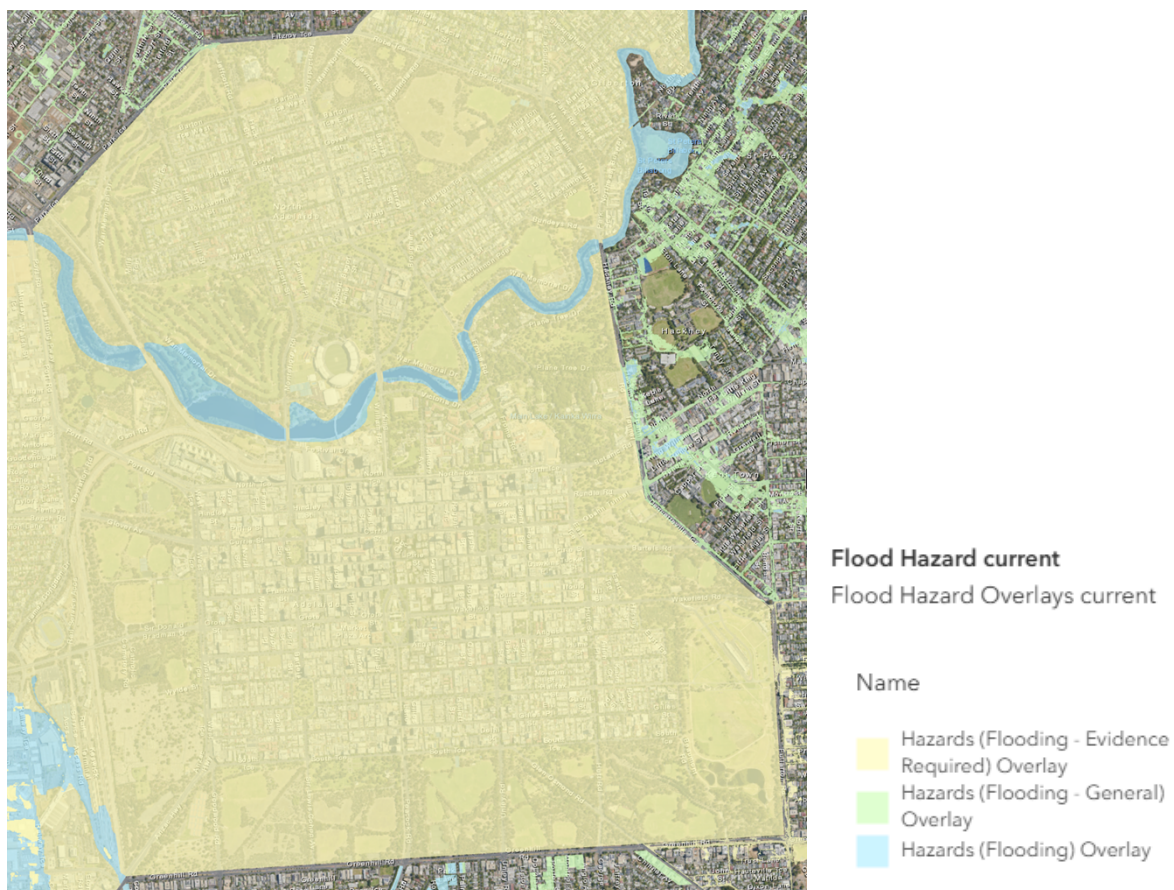


Figure 1 Current flood mapping showing extents of the flood hazard overlays in City of Adelaide

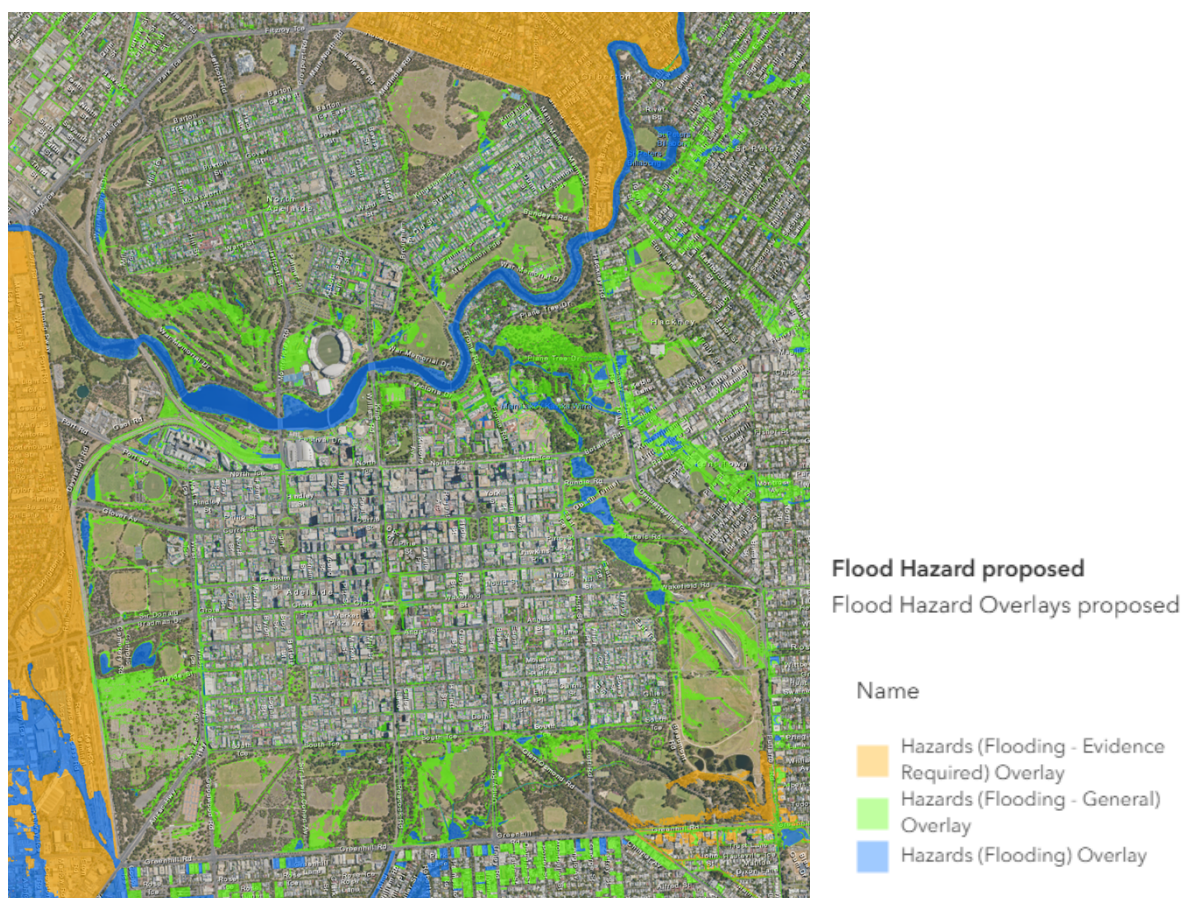


Figure 2 Proposed flood mapping showing extents of the new flood hazard overlays in City of Adelaide

Key changes proposed through the Code Amendment

13. The following key changes are proposed through the Code Amendment:
 - 13.1. Overlay mapping is to be updated and realigned, where supported by new and enhanced mapping
 - 13.2. Mapping has been derived from climate projections to 2050, recognising that future flood behaviour may differ from historical events due to changing rainfall patterns, catchment behaviour, and urban development.
 - 13.3. Underlying flood depth data will no longer form part of the Planning and Design Code mapping. Instead, the detailed technical information required for development assessment will remain in the supporting technical studies.
 - 13.4. Several changes to policy and definitions to align with Australian and International risk management standards, as summarised in **Attachment A**.
 - 13.5. The Minister for Planning can update Flood Hazard Overlays from time to time without the need for a Code Amendment.
14. It is also intended that a Practice Direction be prepared to complement the upcoming Flood Study Guidelines (to be issued by the Department for Environment and Water), to assist in streamlining the process for updates to flood hazard assessment criteria.

City of Adelaide's Draft Submission

15. A draft submission is provided as **Attachment A** – Submission to State-wide Flood Hazard Code Amendment.
16. The submission supports the strategic intent of the Code Amendment and welcomes the State Government's commitment to improving flood resilience through contemporary flood modelling, a more consistent statewide planning framework and the incorporation of projected climate change impacts into development assessment.
17. It notes alignment of the Code Amendment with the City of Adelaide's Integrated Climate Strategy 2030, particularly Council's commitment to becoming a climate-resilient city and a climate-leading capital.
18. While the intent of the Code Amendment to modernise South Australia's flood planning framework is supported, the effectiveness of the reforms will ultimately depend on ensuring that the amended Planning and Design Code remains transparent, evidence-based and practical to administer.
19. Several aspects of the proposed framework require further refinement before implementation. In particular, the proposed removal of readily accessible flood depth information from the planning system is likely to increase reliance on underlying flood studies, engineering advice and council interpretation during development assessment. This has the potential to increase assessment complexity, reduce transparency for applicants and create inconsistencies between assessment authorities.
20. These matters are particularly significant for the City of Adelaide, which is expected to accommodate substantial residential and employment growth while managing a highly constrained urban environment. The city contains critical infrastructure, established drainage networks, the River Torrens / Karrawirra Parri, extensive Adelaide Park Lands and numerous strategic renewal precincts. It is therefore essential that the planning system continues to provide clear, accurate and accessible flood information that supports both resilient development and ongoing urban renewal.
21. The submission identifies areas for refinement and adopts the following key positions:
 - 21.1. Retain access to technical flood information
 - 21.1.1. Council supports the move towards hazard-based flood mapping. However, applicants and assessment authorities should continue to have access to flood depth information, Water Surface Elevations and Finished Floor Level guidance through SAPPa or an associated State platform. Without this information, development assessment is likely to become more complex and increasingly reliant on site-specific engineering advice.
 - 21.2. Recognise contemporary council flood studies
 - 21.2.1. Council supports the ongoing use of contemporary flood modelling but considers that locally prepared flood studies and Stormwater Management Plans should be capable of informing future Flood Hazard Overlay mapping where prepared using accepted methodologies. This will ensure that planning controls continue to reflect the best available evidence.

21.3. Provide certainty through governance

- 21.3.1. Council seeks a clear governance framework defining how flood mapping will be reviewed, updated and maintained over time, including the respective responsibilities of the Department of Housing and Urban Development, the Department of Environment and Water and local government. Regular review of flood mapping should become an integral component of the planning framework.

21.4. Support housing and urban renewal

- 21.4.1. The City of Adelaide is planning to accommodate significant housing growth through urban infill and redevelopment. Flood planning should continue to support these strategic objectives by recognising that many flood risks can be effectively mitigated through contemporary engineering design rather than unnecessarily constraining appropriate development.

21.5. Improve implementation guidance

- 21.5.1. Council recommends updated Flood Development Guidelines, Practice Directions and enhanced SAPPA functionality to provide greater certainty for assessment authorities, applicants and landowners. Clear implementation guidance will improve consistency across South Australia and reduce unnecessary assessment delays.

21.6. Continue collaboration with local government

- 21.6.1. Flood risk will continue to evolve as climate science, flood modelling and infrastructure improvements progress. Council supports ongoing collaboration between the State Government, local government and technical agencies to ensure the Planning and Design Code continues to reflect contemporary flood risk while supporting resilient communities.

22. Key positions are supported by detailed technical comments as provided in **Attachment A**.

Next Steps

- 23. Pending Council's decision, the submission will be provided to the State Planning Commission before consultation closes on 13 August 2026.
- 24. Administration is currently undertaking a comprehensive council-wide flood mapping study utilising improved drainage information and more recent climate change factors.
 - 24.1. This work is expected to be completed in early 2027.
 - 24.2. The submission (**Attachment A**) seeks to use the City of Adelaide's flood mapping in the future to replace the State's flood maps for future development assessment.

DATA AND SUPPORTING INFORMATION

Link 1 – [State-wide Flood Hazard Code Amendment for consultation](#)

Link 2 – [State-wide Flood Hazard Code Amendment Fact Sheet](#)

Link 3 – [Flooding Overlay Consultation](#)

Link 4 – [State-wide Flood Hazard Code Amendment Frequently Asked Questions](#)

ATTACHMENTS

Attachment A – Submission on the State-wide Flood Hazard Code Amendment for Consultation.

- END OF REPORT -

Enquiries: S Gilmour
Reference:

Kaurna Country
25 Pirie Street, Adelaide
GPO Box 2252 Adelaide
South Australia 5001

T +61 (08) 8203 7203
F +61 (08) 8203 7575
W cityofadelaide.com.au

ABN 20 903 762 572

X August 2026

Mr Craig Holden
Chair
State Planning Commission
GPO Box 1815
Adelaide SA 5000

Via email: planASubmissions@sa.gov.au

Dear Mr Holden

Submission to the draft State-wide Flood Hazard Code Amendment consultation

Thank you for the opportunity to provide input into the **State-wide Flood Hazard Code Amendment** (the Code Amendment), open for consultation from 21 May 2026 until 13 August 2026.

On 11 August 2026, the City of Adelaide Council endorsed the following position regarding the Code Amendment.

The City of Adelaide supports the strategic intent of the Code Amendment and welcomes the State Government's commitment to improving flood resilience through contemporary flood modelling, a more consistent statewide planning framework and the incorporation of projected climate change impacts into development assessment.

Council recognises the significant technical work that has informed the Code Amendment and acknowledges that flood risk is dynamic. The planning system must continue to evolve as improved flood studies, modelling methodologies and climate science become available.

Council also considers the objectives of the Code Amendment to be closely aligned with the City's Integrated Climate Strategy 2030, particularly its commitment to becoming a climate-resilient city and a climate-leading capital.

While Council supports the intent of the Code Amendment to modernise South Australia's flood planning framework, the effectiveness of the reforms will ultimately depend on ensuring that the amended Planning and Design Code remains transparent, evidence-based and practical to administer.

Several aspects of the proposed framework require further refinement before implementation. In particular, the proposed removal of readily accessible flood depth information from the planning system is likely to increase reliance on underlying flood studies, engineering advice and council interpretation during development assessment. This has the potential to increase assessment complexity, reduce transparency for applicants and create inconsistencies between assessment authorities.

These matters are particularly significant for the City of Adelaide, which is expected to accommodate substantial residential and employment growth while managing a highly constrained urban environment. The city contains critical infrastructure, established drainage networks, the River Torrens / Karrawirra Parri, extensive Adelaide Park Lands and numerous strategic renewal precincts. It is therefore essential that the planning system continues to provide clear, accurate and accessible flood information that supports both resilient development and ongoing urban renewal.

Council also considers that the Code Amendment does not yet provide sufficient guidance on how flood mitigation measures should be assessed within established urban environments, particularly where flood planning requirements intersect with broader urban design objectives such as accessibility, active frontages and high-quality public realm outcomes.

It is imperative that flood mapping is both accurate and easily interpreted to ensure that the reforms support, rather than unnecessarily constrain, the delivery of housing and urban renewal projects.

The City of Adelaide is currently preparing a comprehensive Stormwater Management Plan for the CBD, with the support of consultancy ARUP, which uses improved drainage information, updated digital elevation modelling and the more recent ARR2019 Version 4.2 climate change factors.

This work is expected to be completed in early 2027 and will inform a comprehensive council-wide flood mapping study. Council understands that many other South Australian councils are undertaking similar investigations or have recently completed updated flood studies. Council considers that these contemporary studies should be capable of replacing the HARC flood mapping where they have been prepared using accepted methodologies and represent the best available evidence.

Key Positions

Retain access to technical flood information

Council supports the move towards hazard-based flood mapping. However, applicants and assessment authorities should continue to have access to flood depth information, Water Surface Elevations and Finished Floor Level guidance through SAPPa or an associated State platform. Without this information, development assessment is likely to become more complex and increasingly reliant on site-specific engineering advice.

Recognise contemporary council flood studies

Council supports the ongoing use of contemporary flood modelling but considers that locally prepared flood studies and Stormwater Management Plans should be capable of informing future Flood Hazard Overlay mapping where prepared using accepted methodologies. This will ensure that planning controls continue to reflect the best available evidence.

Provide certainty through governance

Council seeks a clear governance framework defining how flood mapping will be reviewed, updated and maintained over time, including the respective responsibilities of DHUD, DEW and local government. Regular review of flood mapping should become an integral component of the planning framework.

Support housing and urban renewal

The City of Adelaide is planning to accommodate significant housing growth through urban infill and redevelopment. Flood planning should continue to support these strategic objectives by recognising that many flood risks can be effectively mitigated through contemporary engineering design rather than unnecessarily constraining appropriate development.

Improve implementation guidance

Council recommends updated Flood Development Guidelines, Practice Directions and enhanced SAPPa functionality to provide greater certainty for assessment authorities, applicants and landowners. Clear implementation guidance will improve consistency across South Australia and reduce unnecessary assessment delays.

Continue collaboration with local government

Flood risk will continue to evolve as climate science, flood modelling and infrastructure improvements progress. Council supports ongoing collaboration between the State Government, local government and technical agencies to ensure the Planning and Design Code continues to reflect contemporary flood risk while supporting resilient communities.

The City of Adelaide acknowledges that the Code Amendment represents an important step towards modernising South Australia's flood planning framework. However, Council considers that several aspects of the proposed reforms require further refinement to ensure they are practical to administer, based on the best available evidence and capable of supporting both flood resilience and continued urban renewal.

Many of the issues identified in this submission are likely to be shared by other South Australian councils as they continue to undertake contemporary flood investigations and implement local stormwater management initiatives.

Council has enclosed a detailed schedule of technical comments and recommended policy amendments to accompany this submission and looks forward to continuing to work collaboratively with the State Planning Commission to ensure the Planning and Design Code delivers resilient, evidence-based planning outcomes while supporting a diversity of quality, affordable and accessible housing across South Australia.

To that end, I invite you to contact Sarah Gilmour, Associate Director, Park Lands, Policy and Sustainability on 8203 7033 or s.gilmour@cityofadelaide.com.au to discuss how the City of Adelaide can work with the State Planning Commission and Planning and Land Use Services to refine the Code Amendment.

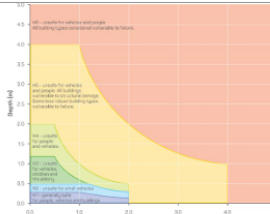
Yours sincerely

Michael Sedgman
Chief Executive Officer

Enc: Technical Comments Draft State-wide Flood Hazard Code Amendment

Enclosure 1 - City of Adelaide - Technical comments on the State-wide Flood Hazard Code Amendment

Topic	Comments	Changes or outcomes recommended								
Part 1 Rules of Interpretation										
In Part 1 – Rules of Interpretation	Spatial Information and Electronic Databases and Files, include, in alphabetical order, the following additional ‘Overlays’ and associated ‘Nature of Updates’ in the ‘Table’ <table><tr><th>Overlay or Concept Plan</th><th>Nature of Updates</th></tr><tr><td>Hazards (Flooding) Overlay</td><td>The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i>.</td></tr><tr><td>Hazards (Flooding – General) Overlay</td><td>The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i>.</td></tr><tr><td>Hazards (Flooding – Evidence Required) Overlay</td><td>The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i>.</td></tr></table> applying to Ministerial Determinations.	Overlay or Concept Plan	Nature of Updates	Hazards (Flooding) Overlay	The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i> .	Hazards (Flooding – General) Overlay	The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i> .	Hazards (Flooding – Evidence Required) Overlay	The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i> .	The details of how flood layers may be updated needs to be determined as part of this Code Amendment to enable councils to understand and determine the extent to which any impending or recent investigations of local conditions can be recognised in the Code.
Overlay or Concept Plan	Nature of Updates									
Hazards (Flooding) Overlay	The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i> .									
Hazards (Flooding – General) Overlay	The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i> .									
Hazards (Flooding – Evidence Required) Overlay	The overlay may be updated in accordance with a practice direction issued by the State Planning Commission under section 42 of the <i>Planning, Development and Infrastructure Act 2016</i> .									
Part 7 Land Use Definitions										
Land use definition for ‘Buildings for vulnerable communities’ In relation to a flood hazard overlay, means a Class 9 building containing any one or more of the following: a) health-care building; b) child care centre; c) primary or secondary school; d) residential care building. and includes Hospital; Childcare facility; Nursing home.	The term ‘vulnerable communities’ should be amended to ‘priority communities’ to align with current terminology and circumstance-based language.	<i>Suggest changing terminology to:</i> Buildings for priority communities								

Topic	Comments	Changes or outcomes recommended
Defined flood event	Means a 1 percent annual exceedance probability (AEP) at a 2050 flood event.	No changes recommended.
Extreme flood event	Means a 0.2 percent annual exceedance probability (AEP) at a 2050 flood event.	No changes recommended.
Flood hazard	In relation to a flood hazard overlay, means the potential loss of life, injury and economic loss caused by future flood events. The degree of hazard varies with the severity of flooding and is affected by topography and flood behaviour (extent, depth, velocity).	No changes recommended.
Flood hazard classification	In relation to a flood hazard overlay, means the classification of flood hazard from H1 to H6 based on depth and velocity, with vulnerability thresholds as follows: H1 – generally safe for vehicles, people and buildings. H2 – unsafe for small vehicles. H3 – unsafe for vehicles, children and the elderly. H4 – unsafe for vehicles and people. H5 – unsafe for vehicles and people. All building types vulnerable to structural damage. Some less robust building types vulnerable to failure. H6 – unsafe for vehicles and people. All building types considered vulnerable to failure. As published by the Australian Institute for Disaster Resilience in the Australian Disaster Resilience Guideline 7-3 Flood Hazard 2017	 Source: Australian Disaster Resilience Guideline 7-3 Flood Hazard published by the Australian Institute for Disaster Resilience dated 2017 and referred to the Flood Hazard, Technical Report 2014/07, prepared by Smith GP, Davey EK and Cox RJ at the Water Research Laboratory, University of New South Wales, Sydney dated 2014 (aidr.org.au)

Topic	Comments	Changes or outcomes recommended
	and illustrated in Column C of this term.	
Flood hazard overlay	Means any of the following: Flooding (Hazards) Overlay Flooding (Hazards – General) Overlay Hazards (Flooding – Evidence Required) Overlay	No changes recommended.
Flood risk	In relation to a flood hazard overlay, means the potential risk of flooding to people, their social setting, and their built and natural environment. Flood risk varies from tolerable flood risk to intolerable flood risk depending on the likelihood of a flood event occurring (AEP) and the consequence (flood hazard classification).	No changes recommended.
High flow area	In relation to a flood hazard overlay, means the area in which a building is vulnerable to structural damage or failure from floodwater in the flood hazard classification H5 or H6 for flood events up to and including the 5 percent annual exceedance probability (AEP) at a 2050 flood event.	No changes recommended.
Intolerable flood risk	In relation to a flood hazard overlay, means a risk that, following understanding of the likelihood and consequences of flooding is so high that it requires consideration of implementation of treatments or actions to improve understanding, avoid, transfer or reduce the risk. Intolerable flood risk is quantified as: H3-6 flood hazard classification for a one per cent annual exceedance probability (AEP) at 2050 flood event H2-6 flood hazard classification for a five per cent AEP at 2050 flood event and illustrated in Column B of this term.	No changes recommended to wording however, mapping should be colour coded to reflect this table for ease of interpretation. i.e. Flooding General should be light blue – Flooding should be dark blue.

