



INFRASTRUCTURE AND PUBLIC WORKS COMMITTEE

Agenda and Reports

for the meeting on

Tuesday, 17 June 2025

at 7.00 pm

in the Colonel Light Room, Adelaide Town Hall

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Bold.
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INFRASTRUCTURE AND PUBLIC WORKS COMMITTEE
Meeting Agenda, Tuesday, 17 June 2025, at 7.00 pm

Members – The Right Honourable the Lord Mayor, Dr Jane Lomax-Smith
Deputy Lord Mayor, Councillor Martin (Chair)
Councillors Abrahamzadeh, Couros, Davis, Giles, Dr Siebentritt and Snape

Agenda

Item		Pages
1.	Acknowledgement of Country At the opening of the Infrastructure and Public Works Committee meeting, the Chair will state: ‘Council acknowledges that we are meeting on traditional Country of the Kurna people of the Adelaide Plains and pays respect to Elders past and present. We recognise and respect their cultural heritage, beliefs and relationship with the land. We acknowledge that they are of continuing importance to the Kurna people living today. And we also extend that respect to other Aboriginal Language Groups and other First Nations who are present today.’	
2.	Apologies and Leave of Absence Apology: The Right Honourable the Lord Mayor, Dr Jane Lomax-Smith	
3.	Confirmation of Minutes - 20 May 2025 That the Minutes of the meeting of the Infrastructure and Public Works Committee held on 20 May 2025, be taken as read and be confirmed as an accurate record of proceedings. View public 20 May 2025 Minutes .	
4.	Declaration of Conflict of Interest	
5.	Deputations	
6.	Workshops Nil	
7.	Reports for Recommendation to Council	
	7.1 School Travel Safety Review	3 - 370
	7.2 Capital Works Monthly Project Update - May 2025	371 - 386
8.	Reports for Noting Nil	
9.	Closure	

School Travel Safety Review

Strategic Alignment - Our Places

Public

Tuesday, 17 June 2025

Infrastructure and Public
Works Committee

Program Contact:

Mark Goudge, Associate Director
Infrastructure

Approving Officer:

Mike Philippou, A/Director, City
Infrastructure

EXECUTIVE SUMMARY

The purpose of this report is to provide the outcomes of the investigation and summary findings from the School Travel Safety Review for schools within the City of Adelaide and detail next steps to progress the Review recommendations including infrastructure improvements.

At its meeting on 31 January 2023, Council resolved that the Administration investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school children entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised “kiss and drop zones” at all schools in the City of Adelaide.

Following the trial study of school drop off / pick up safety at St Aloysius College, which was reported to Council in March 2024, the Administration engaged consultant Tonkin to undertake a School Travel Safety Review for the remaining 11 schools within the City of Adelaide.

The review focused on the streets immediately adjacent to each school and issues on these streets related to driver and pedestrian behaviours.

It is recommended that school zone speed limits be implemented around each school in consultation with Department for Infrastructure and Transport (DIT).

RECOMMENDATION

The following recommendation will be presented to Council on 24 June 2025 for consideration

THAT THE INFRASTRUCTURE AND PUBLIC WORKS COMMITTEE RECOMMENDS TO COUNCIL
THAT COUNCIL

1. Receives the eleven (11) School Travel Safety Review reports prepared by Tonkin contained within Attachments A to K to Item 7.1 on the Agenda for the meeting of the Infrastructure and Public Works Committee held on 17 June 2025.
2. Notes that Administration will develop concept plans for the implementation of infrastructure improvements within the vicinity of each school that align with the recommendations of the reports and safer streets and speed outcomes and will undertake further consultation with each school and other relevant Stakeholders.
3. Notes the delivery of the infrastructure improvements will be subject to funding approvals as part of future Business Plan and Budget processes
4. Approves as a priority measure the implementation of school zone speed limits and / or speed limit changes around each school in consultation with the Department for Infrastructure and Transport.
5. Notes that Administration will consult with the schools to investigate additional opportunities to increase student walking and cycling levels.
6. Notes that the Administration will provide further updates to Council for review and consideration.

IMPLICATIONS AND FINANCIALS

City of Adelaide 2024-2028 Strategic Plan	Strategic Alignment – Our Places Community assets are adaptable and responsibly maintained. Create safe, inclusive and healthy places for our community.
Policy	Not as a result of this report.
Consultation	Consultation undertaken with each of the subject schools in preparing the documents that are the subject of this report.
Resource	Not as a result of this report.
Risk / Legal / Legislative	As set out in South Australia's Road Safety Strategy to 2031 Council, as a Road Authority, has a shared responsibility for road safety outcomes and to seek Safe System outcomes.
Opportunities	Improve safety for students around schools during school drop off and pick up times.
24/25 Budget Allocation	Not as a result of this report.
Proposed 25/26 Budget Allocation	<p>\$150,000 is currently allocated within the Draft 2025/26 Business Plan and Budget, currently out for consultation to progress (in part) the priority measure as per recommendation 4 of this report and the preparation of an implementation plan with prioritisation and costings for the infrastructure improvements around each of the schools. The detailed design and implementation of each school travel safety review is currently unfunded.</p> <p>The required funding is subject to, and needs to be considered in the context of, the prioritisation of projects, initiatives and service enhancements for the development of the Draft 2025/26 budget, and future budgets including the parameters of the LTFP to ensure long-term financial sustainability.</p>
Life of Project, Service, Initiative or (Expectancy of) Asset	The implementation of recommendations from the review is expected to occur over a 10-year period subject to future Business Plan and Budget processes.
24/25 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	Funding grants applications will be progressed to assist in the implementation of projects.

DISCUSSION

Background

1. At its meeting on 31 January 2023, Council resolved:
'That Council:
Asks the Administration to investigate and to report to the appropriate Council Committee by the end of the 2023 school year the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called "kiss and drop zones" at all schools in the City of Adelaide.'
2. In 2023 the Administration engaged an external consultant (InfraPlan) to undertake a trial study of school drop off/pick up safety at St Aloysius College. St Aloysius College was made a priority due to the crash on Angas Street in June 2023 and ongoing safety concerns.
3. The review focused on the streets immediately adjacent to the school and issues on these streets with informal crossing and dangerous driving behaviours, with the report received by Council in March 2024.

School Travel Safety Review

4. Following the completion of the St Aloysius Travel Safety Review, the Administration engaged an external consultant (Tonkin) to undertake a safety review for the remaining 11 schools within the City of Adelaide area, being:
 - 4.1. Adelaide Botanic High School
 - 4.2. Adelaide High School
 - 4.3. Christian Brothers College Junior Campus
 - 4.4. Christian Brothers College
 - 4.5. Gilles Street Primary School
 - 4.6. North Adelaide Primary School
 - 4.7. Pulteney Grammar School
 - 4.8. St Dominic's Priory School
 - 4.9. St Mary's College
 - 4.10. Sturt Street Community School
 - 4.11. University Senior College.
5. Key themes across the School Safety Travel Review include:
 - 5.1. The proportion of students that travel to school by car was high across all schools (greater than 80 percent for some schools) with low proportions of students walking and riding to school.
 - 5.2. Some schools, such as North Adelaide Primary School have a walkable catchment, and the high levels of driving reflect parental concern about road safety.
 - 5.3. Public Transport is generally the alternative mode of transport (other than driving) with some variation depending on location of school and age of students.
 - 5.4. Concerns with driver behaviour, and speeds and compliance with road rules.
 - 5.5. Availability of safe road crossing points for pedestrians and waiting times at existing signalised crossings.
 - 5.6. Availability and design of parking spaces for pick up and drop off.

Adelaide Botanic High School (ABHS) Travel Safety Review

6. The Adelaide Botanic High School Draft School Travel Safety Review Report is contained within **Attachment A**.
7. Key findings from the review include:
 - 7.1. Adelaide Botanic High School is in the Adelaide Park Lands – Frome Park / Nellie Raminyemmerin Park (Park 11) on the eastern side of Frome Road south of Victoria Drive with 1,390 students enrolled in Term 2 - 2024.
 - 7.2. 18 per cent of the students lived in Adelaide and North Adelaide with 11 per cent in the adjacent suburbs to the Ring Road within a distance that they can walk or bicycle to the school. Over 70 per cent of the students lived in suburbs beyond a short walking or cycling distance.
 - 7.3. From the student travel survey, on a fine, dry 25-degree day:
 - 7.3.1. the car mode share was 26 per cent in the AM period and 22 per cent in the PM period.
 - 7.3.2. Public Transport mode share was 61 per cent in the AM period and 65 per cent in the PM period.
 - 7.3.3. The bicycle mode share was about 8 per cent and the walk mode share was 4 to 5 per cent.
 - 7.4. On a wet weather day in the same week, the cycling mode share dropped by five per cent and public transport by nine per cent in the AM period whereas the car mode share increased by 13 per cent.
8. Key recommendations
 - 8.1. For Council:
 - 8.1.1. Most of the student travel safety issues will be addressed with the finalisation of the Frome Road bikeway with the following infrastructure improvements:
 - 8.1.2. Southbound bus stop 1A will be relocated north of Victoria Drive so that the queues of students in the afternoon can be organised to stand in the open area north of the northern side of the school.
 - 8.1.3. The left turn slip lane from Victoria Drive for northbound traffic into Frome Road will be removed to remove this pedestrian safety risk at this intersection.
 - 8.1.4. Required modifications to bicycle lanes in Frome Road as per ongoing monitoring and review.
 - 8.2. For the School:
 - 8.2.1. The high school to complete the landscaping project on the northern side of the school to include a sealed footpath from Frome Road at Victoria Drive for a safer walk route to the student entrance on the northern side of the school.
 - 8.2.2. Maintain the clearance of debris, fallen tree branches and leaves from the footpath in front of the entire school building, especially during the autumn and winter months when wet leaves are a trip hazard for pedestrians and cyclists.
 - 8.2.3. Develop ongoing travel demand management education and training with regular activities and promotions to encourage more students to walk, cycle and use public transport modes instead of the private vehicle.
 - 8.2.4. Consider promoting safe travel to school with the preparation of a School Travel Access Guide that includes the school building entry locations, bus route and timetable information, other public transport information, safe walking and cycling routes and tips for safe cycling.

9. A draft concept plan identifying potential infrastructure improvements around Adelaide Botanic High School including school zone speed limits has been prepared by the Administration ([Link 1](#)).

Adelaide High School Travel Safety Review

10. The Adelaide High School Draft School Travel Safety Review Report is contained within **Attachment B**.
11. Key findings from the review include:
- 11.1. Adelaide High School is located within the Adelaide Park Lands - Ellis Park / Tampawardli (Park 24) on the western side of West Terrace south of Glover Avenue with 1,554 students enrolled in Term 2 2024.
 - 11.2. 7.8 per cent of the students lived in the City of Adelaide and 86.4 per cent of the students lived in the inner suburbs mostly within the enrolment area and remaining students lived in the outer suburban areas.
 - 11.3. From the student travel survey:
 - 11.3.1. Travel by train was the highest transport mode for all students at about 46 per cent in the AM period and 53 per cent in the PM period
 - 11.3.2. 10 to 12 per cent students travelled by bus
 - 11.3.3. Cycling to school was up to five per cent for Years 7 to 9 and about two per cent for Years 10 to 12.
 - 11.3.4. Walking to school was under four per cent of the students in the AM period and about five per cent in the PM period for all year groups.
 - 11.4. Issues for pedestrian and vehicular movements are:
 - 11.4.1. Pedestrian Safety at West Terrace/Glover Avenue and Currie Street
 - 11.4.2. Double Parking on Glover Avenue
 - 11.4.3. pedestrian storage/queuing at the bus stop encroaches onto the shared use path
 - 11.4.4. pedestrians crossing Glover Avenue to travel to/from the school without using the signalised crossing at West Terrace
 - 11.4.5. Vehicles exiting from Ellis Park / Tampawardli (Park 24) to West Terrace traversing across four traffic lanes to travel to Waymouth Street or perform a U-turn manoeuvre.
 - 11.4.6. The school bus stop located adjacent to the main entrance to the school on West Terrace is unsealed resulting in an obstructed shared use path.
 - 11.4.7. Faded and absent line marking in some locations along the shared use path on West Terrace.
12. Key Recommendations
- 12.1. For Council:
 - 12.1.1. Provide improvements to the West Terrace / Glover Avenue / Currie Street intersection including, review of signal operations to increase pedestrian crossing times and upgrades to provide additional pedestrian storage areas, corralling measures such as fencing.
 - 12.1.2. Provide improved access and storage areas at bus stops adjacent to the school, including considering stop relocation.
 - 12.1.3. Implement measures to direct pedestrians to cross at the signalised crossing at West Terrace.
 - 12.1.4. Re-line mark the existing shared use path adjacent to the school to improve delineation and definition for vehicle, cyclist and pedestrian movements.