Topic	Comments	Changes or outcomes recommended																											
	<table><tr><th colspan="2" rowspan="2"></th><th colspan="4">Flood hazard classification</th></tr><tr><th>H1</th><th>H2</th><th>H3</th><th>H4.5</th></tr><tr><td rowspan="2">Likelihood</td><td>1% AEP</td><td></td><td></td><td></td><td></td></tr><tr><td>5% AEP</td><td></td><td></td><td></td><td></td></tr></table> <table><tr><th colspan="2">Legend</th></tr><tr><td></td><td>Tolerable flood risk</td></tr><tr><td></td><td>Intolerable flood risk</td></tr></table>			Flood hazard classification				H1	H2	H3	H4.5	Likelihood	1% AEP					5% AEP					Legend			Tolerable flood risk		Intolerable flood risk	
				Flood hazard classification																									
		H1	H2	H3	H4.5																								
Likelihood	1% AEP																												
	5% AEP																												
Legend																													
	Tolerable flood risk																												
	Intolerable flood risk																												
Tolerable flood risk	In relation to a flood hazard overlay, means a risk that, following understanding of the likelihood and consequences of flooding are tolerated provided the risk is reduced as low as reasonably practicable. Tolerable flood risk is quantified as: H1-2 flood hazard classification for a one per cent annual exceedance probability (AEP) at 2050 flood event H1 flood hazard classification for a five per cent AEP at 2050 flood event as illustrated in Column B of this term. <table><tr><th colspan="2" rowspan="2"></th><th colspan="4">Flood hazard classification</th></tr><tr><th>H1</th><th>H2</th><th>H3</th><th>H4.5</th></tr><tr><td rowspan="2">Likelihood</td><td>1% AEP</td><td></td><td></td><td></td><td></td></tr><tr><td>5% AEP</td><td></td><td></td><td></td><td></td></tr></table> <table><tr><th colspan="2">Legend</th></tr><tr><td></td><td>Tolerable flood risk</td></tr><tr><td></td><td>Intolerable flood risk</td></tr></table>			Flood hazard classification				H1	H2	H3	H4.5	Likelihood	1% AEP					5% AEP					Legend			Tolerable flood risk		Intolerable flood risk	No changes recommended to wording however, mapping should be colour coded to reflect this table for ease of interpretation. i.e. Flooding General should be light blue – Flooding should be dark blue.
				Flood hazard classification																									
		H1	H2	H3	H4.5																								
Likelihood	1% AEP																												
	5% AEP																												
Legend																													
	Tolerable flood risk																												
	Intolerable flood risk																												
Policy Changes - Hazards (Flooding) Overlay																													
DO 1 Impacts on people, property, infrastructure and the environment from high-intolerable flood risk are minimised by retaining areas free from development, and minimising intensification where development has occurred.	Provides consistent terminology for better interpretation.	No changes recommended.																											

Topic	Comments	Changes or outcomes recommended
PO 1.1 Land division is limited to areas where the consequences to buildings and safety are low and can be readily managed or overcome to a tolerable flood risk .	Provides a defined benchmark for appropriate siting and design of land divisions however without flood depth data within the mapping, could increase the complexity of assessment with each division needing to be accompanied by a flood management study.	DTS/DPF should include measures on how to achieve a tolerable flood risk and would also be assisted by including the specific data-set within the overlay.
PO 2.1 Development sited and designed to minimise exposure of people and property to unacceptable intolerable flood risk .	Provides consistent terminology for better interpretation.	No changes recommended.
PO 2.2 Development including buildings for vulnerable communities Buildings housing vulnerable people , community services facilities, key infrastructure and emergency services facilities are not located in the overlay unless : a) there is an overriding planning need for the use b) there is no alternative site outside of the overlay that would address the identified need c) development sited away from flood prone areas to enables the uninterrupted operation of services during an extreme flood event and d) development reduces the likelihood of entrapment during an extreme flood event .	The DTS/DPF includes uses that are NOT permitted. This is not how DTS/DPF provisions have traditionally been utilised (usually worded to demonstrate compliance with the PO) This may cause confusion for interpretation. Agree with the intent however that the uses listed in the DPF should not be located within this Overlay and perhaps would be better understood as an exception within the PO. It is unclear what an 'overriding planning need' refers to. Are points (a) to (d) all required to be 'met' in order to allow certain buildings for vulnerable communities be established within this Overlay? How would 'uninterrupted operation of services' during an extreme flood event be determined (i.e. a standard flood event procedure)?	A definition is required for <i>an 'overriding planning need'</i> Suggested wording of PO 2.2 includes purple text below: Development including buildings for priority communities Buildings housing vulnerable people, community services facilities, key infrastructure and emergency services facilities are not located in the overlay unless all of the following criteria (a) to (d) are demonstrated: a) does not include any of the following land uses in part or whole: <i>Childcare facilities, educational facilities, retirement and supported accommodation, emergency services facilities, hospitals and prisons;</i> b) there is an overriding planning need for the use;

Topic	Comments	Changes or outcomes recommended
		c) there is no alternative site outside of the overlay that would address the identified need; d) development sited away from flood-prone areas to enables the uninterrupted operation of services during an extreme flood event and e) development reduces the likelihood of entrapment during an extreme flood event Practice direction to include understanding of how this (b) – (e) may be demonstrated is required.
PO 3.2 Development does not cause unacceptable adverse impacts on any adjoining property by the diversion of flood waters or an increase in flood velocity or flood level.	With reference to development ensuring no ‘adverse’ impacts on an adjoining property through diversion of flood waters or increase flood level/velocity.	No changes recommended.
PO 3.4 Development avoids frequently flooded or high-velocity high flow areas, other than where it is part of a flood mitigation scheme to reduce flood impact. DTS/DPF 3.4 Other than a recreation area, development is located outside of a 5%-AEP principal flow-path high flow area.	Provides consistent terminology for better interpretation.	No changes recommended.

Topic	Comments	Changes or outcomes recommended
PO 3.5 Buildings are sited, designed and constructed to prevent the entry of floodwaters in a 1%-AEP defined flood event where the entry of floodwaters is likely to result in undue damage to, or compromise ongoing activities within, buildings.	Provides consistent terminology for better interpretation.	No changes recommended.
DTS/DPF 3.5 Buildings comprise one of the following: a) a porch or portico with at least 2 open sides b) a verandah with at least 3 open sides c) a carport or outbuilding with at least 2 open sides (whichever elevations face the direction of the flow) d) any post construction with open sides e) a building with a finished floor level that is at least 300mm above the height of a 1%-AEP defined flood event.	Many developments have occurred under current hazard flooding (water courses, creeks, flood plains with conditions such as FFL of buildings above the 1% AEP flood elevation with the consideration of a buffer not less 10m of both banks of the watercourse/creek). (Reference: Latest National Construction Code)	Are these conditions going to be maintained?
PO 4.1 Buildings and structures used either partly or wholly to contain or store hazardous materials are designed to prevent spills or leaks leaving the confines of the building during the 1%-AEP defined flood event to avoid potential environmental harm. DTS/DPF 4.1 Development involving the storage or disposal of hazardous materials is wholly located outside of the 1%-AEP flood plain or flow path defined flood event.	Provides consistent terminology for better interpretation.	No changes recommended.

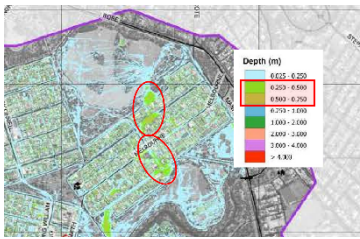
Topic	Comments	Changes or outcomes recommended
PO 6.1 Development does not occur on land: a) from which evacuation to areas not vulnerable to flood risk is not possible during a 1%-AEP defined flood event b) which cannot be accessed by emergency services vehicles or essential utility service vehicles during a 1%-AEP defined flood event.	Provides consistent terminology for better interpretation.	No changes recommended.
PO 6.2 Access driveways and tracks to a Class 1 to 9 building significant development (i.e. dwellings, places of work, etc.) consist of comprises a safe, all-weather trafficable surface that is accessible during a 1%-AEP defined flood event.	Understand that the intent is to exclude the need to demonstrate safe/all-weather trafficable surfaces (during a defined flood event) for class 10 structures. As highlighted earlier, DTS/DPF provisions have traditionally been utilised with enabling assessment criteria 'positive' this may cause confusion for interpretation.	Suggested wording for PO 6.2 in purple: Access driveways and tracks to a Class 1 to 9 building (excluding Class 10 non-habitable buildings) significant development (i.e. dwellings, places of work, etc.) consist of comprises a safe, all-weather trafficable surface that is accessible during a 1%-AEP defined flood event.
Policy Changes - Hazards (Flooding- General) Overlay		
DO 1 Impacts on people, property, infrastructure and the environment from general tolerable flood risk are minimised through the appropriate siting and design of development.	Provides consistent terminology for better interpretation.	No changes recommended.
PO 1.1 Development including buildings for vulnerable communities Buildings housing vulnerable people, community services facilities,	Provides consistent terminology for better interpretation.	PO 1.1 Development including buildings for priority communities Buildings housing vulnerable

Topic	Comments	Changes or outcomes recommended
key infrastructure and emergency services facilities are sited away from flood areas, designed and operated to enable uninterrupted operation of services and reduce likelihood of entrapment in an extreme flood event.		people, community services facilities, key infrastructure and emergency services facilities are sited away from flood areas, designed and operated to enable uninterrupted operation of services and reduce likelihood of entrapment in an extreme flood event.
DTS/DPF 2.1 Habitable buildings, commercial and industrial buildings, and buildings used for animal keeping incorporate a finished ground and floor level not less than 300mm above the height of a defined flood event. Finished Ground and Floor Levels In instances where no finished floor level value is specified, a building incorporates a finished floor level at least 300mm above the height of a 1% AEP flood event.	Developments under this flooding scenario require buildings FFL to be set at 300mm above the defined flood event however, this may not be practical to achieve when the data is not available and/or the overlay does not reach all parts of one allotment. Therefore, the DTS/DPF should recognise the local top of kerb level as a benchmark alternative and include the words <i>or 300mm above the top of the kerb, whichever is higher</i>.	Suggested wording for DTS/DPF 2.1 DTS/DPF 2.1 Habitable buildings, commercial and industrial buildings, and buildings used for animal keeping incorporate a finished ground and floor level not less than 300mm above the height of a defined flood event or 300mm above the top of the kerb, whichever is higher.
PO 3.1 Buildings and structures used either partly or wholly to contain or store hazardous materials are designed to prevent spills or leaks leaving the confines of the building during a 1% AEP defined flood event to avoid potential environmental harm.	Provides consistent terminology for better interpretation.	No changes recommended.

Topic	Comments	Changes or outcomes recommended
DTS/DPF 3.1 Development involving the storage or disposal of hazardous materials is wholly located outside of the 1% AEP flood plain or flow path defined flood event.		
Technical/Other matters		
Consultation material	Interpreting the map viewer is challenging for most people (the general community). For example, any point on the map returns the label "1 in 20 _2050 _H _filt 50 mm" Please explain what this means.	
Interpretation of mapping	The flood hazard from the AIDR (Australian Disaster Resilience) Handbook 7-3 dated 2017 classification This figure is important and should be simplified to enable the non-engineers to understand interpret and provide comments.	
Mapping accuracy	The HARC flood mapping for the CBD shows some depth up to 1m in some high points of some roads, or large depth differences on balanced roads. Therefore, CoA is not confident that the HARC flood depth in most areas is applicable. CoA is currently undertaking Stormwater Management Plan (by ARUP Engineers) for the CBD with greater existing drainage information, DEM data, and using a more recent ARR2019 v4.2 climate change factor which will then inform a	Further clarification required on the discrepancies between the levels and depth of flooding shown on high points of the roads. Confirmation that mapping undertaken by council will be able to be included in the Code in a timely manner.

Topic	Comments	Changes or outcomes recommended
	more comprehensive council-wide flood mapping study. The SMP is expected in early 2027. Once completed, the flood maps produced by ARUP must replace the current HARC flood maps.	
Rainfall intensity increment	Rainfall Intensity increment of 5% per degree Celsius appears to be an older finding from ARR2019 v4.1. A more recent ARR2019 v4.2 suggested a higher intensity increment at about 8%-15% per degree Celsius of temperature warming. This suggests that the flood overlays depth information will underestimate the future climate factor, therefore imposing risk to the development in regard to Finished Floor Level (FFL) design.	Further clarification is required on whether this updated rainfall intensity increment will be part of the future updates for the policy.
Elevations/depression model	Is a 0.5 m LiDAR-derived Digital Elevation Model (DEM) being applied to the Adelaide City catchment area? The HARC report (pg 84) indicates that a 1m DEM was used, and the model results show instances of trapped surface flow within side streets and private properties. This may suggest limitations in the underlying survey data, potentially resulting in artificial depressions and unrealistic ponding in these locations.	Further clarification on the DEM applied.
Data accessibility	The 1% AEP flood depth is currently not visible or identifiable from the web viewer, which is important for development assessment against flood immunity when defining the FFL requirement.	Are there future plans to release flood depth information within the mapping. It is recommended that the flood depth legend be presented for intended user to interpret flood

Topic	Comments	Changes or outcomes recommended
	Further to this, in the HARC flood mapping, a flood depth interval of 250mm is too broad which increases uncertainty and can hide important local differences in hazard and impact for intended user.	depth against the freeboard requirement in the policy. It is suggested that the depth information be colour coded in 50 mm increments (e.g. 0–0.05 m, 0.05–0.10 m, 0.10–0.15 m, etc.) to improve clarity and better represent depth variations.
Inconsistency in mapping	Within the City of Adelaide catchment, the flood overlay is currently mapped over the road network, whereas in the Unley council catchment the overlay is mapped within property parcels (Parcel-based mapping). For example: 1. City of Unley Catchment (Left) 2. City of Adelaide catchment (Right)  Further clarification is required for the 'parcel-based' mapping overlays. e.g. how is this determined or distinguish between 1. The Hazards (Flooding) overlay Intolerable flood risk. vs 2. The Hazards (Flooding-General) Overlay Tolerable flood risk.	This appears to be an inconsistency in the approach used to display the flood overlay in some other council areas. This needs to be standardised to provide a consistent approach across council boundaries.

Topic	Comments	Changes or outcomes recommended
Future projection	Is there any reason for selecting the 2050 climate model when many SA councils are increasingly using 2070 (or even 2090/2100) climate projections?	Provide clarification or any intent to update.
	Based on the HARC Flood Report, several side streets intersecting Jerningham Street are shown to experience ponding depths of up to 0.75m (as per appendix legend). At these depths, flooding would overtop the road network and potentially inundate adjacent properties however, the overlay appears to be limited to the road system only in most cases. This may create confusion for map users where the associated flood depth information is not readily accessible or clearly represented. For example: 1. Flood hazard overlay (Left) 2. HARC Report - Appendix 1%AEP (Right)  	Provide clarification on how this is to be interpreted i.e. does the overlay policy ONLY apply to the area where the overlay is present or is development of the whole allotment affected if part of the overlay affects part of an allotment. And what occurs for a development that has both Flood Hazard and Flood General Overlays intersecting the land.

Topic	Comments	Changes or outcomes recommended
	The HARC report (refer pg 106, pg111, pg113 and snips below) indicates that the CBD hydraulic model has not been calibrated. In the absence of calibration and validation against observed flood behaviour or historical flood records, it is unclear on what basis a high level of confidence can be assigned to the resulting flood mapping outputs. Given that the proposed flood hazard overlay may inform planning controls and influence development outcomes, further clarification is sought regarding the methodology adopted to verify the model performance, the limitations associated with the current mapping, and the degree of confidence that should reasonably be attributed to the HARC flood extents and depths within the Adelaide CBD catchment. Flood Hazard Mapping and Assessment Project As discussed in Section 5.1.1, a residential sewerage in the Lower Torrens Model, i.e. not an on-gate, also, on the property of the CBD has a critical location of 30-metre, the temporal pattern choice of rate representative temporal pattern. A sensitivity analysis of the CBD model was completed, in the form of knowledge of the pipe, however, given the uncertainty around the events of the pipe network and all details a sensitivity network is detailed survey of the pit and pipe network is recommended. As part of the calibration process anecdotal evidence was gathered about the October 2016 event, in particular. The anecdotal evidence suggested that the water did not break the banks of the river Manning's n to that shown in Table 5-1 was adopted. For the initial runs undertaken for the October 2016 event a higher Manning's n value was indicated that the river broke its banks. Therefore, the Manning's n value was lowered to the one shown in Table 5-1. In general, the calibration result indicates that the Manning's n values adopted are appropriate for use. The CBD model was not calibrated as there was no data to calibrate against. 8. Design event flood mapping and sensitivity analysis This section provides an overview of the mapping process. 8.1 Overview From the Lower Torrens model, flood extents are generally contained within the following 10 events up to and including the 1% AEP event. However, for the 1% AEP water height is up to 100-150 AEP water levels occur across locations downstream of the floodplain at a very high level. Up to and including the 1% AEP event none of the results modelled are overtopped. During a 1% AEP event conditions occur South Road, Paper Avenue and Railway Bridge near Moorabie to the south of the CBD. From the CBD model, flood extents are generally using the results for events up to and including the 1% AEP event. These map areas of flooding within the CBD are associated with the 1% AEP event and are the CBD along the riverbank. The 1% AEP event is the highest of a 1% AEP event, for which, the 1% AEP event is the highest of a 1% AEP event, for which, the 1% AEP event is the highest of a 1% AEP event. 8.2 Lower Torrens Model FullScale has the maximum of each map output during the calibration period on a map.	Provide clarification on the calibration of the hydraulic modelling used to assist council engineers to interpret any discrepancies between the Code overlay mapping and any subsequent mapping undertaken by council.

The Economic Value of the Adelaide Park Lands

Strategic Alignment - Our Economy

Public

Tuesday, 4 August 2026

City Planning, Development and Business Affairs Committee

Program Contact:

Sarah Gilmour, Associate Director Park Lands, Policy & Sustainability

Approving Officer:

Ilia Houridis, Director City Shaping

EXECUTIVE SUMMARY

This purpose of this report is to present a draft assessment of the economic value of the Adelaide Park Lands (**Attachment A**), prior to finalising the report for public release.

The report titled '*More Than Green Space: The Economic Value of the Adelaide Park Lands*' (**Attachment A**) delivers against The City of Adelaide's Strategic Plan 2024-2028, The City of Adelaide Economic Development Strategy and the Kadaltilla / Adelaide Park Lands Authority (Kadaltilla) Strategic Plan 2023-2028.

The report was presented to Kadaltilla on 30 July 2026, and establishes a consolidated evidence base across visitation, recreation, employment, business activity, education, sport, transport, cultural, environmental and asset value indicators. Key findings across the Adelaide Park Lands include:

- Visitation and Workforce
 - 41.5 million annual visits, with 3 million unique visitors annually.
 - 1,400 people directly employed.
- Direct Economic Benefit and Revenue
 - \$331.5 million in parks-attributable consumer spending - Spendmapp analysis.
 - Education and Training sector
 - \$2.2 billion contributed annually from activity in the Adelaide Park Lands,
 - \$4.7 billion annually by the Adelaide University located in the Adelaide Park Lands.
 - \$522,581 in 2024/25 of combined annual income from commercial leases and licences.
 - \$167 million in economic activity per year through major institutions in the Adelaide Park Lands.
 - \$32.6 million and \$81.5 million per year through events.
 - \$982,330 in 2024/25 through products and services associated with the City of Adelaide nursery.
 - 5% for properties with frontage and 50% for properties with views of observed property valuation uplift.
- Recreation and Avoided Health Costs
 - \$328.1 million indicative annual recreation value.
 - \$196 million in direct health, transport and environmental benefits.
 - \$56.8 million per year of health benefits.
 - Air quality benefits are calculated at \$71,357 and the value of avoided emissions is \$42,687 per year.
- Environmental
 - \$699,782 per year of greenhouse gas reduction through 485 hectares of tree canopy sequestration.
 - \$180,420 in annual stormwater benefits.
 - \$376.2 million in national ecosystem value through Adelaide Park Lands biodiversity.

The draft assessment is intended to inform future decision-making, advocacy and investment cases relating to the Adelaide Park Lands.

RECOMMENDATION

The following recommendation will be presented to Council on 11 August 2026 for consideration

THAT THE CITY PLANNING, DEVELOPMENT AND BUSINESS AFFAIRS COMMITTEE RECOMMENDS TO COUNCIL

THAT COUNCIL

1. Receives the draft assessment of the economic value of the Adelaide Park Lands as contained in Attachment A to Item 7.4 on the Agenda for the meeting of the City Planning, Development and Business Affairs Committee held on 4 August 2026.
 2. Authorises the Chief Executive Officer, or delegate, to amend the draft assessment of the economic value of the Adelaide Park Lands as contained in Attachment A of Item 7.4 on the Agenda for the meeting of the City Planning, Development and Business Affairs Committee held on 4 August 2026 for the purposes of finalising the document.
-

IMPLICATIONS AND FINANCIALS

City of Adelaide 2024-2028 Strategic Plan	Strategic Alignment – Our Environment The City of Adelaide's Strategic Plan 2024-2028 includes an outcome that <i>'The status, attributes and character of our green spaces and the Park Lands are protected and strengthened'</i>. A key action is to continue the support for the Kadaltilla/Adelaide Park Lands Authority Subsidiary and the delivery of the Kadaltilla Charter and Business Plans. Relevant indicators of success include the delivery of the Adelaide Park Lands Management Strategy.
Policy	Strategy 1.3 of the Adelaide Park Lands Management Strategy – Towards 2036 seeks to promote the Adelaide Park Lands as a visitor and tourist destination. The <i>Adelaide Park Lands Act 2005</i> (SA) includes the following statutory principle for planning for the future of the Adelaide Park Lands: <i>The Adelaide Park Lands provide a defining feature to the City of Adelaide and contribute to the economic and social well-being of the city in a manner that should be recognised and enhanced.</i> The Kadaltilla / Adelaide Park Lands Authority 2023-2028 Strategic Plan includes the following: <i>Objective 3.5: Assess the landscape value of the Adelaide Park Lands including economic, environmental and cultural significance</i> <i>Initiative 3.5: Undertake an assessment of economic, environmental and cultural significance of the Adelaide Park Lands</i> The City of Adelaide's Economic Development Strategy includes that the City of Adelaide <i>will advocate for an assessment of the economic, environmental, social and cultural contributions of the Adelaide Park Lands to the city and South Australia.</i>
Consultation	Stage 1 of the project to establish the methodologies for valuing the Adelaide Park Lands included advice on cultural values; cultural value is acknowledged but not monetised in the draft assessment. The Kurna Culture and Heritage indicator identifies economic opportunity associated with Kurna-led activity, procurement and cultural tourism. The City of Adelaide is separately working on the Kurna Values of the Adelaide Park Lands with the support of KYAC and an Australian Government grant to update the National Heritage Management Plan for the Adelaide Park Lands and City Layout. The Kadaltilla/Adelaide Park Lands Authority considered this matter at its meeting on 30 July 2026.
Resource	Not as a result of this report
Risk / Legal / Legislative	Several indicators within this report use overlapping proxy-value methodologies to express different dimensions of Adelaide Park Lands use and contribution. These indicators should not be interpreted as additive economic totals. Some indicators represent: • Direct economic activity • Indicative recreational value • Avoided cost/value transfer estimates • Contextual or strategic indicators. In some cases, multiple indicators draw upon the same underlying visitation and participation patterns to illustrate different aspects of Adelaide Park Lands contribution.
Opportunities	The report is intended to support future advocacy, funding submissions and business cases, by demonstrating economic value.
26/27 Budget Allocation	Not as a result of this report

Proposed 27/28 Budget Allocation	Not as a result of this report
Life of Project, Service, Initiative or (Expectancy of) Asset	Not as a result of this report
26/27 Budget Reconsideration (if applicable)	Not as a result of this report
Ongoing Costs (eg maintenance cost)	Not as a result of this report
Other Funding Sources	Not as a result of this report

DISCUSSION

Purpose

1. The purpose of this report is to present a draft assessment of the economic value of the Adelaide Park Lands (**Attachment A**), prior to finalising the report for public release.
2. The City of Adelaide's Economic Development Strategy ([Link 1](#)) includes that the City of Adelaide will advocate for an assessment of the economic, environmental, social and cultural contributions of the Adelaide Park Lands to the city and South Australia.
3. The report titled '*More Than Green Space: The Economic Value of the Adelaide Park Lands*' delivers against this Strategy.
4. It delivers against the following objective and initiative in the Kadaltilla / Adelaide Park Lands Authority (Kadaltilla) Strategic Plan 2023-2028 ([Link 2](#)):
 - 4.1. Objective 3.5 – Assess the landscape value of the Adelaide Park Lands including economic, environmental and cultural significance.
 - 4.2. Initiative 3.5 – Undertake an assessment of economic, environmental and cultural significance of the Adelaide Park Lands.
5. The project responds to the following Kadaltilla decision on 18 April 2024:
 - 5.1. Suggests that Administration consider the opportunities for progressing economic/environmental and social value assessment in future Adelaide Park Lands Management Plans and other relevant plans and strategies.
6. The draft assessment is intended to inform future decision-making, advocacy and investment cases relating to the Adelaide Park Lands.

Stage 1 – Economic Value of the Adelaide Park Lands

7. The project is being undertaken in a staged approach. The City of Adelaide completed Stage 1 in 2024/25 with the support of Michael Connell and Associates, Hirst Projects and Brave and Curious consultant teams, to prepare a comprehensive and academic report on economic methods for valuing the Adelaide Park Lands.
8. Part 1 of the project focused on background research, literature review and the development of economic methodologies.
9. Part 1 was informed by international approaches and extensive internal engagement including Park Lands Policy and Sustainability, City Experience, City Culture, Infrastructure, Strategic Property and Commercial, Social Planning and Governance.
10. Since the completion of the initial consultant-led research and economic methods, Administration has continued to refine the methodology to:
 - 10.1. Consolidate and review available datasets across economic, environmental, social and cultural domains.
 - 10.2. Simplify and adapt the methodologies to reflect data that is currently available or feasible to maintain.
 - 10.3. Develop a staged and scalable methodology that can be expanded as additional datasets or resources become available, including measures, indicators and data gaps.

Stage 2 – Economic Value of the Adelaide Park Lands

11. Stage 2 of the project was completed by the Administration in 2025/26 based on the Stage 1 methods and internal and external data sources, with specific investigations completed by Westlink Consulting, Geografia, Pathzz and Economy Id.
12. The subsequent draft assessment of economic value of the Adelaide Park Lands (**Attachment A**) establishes a consolidated evidence base across visitation, recreation, employment, business activity, education, sport, transport, cultural, environmental and asset value indicators.
13. This includes economic value across:
 - 13.1. Visitation and recreational use
 - 13.2. Consumer spending and business activity
 - 13.3. Employment, major institutions and State-managed assets

- 13.4. Education and student activity
- 13.5. Sport and recreation, including school sport and personal training/group exercise
- 13.6. Cycling and walking
- 13.7. Kaurna culture and heritage (non-monetised)
- 13.8. Events, arts and cultural activity
- 13.9. Environment, including biodiversity, urban heat and stormwater management
- 13.10. Property and embedded asset value.
- 14. The draft assessment values the Adelaide Park Lands as more than open space and demonstrates their role as civic infrastructure, a visitor and recreation destination, a setting for major institutions and events, an environmental asset, a contributor to health and wellbeing, and a place of continuing cultural significance.
- 15. The draft assessment recognises that not all Adelaide Park Lands value is captured through direct revenue or market transactions.
 - 15.1. Many benefits, including recreation, health, cooling, biodiversity, stormwater management, cultural significance and preservation value, are experienced as public or non-market benefits.
 - 15.2. The draft assessment therefore uses a combination of direct economic measures and proxy indicators to provide a fuller picture of the Adelaide Park Lands' economic contribution.
- 16. Across some of the assessed areas, there are generally accepted measurement methods although benchmark values may vary significantly.
 - 16.1. This is particularly true in valuing an individual's visit to a park (e.g., walking, running, or cycling).
 - 16.2. Given that park visits are typically free, various methods have been employed to assign an economic value to the park/green space experience.
 - 16.3. For transparency, methods and values used in the draft assessment are disclosed in the assessment report.
- 17. The draft assessment draws on data and reports sourced through existing City of Adelaide programs and records, as well as external datasets, including:
 - 17.1. Pathzz mobile device visitation and movement data
 - 17.2. Spendmapp consumer transaction data prepared by Geografia
 - 17.3. City of Adelaide commercial lease, permit and rates records
 - 17.4. Independent asset valuations
 - 17.5. ABS and .id population, business and employment data
 - 17.6. Environmental monitoring and program data relating to biodiversity, urban heat, stormwater, greening and open space management.
- 18. The timescale for data within the report is drawn from the most current available period for each indicator, generally 2024/25 or 2025/26.

Adelaide Park Lands Visitation

- 19. Critical for assessing economic value of the Adelaide Park Lands is access to reliable data on park users.
 - 19.1. This includes information on the number of users, the activities they engage in, the frequency and duration of their visits, and their places of residence.
 - 19.2. This data is crucial for measuring the recreational/leisure value of individual visits, as a key input in assessing health benefits, and for defining the catchment areas for the Adelaide Park Lands and City Squares.
- 20. The literature review completed in Stage 1 indicates that international studies typically have access to high-quality park user data, whereas this data is not recorded for the Adelaide Park Lands.
- 21. Adelaide Park Lands visitation is based on mobile phone data as shown in Table 1 below. Visitation data is sourced from Pathzz mobile device analytics, covering the period 1 July 2024 to 30 June 2025.

Table 1: Adelaide Park Lands Visitation

Visits *	41,586,210
Unique Visitors **	3,019,479
% of visits under 1 hour	79%
% of visits more than 1 hour	21%
Average duration of visits	47 minutes

* Visits include when a mobile phone device entered the Adelaide Park Lands, the same device can contribute a single or multiple visits over the period.

** Unique visitors refer to a distinct mobile phone device, where each device is counted once regardless of how many times it entered the Adelaide Park Lands.

Economic Value

22. The draft assessment of economic value reinforces that investment in the Adelaide Park Lands is not solely an amenity or conservation outcome; it is a strategic economic investment that supports productivity, resilience, property value creation, and the enduring attractiveness of Adelaide as a globally recognised liveable city.
23. The following highlights use overlapping proxy-value methodologies to express different dimensions of Adelaide Park Lands use and should be read as indicative rather than additive. Whilst not cumulative, key highlights include the following:
 - 23.1. The Adelaide Park Lands are visited 41.5 million times annually, with an indicative annual recreational use value of approximately \$328.1 million.
 - 23.2. The indicative preservation value of the Adelaide Park Lands and its heritage assets, based on willingness to pay modelling, for the population living within a 45-minute catchment to the Adelaide Park Lands is approximately \$44.9 million, which scales significantly with population, and contributes approximately \$19.1 billion when applied to the Australian population as a whole.
 - 23.3. Spendmapp analysis estimates approximately \$331.5 million in parks-attributable consumer spending per year in the broader Adelaide Park Lands catchment.
 - 23.4. There are approximately 1,400 people directly employed within the Adelaide Park Lands based on select publicly available workforce information for major institutions, venues and businesses located within the Adelaide Park Lands. These include Adelaide Festival Centre, Adelaide Oval, Adelaide Zoo, Art Gallery of South Australia, South Australian Museum, and Botanic Gardens and State Herbarium, contributing approximately \$138 million per year in labour and approximately \$2.19 million per year attributed volunteer labour.
 - 23.5. The city workforce provides an indicative workforce income base of \$12.8 billion, and whilst not directly attributable to the Adelaide Park Lands it demonstrates the scale of the workforce passing through the Adelaide Park Lands.
 - 23.6. As a contextual indicator of the scale of the education sector activity in the immediate Adelaide Park Lands precinct, the Education and Training sector contributes \$2.2 billion in value added annually within the City of Adelaide. Adelaide University, whose main campus site is adjacent the Adelaide Park Lands, is projected to contribute approximately \$4.7billion per year to the economy.
 - 23.7. The total combined annual income in 2024/25 generated from commercial leases and licences in the Adelaide Park Lands was \$522,581.
 - 23.8. Major institutions and State-managed assets within the Adelaide Park Lands generate approximately \$167 million in economic activity per year.
 - 23.9. The estimated annual contribution of sports use of the Adelaide Park Lands is \$150 million, highlighting the importance of preserving, enhancing, and investing in sporting infrastructure and community participation opportunities. School based use represents between \$1.2 million and \$5.1 million in recreational value per annum. Lease and licence arrangements associated with sporting facilities generate approximately \$205,000 per annum.
 - 23.10. The estimated direct annual economic value generated by cycling and walking within the Adelaide Park Lands is \$196 million in direct health, transport and environmental benefits alone.
 - 23.11. Events within the Adelaide Park Lands generate between \$32.6 million and \$81.5 million in event participation per year.

- 23.12. The health benefits from the Adelaide Park Lands' cooling effect are estimated at \$56.8 million per year.
- 23.13. The 485 hectares of canopy in the Adelaide Park Lands are sequestering approximately \$699,782 per year through greenhouse gas emission reductions.
- 23.14. The estimated value of air quality benefits from the Adelaide Park Lands is \$71,357 per annum and the estimated value of avoided emissions is \$42,687 per annum.
- 23.15. The Adelaide Park Lands provide stormwater management benefits of \$180,420 per year.
- 23.16. The combined biodiversity associated with the Adelaide Park Lands is estimated to generate approximately \$376.2 million in national ecosystem service value.
- 23.17. In 2024/25, products and service income associated with the City of Adelaide nursery, mulch and green waste activities generated revenue of \$982,330. This figure does not represent profit, net economic benefit or total environmental value.
- 23.18. Properties fronting the Adelaide Park Lands receive an observed valuation uplift of approximately 5% with Adelaide Park Lands view contributing additional premiums of up to 50%.
- 23.19. Proximity of Adelaide Park Lands frontage generates an approximate annual rental uplift of up to \$854,000 per annum with a midpoint estimate of approximately \$518,500.
- 23.20. The City of Adelaide's Park Lands Open Space and Building assets have a current combined asset base of \$131.2 million based on infrastructure assets only, including playgrounds, sports fields, irrigation, water features, community buildings, structure and facilities.
- 23.21. The City of Adelaide invests \$25.6 million annually in the maintenance of open space and the Adelaide Park Lands.

Next steps

24. The draft assessment is pending finalisation and public release by the City of Adelaide.
25. The draft assessment is intended to inform future decision-making, advocacy and investment cases relating to the Adelaide Park Lands.

ATTACHMENTS

Attachment A – More Than Green Space: The Economic Value of the Adelaide Park Lands (draft)

- END OF REPORT -



More Than Green Space: **The Economic Value of the Adelaide Park Lands**

Contents

DRAFT

Introduction

Executive Summary	5
Key Highlights	6
Interpretation of Values	7

1. Visitation

Visitation and Recreational Use Value	12
---------------------------------------	----

2. Business, Employment and Institutional Activity

Economic and Businesses Activity	18
Workforce and Commuter Activity	20
Direct Employment in Adelaide Park Lands assets and Businesses	22
Student and Education Activity	26
Businesses in the Adelaide Park Lands	30
Institutions and State Assets in the Adelaide Park Lands	32

3. Sports, Health and Exercise

Sports Use	36
School Sports and Play	42
Cycling and Walking	46

4. Culture and Events

Kaurna Culture and Heritage	50
Events (Adelaide Park Lands Activation)	52
Heritage Assets	54

5. Environment

City Cooling	58
Greening	60
Air Quality	64
Biodiversity	66
Adelaide Park Lands Products	70
Water Management	72

6. Property and Infrastructure Asset Value

Property Value	76
Rental Uplift for Properties with Adelaide Park Lands Frontage and Views	78
Infrastructure Asset Value	80



Executive Summary

The Adelaide Park Lands are among Australia's most significant urban open spaces. It is a near-continuous green belt encircling the Adelaide city centre that has shaped the city's character and liveability since Colonel William Light's original plan of 1836. While the Adelaide Park Lands have long been celebrated for their environmental and heritage values, this report takes a different lens, focusing on their economic significance and the opportunities they present for South Australia's broader community.

The purpose of this report is to establish a basis for comprehensive economic valuation of the Adelaide Park Lands, quantifying the direct and indirect economic contributions they make to the city, the region, and the State. This includes their role in supporting tourism, events, recreation, and commercial activity, as well as the economic value they generate for surrounding land uses and the broader urban economy. While environmental values are acknowledged and included, this report emphasises the economic dimension, recognising that robust, evidence-based economic analysis is essential to inform decisions about how the Adelaide Park Lands are managed, activated, and developed into the future.

The analysis demonstrates that the Adelaide Park Lands generate broad and enduring economic benefits across environmental, social, health, and property systems. These benefits include urban cooling, biodiversity support, stormwater management, air quality improvement, carbon reduction, recreation and wellbeing outcomes, and uplift in surrounding land and property values associated with the scarcity and desirability of direct Adelaide Park Lands access.

Importantly, many of these functions reduce future public expenditure by strengthening Adelaide's resilience to climate change, heat stress, flooding, and environmental degradation. The Adelaide Park Lands operate as natural capital that complements engineered infrastructure while enhancing the city's liveability, competitiveness, and long-term economic sustainability.

The findings reinforce that investment in the Adelaide Park Lands is not solely an amenity or conservation outcome; it is a strategic economic investment that supports productivity, resilience, property value creation, and the enduring attractiveness of Adelaide as a globally recognised liveable city.

Whilst not cumulative, key highlights include the following:

- The Adelaide Park Lands are **visited 41.5 million times** annually, with an indicative annual recreational use value of approximately **\$328.1 million**.
- Major institutions and State-managed assets within the Adelaide Park Lands generate approximately **\$167 million** in economic activity per year.
- Applied to the Australian population, the indicative preservation value of the Adelaide Park Lands and its heritage assets is approximately **\$19.1 billion**.
- The estimated annual contribution of sports use of the Adelaide Park Lands is **\$150 million**, highlighting the importance of preserving, enhancing, and investing in sporting infrastructure and community participation.
- Spendmapp analysis estimates approximately **\$331.5 million** in parks-attributable consumer spending per year in the broader Adelaide Park Lands catchment.
- The estimated direct annual economic value generated by cycling and walking within the Adelaide Park Lands is **\$196 million** in direct health, transport and environmental benefits alone.
- There are approximately 1,400 people directly employed within the Adelaide Park Lands, contributing approximately **\$138 million**.
- The health benefits from the Adelaide Park Lands' cooling effect are estimated at **\$56.8 million** per year.
- The total combined annual income in 2024/25 generated from commercial leases and licences in the Adelaide Park Lands was **\$522,581**.
- The Adelaide Park Lands provide stormwater management benefits of **\$180,420** per year.

The combined biodiversity associated with the Adelaide Park Lands is estimated to generate approximately **\$376.2 million** in national ecosystem service value.

The City of Adelaide's Park Lands Open Space and Building assets have a combined asset base of **\$131.2 million**.

The City of Adelaide invests **\$25.6 million** annually in the maintenance of open space and the Adelaide Park Lands.

Interpretation of values

Several indicators within this report use overlapping proxy-value methodologies to express different dimensions of Adelaide Park Lands use and contribution.

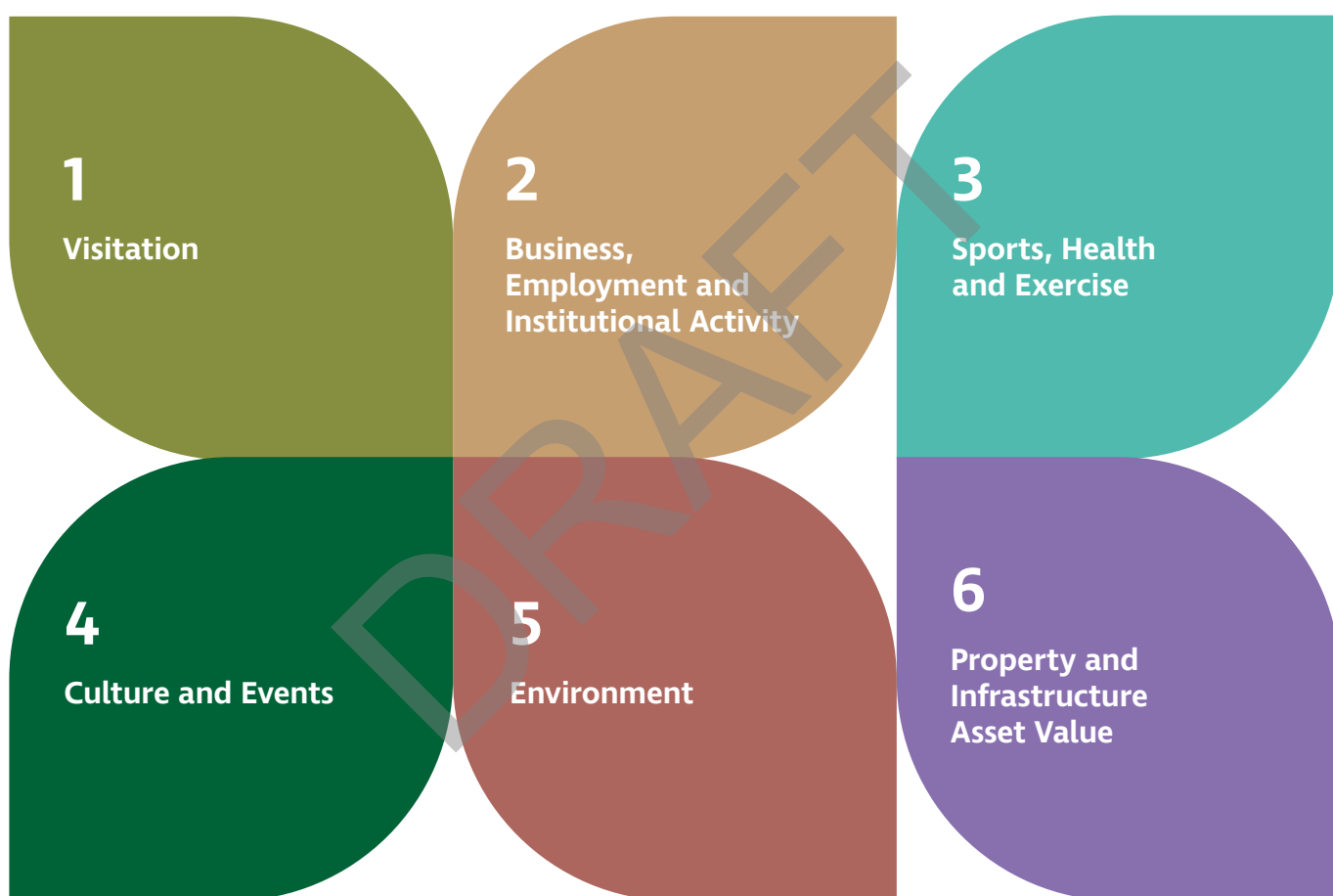
These indicators should not be interpreted as additive economic totals.