- 12.1.5. Review movements out from Park 24 to West Terrace for potential improvements to address traversing across four traffic lanes to travel to Waymouth or perform a U-turn manoeuvre
- 12.1.6. Review kiss and drop facilities adjacent to Glover Avenue and measures to improve compliance and reduce double parking (e.g. compliance strategy).
- 12.2. The recommendations also include a suggestion by the AHS staff for a new public road to be constructed through Ellis Park / Tampawardli (Park 24) and a pedestrian bridge over West Terrace. These measures are not being considered for implementation at this time due to the impact to the Park Lands.
- 13. A draft concept plan identifying potential infrastructure improvements around Adelaide High School has been prepared by the Administration ([Link 2](#)).

Christian Brothers College Junior Campus School Travel Safety Review

- 14. The Christian Brothers College Junior Campus Draft School Travel Safety Review Report is contained within **Attachment C**.
- 15. Key findings from the review include:
 - 15.1. Christian Brothers College (CBC) Junior Campus is a private school located in Wakefield Street between Hutt Street and East Terrace with classes from Reception to Year 6 with an enrolment of 266 students.
 - 15.2. The CBC Junior Campus does not have an enrolment restriction area and students live in a wide range of locations in Greater Adelaide. However, most students reside in inner east or north-west Adelaide suburbs.
 - 15.3. From the student travel survey:
 - 15.3.1. The primary travel mode is private vehicle, with 93 per cent of children being driven to and from school attending Reception to Year 3 and 82 per cent in the older students in Years 4 - 6.
 - 15.3.2. 14 per cent of the students in Years 4 to 6 travelled by bus in the AM period and 13 per cent in the PM period with five per cent by bus for Reception to Year 3.
 - 15.3.3. Less than two per cent of the students travelled by train or tram and less than two percent travelled by bicycle and walking.
 - 15.4. Issues for pedestrian and vehicular movements around Christian Brothers College Junior Campus are:
 - 15.4.1. Limited options to cross Wakefield Street with one signalised crossing at Hutt Street.
 - 15.4.2. Several near misses have been observed at the koala crossing in East Terrace with drivers not stopping.
 - 15.4.3. Heavy vehicles short-cut from Wakefield Street to Bartels Road using East Terrace.
 - 15.4.4. Vehicles are travelling at speeds on Wakefield Street not typically associated with school zones.
 - 15.4.5. A high demand for pick-up activities with the no-parking requirements on Wakefield Street and the eastern side of East Terrace between 3 pm and 4 pm was disobeyed by over 20 vehicles during the 30-minute period of pick-up time.
 - 15.4.6. Hazards associated with cyclists and parking and reversing out of the parking spaces.
- 16. Key Recommendations
 - 16.1. For Council:
 - 16.1.1. Re-investigate the installation of a signalised pedestrian actuated crossing (PAC) adjacent to the school.
 - 16.1.2. Install a pedestrian refuge in Wakefield Street between Hutt Street and East Terrace.

- 16.1.3. Change parking controls on Wakefield Street and East Terrace to improve supply of pick up and drop off spaces.
- 16.1.4. Changes to speed limits around the school.
- 16.1.5. Implement measures to restrict heavy vehicle activity along East Terrace adjacent to the school.
- 16.1.6. Install additional signage to identify the school area for vehicles approaching the school zones.
- 16.2. For the School:
 - 16.2.1. Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in a location that is easy to find, in addition to the school newsletter.
- 17. A draft concept plan identifying potential infrastructure improvements around Christian Brothers Junior Campus School has been prepared by the Administration ([Link 3](#)).

Christian Brothers College School Travel Safety Review

- 18. The Christian Brothers College Draft School Travel Safety Review Report is contained within **Attachment D**.
- 19. Key findings from the review include:
 - 19.1. Christian Brothers College Senior Campus is a private school located in Wakefield Street between Frome Street and Daly Street that has classes from Years 7 to 12 with an enrolment of 686 students.
 - 19.2. Christian Brothers College does not have an enrolment restriction area and students live in a wide range of locations in Greater Adelaide. However, most students reside in inner east or north-west Adelaide suburbs.
 - 19.3. From the student travel survey:
 - 19.3.1. car mode share is 55 per cent in the AM period and 45 per cent in the PM period
 - 19.3.2. public transport mode share is 43 per cent in the AM period and 53 per cent in the PM period
 - 19.3.3. bicycle and walking mode share is less than three per cent.
 - 19.4. Issues for pedestrian and vehicular movements around Christian Brothers College are:
 - 19.4.1. safety for pedestrian movements by parents and students in Wakefield Street opposite the student entrance.
 - 19.4.2. U-turn manoeuvres on Wakefield Street
 - 19.4.3. lack of pedestrian friendly infrastructure on Ifould Street.
 - 19.4.4. vehicle speed limits on Wakefield Street.
- 20. Key Recommendations
 - 20.1. For Council:
 - 20.1.1. Investigate options for safer pedestrian movements by parents and students in Wakefield Street opposite the student entrance such as a PAC.
 - 20.1.2. Fill in the gap in the Wakefield Street central median to stop U-turn manoeuvres.
 - 20.1.3. Rearrange the car spaces in Wakefield Street with parallel parking to provide a formal 2-minute Kiss and Drop zone near the student entrance.
 - 20.1.4. New infrastructure on Ifould Street to change the priority of the street to a pedestrian friendly arrangement.
 - 20.1.5. Consider changing the posted speed in Wakefield Street between Frome Street and East Terrace from 50 km/h to a slower speed limit.
 - 20.2. For the School:

- 20.2.1. Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.
- 21. A draft concept plan identifying potential infrastructure improvements around Christian Brothers College has been prepared by the Administration ([Link 4](#)).

Gilles Street Primary School Travel Safety Review

- 22. The Gilles Street Primary School Draft School Travel Safety Review Report is contained within **Attachment E**.
- 23. Key findings from the review include:
 - 23.1. Gilles Street Primary School is a public school located on Gilles Street between King William Street and Pulteney Street that does not have an enrolment zone and has 301 students.
 - 23.2. Over 64 per cent of the students live in the City of Adelaide and 31 per cent of the students live in the inner suburbs of metropolitan Adelaide. The remaining students live in the outer suburbs.
 - 23.3. From the student travel survey:
 - 23.3.1. About 33 per cent walk to school and over seven per cent cycle to school.
 - 23.3.2. About 17 per cent of the students travel via public transport.
 - 23.3.3. The remaining 43 per cent of students are driven to school by car with similar percentages between the AM arrival and PM departure periods.
 - 23.4. Issues for pedestrian and vehicular movements around Gilles Street Primary School are:
 - 23.4.1. Pedestrian wait times at the signalised crossing on Gilles Street.
 - 23.4.2. Lack of compliance with the 25 km/hr speed limit during school peak hours.
 - 23.4.3. Vehicles parking over the bus bay in front of the school in Gilles Street.
- 24. Key Recommendations
 - 24.1. For Council:
 - 24.1.1. Install flashing lights with the existing school zone signs in Gilles Street.
 - 24.1.2. Review the signal timing at the signalised crossing in Gilles Street at Pulteney Street and improve the pedestrian green light waiting time during school peak hours.
 - 24.2. For the School:
 - 24.2.1. Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in a location that is easy to find, in addition to the school newsletter.
- 25. A draft concept plan identifying potential infrastructure improvements around Gilles Street Primary School (combined with Pulteney Grammar) has been prepared by the Administration ([Link 5](#)).
- 26. In the draft concept plan Gilles Street has been combined with Pulteney Grammar due to the proximity of the two schools.

North Adelaide Primary School Travel Safety Review

- 27. The North Adelaide Primary School Draft School Travel Safety Review Report is contained within **Attachment F**.
- 28. Key findings from the review include:
 - 28.1. North Adelaide Primary School is a public school located in North Adelaide on Tynte Street between O'Connell Street and Margaret Street, with an additional frontage to Gover Street.
 - 28.2. The school comprises Reception to Year 6 with an enrolment of 286 students with a maximum 330 student capacity.

28.3. The school enrolment area is zoned and includes all of the suburb of North Adelaide, parts of Ovingham, Fitzroy and Thorngate and Medindie, with over 44 per cent of the students living in North Adelaide, with 15 per cent in the adjacent suburbs to the Ring Road or in the city area of Adelaide.

28.4. From the student travel survey:

28.4.1. Over 70 per cent of students travel by car

28.4.2. Walk mode share is about 20 per cent

28.4.3. Travel by public transport is about 3.5 per cent

28.4.4. The number of students who travelled by bicycle or scooter was very low.

28.5. Issues for pedestrian and vehicular movements around North Adelaide Primary School are:

28.5.1. Car parking was limited during the 15-minute peak periods around both AM and PM peak times due to high occupancy.

28.5.2. Difficulty utilising angled carparking in Tynte Street for pick up and drop off.

28.5.3. Drivers observed making mid-block U-turn movements in Gover Street.

28.5.4. Vehicle speeds and failure to give way at the Gover Street emu crossing.

28.5.5. Security issues with the bicycle storage area.

29. Key Recommendations

29.1. For Council:

29.1.1. Convert the emu school crossing (red "CHILDREN CROSSING" flags displayed on red and white posts) to a koala crossing (red and white posts and two yellow alternating flashing lights) in Gover Street.

29.1.2. Investigate options for safer pedestrian movements by parents and students in Tynte Street opposite the student entrance immediately east of the former fire station entrance.

29.1.3. Implement changes to the timed angle parking within the vicinity of the school to improve availability of kerbside space for pick up and drop of.

29.1.4. Install additional signage and promotion of the school area for traffic approaching the school zones at the O'Connell Street and Lefevre Terrace end of Gover Street and Tynte Street.

29.2. For the School:

29.2.1. Organise for more staff to be available in the AM peak during the busiest period for student arrivals and in the PM departure period at the Tynte Street and Gover Street entrances.

29.2.2. A consolidated promotional travel access guide for students and parents that would be promoted on the school website in a location that is easy to find, in addition to the school newsletter.

29.2.3. Note the security issues raised with the bicycle storage area and consider if improvements are required.

30. The report includes recommendations that are not being considered, which are:

30.1. Reconfiguration of the footpath and kerb in front of the former fire station entrance that is immediately west of the student entrance in Tynte Street to enable parking. This measure is not being considered as this is an existing vehicle crossing to a private property that must be maintained clear of parked vehicles.

30.2. Staff parking measures with the provision of permits for areas on Gover Street. This measure is not being considered as this is not considered a safety measure and CoA issues parking permits in accordance with council policies.

31. A draft concept plan identifying potential infrastructure improvements around North Adelaide Primary School has been prepared by the Administration ([Link 6](#)).