Some indicators represent:

- Direct economic activity
- Indicative recreational value
- Avoided cost/value transfer estimates
- Contextual or strategic indicators.

In some cases, multiple indicators draw upon the same underlying visitation and participation patterns to illustrate different aspects of Adelaide Park Lands contribution.





1

Visitation

DRAFT



Indicator

Visitation and Recreational Use Value

Metric

Number of visits, unique visitors, proxy-value of visit, visit duration and spatial distribution.

Why this matters

A significant portion of the economic and social value of the Adelaide Park Lands is generated through everyday use by individuals and groups. These uses include passive recreation, active exercise, and commuting through the Adelaide Park Lands as part of daily routines and are referred to as the recreational use value.

Visitation provides a primary quantitative indicator of how the Adelaide Park Lands are used across everyday recreation, movement, commuting, passive leisure, and destination-based activity. The scale, frequency and duration of visits help demonstrate the role of the Adelaide Park Lands as both a local daily-use asset and a metropolitan destination. The pattern of use also shows that value is generated not only through major events but also through continuous day-to-day activity throughout the year.

Economic value

The Adelaide Park Lands are visited 41.5 million times annually, with an indicative equivalent annual recreational use value of approximately \$328.1 million.

Short visits of less than 1 hour are valued at \$197.1 million per year. Longer visits of 1 hour or more are valued at \$131.0 million.

Insight

The Adelaide Park Lands are one of Adelaide's most intensively used metropolitan open space systems and are amongst South Australia's most visited destinations.

The Adelaide Park Lands support both high-frequency short visits, with nearly 80% of visits lasting an hour or less, and longer-duration recreational use. The high share of short visits reflects the Adelaide Park Lands' role in everyday city life, including walking, passing through, informal recreation and routine use.

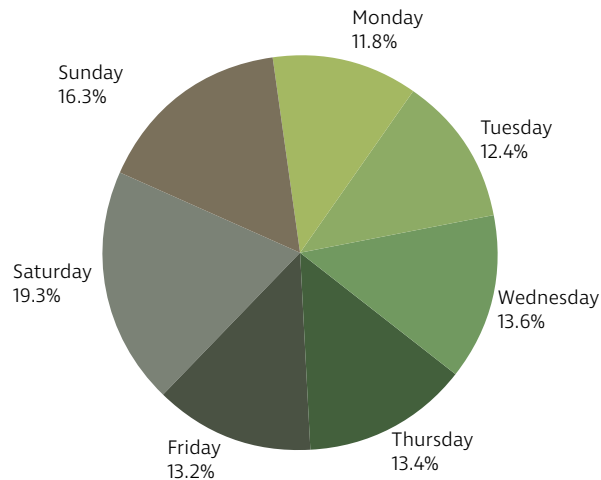
Not all parks within the Adelaide Park Lands experience the same visitation, in terms of both length of visit and overall volume of visitors. This reflects the nature of the land uses within the parks.

Visitor Use Overview

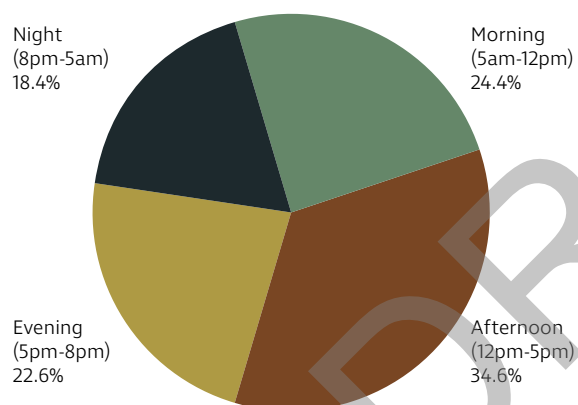


Adelaide Park Lands visitors are relatively equally distributed across all age ranges, with the exception of those over 70 years, who visited at a lower rate (6.1% of visits) compared to other age groups.

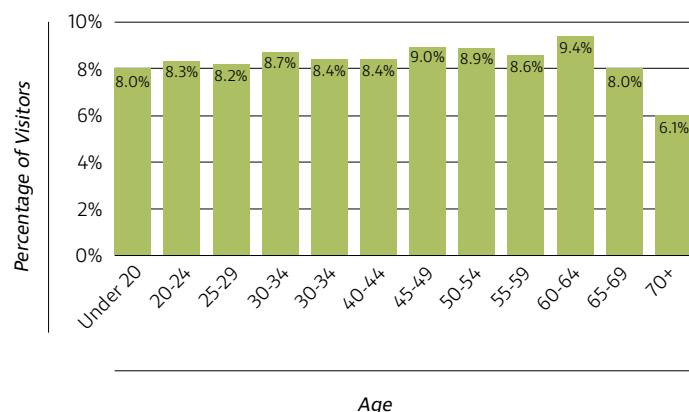
Visitor Distribution by Day of Week (%)



Visits by Time of Day (%)



Visitor Demographics



Data and method

For the period 1 July 2024 to 30 June 2025, visitation to the Adelaide Park Lands was measured using Pathzz mobile device analytics.

Visits	41, 586, 210 total visits*
Visitors	3,019,479 unique visitors** identified
% of visits under 1 hour	79%
% of visits 1 more than 1 hour	21%
Average duration of visits	47 minutes

* Visits include when a mobile phone device entered the Adelaide Park Lands, the same device can contribute a single or multiple visits over the period.

** Unique visitors refer to a distinct mobile phone device, where each device is counted once regardless of how many times it entered the Adelaide Park Lands.

Access to the Adelaide Park Lands is generally unpriced, an indicative proxy-value approach has been applied, consistent with an identified methodology for valuing park use where no direct market price exists. Under this approach, visits are grouped by duration and assigned benchmark values based on comparable paid activities.

This analysis uses visit duration as a proxy for general use type. Visits under one hour are treated as shorter passive or incidental use, while visits of one hour or more are treated as longer recreational use.

For this assessment:

- Visits under 1 hour are valued at \$6 per visit, as a proxy for a short, low-cost leisure activity. (proxy for passive recreation, comparable to low-cost leisure activity- eg purchasing a coffee).
- Visits of 1 hour or more are valued at \$15 per visit, as a proxy for a longer, intentional active recreation activity (proxy for active recreation, comparable to paid exercise activity- eg visit to the gym).

Total visitation is estimated at 41,586,210 visits per annum (2024/25)

This is split as follows:

- Under 1 hour (79%)
41,586,210 × 79% = 32,852,106 visits.
- 1 hour or more (21%)
41,586,210 × 21% = 8,734,104 visits.

Valuation Calculation

Short visits (<1 hour)

$32,852,106 \times \$6 = \$197,112,636$

Long visits (1 hour+)

$8,734,104 \times \$15 = \$131,011,560$

Indicative annual recreational value:

\$328.1 million: \$328,124,196

** This value is used as the primary recreational use-value estimate and is referenced in later general use sections. It should not be added again to those sections.*

Average value per visit: \$328,124,196 divided by 41,586,210 = \$7.89.

The average indicative value per visit is approximately \$7.90.

This recreational use value reflects the benefit users receive from free access to the Adelaide Park Lands. It is a proxy/modelled value based on visit duration and does not represent actual spending. Business spending associated with Adelaide Park Lands visits is measured separately.

Limitations

This valuation is an indicative proxy estimate of recreational use value based on overall visitation levels. It is not a measure of direct revenue generated by the Adelaide Park Lands. The dollar values applied are benchmark proxies only and are intended to provide an accessible and consistent way of expressing the scale of public use in monetary terms.

Mobility analytics are derived from anonymised mobile device location signals and provide an indicative measure of visitation patterns. These analytics capture repeat visitation and movement behaviour and are not directly comparable with survey-based visitation estimates. This is because mobility analytics capture repeat visitation and movement patterns across all visit types, whereas survey-based estimates identify specific activity types undertaken during visits. The valuation is also sensitive to the benchmark assumptions adopted for short and long visits. For this reason, the results should be interpreted as indicative rather than precise market values.

Key limitations include:

- Activity type is inferred from visit duration rather than directly observed.
- Commuting, passive recreation and active recreation may overlap.
- The estimate does not measure actual spending or direct revenue.

¹ Pathzz mobile device analytics, 2024–25.

2

Business, Employment and Institutional Activity

DRAFT



Indicator

Economic and Businesses Activity

Metric

Consumer spending in businesses within the Adelaide Park Lands and Squares Catchments.

Why this matters

The Adelaide Park Lands contribute to the attractiveness and competitiveness of surrounding businesses and precincts through amenity, visitation, walkability, destination appeal and activation.

Visitors to the Adelaide Park Lands interact with nearby businesses, including cafés, restaurants, retail, accommodation and entertainment venues contributing to overall consumer spending.

Economic value

Spendmapp analysis estimates approximately \$331.5 million in parks-attributable consumer spending per year in the Adelaide Park Lands catchment.

Insight

Consumer spending levels associated with businesses in the Adelaide Park Lands catchment area are significant.

The Adelaide Park Lands are not only an environmental and recreational asset but also a significant economic driver, supporting substantial consumer spending in surrounding areas. Their contribution to local economic activity strengthens the case for continued investment in park quality, accessibility, programming, and active transport connections.

Data and method

Spendmapp consumer transaction analysis prepared by Geografia in 2026 estimates consumer spending associated with the Adelaide Park Lands using defined catchments. The preferred \$331.5 million estimate applies a 12% main-reason/generated attribution rate to observed annual spending in the broader 400m Adelaide Park Lands catchment. Sensitivity testing also applies an 8% substitution rate and 27% broad attribution rate, producing a range of \$221.0 million to \$745.9 million. A separate estimate of \$52.8 million is reported for the 100m inner parks, squares and gardens buffer. These estimates are not additive because the geographies overlap.

This measure is different from the recreational use value. The recreational use value estimates the benefit people receive from using the Adelaide Park Lands at no cost.

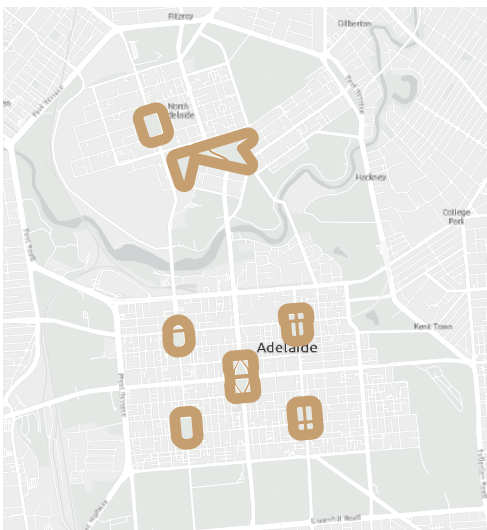
This data reflects gross transaction activity, not business profit, revenue or spending solely caused by the Adelaide Park Lands.

Study Area	Estimated Annual Spending Contribution
Inner parks, squares and gardens	Approximately \$52.8million per annum
Adelaide Park Lands Catchment	Approximately \$331.5million per annum

Adelaide Park Lands Catchment (400m Buffer)



Inner Parks, Squares and Gardens Catchment (100m Buffer)



Limitations

Key limitations include:

- This measure should be interpreted as an indication of how the Adelaide Park Lands support city business activity, rather than a direct economic output solely caused by the Adelaide Park Lands.
- The proportion of visits resulting in spending is assumed and may vary depending on visitor type, purpose of visit and time of day.
- The estimate captures associated and attributable economic activity based on consumer spending and does not isolate spending directly attributable to the Adelaide Park Lands.
- Unlike the recreational use valuation, which estimates the non-market value of no-cost public use of the Adelaide Park Lands, this measure examines observable consumer spending in the Adelaide Park Lands Catchment.
- This measure is separate from, and should not be combined with, the proxy-based recreational use value to avoid double counting.

² Spendmapp consumer transaction analysis, Geografia, 2026

Indicator

Workforce and Commuter Activity

Metric

Workforce size and commuter-based working population in the City of Adelaide.

Why this matters

Workers contribute to city activity, movement, demand for services and use of public spaces. This reinforces the role of the Adelaide Park Lands as part of the broader urban environment experienced by residents, workers and visitors.

The City of Adelaide local government area functions as a major employment centre in South Australia, supporting a substantial daily workforce.

- This daily movement reinforces the role of the Adelaide Park Lands as:
- A key interface between the city and the surrounding suburbs.
- A transition zone for commuters entering and exiting the city.
- Part of the broader urban environment experienced by a large working population.
- A potential recreation, walking, cycling and lunch-break asset for city workers.

While not all workers use the Adelaide Park Lands directly, their proximity and accessibility contribute to the daily experience and functionality of the city for a substantial number of people.

Economic value

Applying the average full-time salary benchmark of \$98,500 to the city workforce provides an indicative workforce income base of approximately \$12.8 billion per annum. This is not attributable to the Adelaide Park Lands but demonstrates the scale of the workforce operating within the city environment and passing through the Adelaide Park Lands.

Insight

According to data from the Australian Bureau of Statistics (2021 Census):

- 130,373 people work within the City of Adelaide.
- 6,922 workers also live in the City of Adelaide.
- Approximately 123,451 workers commute from outside the area.
- Around 94.7% of the city workforce lives outside the City of Adelaide.
- The working population is substantially larger than the resident population.

Data and method

Workforce data is based on the Australian Bureau of Statistics Census 2021 “Place of Work” dataset, which records the location of employment for individuals on Census night.

The average full-time salary benchmark of \$98,500 is sourced from ABS Average Weekly Earnings, South Australia, May 2025. Note: ABS does not publish earnings data at Local Government Area level; the South Australia state figure has been applied as the closest available benchmark.

- Data is reported at the Local Government Area (LGA) level and does not distinguish between specific locations within the City of Adelaide.
- The 2026 Census is scheduled for 11 August 2026. Updated employment data is expected to become available from October 2027.

Limitations

Key limitations include:

- The data reflects employment patterns at the time of the 2021 Census and may not capture more recent changes in workforce distribution, including post-pandemic shifts in working arrangements.
- While the data identifies where people work and live, it does not capture actual daily movement patterns, routes taken, or frequency of travel.
- This analysis does not differentiate how workers travel to the city (e.g. car, public transport, walking or cycling), which may influence interaction with the Adelaide Park Lands.
- The data does not indicate whether workers actively use or access the Adelaide Park Lands and should not be interpreted as a measure of Adelaide Park Lands visitation.

³ Australian Bureau of Statistics, Census of Population and Housing 2021, Place of Work data

⁴ ABS Average Weekly Earnings, South Australia, May 2025 (ABS Cat. 6302.0)

Indicator

Direct Employment in Adelaide Park Lands Assets and Businesses

Metric

Direct paid employment and volunteer contribution associated with major institutions, venues and businesses located within the Adelaide Park Lands.

Why this matters

The Adelaide Park Lands support employment across a range of major institutions, venues, cultural assets, recreation operators, hospitality businesses, education and government.

Economic value

There are approximately 1,400 people directly employed in the Adelaide Park Lands, contributing approximately \$138 million per year in labour.

Volunteer workforces alone represent approximately \$2.19 million per annum in attributed non-market labour contribution.

Insight

Employment in the Adelaide Park Lands reflects their role as a major cultural, recreational, event and visitor destination in the city.

This employment base:

- Supports ongoing operations of key institutions and assets.
- Contributes to the city’s cultural and tourism economy.
- Generates additional indirect employment through events, hospitality and visitor activity.

Volunteers support many Adelaide Park Lands institutions through visitor services, education, guiding, collections, research, horticulture, events and community engagement.

Data and method

Direct Employment

The Adelaide Park Lands support employment across a range of major institutions, venues and cultural assets located within the Adelaide Park Lands. The direct employment estimate is based on publicly available workforce information for major institutions, venues and businesses located within the Adelaide Park Lands. The estimate includes employment reported by Adelaide Festival Centre, Adelaide Venue Management Corporation, Adelaide Oval Stadium Management Authority, Adelaide Zoo, Art Gallery of South Australia, South Australian Museum, Botanic Gardens and State Herbarium, and selected commercial operators within the Adelaide Park Lands.

- Estimated direct paid employment: approximately 1,300 to 1,400 core jobs.
- Indicative salary value: up to approximately \$138 million per annum, based on 1,400 jobs and an average full-time salary of \$98,500 (ABS Average Weekly Earnings, South Australia, May 2025).
- Reported volunteer contribution: approximately \$2.19 million per annum from two reported volunteer workforces alone.

Major employers associated with the Adelaide Park Lands included in the assessment:

Major institutions (large employers)

- Adelaide Festival Centre
- Art Gallery of South Australia
- South Australian Museum
- Botanic Gardens and State Herbarium
- Adelaide Zoo
- City of Adelaide

Sport and recreation employers

- Adelaide Oval Stadium Management Authority
- Tennis SA
- Next Generation Clubs
- TreeClimb Adelaide

Events and venue operators

- Adelaide Venue Management Corporation
- Adelaide Festival

Hospitality and commercial operators

- Adelaide Pavilion
- Jolleys Boathouse
- Various:
 - Kiosks
 - Food vendors
 - Mobile operators

The direct employment estimate of approximately 1,300–1,400 jobs is derived primarily from the publicly reported workforce data of the organisations listed. Where employment data was not publicly available, organisations were identified as contributors to

Adelaide Park Lands activity but were not included in the quantified employment estimate.

Publicly available data indicates that key organisations employ:

- Adelaide Festival Centre - approximately 279 FTE.
- Adelaide Venue Management Corporation - approximately 263 FTE.
- Adelaide Oval Stadium Management Authority - approximately 380–450 core employees (derived from reported employee benefits expense of \$44.4 million, year ended October 2024, SA Audit Office), plus a substantial casual event workforce..
- Adelaide Zoo - approximately 200+ employees.
- Art Gallery of South Australia - approximately 110 FTE employees.
- South Australian Museum - approximately 130 FTE employees.
- Botanic Gardens and State Herbarium - approximately 150–200 employees.
- City of Adelaide – approximately 200 employees.

The Adelaide Aquatic Centre and the North Adelaide Golf Course are excluded from the assessment as FTE. is not separately reported in publicly available data.

⁵ ABS Average Weekly Earnings, South Australia, May 2025 (ABS Cat. 6302.0)

⁶ Derived from reported employee benefits expense of \$44.4 million, year ended October 2024, Audit Office of South Australia

Volunteer Workforce

Volunteer labour is reported separately from paid employment, as it does not represent wages paid or direct jobs. It is valued as a non-market contribution using a replacement-cost approach.

Based on the current South Australian volunteer replacement rate of \$50.50 per hour, publicly reported volunteer contributions include:

- Art Gallery of South Australia -180 volunteers contributing more than 13,500 hours, equivalent to approximately \$682,000 per annum in volunteer labour value.
- Botanic Gardens and State Herbarium - 413 volunteers contributing 45,888 hours, equivalent to approximately \$2.19 million per annum in volunteer labour value.
- The City of Adelaide has nearly 300 volunteers active in its program of which 37% is attributed to the Adelaide Park Lands.

Applying site-specific proportions where volunteer figures are organisation-wide, the combined attributed volunteer labour value across these three institutions is approximately \$2.40 million per annum.

Limitations

This estimate is based on publicly available employment data for major institutions located in the Adelaide Park Lands.

Key limitations include:

- This indicator measures employment supported by institutions, venues and businesses located within the Adelaide Park Lands. Several of these organisations are also considered in the "Institutions and State Assets" indicator; however, that indicator measures organisational activity and economic contribution rather than employment. The indicators represent different dimensions of Adelaide Park Lands value and should not be interpreted as additive.
- Direct employment data is based on institutional annual reports and publicly available workforce data for 2024–25.
- Not all employers within the Adelaide Park

Lands are captured due to data availability.