Pulteney Grammar School Travel Safety Review

32. The Pulteney Grammar School Draft School Travel Safety Review Report is contained within **Attachment G**.
33. Key findings from the review include:
- 33.1. Pulteney Grammar School is a private school located on South Terrace between King William Street and Pulteney Street.
 - 33.2. The school has 876 students that accommodates students from Reception to Year 12 as well as an Early Learning Centre.
 - 33.3. The school does not have an enrolment zone and about 10 per cent of students live in the City of Adelaide, with 83 per cent of the students living in the inner metropolitan suburbs.
 - 33.4. From the student travel survey:
 - 33.4.1. In the AM period, 81 per cent of students travelled to school by car with 74 per cent in the PM period.
 - 33.4.2. Public transport usage was 12 per cent in the AM period and 20 per cent in the PM period.
 - 33.4.3. The walk and cycling modes were about 6-7 percent in the AM and PM periods.
 - 33.5. Issues for pedestrian and vehicular movements around North Adelaide Primary School are:
 - 33.5.1. Delays for pedestrians to wait to cross at the PAC signalised crossing in Gilles Street. (as was reported by Gilles Street Primary School)
 - 33.5.2. Vehicle speeds in South Terrace in the school zone area.
 - 33.5.3. Lack of availability of kerbside space for Kiss and Drop activity close to the school due to longer term parking controls and spaces being occupied.
34. Key Recommendations
- 34.1. For Council:
 - 34.1.1. Review the signal timing at the signalised crossing and improve the pedestrian green light waiting time during school peak hours.
35. The report includes recommendations that are not being considered, which are:
- 35.1. Installation of red-light cameras along South Terrace around the school zone area.
36. A draft concept plan identifying potential infrastructure improvements around Pulteney Grammar School (combined with Gilles Street Primary School) has been prepared by the Administration ([Link 5](#)).

St Dominic's Priory School Travel Safety Review

37. The St Dominic's Priory School Draft School Travel Safety Review Report is contained within **Attachment H**.
38. Key findings from the review include:
- 38.1. St Dominic's Priory College is a private school located in North Adelaide on Molesworth Street between Mills Terrace and Hill Street. The school also has accesses at Barnard Street and Hill Street.
 - 38.2. The school has 1,226 students from Reception to Year 12.
 - 38.3. The St Dominic's Priory College does not have an enrolment area, and most students reside in inner Adelaide suburbs with clusters of students in Port Adelaide and Elizabeth that have special bus services to the school.
 - 38.4. From the student travel survey:
 - 38.4.1. The car mode share is 81 per cent in the AM period and 79 per cent in the PM period
 - 38.4.2. Public transport is used by 15 per cent of the students in the AM period and over 20 per cent the PM period

- 38.4.3. The bicycle mode share is less than three per cent and walk mode share is less than two per cent.
- 38.5. Issues for pedestrian and vehicular movements around the school are:
 - 38.5.1. Double parking was continuous over a 20-minute period on Barnard Street. This exceeded 125m in length, reaching to the Mills Terrace intersection.
 - 38.5.2. Angled carparking in Molesworth Street is difficult to navigate for school drop off / pick up.
 - 38.5.3. Large crossing distances across Molesworth Street at the Hill Street intersection resulting in issues with pedestrian / vehicle conflicts.
 - 38.5.4. Pedestrian behaviour crossing Molesworth Street and Barnard Street.
 - 38.5.5. Staff parking on the nearby local streets (mostly Molesworth Street) with the time limit restrictions and limited spaces result in staff leaving classrooms to shift vehicles.
- 39. Key Recommendations
 - 39.1. For Council:
 - 39.1.1. Ban the right turn movements from Molesworth Street into Hill Street during peak periods.
 - 39.1.2. Rearrange the car spaces in Molesworth Street with parallel parking to provide a formal 2-minute Kiss and Drop zone near the entrance to the student entrance.
 - 39.1.3. Extend the existing Kiss and Drop area in Barnard Street for the junior school.
 - 39.1.4. Provide a central median within the Molesworth Street corridor between Hill Street and Barnard Street. This could also be explored along Barnard Street.
 - 39.1.5. Investigate the inclusion of further pedestrian crossings mid-block of Molesworth Street and Barnard Street. This could be integrated with a central median treatment.
 - 39.1.6. Install additional signage to promote the school area for traffic approaching the school zones at the Hill Street and Mills Terrace ends of Molesworth Street and Barnard Street.
 - 39.2. For the School:
 - 39.2.1. Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in a location that is easy to find, in addition to the school newsletter.
- 40. The consultant's report includes recommendations that are not being considered, which are:
 - 40.1. Provision of permits for staff in the local streets, mostly focused on the 4P sections on Molesworth Street. This measure is not being considered as this is not considered a safety measure and CoA issues parking permits in accordance with council policies.
- 41. A draft concept plan identifying potential infrastructure improvements around St Dominic's Priory School has been prepared by the Administration ([Link 7](#)).
- 42. Administration has submitted an application seeking Australian Government funding under the Safer Local Roads and Infrastructure - Tranche 2C for some of the works identified in the draft concept plan ([Link 8](#)). The outcome of the grant application has not yet been advised.

St Mary's College School Travel Safety Review

- 43. The St Mary's College Draft School Travel Safety Review Report is contained within **Attachment I**.
- 44. Key findings from the review include:
 - 44.1. St Mary's College is a Reception to Year 12 Catholic girls' school located on the block between Franklin Street, West Terrace, Grote Street and Gray Street in the Adelaide CBD.
 - 44.2. The College accepts students from all suburbs and has 686 students
 - 44.3. From the student travel survey:

- 44.3.1. The students in Reception to Year 3 are mostly driven to school with five per cent walking home.
- 44.3.2. Over 82 per cent of students in Years 4 to 6 were driven to school with over 91 per cent of students picked up by car.
- 44.3.3. About 40 per cent of students in Years 10 to 12 used the car mode to travel home with this year group having the highest usage of public transport at 58 per cent.
- 44.3.4. The highest usage of public transport was for students in Years 7 to 9 at 36 per cent.
- 44.3.5. Cycling to the school was very low for all year groups.
- 44.4. Issues for pedestrian and vehicular movements around the school are:
 - 44.4.1. Reports of vehicles driving through red lights at the Franklin Street and Grote Street signalised Pedestrian Actuated Crossings (PAC).
 - 44.4.2. Queuing of vehicles in Franklin Street creating local traffic congestion.
 - 44.4.3. Parents and children not watching the traffic as they enter the roadway in Franklin Street.
 - 44.4.4. Drivers not complying with parking controls, either parking or stopping where they should not be, or parking for longer than the posted time limits.
 - 44.4.5. Long pedestrian waiting times at the crossings in Franklin Street and Grote Street.
- 45. Key Recommendations
 - 45.1. For Council:
 - 45.1.1. Implement school zones and corresponding the 25 km/hr speed limit conditions in Franklin Street.
 - 45.1.2. Install overhead mast arm at the PAC in Grote Street.
 - 45.1.3. Install measures such as a solid white line in Franklin Street to ban U-turn movements in Franklin Street.
 - 45.1.4. Install built-out islands or extension at the signalised crossing in Grote Street to prevent vehicles from travelling on cycle lane and road shoulder to bypass traffic queues from West Terrace.
 - 45.1.5. Convert the no stopping parking control at the indented bay west of the PAC in Grote Street to a Kiss and Drop area.
 - 45.1.6. Review the signal timing at the signalised crossing in Grote Street and Franklin Street to reduce pedestrian waiting time.
- 46. The report includes recommendations that are not being considered, which are:
 - 46.1. Install red light cameras at the signalised crossings in Franklin Street and Grote Street.
- 47. A draft concept plan identifying potential infrastructure improvements around St Mary's College School has been prepared by the Administration ([Link 9](#)).
- 48. CoA has submitted an application seeking Australian Government funding under the Safer Local Roads and Infrastructure - Tranche 2C for some of the works identified in the draft concept plan ([Link 10](#)). The outcome of the grant application has not yet been advised.

Sturt Street Community School Travel Safety Review

- 49. The Sturt Street Community School Draft School Travel Safety Review Report is contained within **Attachment J**.
- 50. Key findings from the review include:
 - 50.1. Sturt Street Community School is located on Sturt Street between West Terrace and Whitmore Square and has 191 students.

- 50.2. The school does not have an enrolment zone and includes all suburbs in metropolitan Adelaide, however over 55 per cent of the students live in the City of Adelaide.
- 50.3. From the student travel survey:
 - 50.3.1. 68 and 61 per cent using the car mode in the AM and PM periods respectively.
 - 50.3.2. Four per cent of students travel to school by public transport in the AM period and seven per cent from school in the PM.
 - 50.3.3. The walk mode share is 22 and 26 per cent in the AM and PM periods respectively.
 - 50.3.4. Travel to school by bicycle and scooters is six per cent.
- 50.4. Issues for pedestrian and vehicular movements around the school are:
 - 50.4.1. Vehicle speeds around the school.
 - 50.4.2. Lack of patrolling and enforcement by police.
 - 50.4.3. The need to review the waiting area at the intersection of West Terrace and Sturt Street.
 - 50.4.4. Lack of a formal Kiss and Drop zone in Sturt Street near the school entrance.

51. Key Recommendations

51.1. For Council:

- 51.1.1. Implement a formal Kiss and Drop area near the school entrance in Sturt Street.
- 51.1.2. Implement a 25 km/hr school zone in Sturt Street with Council discussions and approval from DIT.
- 51.1.3. Review and improve the traffic signal phasing and infrastructure at the intersection of West Terrace and Sturt Street to address conflict between pedestrians and vehicles.

51.2. For the school:

- 51.2.1. Request increased police enforcement for speeding in Sturt Street and to prevent and address the anti-social and homeless activity in the area.

52. The report includes recommendations that are not being considered, which are:

- 52.1. Install red light cameras at the signalised crossing on Sturt Street.

53. A draft concept plan identifying potential infrastructure improvements around Sturt Street Community School has been prepared by the Administration ([Link 11](#)).

University Senior College School Travel Safety Review

54. The University Senior College Draft School Travel Safety Review Report is contained within **Attachment K**.

55. Key findings from the review include:

- 55.1. The University Senior College comprises years 10 to 12 and is located in two campuses, one on Kintore Avenue near Victoria Drive, and the other on North Terrace at Gawler Place.
- 55.2. The school has 471 students with the majority living outside the City of Adelaide area.
- 55.3. From the student travel survey:
 - 55.3.1. The majority of students use public transport to travel to and from the school with 75 per cent in the AM arrival period and 90 per cent in the PM departure period.
 - 55.3.2. Travel by car is 23.5 per cent in the AM arrival period and 8.3 per cent in the PM.
 - 55.3.3. Travel to school by bicycle and scooters is 1.5 per cent.
- 55.4. Issues for pedestrian and vehicular movements around the school are:
 - 55.4.1. Safety for walking along footpaths in the city streets with trip hazards, in particular along Kintore Avenue.

- 55.4.2. Risks for incidents between pedestrians and vehicles entering and exiting the U-Park in Gawler Place at the entrance of the Gawler Place campus.
- 55.4.3. Traffic entering the University of Adelaide at Gates 11, 12 and 13 often do not give way to pedestrians and are travelling too fast.
- 55.4.4. The U-Park parking facility in Gawler Place attracts anti-social behaviour in the stairwells and on the street.

56. Key Recommendations

56.1. For Council:

- 56.1.1. Review the condition of footpaths along Kintore Avenue.
- 56.1.2. Install warning signs at the entrance and exit of the U-Park in Gawler Place.
- 56.1.3. Council to follow up on security issues reportedly associated with the Gawler Place U-Park entrance and stairwells.
- 56.1.4. Prepare a promotional brochure about public transport and safe cycling routes to Adelaide CBD.

- 57. A draft concept plan identifying potential infrastructure improvements around University Senior College has been prepared by the Administration ([Link 12](#)).

School Zone Speed Limit

- 58. The City of Adelaide requires DIT approval for the installation of school zones that do not meet the requirements of the Department's Code of Technical Requirements and the Speed Limit Guideline of South Australia (the Guideline).
- 59. DIT approval is required for the proposed new and altered school zones as the Guideline does not permit school zones on roads which function as a major traffic route, or are multi-laned, or are near a signalised intersection, or are near a pedestrian actuated crossing, and requires school zones to be as kept as short as practicable.
- 60. DIT are currently rolling out new 40km/h time-based school speed limits across South Australia in a phased approach, with the first phase starting from mid-2025 which are specifically targeted for schools on busy roads which may not meet the DIT criteria for a '25 km/h when children present' school zone [Link 13](#).
- 61. The Administration has requested further details on proposed locations for the DIT 40 km/h school speed limits project.
- 62. The 40 km/h school zone speed limits are not currently included in the Speed Limit Guideline of South Australia and require DIT approval prior to installation.

Next Steps

- 63. The City of Adelaide Draft 2025/26 Business Plan and Budget includes \$150,000 allocated for the School Safety Implementation Project.
- 64. The following next steps are proposed for the implementation of the recommendations of the School Travel Safety Reports:
 - 64.1. A consultant has been engaged to undertake a Safe System Assessment for the draft concept plans to identify any improvements or additional measures.
 - 64.2. Consult directly with each school on the infrastructure improvements identified in the draft concept plans.
 - 64.3. Prepare an implementation plan with prioritisation and costings for the infrastructure improvements around each of the schools.
 - 64.4. As a priority measure, implement school zone speed limits around each school in consultation with DIT.

64.5. Progress Infrastructure improvements and implementation as funding becomes available.

DATA AND SUPPORTING INFORMATION

- Link 1** - [Draft concept plan – Adelaide Botanic High School Infrastructure Improvements](#)
 - Link 2** - [Draft concept plan – Adelaide High School Infrastructure Improvements](#)
 - Link 3** - [Draft concept plan – Christian Brothers College Junior Campus](#)
 - Link 4** - [Draft concept plan – Christian Brothers College Senior Campus](#)
 - Link 5** - [Draft concept plan – Gilles Street Primary School and Pulteney Grammar School](#)
 - Link 6** - [Draft concept plan – North Adelaide Primary School](#)
 - Link 7** - [Draft concept plan – St Dominics School](#)
 - Link 8** - [Draft concept plan – St Dominics School with Grant Application Scope Clouded](#)
 - Link 9** - [Draft concept plan – St Mary's School](#)
 - Link 10** - [Draft concept plan – St Mary's School with Grant Application Scope Clouded](#)
 - Link 11** - [Draft concept plan – Sturt Street Community School](#)
 - Link 12** - [Draft concept plan - University Senior College Infrastructure Improvements](#)
 - Link 13** - [DIT 40 km/h school speed limits project information](#)
-

ATTACHMENTS

- Attachment A** – Adelaide Botanic High School Travel Safety Report
- Attachment B** - Adelaide High School Travel Safety Report
- Attachment C** - Christian Brothers College Junior Campus School Travel Safety Report
- Attachment D** - Christian Brothers College Senior Campus School Travel Safety Report
- Attachment E** - Gilles Street Primary School Travel Safety Report
- Attachment F** - North Adelaide Primary School Travel Safety Report
- Attachment G** - Pulteney Grammar School Travel Safety Report
- Attachment H** - St Dominics School Travel Safety Report
- Attachment I** - St Mary's School Travel Safety Report
- Attachment J** - Sturt Street Community School Travel Safety Report
- Attachment K** - University Senior College School Travel Safety Report

- END OF REPORT -



Adelaide Botanic High School

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
8 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	John Devney	James Arnold	James Arnold	8 July 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Appendix A – Student Travel Survey Form

Appendix B – NSW School Travel Access Guide



Executive Summary

Overview

Adelaide Botanic High School is located in the Adelaide Park Lands on the eastern side of Frome Road south of Victoria Drive. The high school comprises Years 7 to 12. The recent expansion for a new southern wing was completed in June 2024 and is fully operational for Term 3 2024 in July 2024. The high school had 1,390 students enrolled in Term 2 2024.

Key Findings

The high school has a zoned enrolment area that is the same for Adelaide High School. It includes the City of Adelaide and suburbs to the inner west and inner north, such as Mile End, Bowden, Prospect and Walkerville. 18 per cent of the students live in Adelaide and North Adelaide with 11 per cent in the adjacent suburbs to the Ring Road within a distance that they can walk or bicycle to the school. Over 70 per cent of the students live in suburbs beyond a short walking or cycling distance. Only 5 per cent live in outer suburbs that are outside of the enrolment area.

From the student travel survey, the car mode share was 26 per cent in the AM period and 22 per cent in the PM period on a typical fine weather day in May 2024. The PM departure period had four per cent more students using public transport than in the AM period. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. The bicycle mode share was about 8 per cent and the walk mode share was 4 to 5 per cent.

On a wet weather day in the same week, the cycling mode share dropped by five per cent and public transport by nine per cent in the AM period whereas the car mode share increased by 13 per cent.

Key Recommendations

Most of the student travel safety issues will be addressed with the completion of the Frome Road bikeway with the following infrastructure improvements:

- Southbound bus stop 1A will be relocated north of Victoria Drive so that the queues of students in the afternoon can be organised to stand in the open area north of the northern side of the school.
- The left turn slip lane from Victoria Drive for northbound traffic into Frome Road will be removed to remove this pedestrian safety risk at this intersection as shown in Figure 4.1.
- The bicycle lanes in Frome Road will be redesigned and rebuilt to be separated from the footpaths on both sides of Frome Road south of Victoria Drive and as a two-way cycleway on the westside of Frome Road north of Victoria Drive. This will provide a safer location for the north-south cycling route with the hazards with pedestrians sharing the path.

Other recommendations for the high school to consider are:

- The high school to complete the landscaping project on the northern side of the school to include a sealed footpath from Frome Road at Victoria Drive for a safer walk route to the student entrance on the northern side of the school.
- Maintain the clearance of debris, fallen tree branches and leaves from the footpath in front of the entire school building, especially during the autumn and winter months when wet leaves are a trip hazard for pedestrians and cyclists.
- Develop ongoing travel demand management education and training with regular activities and promotions to encourage more students to walk, cycle and use public transport modes instead of the private vehicle.
- Consider promoting safe travel to school with the preparation of a School Travel Access Guide that includes the school building entry locations, bus route and timetable information, other public transport information, safe walking and cycling routes and tips for safe cycling.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.

The following tasks were completed for this school travel safety review:

- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a student travel mode survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

Adelaide Botanic High School is located on Frome Road south of the intersection at Victoria Drive within the Adelaide Park Lands and west of the Adelaide Botanic Garden within the City Riverbank zone. The school site and the existing surrounding environs are shown in Figure 1.1.



Figure 1.1 Adelaide Botanic High School Location

The existing entrances to Adelaide Botanic High School are shown in Figure 1.2. From Term 3 2024, students will have an alternative entrance on the south side of the school to enter the new wing.



Footpath and existing bicycle path at the front public entrance to the high school



The entrance for students is on the eastern and northern side of the school

Figure 1.2 Student and Public Access to the Adelaide Botanic High School



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

Adelaide Botanic High School that comprises years 7 to 12 opened in January 2019 is unique with a CBD location in a Park Lands setting, multi-level modern architecture and fosters a culture to support sustainable transport modes.

Adelaide Botanic High School was expanded with a new southern wing to the school that can accommodate growth for an additional 700 students. The new facilities are designed in an integrated vertical building that can accommodate up to 1,950 students. The school expansion was completed in June 2024 and is fully operational for Term 3 2024 in July 2024.

The school building opens at 8:25 am on school days. The bell times are:

- Start of classes at 9:25 am on Mondays, Tuesdays, Thursdays and Fridays
- Start of classes at 10:15 am on Wednesdays only
- End of classes at 4:00 pm Monday to Friday, except public holidays

A 9.25 am start time (10.15 am on Wednesday) for students was chosen because the traffic on the road network is less busy and it provides the greatest capacity on public transport. Bike paths are also less congested at these times. The late start is supported by research regarding adolescent sleep and learning patterns as well as providing a unique staff collaboration and planning opportunity each morning. For staff, the school day starts at 8.25 am when they meet to plan and prepare the lessons for the students. Students finish their school day at 4.00 pm which allows them to travel home during the less busy traffic period before PM commuter peak hour after 5:00 pm.

The school office hours are:

- Monday to Tuesday 8.30 am to 4.30 pm
- Wednesday 10.00 am to 4.30 pm
- Thursday to Friday 8.30 am to 4.30 pm

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 was for 1,390 students with a distribution by year as follows:

- 307 students in Year 7
- 224 students in Year 8
- 220 students in Year 9
- 236 students in Year 10
- 214 students in Year 11
- 189 students in Year 12

Enrolment for Term 3 2023 with 1,151 students.

Students typically reside from areas within the enrolment catchment area that is shown in Figure 2.1. These areas include the City of Prospect, City of Adelaide, City of Charles Sturt, and City of Norwood Payneham St Peters. However, some students travelled outside of the enrolment area such as City of Onkaparinga and District Council of Mount Barker.

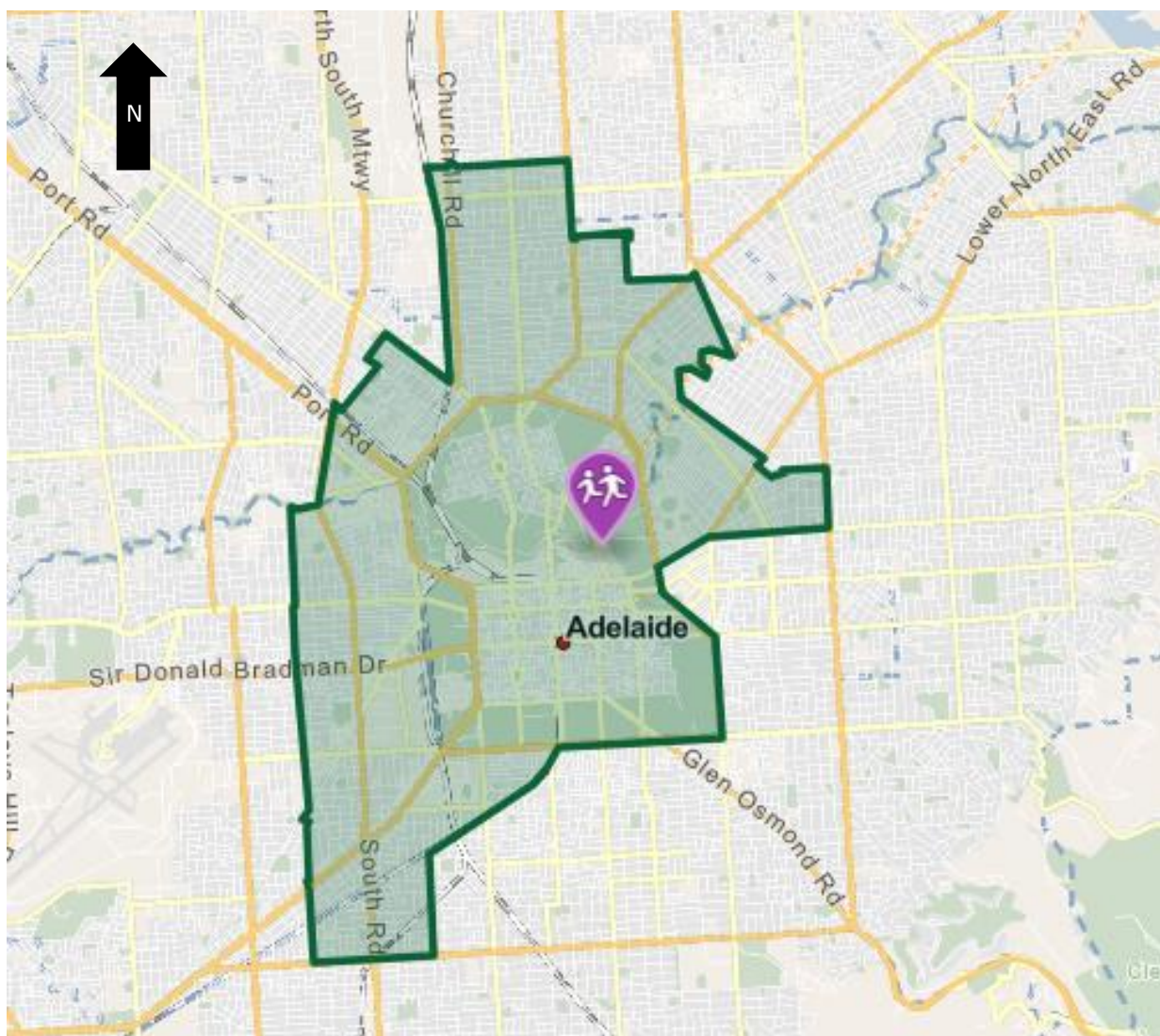


Figure 2.1 School Enrolment Area for Adelaide Botanic High School

The Adelaide Botanic High School catchment boundary area includes all the City of Adelaide and parts of the City of Prospect, Town of Walkerville, City of Norwood Payneham & St Peters Council, City of Unley, City of West Torrens Council and City of Charles Sturt. A breakdown of the distribution of student residence per neighbouring area is shown in Table 2.1.