- Some figures are reported as FTE, while others are reported as employee numbers.
- Casual, seasonal and event-based employment is not fully quantified.
- Figures should be interpreted as indicative of core employment rather than total workforce impact.
- Volunteer contribution is reported separately from paid employment and direct jobs.
- Volunteer value is estimated using a replacement-cost method where annual volunteer hours are publicly available.
- Volunteer data is incomplete across institutions, and some reported figures are organisation-wide rather than specific to Adelaide Park Lands sites. In these cases, a proportion has been allocated on the following basis:
 - I. Art Gallery of South Australia - 100% attributed, as all volunteer activity occurs on-site within the Adelaide Park Lands.
 - II. Botanic Gardens and State Herbarium — 65% attributed to the Adelaide Park Lands, based on Adelaide Botanic Garden's share of total organisational visitation (approximately 1.3 million of 2+ million visits across all three sites, 2022/23). This proportion should be updated when 2024/25 site-level visitation data becomes available.
 - III. City of Adelaide - 37.5% attributed to the Adelaide Park Lands, based on Park Lands-specific activities (bushland care, nursery operations and wetlands maintenance).
- Volunteer values are based on publicly reported volunteer hours and the South Australian volunteer replacement rate in 2025.
- Volunteer value should not be added directly to salary-based employment estimates to avoid double counting.



Indicator

Student and Education Activity

Metric

Value added by industry sector, tertiary student population, vocational student population and city-based education institutions.

Why this matters

The City of Adelaide is a major education hub in South Australia, with a strong concentration of universities, schools and tertiary institutions located in and around the central business district (CBD).

Tertiary student activity is concentrated in the CBD and North Terrace.

Students benefit from the recreation and amenity afforded by the Adelaide Park Lands and contribute to daily activity, movement, demand for services and city vibrancy. Their presence supports regular use of public spaces, including the Adelaide Park Lands, for study breaks, social interaction, informal recreation and movement between destinations.

The proximity of major education institutions to the Adelaide Park Lands means that students form a consistent and recurring user group.

This reinforces the role of the Adelaide Park Lands as:

- Accessible open space for study breaks, social interaction and informal recreation.
- A shared environment supporting both structured and unstructured student activity.
- Part of the broader urban experience for a large student population.

Economic value

The Education and Training sector contributes \$2.2 billion in value added annually within the City of Adelaide local government area.⁹ Approximately \$1.8 billion of this is from the tertiary education sector alone. These figures represent the sector's contribution to the City of Adelaide LGA economy as a whole and have not been attributed or proportioned specifically to the Adelaide Park Lands.

Adelaide University, whose main campus sits on North Terrace is projected to contribute approximately \$4.7 billion per year to the Australian national economy at inception, with an additional \$500 million per year flowing to South Australia's economy by 2034.¹⁰ This figure represents the university's total national economic footprint and is included here as a contextual indicator of the scale of education sector activity in the immediate Adelaide Park Lands.

Insight

The Education and Training sector contributes approximately \$2.2 billion in value added annually to the City of Adelaide LGA economy, around 8.3% of the city's total, making it one of the largest sectors alongside finance, professional services, government and health. This scale of activity reinforces the role of the Adelaide Park Lands as amenity infrastructure supporting one of the city's most economically significant precincts.

Adelaide University, whose main campus sits on North Terrace is projected to contribute approximately \$4.7 billion per year to the Australian national economy in 2026.

Data and method

Value comes from five main channels:

- Direct employment and wages.
- Student spending in the city.
- International education exports.
- Research and innovation activity.
- Long-term talent attraction and business formation.

Education profile

According to publicly reported enrolment data for 2026, Adelaide's two major public universities enrol approximately 89,000 students:

- Adelaide University - approximately 64,000 current students.
- Flinders University - 25,000+ students.

Adelaide also supports a broader tertiary and vocational student population through providers including:

- Torrens University Australia.
- TAFE SA - over 49,000 students across South Australia.
- Specialist and pathway institutions.

This indicates that total tertiary and vocational student numbers associated with Adelaide exceed 100,000.

⁸ City of Adelaide Economic Profile, Education and Training sector value added, City of Adelaide LGA.

⁹ Adelaide University economic impact projection.

City schools

Preschool and School Education accounts for \$317 million of value added to the City of Adelaide. These schools are located close to the Adelaide Park Lands and contribute to regular weekday activity, movement and potential use of open space.

The City of Adelaide contains a concentration of schools across government, independent and Catholic sectors.

The City of Adelaide is home to 13 primary and secondary schools comprising 5 government and 8 non-government (4 independent, 4 Catholic).

Government Schools

Adelaide CBD (5000)

School	Address	Type	Years
Adelaide Botanic High School	Frome Road	Secondary	Year 7–12
Adelaide High School	West Terrace	Secondary	Year 7–12
Gilles Street Primary School	91 Gilles Street	Primary	Reception–Year 6
Sturt Street Community High School	Sturt Street	Combined	Birth–Year 6

North Adelaide (5006)

School	Address	Type	Years
North Adelaide Primary School	62-80 Tynte Street	Primary	Reception–Year 6

Non-Government — Independent Schools

Adelaide CBD (5000)

School	Address	Type	Gender	Years	Character
Adelaide International School	Level 4, 127 Rundle Mall	Secondary	Co-education	Year 10–12	Non-denominational
Inventorium Academy	Level 1, 211 Pulteney Street	Secondary	Co-education	Year 7–12	Non-denominational
Muirden Senior College	368 King William Street	Secondary	Co-education	Year 11–12	Non-denominational
Premed Senior College	251 Morphett Street	Secondary	Co-education	Year 11–12	Non-denominational
Pulteney Grammar School	190 South Terrace	Combined	Co-education	Reception–Year 12	Anglican

Non-Government — Catholic Schools

Adelaide CBD (5000)

School	Address	Type	Gender	Years
Christian Brothers College	214 Wakefiled St (Senior) & 324 Wakefield St (Junior)	Combined	Boys (R-12) / Co-ed (ELC-6)	Reception–Year 12
St Aloysius College	53 Wakefield Street	Combined	Girls	Reception–Year 12
St Mary's College	253 Franklin Street	Combined	Girls	Reception–Year 12

North Adelaide (5006)

School	Address	Type	Gender	Years
St Dominic's Priory College	139 Molesworth Street	Combined	Girls	Reception–Year 12

Limitations

Key limitations include:

- This indicator demonstrates the scale of educational and social interaction with the Adelaide Park Lands. It is intended to quantify access and use rather than assign a direct economic value.
- Student figures are based on publicly reported enrolment data from major universities and indicative estimates for the broader education sector.
- Student numbers are reported at an institutional level and may include students studying outside the CBD, online, interstate or offshore.
- The data does not distinguish between students studying in the City of Adelaide and those located elsewhere in the metropolitan area.
- School counts have not been reconciled against a single authoritative dataset. The figures presented are based on publicly available school profiles and City of Adelaide education provider information current as at 2025 and should be treated as indicative.
- There is no direct measurement of how frequently students use or access the Adelaide Park Lands. As an indicative proxy, if 10% of the estimated 17,000 students within walking distance visited the Adelaide Park Lands once per week during the 40-week school year, this would represent approximately 68,000 visits per annum. Applying the short-visit proxy value of \$6 per visit gives an indicative student access value of approximately \$408,000 per annum. This is a conservative illustrative estimate only and should not be added to the broader visitation value without adjusting for potential overlap.
- The analysis does not capture differences in student behaviour, including study patterns, travel modes or spending activity.
- This section should not be interpreted as a direct measure of Adelaide Park Lands usage or economic contribution.

Indicator

Businesses in the Adelaide Park Lands

Metric

Commercial lease revenue generation, and permit revenue generation.

Why this matters

The Adelaide Park Lands support a range of businesses that operate in the Adelaide Park Lands through leases, licences and permits.

These include cafes, kiosks, recreational operators, venues and mobile vendors. These businesses contribute to the activation of the Adelaide Park Lands, enhance visitor experience, and generate direct revenue to the City of Adelaide.

- 32 garden beds with 4 different displays annually.
- 540 ha of turf mown and over 150km of turf edged annually.
- 75km of shared paths and bike tracks maintained.
- 10,500 irrigation sprinklers maintained.
- Over 15,600m of green organics recycled annually.

Economic value

The total combined annual income in 2024/25 generated from commercial leases and licences in the Adelaide Park Lands was \$522,581.

Insight

The City of Adelaide receives income directly from 18 leases and licences, with a total annual lease and licence income in 2024/25 of \$522,581.34 plus GST.

The total reported City of Adelaide income in the 2024/25 financial year was \$243 million. The \$522,000 received from leases and licences in the Adelaide Park Lands represents 0.2% of total income.

The City of Adelaide's Operational Management of the Adelaide Park Lands in 2024/25 year included:

- 25,000+ rose bushes pruned annually.
- 60,000 annuals grown and planted annually.

Data and method

The analysis reflects revenue to the City of Adelaide based on current lease and licence arrangements. Commercial lease and permit data has been sourced from the City of Adelaide (March 2026).

The businesses and sites included in this total represent a mix of active tenancies, vacant sites and nil-rent arrangements, indicating that while the Adelaide Park Lands support commercial activity, not all locations currently generate direct revenue.

Red Ochre (Torrens Weir Restaurant) – Wessell - VACANT Possum Park / Pirltawardli (1)
North Adelaide Railway Station – Renew Adelaide- NIL RENT Bonython Park / Tulya Wardli (27)
Jolleys Boathouse Red Gum Park / Karrawirra (12)
Lounders Café (Tenancy 1) Red Gum Park / Karrawirra (12)
Popeye (paddleboats/popeye) (Tenancy 2) Red Gum Park / Karrawirra (12)
Rymill Park Kiosk – Creative Place Hospitality Group Pty Ltd Rymill Park / Murlawirrapurka (14)

Vic Park Grandstand - VACANT	Victoria Park / Pakapakanthi (16)
Part A Vic Pk Grandstand - EFM	Victoria Park / Pakapakanthi (16)
Victoria Park Social Club (La Dolce Vita) (Horse Float belongs to Vic Pk Social Club)	Victoria Park / Pakapakanthi (16)
Kiosk Lola - Victoria Park	Victoria Park / Pakapakanthi (16)
TreeClimb	Blue Gum Park / Kurangga (20)
Adelaide Pavilion	Veale Park / Walyu Yarta (21)
Adelaide Oval (Main Oval) – NIL RENT	Adelaide Oval
Adelaide Oval (Oval 2) – NIL RENT	Adelaide Oval
Memorial Drive - Next Generation	Tarntanya Wama (26)
Tennis SA	Tarntanya Wama (26)
Bonython Park Kiosk	Bonython Park / Tulya Wardli (27)
BBQ Buoys	Tarntanya Wama (26)
Earth Adventure	

Limitations

Key limitations include:

- This indicator measures direct revenue from leases and licences and should be interpreted as an indicative measure, rather than the full economic contribution of businesses operating within the Adelaide Park Lands.
- It does not capture total business turnover, profitability, employment outcomes or broader economic activity generated by businesses operating in the Adelaide Park Lands.
- Several lease/licence sites are currently vacant or operate under nil-rent arrangements.
- It excludes temporary vendors, event-based operators and informal commercial activity unless separately captured in lease/licence data.
- Revenue varies over time due to changes in tenancy, lease terms, vacancies or policy settings.

Indicator

Institutions and State Assets in the Adelaide Park Lands

Metric

Assets, ticket sales, and sale of goods and services.

Why this matters

The Adelaide Park Lands are home to major institutions and State-managed assets that generate significant economic activity. These include cultural institutions, sporting venues, educational facilities and tourism assets. Together, they attract large numbers of visitors, support employment, and generate substantial revenue through ticket sales, events, and services.

Economic value

Major institutions and State-managed assets within the Adelaide Park Lands generate approximately \$167 million in economic activity per year.

Insight

The concentration of major institutions and State assets in the Adelaide Park Lands reinforces their role as a central cultural, economic and civic precinct.

This clustering:

- Attracts visitors at a metropolitan, state and national level.
- Supports tourism and event activity.
- Strengthens Adelaide's cultural and civic identity.

Data and method

The Adelaide Park Lands provide the setting and spatial context that supports these institutions, but their activity is also influenced by programming, tourism, events, government funding, institutional operations and broader economic conditions.

The currently listed reported financial activity totals approximately \$166.8 millions.

- Reported revenue streams such as ticket sales, fees and charges, sales of goods and services and trading income.
- Reflects reported institutional activity, not revenue generated directly by the Adelaide Park Lands.

In the year ending 30 June 2025, the following economic contributions, totalling approximately \$166.8 million were reported by the following major institutions and State-managed assets:

- Adelaide Festival Centre
 - Sales of Goods and Services \$26.2M¹⁹
 - Works of art \$24.8M
- Adelaide Festival
 - Box Office Sales \$4.1M²⁰
- Adelaide Oval (SMA)
 - Total income from trading activities \$101.7M²¹
- Adelaide Art Gallery
 - Fees and charges + sale of goods \$2M²²
- Adelaide Botanic Gardens and State Herbarium
 - Fees and changes \$5.37M²³
- Adelaide Museum
 - Sales, and fees and charges \$2.6M²⁴

The following institutions located within the Adelaide Park Lands are not included in the \$167 million²⁵ estimate due to a lack of publicly available data:

1. Adelaide Botanic High School
2. Adelaide Gaol
3. Adelaide High School
4. Adelaide Railway Station
5. Adelaide University (formerly University of Adelaide/University of South Australia)
6. Adelaide Venue Management Corporation
7. Adelaide Zoo
8. Festival Plaza
9. Lot Fourteen
10. National Wine Centre
11. New Women’s and Children’s Hospital
12. North Adelaide Golf Course
13. Torrens Parade Ground.

Limitations

Key limitations include:

- The listed values are not directly comparable measures. They represent different parts of institutional activity, including trading income, ticket sales, fees, charges, sales of goods and services and asset-related values.
- This figure should be interpreted as an indicator of scale, not as a precise aggregate economic

contribution or a direct value generated by the Adelaide Park Lands.

- Figures represent total institutional activity, not activity solely attributable to Adelaide Park Lands location.
- Not all institutions are included due to data availability.
- Reported values are not directly comparable across institutions.
- Some values represent revenue streams, while others may represent asset-related values.
- Potential overlap exists with broader tourism, events, visitation and business activity indicators.
- Figures per the Audited Annual Statements – Audit Office of South Australia Institutional financial reports (2024–25): [Audited Annual Statements from Audit Office of South Australia](#)

¹⁹ Adelaide Festival Centre Trust, Annual Report and Financial Statements, year ended 30 June 2025, Audit Office of South Australia.

²⁰ Adelaide Festival Corporation, Financial Statements, year ended 30 June 2025, Audit Office of South Australia.

²¹ South Australian Cricket Association / Stadium Management Authority, Financial Statements, year ended 30 June 2025, Audit Office of South Australia.

²² Art Gallery Board of South Australia, Annual Report and Financial Statements, year ended 30 June 2025, Audit Office of South Australia.

²³ Botanic Gardens and State Herbarium, Annual Report and Financial Statements, year ended 30 June 2025, Audit Office of South Australia.

²⁴ South Australian Museum Board, Annual Report and Financial Statements, year ended 30 June 2025, Audit Office of South Australia.

²⁵ Aggregated from institutional figures at footnotes 19–24 above, Audit Office of South Australia audited annual statements, 2024–25.

Source: Audit Office of South Australia.

3

Sports, Health and Exercise

DRAFT



Indicator

Sports Use

Metric

Direct economic impact, health cost savings, social capital value, productivity benefits, visitor and event spending, and direct lease/licence revenue associated with sport and recreation facilities in the Adelaide Park Lands.

Why this matters

Community participation in sport in the Adelaide Park Lands generates substantial economic, social, and public health value for the City of Adelaide and the broader South Australian community. Beyond recreation, organised sport provides critical urban infrastructure that supports physical health, social cohesion, volunteerism, tourism, and economic activity.

The Adelaide Park Lands support a wide range of physical activity, including walking, running, jogging, cycling, informal exercise and organised sport.

These activities contribute to recreation, health and wellbeing, and reinforce the role of the Adelaide Park Lands as a high-frequency, low-barrier public health and recreation asset.

Economic value

The estimated annual contribution of sports use of the Adelaide Park Lands is \$150 million, highlighting the importance of preserving, enhancing, and investing in sporting infrastructure and community participation opportunities throughout the Adelaide Park Lands.

Indicative lease and licence revenue provides a direct measure of the economic activity

associated with this use, generating approximately \$205,000 per annum (2025/26, excluding GST).

Insight

The Adelaide Park Lands represent one of Australia's most significant urban open-space networks and serve as a major hub for organised community sport and recreation. The Adelaide Park Lands accommodate a wide range of sporting activities including football, cricket, soccer, athletics, touch football, and social recreation.

Sports fields, playgrounds and recreation facilities are distributed throughout the Adelaide Park Lands, enabling both organised sport and informal activity.

Increasing urban density and population growth in metropolitan Adelaide are intensifying demand for accessible community sporting facilities and active recreation infrastructure.

Community sports accounts for 20% of visitation amongst the diverse uses of the Adelaide Park Lands. This usage is predicted to increase in alignment with population projections across the Greater Adelaide Region, community expectations for accessible and inclusive community sport infrastructure, and pressures on inner ring local government areas to provide accessible open space.

Sport participation should be viewed not only as recreation, but as a critical contributor to Adelaide's long-term social, economic, and public health outcomes.

Investment in sporting infrastructure and participation programs can be recognised as investment in:

- Public health infrastructure.
- Social infrastructure.
- Economic development.
- Urban liveability.
- Community wellbeing.

Continued support for accessible and inclusive sporting participation will assist the City of Adelaide in achieving broader strategic outcomes relating to health, sustainability, social inclusion, and economic resilience.

Data and method

The Adelaide Park Lands are a major recreation and sport asset:

- Approximately 41 million visits annually.
- Organised sport can account for up to 20% of visitation of large open space²⁶, however for modelling purposes we have adopted a more conservative 25,000 participants.
- 63 sport-related buildings exist within the Adelaide Park Lands.
- Participation demand is increasing due to population growth and urban infill.

For modelling purposes, the following assumptions are adopted:

Variable	Assumption
Annual active sport participants	25,000 participants
Sport-related annual visits	1.8–2 million
Volunteer base	3,000 individuals

These assumptions provide the basis for indicative economic valuation estimates.

The total economic value generated through community sport participation is represented as:

$$\text{Total Economic Value} = \text{Direct Impact} + \text{Health Savings} + \text{Social Capital} + \text{Volunteer Contribution} + \text{Visitor Spending}$$

The economic value of community sport is grouped into five primary categories.

Value Category	Description
Direct Economic Impact	Spending generated through participation in sport
Health Cost Savings	Reduced healthcare expenditure due to active lifestyles
Social Capital Value	Community cohesion, inclusion, volunteering and wellbeing
Volunteer Contribution	Value of volunteer labour including coaching, administration, officiating and event management
Visitor and Event Spending	Economic activity generated through competitions and events

Education profile

Community sport generates direct expenditure through:

- Membership fees.
- Uniforms and equipment.
- Hospitality spending.
- Facility hire and maintenance.
- Local transport and retail activity.

Assumptions

Variable	Assumption
Active participants	25,000 participants
Average annual sport expenditure	\$1,200 (conservative estimate; current AusPlay national average is \$1,304, 2022/23) ²⁷
Local expenditure retained	50%

Calculation

$25,000 \times \$1,200 \times 50\%$

Estimated Annual Direct Economic Impact

Approximately \$15 million per annum

Health System Savings

Participation in organised sport contributes to improved physical and mental health outcomes and reduces long-term healthcare costs associated with chronic disease and inactivity.

Assumptions

Variable	Assumption
Active participants	25,000 participants
Average avoided healthcare cost	\$600 per participant

Calculation

$25,000 \times 600$

Estimated Annual Health Savings

Approximately \$15 million per annum

Social Capital Value

Community sport contributes significantly to social capital through:

- Community connection.
- Youth engagement.
- Multicultural inclusion.
- Women’s participation.
- Mental wellbeing.
- Reduction in antisocial behaviour.

The social benefits of playing community club-based sport once per week are estimated to be worth \$5,932 per participant, per year (Australian Sports Commission, Value and Benefits of Sport, Economic Clearinghouse)²⁸. Using national social value benchmarks, Adelaide Park Lands community sport participation is estimated to contribute:

Estimated Social Capital Value

Approximately \$148.3 million per annum

Volunteer Sport Contribution

Community sport relies heavily on volunteer labour including coaching, administration, officiating, event management, and facility operations.

Assumptions

Variable	Assumption
Volunteers	3,000 volunteers
Annual volunteer hours	120 volunteer hours
Replacement labour value	\$50/hour

Calculation

$3,000 \times 120 \times \50

Estimated Volunteer Contribution

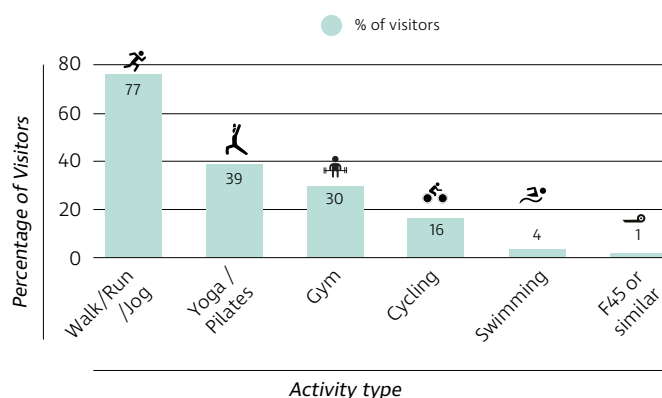
Approximately \$18 million per annum

Visitor and Event Spending

Sporting competitions and events attract participants and spectators from metropolitan, regional, and interstate locations.

This generates additional expenditure on:

- Food and beverage.
- Accommodation.
- Transport.
- Retail activity.



Assumptions

Variable	Assumption
Annual visitor trips	120,000 visitor trips
Average expenditure	\$75 per visitor trip

Calculation

$$120,000 \times \$75$$

Estimated Visitor Economy Contribution

Approximately \$9 million per annum

Indicative Total Economic Value

Economic Component	Estimated Annual Value
Direct economic impact	\$15 million
Health savings	\$15 million
Social capital value	\$148.3 million
Volunteer contribution	\$18 million
Visitor economy	\$9 million

Total Estimated Annual Economic Value

Approximately \$150 million per annum

²⁶ Pathzz mobile device analytics, 2024–25.