The number of students in Term 2 2024 by residence location and year is provided in Table 2.1 and is shown in the histogram in Figure 2.2. 18 per cent of the students live in Adelaide and North Adelaide with 11 per cent in the adjacent suburbs to the Ring Road within a distance that they can walk or bicycle to the school. Over 70 per cent of the students live in suburbs beyond a short walking or cycling distance. Only 5 per cent live in outer suburbs that are outside of the enrolment area.



Table 2.1 Student Residence per Location for Adelaide Botanic High School

Location	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Total (Percentage)
Adelaide	49	32	30	18	21	23	173 (12.4%)
North Adelaide	14	15	12	10	15	11	77 (5.5%)
Neighbouring Suburbs	29	18	26	26	19	28	146 (10.5%)
Inner Council Suburbs	202	148	139	169	148	117	923 (66.4%)
Outer Council Suburbs	13	11	13	13	11	10	71 (5.1%)
Total	307	224	220	236	214	189	1,390

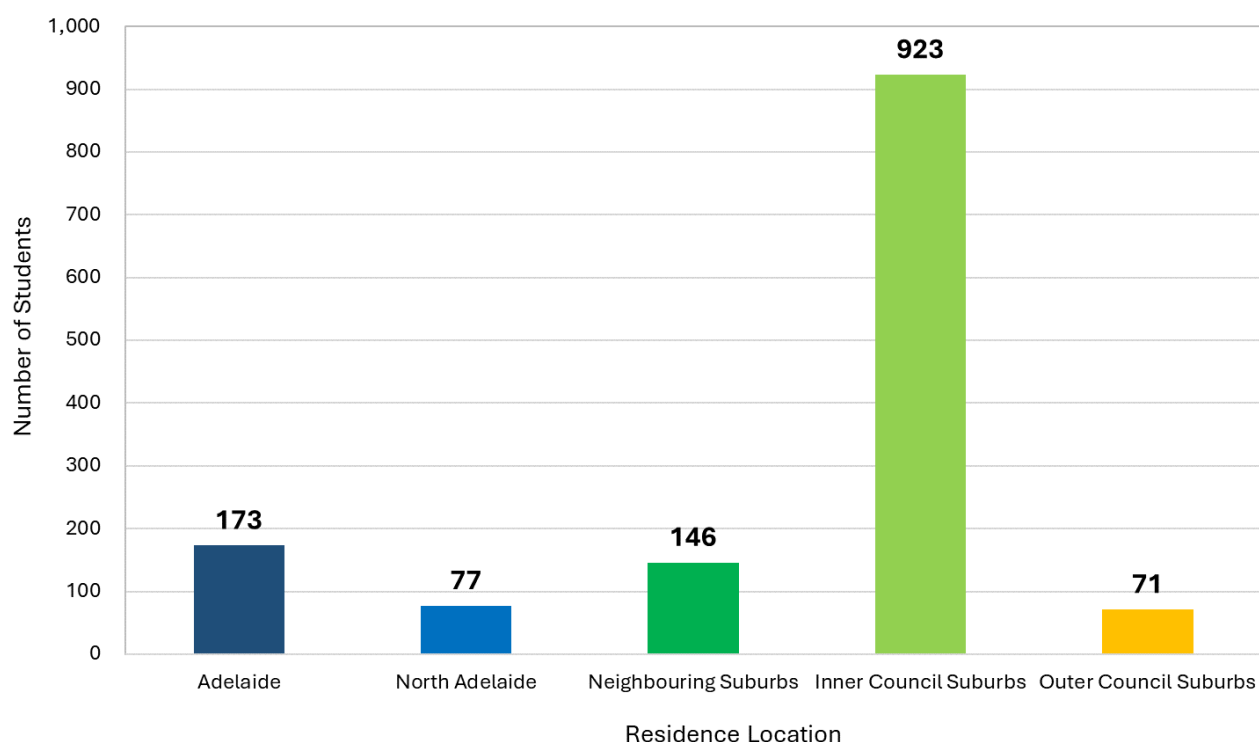


Figure 2.2 Adelaide Botanic High School Student Residence Location Analysis



2.3 Student Travel Demand

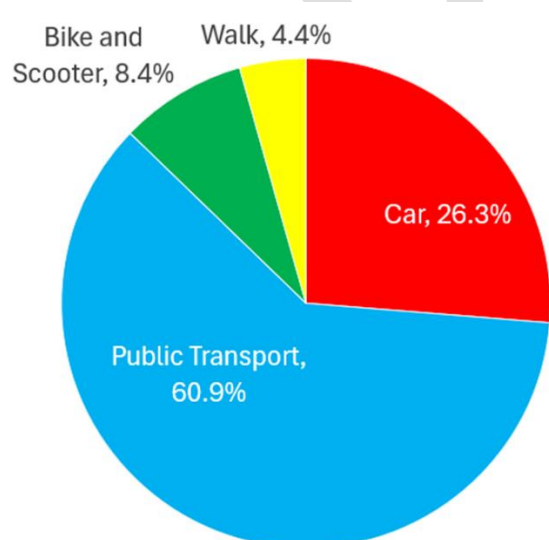
The existing school travel activity to and from the Adelaide Botanic High School was reviewed through site observations and a student travel mode survey on a typical school day. The student travel mode survey form is included in **Appendix A**.

The student travel mode survey was conducted by the teachers during the first morning class on Tuesday 28 May 2024 and Thursday 30 May 2024. The findings from the surveys were used to confirm the existing transport mode shares for:

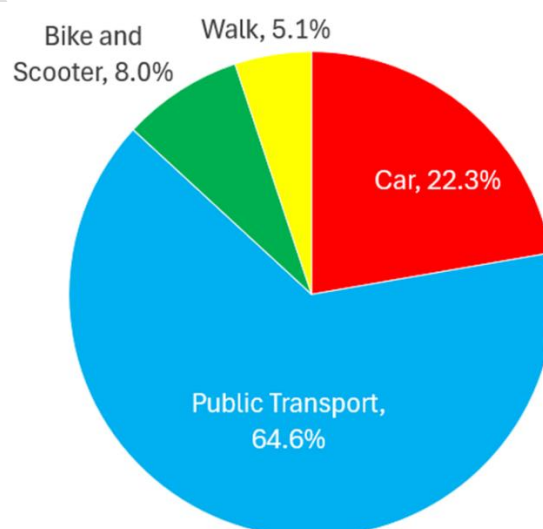
- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus, Train or Tram
- Bicycle or e-bike
- Scooter

The student travel mode shares to school in the AM period and from school in the PM period on Tuesday 28 May are shown in Figure 2.3. The weather was fine and dry with a high temperature of 25 C. A total of 274 students completed the online survey organised by the school, which is about 20 per cent of the total enrolment. This provides an adequate sample of the students for the transport mode share analysis.

The car mode share was 26 per cent in the AM period and 22 per cent in the PM period. The PM departure period had four per cent more students using public transport than in the AM period, which correlates directly to the change in vehicle usage between both periods. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. The bicycle mode share was about 8 per cent and the walk mode share was 4 to 5 per cent.



AM Period Arrival Transport Mode Share



PM Period Departure Transport Mode Share

Figure 2.3 Adelaide Botanic High School Student Transport Mode Shares on 28 May 2024



The student travel mode shares to school in the AM period and from school in the PM period on Thursday 30 May are shown in Figure 2.4. The weather was wet and rainy in the AM period with a high temperature of 18 C. This survey shows that the travel to school is affected by the weather with a comparison between a fine dry weather day and a rainy cooler day in the same week. A total of 395 students completed the online survey organised by the school, which is about 28 per cent of the total enrolment. This provides an adequate sample of the students for the transport mode share analysis.

The car mode share in the AM period was 40 per cent which about 13 per cent higher than the Tuesday due to the rainy weather. The PM departure period had 13 per cent more students using public transport than in the AM period, which correlates directly to the change in vehicle usage between both periods. As a results of the wet weather day, the public transport mode share in the AM period reduced by nine per cent. The bicycle mode share was five per cent less than the Tuesday at three per cent, whereas the walk mode share at six per cent was slightly higher than on the fine weather day.

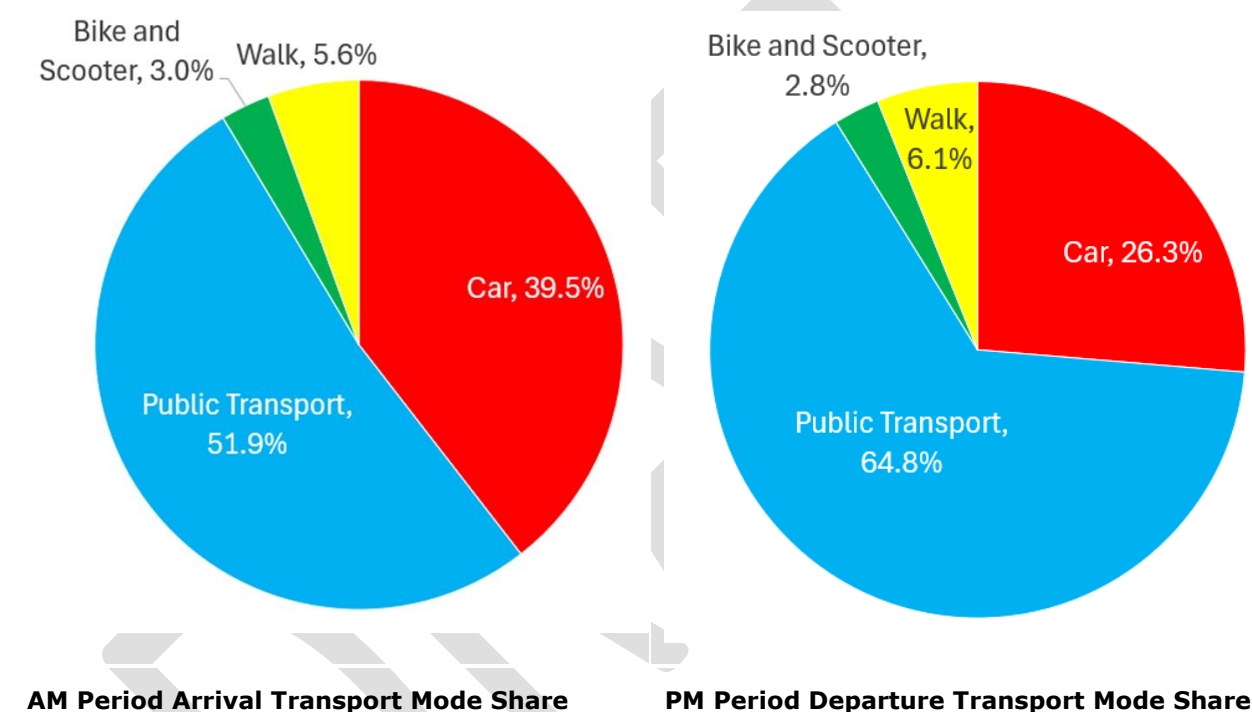


Figure 2.4 Adelaide Botanic High School Student Transport Mode Shares on 30 May 2024



2.4 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section. The facility is designed to support and encourage sustainable and healthy commuting by students and staff. Secure fenced and roofed storage for bicycles, scooters and other modes of non-vehicular transport is required for students and staff, in locations safe and convenient to users.