²⁷ AusPlay National Participation Survey, Australian Sports Commission, 2022/23.

²⁸ Australian Sports Commission, Value and Benefits of Sport, Economic Clearinghouse for Sport.

Limitations

The \$150 million estimate is an indicative modelled value based on a set of assumptions about participation numbers, expenditure rates, volunteer hours and visitor spending. It should not be interpreted as a directly measured economic output.

Key limitations include:

- The 25,000 participant figure is an indicative and deliberately conservative estimate adopted in the absence of comprehensive participation data across Adelaide Park Lands sporting facilities. A direct conversion of overall visitation data to sport participants is not considered appropriate due to repeat visitation, multiple activity types and the absence of participant-level data.
- The \$1,200 average annual sport expenditure figure is based on AusPlay 2022/23 national data and may not reflect Adelaide Park Lands participants specifically. The most current AusPlay figure is \$1,304 per participant.
- The social capital value of \$5,932 per participant is a national benchmark from the Australian Sports Commission and has not been adjusted for local conditions.
- In the absence of project-specific economic modelling, it is assumed that approximately 50% of direct community sport expenditure is retained within the local economy through spending on locally supplied goods and services, wages and business-to-business transactions. The actual proportion will vary depending on the nature of expenditure and the structure of local supply chains.
- The volunteer base of 3,000 individuals at 120 hours per annum is a modelled assumption. No directly measured volunteer data for Adelaide Park Lands community sport is currently available.
- The visitor economy estimate of 120,000 trips is a modelled assumption without a directly cited source and should be treated as indicative.
- The five value categories are not directly additive as some overlap may exist between health savings, social capital and productivity benefits.
- Lease and licence revenue of \$205,000 per annum is a direct revenue measure from the City of Adelaide and is separate from the modelled \$150 million estimate. These figures should not be added together. The listed values are not directly comparable measures. They represent different parts of institutional activity, including trading income, ticket sales, fees, charges, sales of goods and services and asset-related values.
- School sports and play are excluded from this modelling and are considered separately under the School Sports and Play indicator, to avoid double counting between the two indicators.



Indicator

School Sports and Play

Metric

Use of the Adelaide Park Lands for school-based sport, recreation and play.

Why this matters

The Adelaide Park Lands provide accessible open space for schools and educational institutions to support school sport, recreation, outdoor learning, before and after school use, and informal play.

This contributes to physical activity among children and young people, supports learning and development, and provides access to open space for schools with limited on-site recreation areas.

More than 17,000 students attend schools in the City of Adelaide or within 1 kilometre of the Adelaide Park Lands.

- Schools located in the City of Adelaide have direct and immediate access to the Adelaide Park Lands.
- Additional schools located within 1 kilometre of the Adelaide Park Lands boundary are within walking distance.
- Across these areas, the Adelaide Park Lands are accessible to more than 17,000 students across primary and secondary school populations.

This represents a significant student population with regular and convenient access to open space within walking distance of their place of education.

Economic value

School-based use represents between \$1.2 million and \$5.1 million in recreational value per annum. This activity is not captured in mobility-based visitation estimates and represents an additional, currently underrepresented layer of use within the Adelaide Park Lands.

Lease and licence arrangements associated with sporting facilities generate approximately \$205,000 per annum, excluding GST.

Insight

The Adelaide Park Lands effectively function as an extension of school grounds, particularly for schools with limited on-site open space. Access to high-quality open space for school use reinforces the Adelaide Park Lands as a shared community and educational asset.

This supports:

- Early development of active lifestyles.
- Long-term health and wellbeing outcomes.
- Equitable access to recreational space for young people.
- Structured and unstructured outdoor learning.

Data and method

Indicative recreational value (school-based use)

School-based use of the Adelaide Park Lands is not fully captured in mobile device datasets, as younger users are less likely to carry trackable devices during school hours.

To illustrate the potential scale of this activity, a conservative indicative scenario has been applied.

Assuming:

- Student access base: 17,000 students.
- Participation rate: 30% to 50%.
- Frequency: once per week.
- School year: 40 weeks.

Scenario	Calculation	Estimated visits
Low participation	$\$17,000 \times 30\% \times 40 \text{ weeks}$	204,000 visits per year
High participation	$\$17,000 \times 50\% \times 40 \text{ weeks}$	340,000 visits per year

Applying the active recreation proxy value:

Scenario	Value per visit	Estimated annual value
Low participation / short-use proxy	\$6	\$1.2 million
Low participation / active-use proxy	\$15	\$3.1 million
High participation / short-use proxy	\$6	\$2.0 million
High participation / active-use proxy	\$15	\$5.1 million

This indicative scenario suggests that school-based use may represent \$1.2 million to \$5.1 million per annum in recreational value. This activity is not captured in mobility-based visitation estimates and represents an additional, currently underrepresented layer of use within the Adelaide Park Lands.

School lease and licences

In addition to proximity-based access, a number of schools and institutions use dedicated sporting facilities within the Adelaide Park Lands under lease and licence arrangements.

Lease data indicates that multiple Adelaide Park Lands sites include built sporting infrastructure used by schools and organisations, with lease tenure arrangements typically ranging from approximately 5 years to 42 years.

These long-term arrangements support ongoing and structured use of the Adelaide Park Lands for school sport, training and competition.

Facilities are used across multiple time periods, including:

- During school hours (particularly by inner-city schools).
- After school during weekdays.
- On weekends for organised sport and competition.

This demonstrates that school-based use of the Adelaide Park Lands is regular, scheduled and sustained over time, rather than incidental.

Indicative lease and licence revenue provides a direct measure of economic activity associated with this use. Lease advice indicates that these arrangements

generate approximately \$205,000 per annum (2025/26, excluding GST).

This revenue reflects direct lease and licence income only and does not capture the number of students or teams using the facilities, the frequency of use, or broader health, participation and social benefits.

City of Adelaide school proximity and enrolment data (2025)

Primary and Secondary schools in the City of Adelaide

School name	School Type	Address	Approx. walking distance from Park Lands	Total student enrolments (2025)	Total no. of teacher staff (2025)	Total no. of non-teaching staff (2025)
Adelaide Botanic High School	Government Secondary	2 Frome Rd, Adelaide SA 5000	0m	1,258	88	43
Adelaide High School	Government Secondary	West Terrace, Adelaide SA 5000	0m	1,821	135	67
North Adelaide Primary School	Government Secondary	62-80 Tynte St, North Adelaide SA 5006	220m	296	20	11
Giller Street Primary School	Government Secondary	91 Gilles St, Adelaide SA 5000	300m	275	25	22
Sturt Street Community School	Government Secondary	221/239 Sturt St, Adelaide SA 5000	350m	162	16	6
Adelaide International School	Non-government combined	Level 4/127 Rundle Mall, Adelaide SA 5000	700m	N/A	N/A	N/A
Muirden Senior College	Non-government combined	368 King William St, Adelaide SA 5000	450m	91	13	1
Specialised Assistance School for Youth (SASY)	Non-government combined	30 Chesser St, Adelaide SA 5000	850m	205	23	32
University Senior College	Non-government combined	Kintore Ave, Adelaide SA 5000	75m	523	50	15
Pulteney Grammar School	Non-government combined	190 South Tce, Adelaide SA 5000	20m	839	112	55
Christian Brothers College	Non-government combined	324 Wakefield St, Adelaide SA 5000	60m	990	86	81
St Mary's College	Non-government combined	253 Franklin St, Adelaide SA 5000	130m	659	70	42
St Aloysius College	Non-government combined	53 Wakefield St, Adelaide SA 5000	1km	1,091	112	49
St Dominic's Priory College	Non-government combined	139 Molesworth St, North Adelaide SA 5006	160m	658	65	30

Primary and secondary schools outside of the City of Adelaide within a 1km of the Adelaide Park Lands

School name	School Type	Address	Approx. walking distance from Park Lands	Total student enrolments (2025)	Total no. of teacher staff (2025)	Total no. of non-teaching staff (2025)
Rose Park Primary School	Government Primary	54 Alexandra Ave, Rose Park SA 5067	600m	525	33	16
Parkside Primary School	Government Primary	12 Robsart St, Parkside SA 5063	900m	331	22	14
Annesley College	Non-government Primary	28 Rose Terrace, Wayville SA 5034	290m	292	28	26
Immaculate Heart of Mary	Non-government Primary	95 East St, Brompton SA 5007	750m	153	14	14
Temple Christian College	Non-government Secondary	C/2 Henley Beach Rd, Mile End SA 5031	210m	1,151	108	103
St George College	Non-government combined	15 Dew St, Mile End SA 5031	850m	350	50	25
Blackfriars Priory School	Non-government combined	17 Prospect Rd, Prospect SA 5082	450m	786	61	56
Wilderness School	Non-government combined	30 Hawkers Rd, Medindie SA 5081	500m	856	93	59
St Peter's College	Non-government combined	55 Hackney Rd, St Peters SA 5069	550m	1,585	160	111
Prince Alfred College	Non-government combined	23 Dequetteville Terrace, Kent Town SA 5067	500m	1,127	145	129

Limitations

Key limitations include:

- School-based recreational value is based on school enrolment data, school proximity to the Adelaide Park Lands and scenario-based assumptions about use.
- The school-based recreational value is not directly measured. It is based on assumptions about participation, frequency and proxy value per visit.
- It may overlap with broader visitation estimates where students or employees are captured in mobility data. However, school-based use is likely to be underrepresented because younger students may not carry trackable devices during school hours.

The estimated school-based recreational value should be treated as an illustrative supplementary indicator and should not be added to the overall visitation value

without adjusting for potential overlap.

- The analysis does not directly measure frequency or intensity of school use.
- Participation rates are assumed and should be treated as illustrative.
- Some school-based activity may already be partially captured in broader visitation datasets.
- Younger students may be underrepresented in mobile device-derived datasets due to lower device ownership or carriage during school hours.
- The valuation does not capture broader health, education or social benefits.
- Lease and licence revenue reflects direct City of Adelaide income only and does not capture participation volume or total sport-related economic activity.

Indicator

Cycling and Walking

Metric

Direct economic value of walking and cycling activity within the Adelaide Park Lands, including health, transport and environmental benefits.

Why this matters

The Adelaide Park Lands contain approximately 59 kilometres of continuous walking and cycling paths, including the Adelaide Park Lands Trail and River Torrens Linear Park, connecting major precincts across the city. Public amenities including drinking fountains, seating, picnic areas and bike racks are integrated throughout the network, supporting both incidental and destination-based active transport use.

Cycling in the Adelaide Park Lands supports both active recreation and active transport. It plays a key role in daily movement across the city, reduces reliance on vehicles, and contributes to improved physical health and wellbeing.

The Adelaide Park Lands provide a continuous, accessible network that supports cycling for commuting, exercise and leisure, reinforcing their role as key green infrastructure within the city. The Adelaide Park Lands include approximately 59 kilometres of cycling and walking paths.

A significant share of the 41 million annual visits to the Adelaide Park Lands are for cycling and walking.

Economic value

The estimated direct annual economic value generated by cycling and walking within the Adelaide Park Lands is \$196 million in direct health, transport and environmental benefits alone.

Data and method

Based on 41 million annual visits and using standard South Australian active transport valuation methodologies, walking generates an estimated economic benefit of approximately A\$2.12 per kilometre travelled, while cycling generates approximately A\$1.43 per kilometre travelled.

These values include:

- Avoided healthcare costs.
- Reduced congestion.
- Lower emissions.
- Reduced road wear.
- Productivity gains.

Assuming that approximately 60% of total visits involve walking activity and 15% involve cycling activity, the Adelaide Park Lands may support more than:

- 24 million annual walking trips.
- 6 million annual cycling trips.

It is assumed that the average walking distance is 3 kilometers and the average cycling distance is 5 kilometers.

Under conservative trip distance assumptions, this equates to:

- Approximately 72 million kilometres walked annually.
- Approximately 30 million kilometres cycled annually.

Using standard valuation rates, the estimated direct annual economic value generated is:

Activity	Estimated Annual Economic Value
Walking	~A\$153 million
Cycling	~A\$43 million
Total Active Transport Value	~A\$196 million per year

These estimates represent direct economic benefits only and exclude broader contributions associated with tourism, events, productivity, property value uplift, climate resilience and city attractiveness.

Limitations

Key limitations include:

- The proportion of visits involving walking (60%) and cycling (15%) are modelled assumptions based on general active transport mode share estimates and have not been directly measured within the Adelaide Park Lands. If actual mode shares differ significantly, the economic value estimate would change accordingly.
- The data does not capture all cycling routes, trip purposes or user characteristics.
- Cycling activity may already be captured within broader Pathzz visitation and recreational use value estimates.
- Cycling value should not be added separately to the overall recreational use value without adjusting for overlap.

¹⁰ For modelling purposes, it is assumed that approximately 60% of Adelaide Park Lands visits involve walking and 15% involve cycling. This assumption is based on the Adelaide Park Lands' primary role as a major active recreation and shared-path network, together with the generally higher participation in walking than cycling observed in Australian travel and recreation data. No publicly available visitor survey reporting these exact proportions was identified.

4

Culture and Events

DRAFT



Indicator

Kaurna Culture and Heritage

Metric

Cultural significance, recognition of Kaurna Country and related economic opportunity. Cultural value is not monetised.

Why this matters

The Adelaide Park Lands hold ongoing cultural significance for Kaurna People as part of a living cultural landscape. Cultural value within the Adelaide Park Lands is place-specific and cannot be treated as uniform across the landscape.

Cultural and environmental values are closely linked and sensitive to change. Cultural value is ongoing and living, rather than static or historic.

Economic value

Cultural significance itself has not been monetised in this assessment. However, Kaurna-led activities and cultural initiatives generate economic and social value through:

- Cultural tourism
- Education and interpretation programs
- Aboriginal ranger programs
- Cultural events
- Knowledge sharing
- First Nations procurement and business participation.

As an economic opportunity indicator, Supply Nation estimates that every \$1 spent with a First Nations business generates approximately \$4.41 in social and economic impact.

This should be interpreted as a potential economic multiplier for future Kaurna-led or First Nations business activity, not as a monetary valuation of Kaurna cultural significance.

Insight

The Adelaide Park Lands are part of Kaurna Country. Kaurna People are recognised as the Traditional Owners of the Adelaide Plains, and the Adelaide Park Lands form part of a living cultural landscape with tangible and intangible cultural values. Many Adelaide Park Lands areas and key sites now carry Kaurna names, reflecting ongoing cultural identity and connection to place.

The Adelaide Park Lands are understood as a cultural landscape encompassing significant places and cultural sites, ecological systems and land management practices, cultural knowledge, narratives and songlines, and ongoing spiritual and community connection to Country.

Within the Adelaide Park Lands, 67 places are formally recognised under Local Heritage and State Heritage Registers. However, Kaurna cultural heritage extends

beyond formally listed sites and is not fully captured through statutory planning frameworks. The South Australian Aboriginal Heritage Register records numerous Aboriginal sites and places across the Adelaide Plains, although many are not publicly disclosed due to cultural sensitivity.

The contrast between 67 formally listed Heritage Places and the broader, largely unregistered cultural landscape highlights the limitations of conventional heritage frameworks in capturing living cultural value. Connection to Country is fundamental to Aboriginal and Torres Strait Islander wellbeing and contributes to improved mental health, stronger cultural identity, community resilience and positive land and environmental outcomes. These benefits extend beyond First Nations communities and contribute to the broader cultural, social and environmental value of the Adelaide Park Lands.

The City of Adelaide supports ongoing connection to Country through Kurna-informed land management practices, cultural programs and community engagement, yarning circles and cultural gathering spaces, and public art and commemorative spaces including the Place of Reflection.

Strengthening recognition, engagement and Kurna-led initiatives represents an important opportunity to enhance cultural outcomes and broader community benefit.

Data and method

Cultural significance has not been monetised in this assessment. The Supply Nation multiplier of \$4.41 per \$1 spent with a First Nations business is the only quantitative indicator applied, and is used as a

potential economic opportunity indicator rather than a valuation of cultural significance. All other content in this section is based on qualitative assessment drawing on the Adelaide Park Lands Management Strategy, the City of Adelaide Stretch Reconciliation Action Plan and the South Australian Aboriginal Heritage Register.

Limitations

Kurna cultural values should not be expressed as a conventional dollar value. It is place-based, relational, living and not substitutable in market terms.

Any future economic assessment should focus on measurable Kurna-led activities, employment, procurement, tourism or program delivery, rather than attempting to monetise cultural significance itself.

This assessment recognises that:

- Cultural value is place-based and relational.
- Cultural value cannot be substituted or traded in conventional markets.
- Cultural value is not directly comparable to economic or recreational values.
- Many Aboriginal and Torres Strait Islander cultural sites are not publicly disclosed due to cultural sensitivity.
- Formal heritage registers do not fully capture living cultural landscapes.

Adelaide Park Lands Management Strategy City of Adelaide
Reconciliation Action Plan South Australian Aboriginal Heritage
Register Supply Nation

Indicator

Events (Adelaide Park Lands Activation)

Metric

Number of permitted events, expected attendance, event size, event days and indicative event participation value.

Why this matters

The Adelaide Park Lands function as a highly programmed civic asset supporting:

- Community events.
- Cultural programming.
- Major festivals.
- Sport and recreation events.
- City-wide activation.
- Tourism and visitor attraction.

Permitted events provide a direct measure of how the Adelaide Park Lands are actively used and programmed. Unlike broader cultural indicators, this indicator reflects approved activity occurring in the Adelaide Park Lands.

Economic value

Events within the Adelaide Park Lands generate between \$32.6 million and \$81.5 million in event participation value each year. This reflects the role of the Adelaide Park Lands as a key platform for cultural programming, community activity and large-scale city events.

Insight

In 2024/25, 705 permitted events were held in the Adelaide Park Lands, recording 5.43 million expected attendances. The average attendance per event was approximately 7,705 people across a total of 12,364 event days, with an average event duration of approximately 17.5 days. The indicative event participation value is estimated at between \$32.6 million and \$81.5 million per annum.

The incidence of 305 small events alongside 179 major events shows that the Adelaide Park Lands support both local community use and large-scale city activation.

Data and method

Data is based on the City of Adelaide's permitted event records for 2024/25. The following tables summarise permitted event activity and the proxy valuation applied.

Measure	Result
Total permitted events	705
Total expected attendance	5,431,796
Average attendance per event	7,705
Total event days	12,364
Average event duration	17.5 days

Event size	No. of events
Small events	305
Medium events	163
Large events	58
Major events	179
Total	705

To estimate the indicative recreational value associated with event participation, proxy values consistent with the broader valuation framework have been applied.

Proxy value	Rationale
\$6 per attendee	Short, low-cost participation
\$15 per attendee	Longer, active or intentional participation

Applying these values to total expected attendance:

Scenario	Calculation	Indicative value
Lower bound	5,431,796 x \$6	\$32.6 million
Upper bound	5,431,796 x \$15	\$81.5 million

This results in an indicative event participation value of:

- \$32.6 million per annum (lower bound).
- \$81.5 million per annum (upper bound).

Limitations

Key limitations include:

- This indicator uses an indicative participation value and the proxy values do not represent direct event revenue, ticket sales or visitor spending.
- The event participation value should not be added to the overall visitation value without adjusting for double counting.
- The estimate should be interpreted as a supporting indicator of the scale and value of event activation in the Adelaide Park Lands.

- This analysis is based on permitted event records and expected attendance estimates.
- Expected attendance may differ from actual attendance.
- Event days may include setup, pack-down and multi-day occupation periods, not only public event days.
- Attendance estimates may include repeat attendance across multi-day events.
- The proxy values of \$6 and \$15 per attendee are indicative only and do not represent ticket prices, actual spending or direct revenue.
- Some event attendance may overlap with broader Adelaide Park Lands visitation data captured through mobility analytics.

Source - Data is based on City of Adelaide captured cultural activity, including live music activity, venue counts, precinct activity and Make Music Day visitation estimates

Indicator

Heritage Assets

Metric

Preservation value of formally recognised heritage places within the Adelaide Park Lands.

Why this matters

The built heritage of the Adelaide Park Lands contributes significantly to the city's identity, character and sense of place.

Heritage assets:

- Support cultural continuity and understanding of history.
- Contribute to community identity and belonging.
- Provide spaces for tourism, commercial activity and community use.

In addition to their cultural significance, heritage assets can generate measurable economic value through the community's willingness to preserve and maintain them.

This type of value is distinct from recreational use value, as it represents:

- The importance of heritage to identity and place.
- The value of preservation regardless of visitation.
- Broader social and cultural benefits.
- Non-use value associated with protecting heritage for current and future generations.

The Adelaide Park Lands contribute to this value as part of a recognised and valued heritage landscape.

Economic value

Applied to the Australian population, the indicative preservation value of the Adelaide Park Lands and its heritage assets is approximately \$19.1 billion.

Insight

The Adelaide Park Lands contain 67 formally recognised Heritage Places, reflecting the depth and diversity of built and historical heritage embedded within the park system. Applying a willingness-to-pay estimate of approximately \$702 per person, the indicative preservation value of these heritage assets scales significantly with population. For the immediate 45-minute catchment population of 63,973 people, this equates to approximately \$44.9 million. Applied to the Australian population as a whole, the indicative preservation value is approximately \$19.1 billion, reflecting the national significance of the Adelaide Park Lands as a recognised and valued heritage landscape.