2.4.1 Road Network

Vehicular access to the to the underground level of the school is from the eastern side of Frome Road about 80 m south of the signalised intersection at Victoria Drive. Traffic only has left-in and left-out only from Frome Road with a space for unloading vehicles, such as delivery trucks to unload south of the existing main entrance, and for staff and students in cars, bicycles and scooters to use the ramp to the underground car parks and bicycle storage facilities.

Frome Road

Frome Road is a two-way four lane sub-arterial road aligned in a north to south direction and is under the care and control of the City of Adelaide. The road has a 12.3 m carriageway set within a 24 m road reserve. A 1.5 m wide off-road shared path exists on the eastern side and a 1.2 m wide on road bike lane on the western side of the road. Sealed bitumen footpaths are on both sides of Frome Road that range from 1.8 to 2.2 m in width. The traffic volumes in Frome Road at Victoria Drive is about 15,500 vehicles per day. It has a posted speed limit of 50 km/h. The kerbside usage, bicycle lanes and traffic lanes in Frome Road north of Victoria Drive next to Botanic Park is shown in Figure 3.1

Victoria Drive

The T-junction at Frome Road and Victoria Drive is a signalised traffic intersection that is located immediately northwest of the school as shown in Figure 3.4. The University of Adelaide campus is on the southwest corner and Park Lands on the northwest corner.

Plane Tree Drive in Botanic Park

Plane Tree Drive provides access to the north-eastern side of the school with a one-way loop road through Botanic Park with entry from Hackney Road as shown in Figure 3.5. The section of Plane Tree Drive closest to Frome Road is used for informal Kiss and Drop activity on school days where the students have a short walk from the school through Botanic Park.

Street access adjacent to the school and leading to the school are provided in Table 2.2

Table 2.2 Local Streets at Adelaide Botanic High School

Road	Classification	Relevance to the School
Frome Road	Local street	Front entrance
Victoria Drive	Local street	50 m opposite school entrance



The attributes of the local road network at Adelaide Botanic High School are summarised in Table 2.3. In areas where no data was provided, the field was labelled as not applicable (n/a). Generally, the posted speed limit was obeyed by drivers in the area.

Table 2.3 Local Road Network Attributes at Adelaide Botanic High School

Road	Number of Lanes	Daily Traffic Volumes	Posted Speed (km/h)	Average Speed	85 th Percentile Speed
Frome Road	4	6,820	50	42.6	49.8
Victoria Drive	2	n/a	50	n/a	n/a

Frome Road and Victoria Drive are not subject to 25km/h school zone during AM and PM peak times. Signalised crossing points are provided to pedestrians at the nearby intersection of Victoria Drive and Frome Road.

Table 2.4 Local Road Network Attributes at Adelaide Botanic High School

Road	25 km/h School Zone in Street	Type of Crossing in Street
Frome Road	No	Signalised Intersection at Victoria Drive PAC south of the school
Victoria Drive	No	Signalised Intersection

The signalised intersections in Frome Road that provide the safe pedestrian crossings to the high school are shown in Figure 2.5.



Looking west from Frome Road at Victoria Drive where students cross Frome Road to walk to bus stop 1A to and from the northbound bus services.



Looking south to the PAC in Frome Road south of the school at the access road to the Wilson's car park that is used by staff and some Year 12 students.

Figure 2.5 Pedestrian Crossings leading to Adelaide Botanic High School



2.4.2 Crash Analysis

A review of the latest crash data from 2018 to 2022 (five-year period) has been sourced from DataSA. During this time there has been the following crashes within direct vicinity of the school:

- Frome Road: 2 property damage crashes
- Victoria Drive: 1 property damage crash

The crash statistics from 2018 to 2022 are shown by location in Figure 2.6.



Figure 2.6 Crashes on School Days at Adelaide Botanic High School



2.4.3 Parking and Kiss and Drop Areas

The types of carparking provided in the streets surrounding the school are provided in Table 2.5. The on-street car parking controls along the streets in the vicinity of the school are shown in Figure 2.7.

Table 2.5 Parking Types at Adelaide Botanic High School

Road	Type of Parking
Frome Road (North of Victoria Drive)	Angled Timed, Parallel Timed
Frome Road (South of Victoria Drive)	Bus zone, No Stopping at all times
Victoria Drive	Motorcycle All Times, Angled Timed

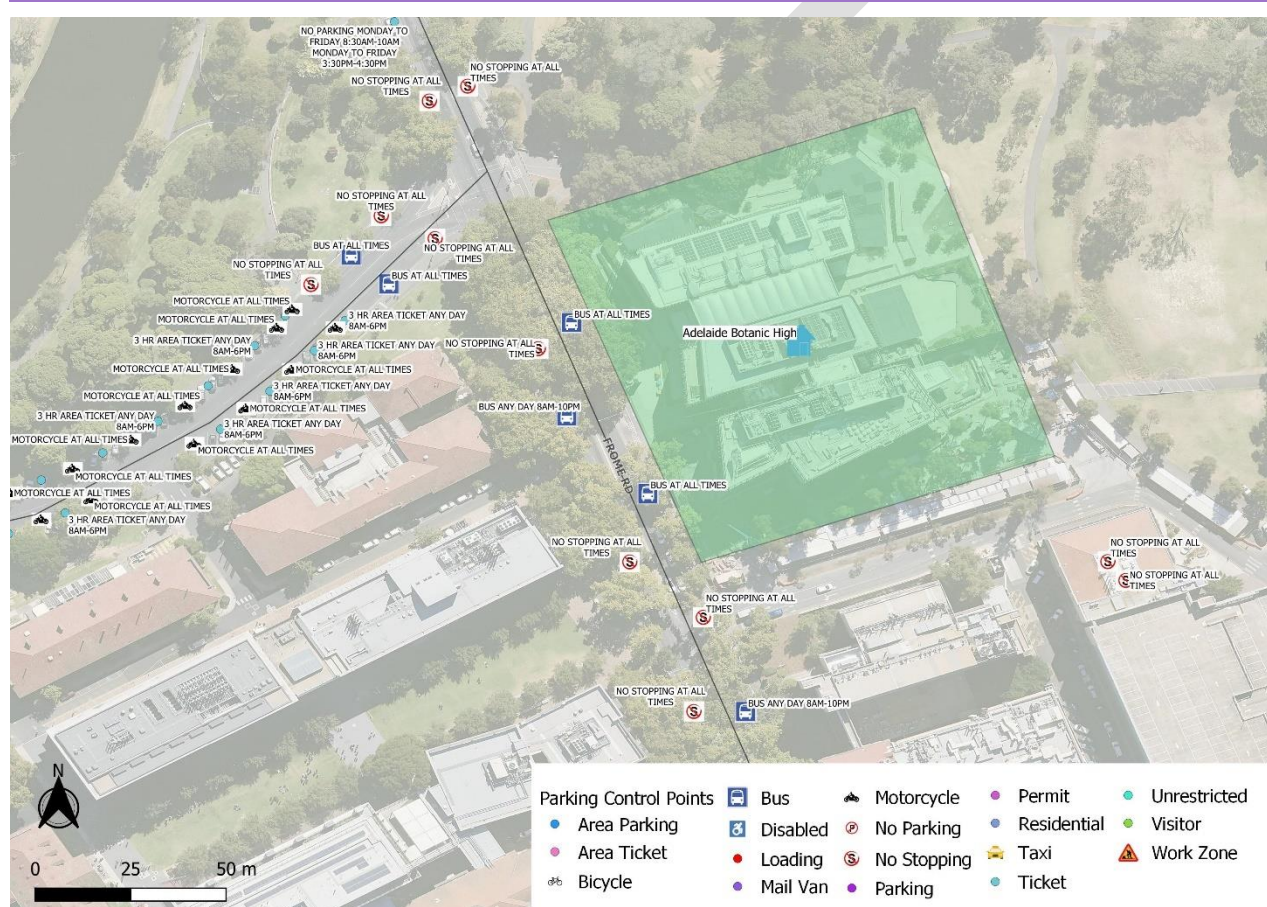


Figure 2.7 On-street Parking Controls at Adelaide Botanic High School

On-street parking on both sides of Frome Road north of Victoria Drive is used for Kiss and Drop activity on school days as well as for visitors to the university, the Park Lands and Botanic Park is shown in Figure 2.8.



Looking south in Frome Road at Kiss and Drop parking spaces north of Victoria Drive



Motorcycle parking is located immediately south of the on-street car parking in Frome Road north of Victoria Drive

Figure 2.8 On-street Parking and Kiss and Drop Areas at Adelaide Botanic High School

The on-street parking along Frome Road north of Victoria Drive has passenger loading zones from 8:30 am to 10 am and 3:30 pm to 4:30 pm on school days as shown in Figure 2.9.



Existing parking controls in Frome Road north of Victoria Drive vary by time of day and day of the week.



Looking south on the east side of Frome Road at timed car parking spaces north of Victoria Drive

Figure 2.9 On-street Parking Restrictions in Frome Road at Adelaide Botanic High School

Wilson Parking offer affordable and secure parking at Lot Fourteen Car Park, located with access from Frome Road. It has 24/7 access, the car park offers Hourly, Early Bird, Night and Weekend parking and discount online parking options. Parking customers can pay as you go with a Wilson Parking Card, or get unlimited 24/7 access when you subscribe to Monthly Parking. The "pay as you go" Wilson Parking Card avoids the need for drivers to avoid the queue as they simply swipe in and out of the car park, with one monthly invoice based on the actual usage with no additional fees.

Parents who do not work in the CBD are unlikely to regularly drive into the CBD to drop off or pick up their child. Most students are capable of travelling on their own and use public transport.



2.4.4 Public Transport

Adelaide CBD is the focus of the bus, tram and train network with the walkable access from Adelaide Botanic High School at:

- bus stops in Frome Road, King William Road, North Terrace and Grenfell Street,
- the Botanic Gardens tram stop in North Terrace that is a 400 m via the walk route between the buildings in Lot Fourteen or along the eastern side of Frome Road, and
- Adelaide railway station which is a 1.2 km walk west of Frome Road via Victoria Drive or using the 98A/98C Free City Connector bus.

The bus stops that are located at or in the immediate vicinity of Adelaide Botanic High School in Frome Road and Victoria Drive are shown in Figure 2.10

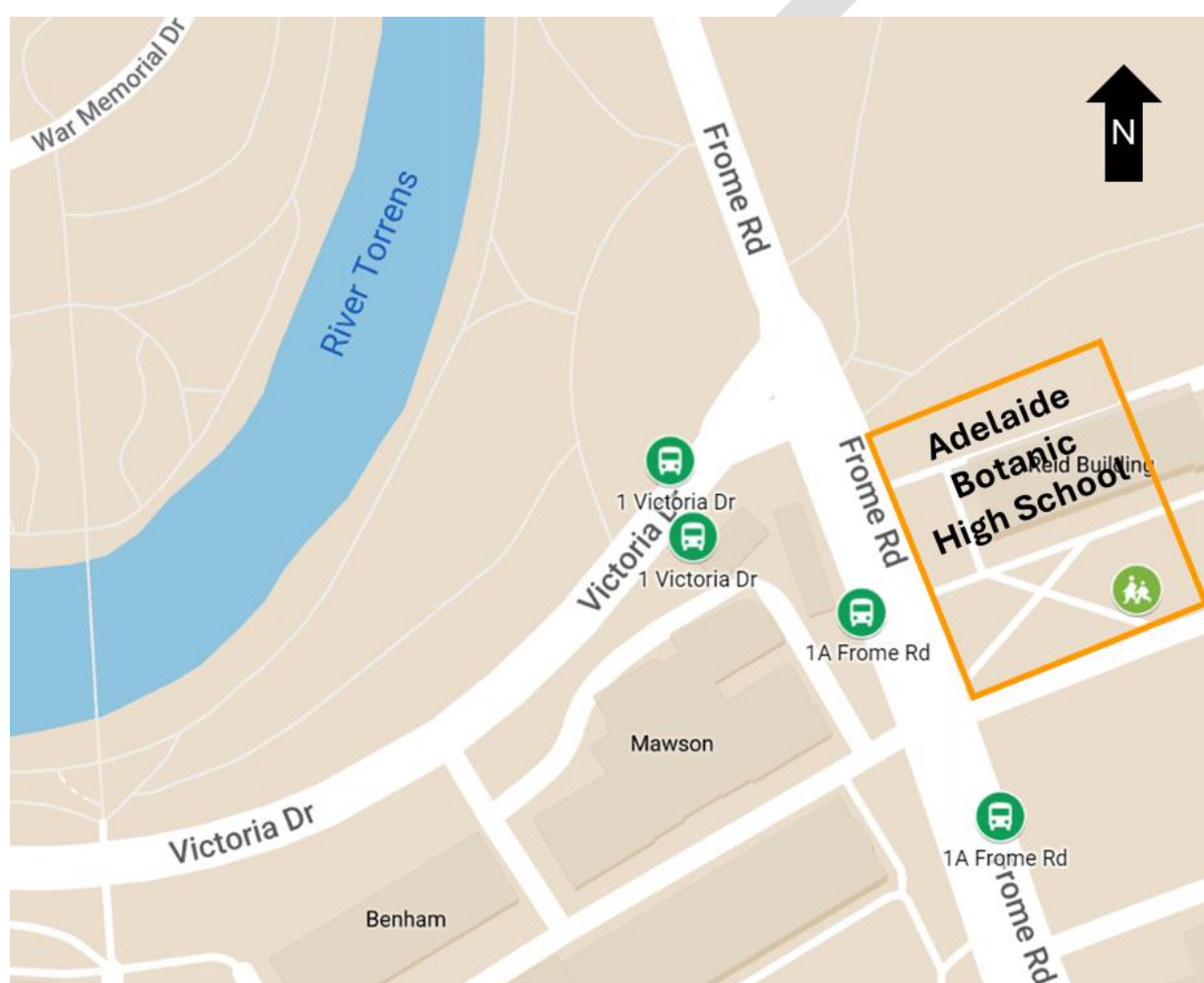


Figure 2.10 Bus Stops at Adelaide Botanic High School



The bus and tram routes and timetabled services that students can walk to within 400 m of the school are provided in Table 2.6. Routes 271 and 273 are part of the high frequency Go Zone in Frome Road.

Table 2.6 Public Transport Services at Adelaide Botanic High School

Road	Closest Bus or Tram Stop	Walk Distance to Closest Stop (m)	Routes	Relevant Services on School Days
Frome Road	Stop 1A Frome Road - East side	20 m	271 and 273 to Adelaide CBD via Frome Road, Grenfell Street and Currie Street	9:17 am, 9:28 am, 9:34 am, 9:42 am, 9:49 am, 10:04 am 4:01 pm, 4:18 pm, 4:31 pm, 4:45 pm
	Stop 1A Frome Road – West side	40 m with crossing Frome Road	271 and 273 to Tea Tree Plaza or Paradise via Melbourne Street and North East Road	9:17 am, 9:31 am, 9:41 am, 9:53 am, 10:10 am 4:09 pm, 4:24 pm, 4:37 pm
Victoria Drive	Stop 1 Victoria Drive – North side	50 m with crossing of Frome Road	98A Connector Bus (free) to North Adelaide and from Adelaide railway station	9:15 am, 9:45 am 4:15 pm, 4:45 pm
	Stop 1 Victoria Drive - South side	50 m with crossing of Frome Road	98C Connector Bus (free) from North Adelaide to Adelaide railway station	9:28 am, 9:58 am 3:58 pm, 4:28 pm
North Terrace	Botanic Gardens tram stop	400 m south through Lot Fourteen walkway	Botanic Gardens to Entertainment Centre tram line	Every 10 minutes from 7:00 am to 7:00 pm



2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.11. Frome Road has an on-road bicycle lane on the western side and an off-road 1.5 m wide bike lane on the eastern side. Sealed shared paths exist throughout the Adelaide Park Lands. Two shared bicycle paths are parallel to the River Torrens and one path is along the Adelaide Botanic Gardens. The Frome Street Bikeway is about 600 m south of the school.

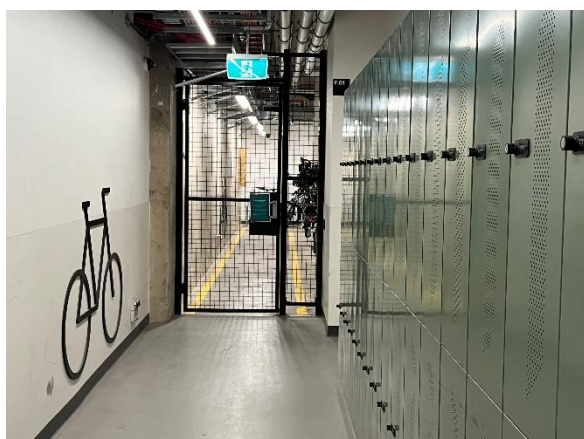


Figure 2.11 Cycling Network to Adelaide Botanic High School

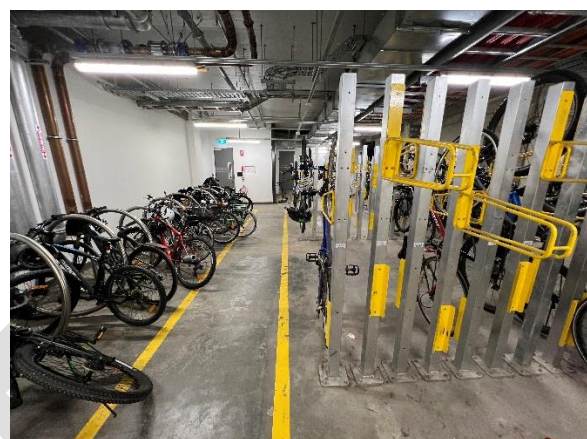
In the immediate vicinity of the school, the bicycle path along the eastern side of Frome Road is located between the footpath and the verge area of Frome Road. This creates a safety hazard during the AM school peak period between 8:30 am and 9:30 am and to 10:15 am on Wednesdays) when students and staff are arriving at the school and after 4 pm when they are leaving the school. In order to mitigate the risks, the school has staff monitor the situation with a safety instruction for all students on bicycles to walk their bicycle in the area immediate in front of the school building.



The secure bicycle storage area in the basement of the school has over 250 spaces available for staff and students. The new facilities are shown in Figure 2.12. Students enter the basement level from a ramp with access from Frome Road. They must use their student card to access the secure parking area that is validated only for students with bicycles. In addition to the storage area, a bicycle repair room is located adjacent to the lock-up that is used for regular courses about how to repair and maintain your bicycle as part of the school program to support a culture for sustainable transport.



Students can only enter the secure bicycle storage area with their validated access card.



Secure bicycle storage in the basement level of the high school is provided for over 250 bicycles.

Figure 2.12 Secure Bicycle Storage Facility at Adelaide Botanic High School

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff and visitors who walk for their entire trip or as an access mode to the bus stops in Frome Road, Victoria Drive and the CBD, tram stops in North Terrace and train services at Adelaide Railway Station. The footpath network along Frome Road, Victoria Drive and through the Park Lands in Botanic Park needs to be well maintained and kept clear of fallen trees and debris by the City of Adelaide.

The high school has good pedestrian access from all directions from Adelaide CBD, through Botanic Park and from Victoria Drive. Two signalised intersections with pedestrian crossings are at the intersection of Frome Road and Victoria Drive and with the PAC across Frome Road which is 130 m south of Victoria Drive.

Pedestrian access routes to the high school are via:

- Sealed footpaths exist along on both sides of Frome Road.
- Footpaths through the path network in Botanic Park and from Plane Tree Drive.
- Along both sides of Victoria Drive to the west along the northern side of the university campuses and to Adelaide Railway Station via a signalised pedestrian crossing in King William Road.
- An alternative pedestrian route through Lot Fourteen to the Wilson car park and to North Terrace. However, students are discouraged to use this route through the construction zone in Lot Fourteen until the public domain works are completed, possibly by 2026.

The 1 km, 1.5 km and 2 km walkable access catchment areas to Adelaide Botanic High School that were calculated using the footpath network are shown in Figure 2.13.

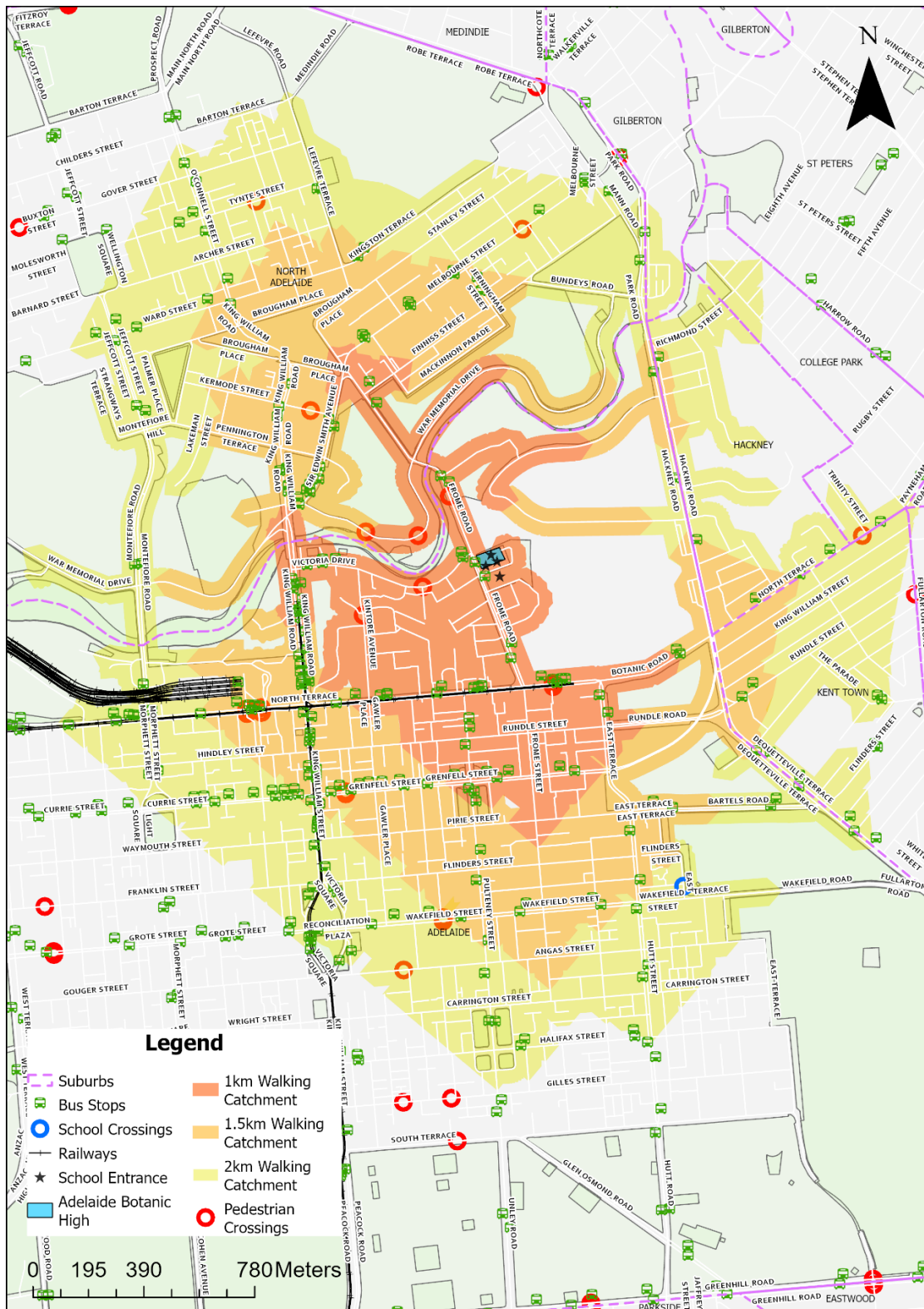


Figure 2.13 Walkable Access Catchment to Adelaide Botanic High School



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting and tour of the high school was held with Andrea West on Tuesday 28 May 2024. The following issues regarding student travel were discussed:

- The school expansion that was completed in June 2024 will be fully operational for Term 3 2024 at the end of July.
- The Frome Bikeway project is under construction by the City of Adelaide and will be completed by the end of November 2024. This project will address several safety issues for students such as:
 - The relocation of the bus stop north of Victoria Drive to provide a safer queuing area for students waiting for the southbound buses in the afternoon.
 - Close off the slip lane for the left turning traffic from Victoria Drive to Frome Road north to provide a safer pedestrian crossing at this intersection.
 - Separate the bicycle lane from the footpath to provide segregation between the pedestrians, students and cyclists in Frome Road.
- A total of 306 bicycles spaces are provided in the secure basement level that will cater for the growth in the bicycle demand from students and staff. For the ultimate school capacity of 1,950 students and 169 FTE staff, the bicycle demand is estimated to be for 230 spaces which can be catered by the bicycle racks.
- The school has plans to upgrade the landscaping on the north side of the building, including the walk access to the northern student entrance from Frome Road.