Region	Population 2024	Value (population x \$702.16)
City of Adelaide	29,118	\$20.446M
Adelaide Park Lands 45 mins catchment	63,973	\$44.9M
Greater Adelaide Region	1,469,163	\$1,031,588M
South Australia	1,882,164	\$1,321,580M
Australia	27,204,809	\$19,102,128M

Sources: The Economic Value of Built Heritage, City of Adelaide, June 2025, SGS Economics and Planning; The Economic Value of Built Heritage in the City of Adelaide, 2018, SGS Economics and Planning; City of Adelaide Community Profile, Australian Bureau of Statistics.

Data and method

Heritage preservation values reflect community willingness to pay for the protection of heritage assets, rather than direct market or usage-based value. This assessment applies willingness-to-pay estimates derived from previous heritage valuation studies undertaken by SGS Economics and Planning. Key assumptions include:

- Individuals are willing to pay to protect heritage assets.
- The adopted willingness-to-pay value of approximately \$702 per person is applied across 67 formally recognised heritage places within the Adelaide Park Lands.
- Population figures are drawn from ABS 2024 data.

Limitations

This is an indicative preservation value based on willingness-to-pay modelling. It should not be interpreted as direct revenue, market value, tourism expenditure, replacement cost, or a value that can be added to recreational use, business activity or property value indicators without adjustment.

Key limitations include:

- Values represent stated preferences, not actual market transactions.
- Results reflect perceived preservation value, not direct economic output.
- The estimate does not distinguish between individual heritage assets.
- Values should not be treated as additive with other indicators without checking for overlap.
- The willingness-to-pay estimate is drawn from SGS Economics and Planning work (June 2025).

5

Environment

DRAFT



Indicator

City Cooling

Metric

Health benefits from urban cooling and reduced household cooling costs attributable to the Adelaide Park Lands cooling effect.

Why this matters

The Adelaide Park Lands operate as a continuous green system surrounding the city, supporting ecological function, urban cooling and water movement at a scale that individual parks cannot achieve alone. Climate change means the City of Adelaide is facing an increasingly hot urban environment, compounded by the urban heat island effect. The Adelaide Park Lands reduces this urban heat island effect in the city.

The Adelaide Park Lands play a role in moderating urban temperatures and local microclimates through vegetation cover, irrigation, waterways and green space. Areas with higher vegetation cover within the Adelaide Park Lands help reduce surface and ambient temperatures compared to surrounding built-up areas. The cooling effect of the Adelaide Park Lands supports thermal comfort for people using adjacent streets, facilities and public spaces. Urban cooling benefits are generated by the scale and continuity of green space, reinforcing the Adelaide Park Lands' role in climate resilience.

Economic value

The health benefits from the Adelaide Park Lands' cooling effect are estimated at \$56.8 million per year.

Reduced cooling costs from the Adelaide Park Lands' cooling effect are estimated at \$2.2 million per year.

Insight

The Adelaide Park Lands function as critical urban cooling infrastructure, reducing heat intensity across the CBD and surrounding suburbs. The cooling effect has direct economic value, lowering energy demand, improving worker productivity, reducing heat-related health costs and increasing Adelaide's attractiveness and resilience as temperatures rise.

Data and method

There are two separate calculations used:

- Health benefits from cooling: based on number of people within impacted catchment multiplied by the number of days above 30 degrees per year multiplied by a reduction in temperature in degrees (°C) multiplied by the benchmark health benefit per 1°C reduction in temperature per person per year.
- Reduced cooling costs: number of households in catchment multiplied by a reduction in temperature in degrees (°C) multiplied by a benchmark energy benefit per 1°C reduction in temperature per household.

Health benefits from cooling

The following assumptions are made for this calculation:

- The number of people within the impacted catchment is taken as those within approximately 1000 meters of the Adelaide Park Lands.¹ This is estimated as 175,830 people at the outer edge of the Adelaide Park Lands, plus 30,173 residents in the City of Adelaide, giving a total catchment population of 206,003. This figure captures entire suburb populations using

census population geography (SA2) level rather than only residents within exactly 1,000m of the Adelaide Park Lands boundary.

- The mean number of days above 30 degrees per year in the City of Adelaide over the period 1991 – 2020 was 46 days.¹¹
- The reduction in temperature in degrees (°C) is estimated as 2°C.¹²
- The benchmark health benefit used is \$3.00 for each °C reduction per person per year per day above 30 °C.¹³

Therefore, the calculation is:

206,003 people x 46 days x 2°C reduction in temperature in degrees (°C) x \$3.00 per person per year = \$56,856,828 health benefits from Adelaide Park Lands cooling effect.

Reduced cooling costs

The following assumptions are made for this calculation:

- Captures entire suburb household counts at SA2 level rather than only households within approximately 1,000 meters of the Adelaide Park Lands boundary.
- The reduction in temperature in degrees (°C) is 2°C.
- The benchmark energy benefit used is \$13.50 per year per household per °C of temperature reduction.¹⁴

Therefore, the calculation is:

79,961 number of households in catchment x 2°C reduction in temperature in degrees (°C) x \$13.50 benchmark health benefit = \$2,158,947 reduced cooling costs.

Limitations

Key limitations include:

- While a catchment of approximately 1,000 meters is advised in the Framework for Valuing Green Infrastructure and Public Spaces, this may be too far for meaningful reduction in temperature in the Adelaide context.
- This catchment is also impacted by increased urban heat island effect compared to outer Adelaide suburbs and the counterbalancing effect of this would require additional studies to determine.
- The 2°C temperature reduction estimate is taken from Ali Soltani, Ehsan Sharifi (2017) Daily variation of urban heat island effect and its correlations to urban greenery: A case study of Adelaide, and represents the maximum temperature differential recorded between green and urban spaces. It is likely to be an overestimation for the purposes of this valuation but is a gap in currently available data and research.
- The benchmark dollar figures are in 2022 dollars and have not been adjusted for inflation. Applying current dollar values would increase both the health benefit and reduced cooling cost estimates.

¹¹ Bureau of Meteorology, Climate Statistics for Australian Locations, period 1990 – 2020, Climate statistics for Australian locations (accessed 27 April 2026).

¹² Ali Soltani, Ehsan Sharifi (2017) Daily variation of urban heat island effect and its correlations to urban greenery: A case study of Adelaide, Frontiers of Architectural Research, Volume 6, Issue 4, Pages 529-538.

¹³ Framework for Valuing Green Infrastructure and Public Spaces, October 2023, Dept of Planning NSW p46.

¹⁴ <https://www.planning.nsw.gov.au/sites/default/files/2023-10/framework-valuing-green-infrastructure-public-spaces.pdf> Framework for Valuing Green Infrastructure and Public Spaces, October 2023, Dept of Planning NSW p47.

Indicator

Greening

Metric

Greenhouse gas emissions reduction and carbon sequestration.

Why this matters

Climate change is impacting society, the economy, and our natural environments, caused by excessive greenhouse gas emissions in the atmosphere. The amount of greenhouse gas emissions in the atmosphere is determined by the balance of how much is emitted by carbon emission sources and removed by carbon emission sinks.

The 63,674 trees in the Adelaide Park Lands act as a carbon sink by drawing carbon dioxide out of the atmosphere via photosynthesis and storing it in their trunks, branches, leaves, roots and surrounding soil.

Economic value

The trees of the Adelaide Park Lands sequester carbon, providing a positive contribution to climate change mitigation.

The 485 hectares of canopy in the Adelaide Park Lands are sequestering approximately \$699,782 through greenhouse gas emission reductions.

Insight

The Adelaide Park Lands' 485 hectares of canopy and 63,674 trees function as an active carbon sink within one of Australia's most significant urban green systems. At a sequestration rate of 0.3kg per square metre of canopy, the Adelaide Park Lands remove approximately 5,340 tonnes of carbon dioxide from the atmosphere annually. Valued at the 2024 NSW Treasury carbon price of \$131 per tonne, this equates to approximately \$699,782 in greenhouse gas reduction value per year.

Strategically, investment in urban canopy is climate infrastructure with compounding environmental and economic returns. Every additional tree planted in the Adelaide Park Lands contributes to the city's carbon reduction targets and long-term climate resilience.

Data and method

The calculation method is as follows:

Greenhouse gas (GHG) reduction benefits equals the area of tree planting m^2 multiplied by carbon sequestered per m^2 multiplied by CO_2 sequestered per unit of carbon multiplied cost per tonne of CO_2 . The following assumptions have been applied to this method:

- A figure of 485 hectares of canopy cover has been used, which includes all vegetation above 1 metre in height.
- A rate of carbon sequestration of 0.3kgs per m^2 of tree canopy has been used, as a sequestration estimate for trees after the first 20 years.
- A rate of 3.67 is used to calculate the CO_2 sequestered per unit of carbon, as the atomic weight of CO_2 is 44 and the atomic weight of C is 12.
- A carbon value of \$131/t CO_2 has been used based on 2024 NSW Treasury figures, which equates to \$0.131 per kg CO_2 .

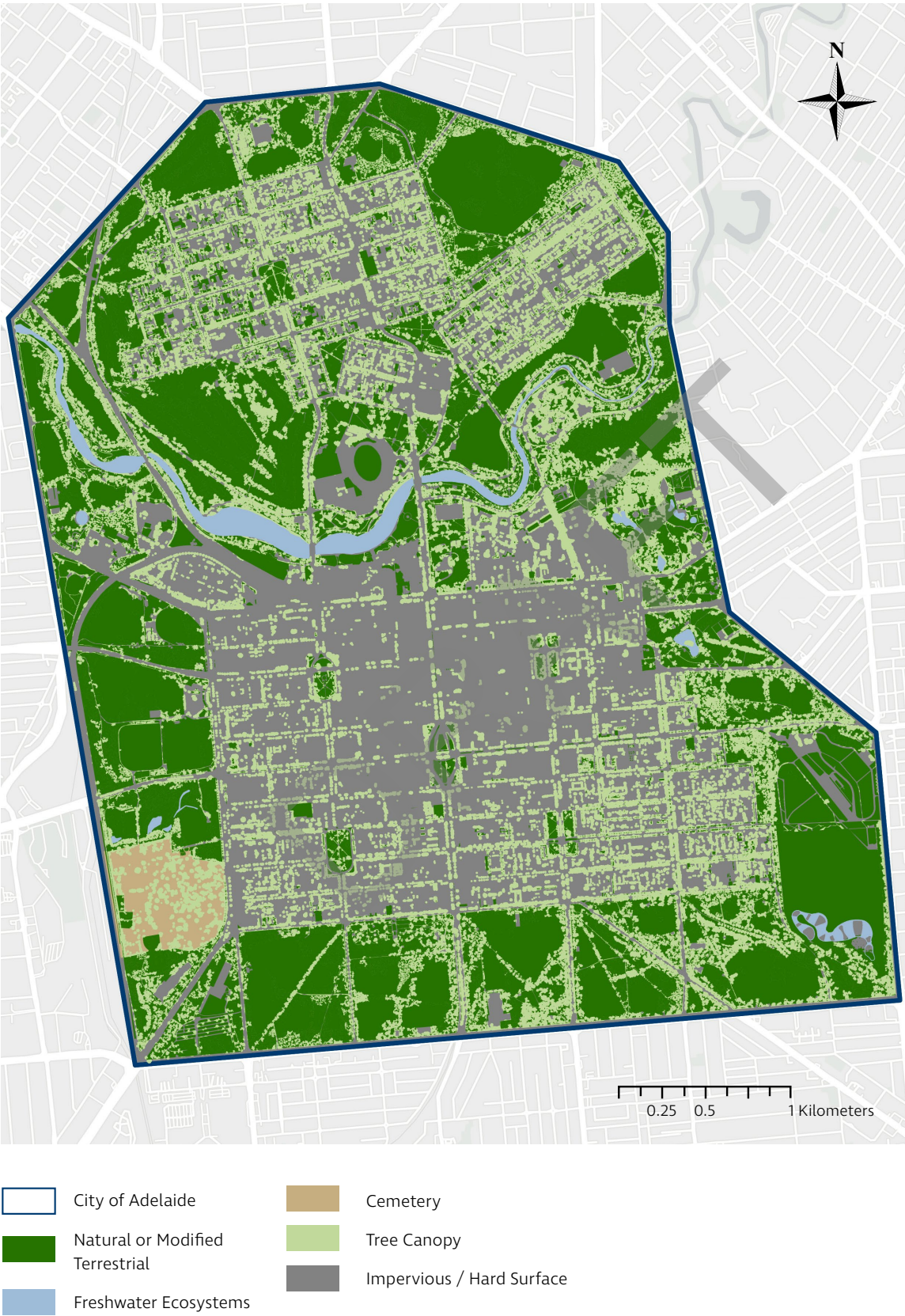
The resulting greenhouse gas (GHG) reduction benefits are calculated as follows:

- $4,850,000m^2$ of vegetation $\times$ 0.3kgs carbon sequestered per m^2 $\times$ 3.67 to convert this carbon to CO_2 $\times$ \$0.131/kg CO_2 of economic value = \$699,782 economic value from the CO_2 sequestered by vegetation in the Adelaide Park Lands.

¹⁵ Framework for Valuing Green Infrastructure and Public Spaces, October 2023, Dept of Planning NSW.

¹⁶ NSW Treasury, December 2024, Carbon emissions in the Investment Framework, TPG24-34 Carbon emissions in the Investment Framework

Urban Greening Venue Types



Limitations

Key limitations include:

- The assessment of greenhouse gas reduction is conservative as it applies a sequestration rate appropriate for trees older than 20 years. Younger trees in the Adelaide Park Lands sequester carbon at a higher rate, meaning the true annual sequestration value is likely higher. As the urban forest matures and canopy cover expands through ongoing planting programs.
- The sequestration value of the Adelaide Park Lands is expected to increase. The sequestration rate of 0.3kg per m² of canopy is applied uniformly across all vegetation regardless of species, age or condition. Different tree species sequester carbon at significantly different rates, and this variation is not captured in the current estimate.
- The 0.3kg per m² rate is appropriate for trees older than 20 years. Younger trees typically sequester carbon at a higher rate, meaning the estimate may understate total sequestration where the canopy includes a significant proportion of younger trees. Based on the City of Adelaide tree asset data, a substantial proportion of the 63,674 trees are juvenile or young, suggesting the true sequestration value may be higher than the current estimate.
- The 485 hectares of canopy cover includes all vegetation above 1 metre in height and has not been adjusted for canopy condition, gaps or seasonal variation in leaf cover.
- The carbon value of \$131 per tonne CO₂ is based on 2024 NSW Treasury figures and may not reflect South Australian carbon market conditions or future carbon price movements.
- The estimate does not account for carbon stored in soil, roots or woody biomass, which can represent a significant proportion of total tree carbon storage.
- Sequestration values will change over time as the urban forest matures, trees are removed or replaced, and canopy cover changes.

Sources - Opportunity costs are based on the Assessing the Contributions of the Adelaide Park Lands – Report 2: Guide to Measurement report, April 2025, prepared by MCA, HP Hirst Projects and Brave and Curious. Framework for Valuing Green Infrastructure and Public Spaces, October 2023, Dept of Planning NSW. NSW Treasury, December 2024, Carbon emissions in the Investment Framework, TPG24-34 Carbon emissions in the Investment Framework.

Indicator

Air Quality

Metric

Pollution removal and avoided energy emissions.

Why this matters

Natural spaces such as the Adelaide Park Lands provide valuable services for air quality in an urban environment. Vegetation filters particulate matter and absorbs pollutants, which have air quality benefits for human health.

Economic value

The estimated value of air quality benefits from the Adelaide Park Lands is \$71,357 per annum and the estimated value of avoided emissions is \$42,687 per annum.

Insight

The Adelaide Park Lands' 63,712 trees provide a measurable air quality benefit to residents, workers and visitors across the city centre and surrounding suburbs. As Adelaide's population grows and traffic increases, the air filtration and emissions reduction role of the Adelaide Park Lands becomes increasingly significant as both a public health asset and a residential and business amenity. These benefits are largely invisible in conventional economic accounts but represent real avoided costs to the health system and real value to the city's liveability and attractiveness.

Data and method

Pollution removal

The benchmark value used for pollution removal per tree is \$1.12.

The total number of trees in the Adelaide Park Lands at the time of this report is 63,712.

The pollution removal benefits for air quality of the Adelaide Park Lands is:

63,712 total trees x \$1.12 value of pollution removal per tree = \$71,357

Avoided energy emissions

The benchmark value used of avoided energy emissions per tree is \$0.67.

The total number of trees in the Adelaide Park Lands at the time of this report is 63,712.

The avoided energy emissions for air quality of the Adelaide Park Lands is: 63,712 total trees x \$0.67 avoided energy emissions per tree = \$42,687.

Limitations

Key limitations include:

- The benchmark values of \$1.12 per tree for pollution removal and \$0.67 per tree for avoided energy emissions are applied uniformly across all trees regardless of species, size, age or condition. Larger and more mature trees provide significantly greater air quality benefits than young or small trees, meaning the estimate may understate benefits where the canopy is mature and overstate them where it is not.

- The Adelaide Park Lands tree dataset shows that of the 63,712 trees, the majority are juvenile or mature, with a significant proportion recorded as semi-mature or senescent. This age and condition variation is not reflected in the per-tree benchmark values.
- The benchmark values are drawn from the MCA Guide to Measurement and are not SA-specific. Local conditions including Adelaide's climate, tree species mix and urban form may affect actual air quality outcomes.
- Pollution removal and avoided energy emissions are reported as separate indicators but are not additive in environmental terms, as both derive from tree canopy function.
- These estimates do not capture seasonal variation in air quality benefits, which are influenced by leaf cover, temperature and wind patterns.
- The 63,712 tree count includes trees outside the formal Adelaide Park Lands boundary. While this is methodologically appropriate for air quality assessment, it means the estimate is not directly comparable to other indicators that use the 63,674 Adelaide Park Lands-specific tree count.

¹⁷ Opportunity costs are based on the Assessing the Contributions of the Adelaide Park Lands – Report 2: Guide to Measurement report, April 2025, prepared by MCA, HP Hirst Projects and Brace and curious.

¹⁸ Opportunity costs are based on the Assessing the Contributions of the Adelaide Park Lands – Report 2: Guide to Measurement report, April 2025, prepared by MCA, HP Hirst Projects and Brace and curious.

Indicator

Biodiversity

Metric

National ecosystem service and aquatic biodiversity values.

Why this matters

Biodiversity is vital for healthy, vibrant and aesthetic ecosystems, including the Adelaide Park Lands. The Adelaide Park Lands have biodiversity value as a park system, with the highest biodiversity values concentrated in specific areas rather than evenly distributed across the entire park system.

These areas form a network of ecological assets that support habitat, movement and ecological function in a highly urbanised environment. The Adelaide Park Lands play an important role in the preservation of genetic diversity and native plant and animal species.

Economic value

The combined biodiversity associated with the Adelaide Park Lands is estimated to generate approximately \$376.2 million in national ecosystem service value.

Within South Australia, aquatic biodiversity values are estimated at approximately \$27 million.

Insight

The Adelaide Park Lands contain seven Key Biodiversity Areas, representing the highest concentrations of native species abundance and diversity within the park system. These areas support four distinct pre-European ecological communities, including Grey Box and SA Blue Gum Woodland,

Mallee Box Woodland, and Derived Native Grasslands. The Grey Box Grassy Woodland found in Victoria Park / Pakapakanthi (Park 16) is listed as a threatened ecological community under Commonwealth legislation, reflecting the national significance of what the Adelaide Park Lands have preserved within a highly urbanised environment.

The aquatic biodiversity of the Adelaide Park Lands is equally significant. Field surveys in 2023 and 2024 recorded 4,258 individual fish from 14 species in Torrens Lake and downstream of Torrens Weir, including two species not previously recorded since 2003, among them the rare Short-finned Eel. Constructed wetlands within the Adelaide Park Lands have also confirmed frog populations, demonstrating that active habitat creation is expanding biodiversity outcomes.

Five threatened or near-threatened flora species were recorded in 2024, including Swollen Spear Grass and Rock Logania. Native fauna including Brushtail and Ringtail Possums, microbats, native bees, butterflies including the rare Chequered Copper, and a wide range of bird species are supported across the Key Biodiversity Areas and Adelaide Park Lands.

This biodiversity represents natural capital that underpins urban economic performance. The ecological functions delivered by these areas, including pollination, pest control, soil health and water filtration, reduce reliance on costly engineered substitutes and support the long-term liveability and resilience of the city.

Data and method

This assessment uses a benefit transfer approach to valuing terrestrial and aquatic biodiversity in the Adelaide Park Lands. The following assumptions are used:

- Benefit transfer is based on 2022 dollars (this figure has not been adjusted to account for inflation as it is used with 2021 Census data and is therefore a conservative figure).
- Aquatic biodiversity values represent the dominant component of total estimated biodiversity value and should be interpreted as indicative ecosystem service values derived through benefit transfer assumptions.
- Benefit transfer for terrestrial biodiversity is \$0.0007 per household per hectare of Key Biodiversity Area and woodland-grassland areas in the Adelaide Park Lands.
- Using this benefit transfer figure, the benefit transfer figure for the Adelaide Park Lands is \$0.2289 (calculated as \$0.0007 multiplied by 327 hectares of Key Biodiversity Areas and woodlands-grasslands) multiplied by households.
- Benefit transfer for wetlands and water bodies is \$0.0009 per household per hectare of area in the Adelaide Park Lands.
- Using this benefit transfer figure, the benefit transfer figure for the Adelaide Park Lands is \$0.0405 (calculated as \$0.0009 multiplied by 45 hectares) multiplied by households.
- Benefit transfer for aquatic biodiversity is based on a proxy value of \$0.83 per household applied over 45 units for 30 years, consistent with the consultant-identified methodology.
- Using this benefit transfer figure, the benefit transfer figure for the Adelaide Park Lands is \$37.35 (calculated as \$0.83 multiplied by 45 hectares) multiplied by households.
- As biodiversity serves state and national ecosystem level services, total household numbers for the City of Adelaide, Greater Adelaide, South Australia, and Australia have been considered using ABS data.
- Benefit transfer values and methodology are drawn from the Assessing the Contributions of the Adelaide Park Lands, Report 2: Guide to Measurement, April 2025, prepared by MCA, HP Hirst Projects and Brace Curious. Household data is sourced from the City of Adelaide Community Profile, Australian Bureau of Statistics.

Key Biodiversity Areas and woodlands-grassland areas

Region	Households	Value (households x \$0.2289)
City of Adelaide	12,087	\$2,767
Greater Adelaide Region	553,824	\$126,770
South Australia	723,000	\$165,495
Australia	10,000,000	\$2,289,000

Wetlands and waterbodies

Region	Households	Value (households x \$0.0405)
City of Adelaide	12,087	\$490
Greater Adelaide Region	553,824	\$22,430
South Australia	723,000	\$29,282
Australia	10,000,000	\$405,000

Aquatic biodiversity

Region	Households	Value (households x \$37.35)
City of Adelaide	12,087	\$451,450
Greater Adelaide Region	553,824	\$20,685,326
South Australia	723,000	\$27,004,050
Australia	10,000,000	\$373,500,000

Limitations

- Valuation is based on a benefit transfer methodology and should be considered an indicative estimate of biodiversity value rather than a direct market value.
- Assessment is limited to Key Biodiversity Areas, woodland and grassland areas, wetlands, water bodies and aquatic biodiversity identified within the Adelaide Park Lands.
- Biodiversity value is based on the extent (hectares) of biodiversity assets, not ecological condition, habitat quality, species richness or conservation status.
- Other ecosystem services provided by the Adelaide Park Lands, including urban cooling, carbon sequestration, air quality improvement, pollination and habitat connectivity, are not included in this valuation.
- Values represent community willingness to pay for biodiversity outcomes and are derived from published valuation benchmarks adopted in the Adelaide Park Lands Guide to Measurement.
- The assessment does not account for future biodiversity improvements, restoration programs or ecological enhancement projects that may increase biodiversity value over time.
- Biodiversity benefits extend beyond Adelaide Park Lands users; therefore, values are estimated using household populations at local, regional, state and national scales.

Source - Benefit transfer values and methodology are drawn from the Assessing the Contributions of the Adelaide Park Lands, Report 2: Guide to Measurement, April 2025, prepared by MCA, HP Hirst Projects and Brace Curious. Household data is sourced from the City of Adelaide Community Profile, Australian Bureau of Statistics.

Indicator

Adelaide Park Lands Products

Metric

Revenue from Adelaide Park Lands-related nursery, mulch and green waste products/ services.

Why this matters

The Adelaide Park Lands generate a small but measurable product-based revenue stream through the reuse and sale of organic materials and related nursery activity. These activities support resource recovery, circular economy outcomes and sustainable management of green waste generated through Adelaide Park Lands and city greening operations.

Economic value

In 2024/25, Adelaide Park Lands products managed by the City of Adelaide generated revenue of \$982,330.

Insight

Adelaide Park Lands-related products and green waste activity undertaken by the City of Adelaide generate just under \$1.0 million per annum.

Data and method

This is a direct revenue measure, not a proxy value. The revenue reflects product and service income associated with nursery, mulch and green waste activity. It does not represent profit, net economic benefit or total environmental value.

- 2025/26 year-to-date revenue to April: \$808,996
- Revenue includes mulch sales to residents and charges for residents to dispose of green waste.

- The Nursery sells mulch to residents and charges residents to dispose of green waste.

Period	Revenue
2024/25 financial year	\$982, 330
2025/26 year-to-date to April	\$808,996

It should not be combined with broader environmental indicators, such as carbon, greening, biodiversity or water management benefits, without checking for overlap.

Limitations

- Key limitations include:
- This analysis is based on reported City of Adelaide revenue from nursery, mulch and green waste-related activity in 2024/25 only.
 - The revenue figure does not separate mulch sales, green waste disposal charges, plant sales or other nursery-related income.
 - The figure represents gross revenue, not profit or net economic contribution.
 - Environmental benefits associated with reuse, avoided landfill or circular economy outcomes are not monetised in this indicator.



Indicator

Water Management

Metric

Management value

Why this matters

The Adelaide Park Lands form part of Adelaide's broader stormwater and flood management system by providing space for water movement, storage and absorption. Open and vegetated areas within the Adelaide Park Lands support stormwater flow paths and open vegetated drainage systems that are difficult to accommodate within the built city. The Adelaide Park Lands help manage runoff during heavy rainfall, reducing pressure on downstream stormwater infrastructure. Stormwater functions are delivered at a system level, supporting upstream and downstream catchments.

The Adelaide Park Lands contribute to the city's broader water management and climate resilience system by supporting:

- Flood mitigation.
- Runoff reduction.
- Infiltration and storage.
- Water-sensitive urban design.
- Reduced pressure on downstream infrastructure.

Whilst future urban growth will have a limited impact on the extent of impervious surfaces within the City of Adelaide, climate change impacts are expected to result in more intense rainfall events, placing increased stress on stormwater infrastructure. Maintenance and enhancement of the stormwater management elements of the Adelaide Park Lands will improve the city's ability to adapt to climate change while minimising expensive capital projects to increase the storage capacity within the street and pipe network.

Economic value

The Adelaide Park Lands provide stormwater management benefits of \$180,420 per year.

Insight

The Adelaide Park Lands provide significant economic value through their role as urban stormwater infrastructure. By absorbing, slowing, and filtering runoff, the Adelaide Park Lands reduce flood risk, ease pressure on engineered drainage systems, improve water quality, and lower long-term infrastructure and maintenance costs. They function as a natural resilience asset that helps the city adapt to more intense rainfall events while supporting urban amenity, liveability, and water security.

Data and method

Urban parks absorb rainfall, reduce stormwater runoff, and avoid the need for grey infrastructure. The Trust for Public Land New York City study found that the avoided cost of additional wastewater infrastructure across the 30,868 ha NYC park system was AU\$8.98 million (equivalent), equating to approximately AU\$291 per hectare.

This reflects avoided stormwater runoff, nutrient reduction and sediment management benefits associated with tree canopy and vegetation.

A broader benefit-transfer estimate has also been applied using an adjusted benchmark from the Trust for Public Land New York City parks study.

Applying the NYC benefit-transfer rate:

Parameter	Indicative Value
Applicable permeable area (excl. impervious surfaces)	~620 ha (estimate)
Benefit transfer rate (TPL NYC, adjusted)	AU\$291/ha/year
Indicative annual stormwater avoided infrastructure value	AU\$180,420
Avoided cost of new green stormwater infrastructure (total asset)	Subject of full engineering assessment

The indicative avoided stormwater infrastructure value is calculated as 620 ha × AU\$291 per hectare per year, giving an indicative annual value of approximately AU\$180,420. The following assumptions underpin this calculation:

- An avoided stormwater runoff value of \$0.38 per tree for stormwater, nutrient and sediment reduction benefits.
- An applicable permeable area of approximately 620 hectares, excluding impervious surfaces.
- An adjusted benefit transfer rate of approximately AU\$291 per hectare per year derived from the Trust for Public Land New York City parks study.

These estimates are indicative only and should not be interpreted as a substitute for detailed hydrological or engineering analysis.

Limitations

Key limitations include:

- The benefit transfer rate is derived from the Trust for Public Land New York City parks study and has not been calibrated to Adelaide's

specific rainfall patterns, catchment conditions or stormwater infrastructure costs.

- The applicable permeable area of 620 hectares is an estimate based on existing mapping.
- The calculation does not account for variation in permeability across different surface types within the Adelaide Park Lands, including turf, native vegetation, mulched areas and compacted paths.
- A full assessment would require local rainfall and runoff modelling, catchment modelling, SA Water infrastructure cost benchmarks and an engineering assessment of avoided infrastructure requirements.
- The \$180,420 figure should not be interpreted as a precise engineering valuation. It is an indicative benefit transfer estimate based on an international benchmark adjusted for the Adelaide context.
- The avoided stormwater runoff value of \$0.38 per tree cited in the assumptions has not been used in the final calculation, which is based on the per hectare benefit transfer rate.

Source - Assessing the Contributions of the Adelaide Park Lands Report 2: Guide to Measurement, April 2025, prepared by MCA, HP Hirst Projects and Brace Curious.

Cost Benefit Analysis of Specific WSUD Features – Framework for Valuing Green Infrastructure and Public Spaces, NSW Department of Planning, October 2023.

Trust for Public Land New York City parks study.

6

Property and Infrastructure Asset Value



Indicator

Property Value

Metric

Property valuation uplift for development adjacent the Adelaide Park Lands.

Why this matters

Locations adjacent to high-quality green space are generally considered desirable places to live and operate businesses. The Adelaide Park Lands provide open space and environmental amenity views, recreational access, and landscape character.

These attributes contribute to residential and commercial desirability and can influence surrounding land and property values through amenity-related price premiums.

There is strong international and Australian evidence demonstrating that proximity to major urban parks can generate measurable increases in surrounding property values.

Economic value

Properties fronting the Adelaide Park Lands receive an observed valuation uplift of approximately 5%, with Adelaide Park Lands views contributing additional premiums of up to 50%.

Insight

The Adelaide Park Lands function as a value-enhancing component of Adelaide’s urban structure. Their presence supports residential desirability, commercial attractiveness and long-term land value in surrounding areas.

This reinforces the Adelaide Park Lands’ role not only as a recreational and environmental asset, but also as a contributor to urban amenity and property market value. The additional value from parkland frontage may serve as a development driver for sites with a low site-to-capital value ratio.

Current valuation impacts observed within the City of Adelaide include:

- Approximately 5% uplift for properties directly fronting the Adelaide Park Lands.
- Between 5% and 50% uplift for properties with Adelaide Park Lands views, depending on view quality, obstruction, building level and location characteristics.

For example, a 5% frontage uplift would equate to:

Property value	Indicative 5% uplift
\$750,000	\$37,500
\$1,000,000	\$50,000
\$1,500,000	\$75,000

Stronger premiums are observed in locations with direct access and uninterrupted views, particularly along South Terrace, North Terrace and East Terrace. Higher view premiums may apply where properties have elevated, direct or uninterrupted Adelaide Park Lands views.

This uplift is distinct from rental premiums and reflects the capital value effect of Adelaide Park Lands proximity, frontage and views.

Data and method

Property value uplift estimates are based on City of Adelaide valuation practice, drawing on paired market analysis comparing similar properties with and without Adelaide Park Lands frontage or views. This approach identifies the price differential attributable to Adelaide Park Lands proximity by controlling for other property characteristics such as size, age, condition and location. The 5% frontage uplift is drawn from Westlink's property valuation report, May 2026, prepared for the City of Adelaide.

The 5% uplift figures reported in Westlink's property valuation report, May 2026, commissioned by the City of Adelaide, are consistent with Australian urban park studies, which commonly identify residential property premiums of approximately 3–8% for properties located within 400 metres of major urban parks.

The Trust for Public Land New York City parks study estimated that proximity to parks contributed more than USD \$15.2 billion in increased residential property value across the New York City park system. Australian urban park studies commonly identify residential property premiums of approximately 3–8% for properties located within 400 metres of major urban parks, consistent with the observed Adelaide Park Lands uplift range.

Limitations

Key limitations include:

- This indicator identifies property value uplift rates and illustrative capital value impacts. It does not calculate the total cumulative property value premium generated by the Adelaide Park Lands across all adjacent properties.
- A full aggregate property value estimate would require detailed property transaction data, spatial modelling and controls for property attributes.
- The assessment does not quantify the total cumulative property premium associated with the Adelaide Park Lands across metropolitan Adelaide.
- To robustly isolate and quantify the contribution of Adelaide Park Lands proximity to surrounding property values, a full hedonic pricing assessment would require SA Government property transaction data, GIS proximity modelling, property attribute controls and spatial econometric analysis.

Indicator

Rental Uplift for Properties with Adelaide Park Lands Frontage and Views

Metric

Indicative annual rental uplift for residential properties with Adelaide Park Lands frontage or views.

Why this matters

The areas surrounding the Adelaide Park Lands contain a significant concentration of residential, commercial and mixed-use properties. These properties form the immediate urban context within which the Adelaide Park Lands operate. Proximity to the Adelaide Park Lands provides access to open space, amenity and recreational opportunities, contributing to liveability and supporting economic activity in surrounding areas.

Economic value

Proximity to Adelaide Park Lands frontage generates an annual rental uplift of approximately \$183,000 to \$854,000 per annum, with a midpoint estimate of approximately \$518,500 per annum.

Properties achieve rental premiums of between approximately \$1,500 to \$7,000 per year per property.

Insight

Proximity to the Adelaide Park Lands is being capitalised more strongly into long-term property values than into short-term rental returns. This reflects the scarcity of direct Adelaide Park Lands frontage and the enduring market premium for access to high-quality green open space.

Annual rental uplift in the City of Adelaide is generally moderate, reflecting competing urban factors such as traffic, noise and built form. Uplift within North Adelaide is typically stronger and more consistent, reflecting the premium nature of park-facing residential properties.

Investment in the Adelaide Park Lands contributes not only to amenity and liveability outcomes, but also to sustained land value uplift, strengthening the municipal rate base and reinforcing Adelaide's competitive positioning as a highly liveable city.

Observed rental uplifts range from approximately \$1,500 to \$4,500 per year per property within the City of Adelaide and \$2,000 to \$7,000 per year per property within North Adelaide. In percentage terms observed uplifts typically fall within 2% to 15%, with variation influenced by property type, building level, quality of views and surrounding urban conditions.

Scenario	Calculation	Estimated annual uplift
Low estimate	122 x \$1500	\$183,000
Midpoint estimate	122 x \$4250	\$518,500
High estimate	122 x \$7000	\$854,000

Data and method

Rental uplift estimates are based on observed paired comparisons of similar residential properties with and without Adelaide Park Lands frontage or views, drawing on City of Adelaide valuation practice. The observed sample comprises 122 residential properties within the Other land use category identified in rateable property records.

Rateable property data for areas adjacent to the Adelaide Park Lands indicates the following land use distribution:

Land Use Category	Number
Commercial office	1991
Commercial other	2350
Commercial Shop	1546
Industry Light	76
Other	122

There are a total of 6,085 rateable properties identified in the City of Adelaide with direct frontage to the Adelaide Park Lands, with the largest categories being Commercial other and Commercial office. Adjacent areas include a substantial concentration of offices, shops and mixed-use business activity, indicating strong potential for visitor-related spending and economic interaction between the Adelaide Park Lands and surrounding areas.

Applying the observed uplift range of \$1,500 to \$7,000 per property per year to the 122 observed properties gives an illustrative annual rental uplift of \$183,000 to \$854,000 per annum, with a midpoint estimate of approximately \$518,500 per annum. This estimate reflects the observed sample only and should not be extrapolated to all adjacent properties without further analysis.

This estimate should be interpreted as an indicative rental uplift for the observed sample only, not as the total economic value of all properties adjacent to the Adelaide Park Lands.

Limitations

Key limitations include:

- This section should be interpreted as contextual analysis supporting future valuation work, rather than a direct economic measure.
- The land use data identifies property distribution but does not directly measure business turnover, resident behaviour or spending activity.
- Rental uplift estimates are based on observed comparisons and may vary by property type, quality, location, frontage, views and surrounding conditions.
- The uplift estimate applies only to the observed property sample and should not be extrapolated to all adjacent properties without further analysis.
- The estimate reflects rental uplift only and does not capture potential capital value uplift.
- Further work is required to quantify spending behaviour in adjacent areas, assess broader property value uplift and understand business reliance on Adelaide Park Lands visitation.

Source - City of Adelaide rateable property records, March 2026.

Indicator

Infrastructure Asset Value

Metric

Infrastructure replacement value and infrastructure condition.

Why this matters

Adelaide Park Lands and Open Space assets are comprised of green assets (trees, turf, biodiversity and landscaped areas) and infrastructure assets (irrigation systems, playgrounds, sports fields and water features). Only infrastructure assets are classified as capital assets and carry a recognised replacement value; green assets are not classified as capital assets and do not carry a replacement value.

The Adelaide Park Lands also support a range of buildings, structures and facilities for sport, recreation and community use, and that support the operations of the Adelaide Park lands.

Economic value

The City of Adelaide's Park Lands and Open Space assets have a current replacement value of \$46.3 million for infrastructure assets, plus \$83.9 million across buildings, structures and facilities located within the Adelaide Park Lands, bringing the combined asset base to \$131.2 million.

The City of Adelaide invests \$25.6 million annually in the maintenance of open space and the Adelaide Park Lands.

Insight

Asset condition assessments indicate that the Adelaide Park Lands and Open Space infrastructure portfolio is performing well overall.

Current assessments show:

- 91% of infrastructure assets are rated in very good to fair condition.
- Only 9% are rated in poor or very poor condition.

The overall condition index ranges from 1.86 (Playgrounds) to 2.31 (Sports fields), all within the Good to Fair band.

Asset condition assessments for buildings show:

- 90% of building assets are rated in very good to fair condition
- Only 10% are rated in poor condition.

Data and method

This assessment uses the infrastructure replacement cost as reported in the City of Adelaide Park Lands and Open Space Asset Mangement Plan and Building Asset Mangement Plan as a measure of the total current cost of replacing Adelaide Park Lands infrastructure assets. Condition assessments are conducted approximately every four years across four asset categories: playgrounds, sportsfields and active areas, green infrastructure and water features. Assets are graded on a five-point condition scale from Very Good (Condition 1) to Very Poor (Condition 5). The overall condition index for each asset category is calculated as a weighted average of condition grades across all assessed assets within that category.

Asset Sub-Category	Quantity	Replacement Value (\$ million)
Park 10 Nursery	11	\$0.8
Garden Sheds & Horticulture Hubs	22	\$1.4
Park Lands Sports Clubs & Grandstands	63	\$37.5
Adelaide Aquatic Centre	1	\$39.6
Park Lands Businesses	2	\$0.4
North Adelaide Golf Links	4	\$4.2
Total	103	\$83.9

Playgrounds	Sports Fields	Green Infrastructure	Water Feature	Total
\$0.89M Renewal Cost	\$0.87M Renewal Cost	\$1.00M Renewal Cost	\$0.09M Renewal Cost	\$2.85M Renewal Cost
\$0.34M Maintenance Cost	\$0.04M Maintenance Cost	\$9.20M Maintenance Cost	\$0.25M Maintenance Cost	\$9.83M Maintenance Cost
\$0.10M Operation Cost	\$0.007M Operation Cost	\$1.72M Operation Cost	\$0.17M Operation Cost	\$2.01M Operation Cost
\$1.32M Lifestyle Cost	\$0.91M Lifestyle Cost	\$11.94M Lifestyle Cost	\$0.51M Lifestyle Cost	\$14.69M Lifestyle Cost

Infrastructure Assets covered by the Park Lands and Open Space Asset Management Plan

Asset Category	Asset Type	Quantity/Dimension	Replacement Value
Playgrounds	Playground Rubberised Softfall	7,845 m ²	\$798,656
	Playground Equipment	202 assets	\$3,171,538
Sportsfields and Active Areas	Basketball Court	5 assets	\$719,809
	BMX Track	4 assets	\$1,791,228
	Chess Set	1 asset	\$14,755
	Cricket Pitch	6 assets	\$112,658
	Golf Greens	57 assets	\$2,669,130
	Multipurpose Court	2 assets	\$1,278,178
	Netball Court	1 asset	\$5,756,152
	Petanque	4 assets	\$249,373
	Skatepark	2 assets	\$1,836,313
	Sports Equipment	66 assets	\$714,364
	Tennis Court	6 assets	\$780,089
Green Infrastructure	Street and Park Trees	56,997 assets	n/a *
	Streetscape	94,469 m ²	n/a *
	Park Lands Garden Bed	100,332 m ²	n/a *
	Biodiversity Area	1,012,664 m ²	n/a *
	Turf	2,606,656 m ²	n/a *
	Irrigation System	371 assets	\$12,372,154
	Strata cell	39 assets	\$3,329,205
Water Features	Water Features	13 assets	\$10,752,961
Total			\$46,346,562

Limitations

Key limitations include:

- Infrastructure condition audits are updated approximately every four years, meaning condition data may not reflect the current state of all assets at the time of publication.
- The replacement value of \$46.3 million covers only infrastructure assets including playgrounds, sportsfields, irrigation systems and water features.
- The replacement value of \$83.9 million covers building, structures and facilities. This includes the value of Adelaide Aquatic centre and North Adelaide Golf Links prior to their transfer to the State Government in 2025/26.
- Green assets including trees, streetscapes, garden beds, biodiversity areas and turf are not classified as capital assets and therefore do not have a recognised replacement value. Their ongoing costs are reported through the operational and maintenance budget rather than as asset values.
- The \$25.6 million annual maintenance figure represents the total City of Adelaide investment in open space and Adelaide Park Lands maintenance and includes both labour and non-labour costs. It has not been disaggregated by asset type or activity.
- Condition indices are calculated as weighted averages across asset categories and do not reflect the condition of individual assets within each category.
- The condition assessments for buildings, structures and facilities reflects overall condition of all City of Adelaide buildings not only those in the Adelaide Park lands.
- Community satisfaction data cited in this section is based on survey responses and may not reflect the views of all user groups.

Source - City of Adelaide, Park Lands and Open Space Asset Management 2025. 2021 City User Profile survey. City of Adelaide 2025/26 Business Plan and Budget.

Kadaltilla[®]
Adelaide Park Lands Authority

P (08) 8203 7203

E kadaltilla@cityofadelaide.com.au

W cityofadelaide.com.au/Kadaltilla