3.2 Site Observations

The existing staff and student transport mode activity to and from the Adelaide Botanic High School were observed during the AM peak arrival period and the PM peak departure period on typical school days in Term 2 2024 during May 2024. The site visits were conducted on Tuesday 28 May 2024 for the AM peak and the PM peak periods. The weather was fine and 18 C.

3.2.1 AM Arrival Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during AM arrival period from 8:30 am to 9:30 am. The AM period arrival profile was relatively distributed over the hour before the school start time, with the peak activity of arrivals between 9:05 am and 9:20 am.

Other findings from the AM observations are:

- Most of the drop off activity for students occurred on from the eastern side of Frome Road with the busiest period between 9:00 am and 9:30 am with no safety issues or traffic delays.
- A low level of drop off activity was observed in Plane Tree Drive with less than 20 vehicles.
- The busiest time for students crossing at the Frome Road / Victoria Drive signalised intersection was from 9:15 am to 9:20 am.

The existing condition of the footpath for walk access to the northern student entrance is shown in Figure 3.1.



The pedestrian desire line to the northern student entrance to the school is an unpaved path.



Looking west along the unpaved walk route to the northern student entrance.

Figure 3.1 Walk Access to the Northern Student Entrance during the AM Arrival Period

The most significant safety hazard is the risk of conflicts between pedestrians including students from the buses and cyclists along the eastern side of Frome Road as shown in Figure 3.2



Students alighting from a bus need to watch for cyclists on the bicycle lane heading to Adelaide CBD to cross to the school entrance.



Looking south along the footpath and bicycle lane on the eastern side of Frome Road at Victoria Drive.

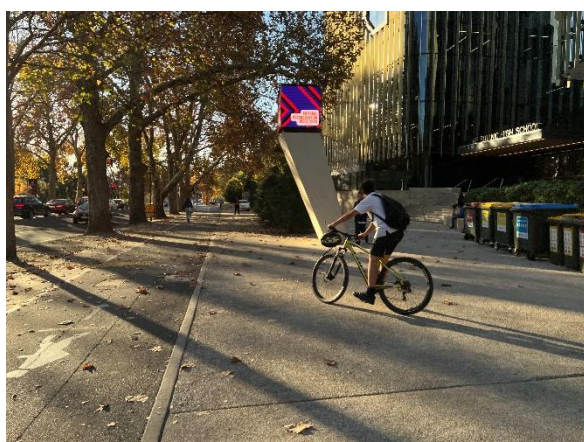
Figure 3.2 Unsafe Pedestrian and Cyclist Movements along Frome Road during the AM Arrival Period

3.2.2 PM Departure Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during PM departure period from 4:00 pm to 4:30 pm. The PM period departure profile was relatively distributed over the hour before the school start time, with the peak activity of departures from 4:05 pm to 4:15 pm. The key findings from the observations are shown in Figure 3.3.

Other findings from the PM observations are:

- The peak period for departure activity was between 4:10 pm to 4:20 pm with most students crossing at the Frome Road / Victoria Drive signalised intersection with 50 to 70 students crossing per signal phase.
- Pick-up activity occurred on both sides of From Road with minor traffic delays and no safety issues.
- Students riding bicycles along Frome Road on the east side in the northbound direction creates safety hazards for pedestrians.
- Students used the Frome Road bus stop at the front entrance to the school.



A student exits the basement cycling across the forecourt and footpath in Frome Road that is against the school safety policy.



A large group of students wait to board the southbound bus to the City block the footpath in front of the main entrance to the school.

Figure 3.3 Unsafe Pedestrian and Cyclist Movements in the PM Departure Period

Parents were observed in cars waiting for students along both sides of Frome Road shown in Figure 3.4.



Parents in cars waiting for students in Frome Road north of Victoria Drive.



The parked cars on both sides of Frome Road created some vehicle queues for a short period.

Figure 3.4 Parking along Frome Road north of Victoria Drive in the PM Departure Period

3.3 Summary of the Issues and Opportunities

Issues for pedestrians accessing the high school are mostly for the City of Adelaide to address and are:

- The footpath along the eastern side of Frome Road south of the Victoria Drive intersection is flooded during heavy rain periods requiring pedestrians to walk around via the grassed area in Botanic Park. This footpath is planned to be upgraded to a bus zone by the City of Adelaide.
- During the autumn and winter months, fallen leaves that are wet from the rain are a hazard for pedestrians on the footpaths on both side of Frome Road, in particular in front of the school and on the paths leading to the school. These paths need to be kept clear of debris, including fallen branches, by the City of Adelaide to avoid any trip and fall risks for students, staff and the general public.
- Students walking from the south to the school must cross the path of the access driveway to the basement bicycle storage facility that cyclists use. They walk around to the northern entrance of the school as they are not permitted to use the existing main entrance in Frome Road.



4 Travel Safety Options and Assessment

4.1 Student Travel Safety Options

Options to improve the travel safety for students were developed under three categories, namely:

- Infrastructure treatments requiring civil works with changes to signals or pedestrian crossings.
- Operational efficiencies, with changes to parking controls, Kiss and Drop areas or school zones.
- Safety promotions to increase awareness of the school with warning signage or information.

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options for North Adelaide Primary School

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Relocate the southbound bus stop 1A to be relocated north of Victoria Drive	To remove the queuing of students in the PM departure period from blocking the footpath and bicycle lane on the eastern side of Frome Road in front of the main entrance to the school. The location of the bus stop north of Victoria Drive will align closer to the signal and pedestrian crossing that is immediately south and closer to the north student entrance.
	Remove the left turn slip lane at Victoria Drive and Frome Road as shown in Figure 4.1.	The slip lane is a pedestrian safety hazard as they must wait for the free flowing traffic to stop.
	Build a separate the footpath and bicycle lane along Frome Road as per the Frome Bikeway plans from the City of Adelaide.	The pedestrians and cyclists who are City commuters, attending or working at businesses at Lot Fourteen or at the university block the access for the students to the school entrances.
	Landscape the northern side of the school to include a sealed footpath.	Students who enter and exit the northern entrance to the school currently are walking from Frome Road at Victoria Road through a gravel path with slippery leaves during the wet weather.
Operational Efficiencies	Manage the distribution of students to enter and exit the school between north and south sides of the high school with Term 3 2024 with the full opening of the school expansion. Students will not use the Frome Road main entrance.	In Term 2 2024, most students were entering the school from the northern entrance via Frome Road or from the east through the Park Lands and from the walkways in Lot Fourteen. This created a large queue of students at the northern entrance in the morning that is considered difficult to manage.



Type of Option	Description	Issue Addressed
Safety Promotions	Promote safe travel to school with the preparation of a School Travel Access Guide that includes the school building entry locations, bus route and timetable information, other public transport information, safe walking and cycling routes and tips for safe cycling.	The travel mode share for non-car transport can be increased with more promotional information that provides all of the transport options to the school.

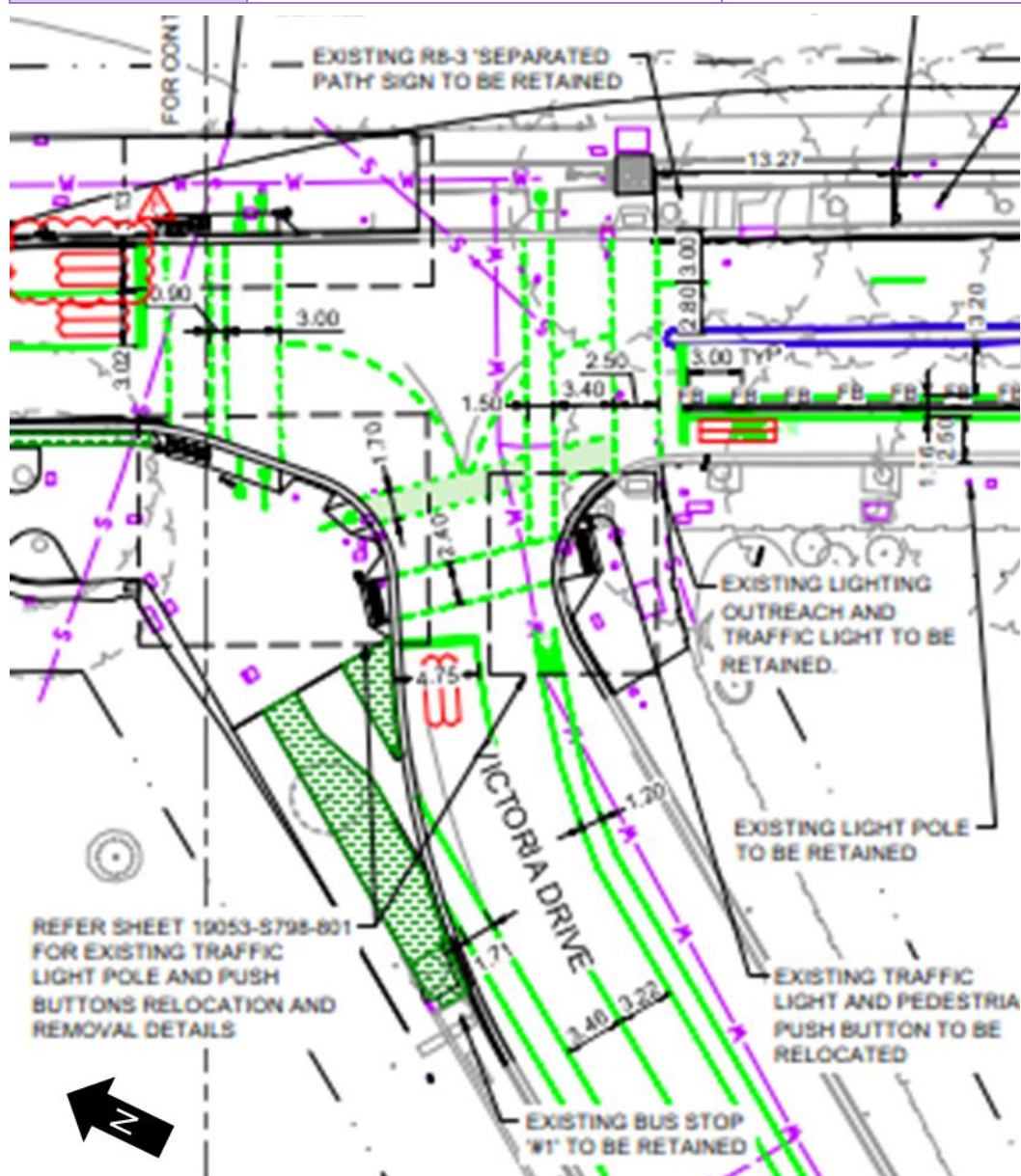


Figure 4.1 Redesign of the Victoria Drive/Frome Road Intersection

4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives are shown on Figure 4.2. They include:

- Southbound bus stop 1A will be relocated north of Victoria Drive so that the queues of students in the afternoon can be organised to stand in the open area north of the northern side of the school.
- The left turn slip lane from Victoria Drive for northbound traffic into Frome Road will be removed to remove this pedestrian safety risk at this intersection as shown in Figure 4.1.
- The bicycle lanes in Frome Road will be redesigned and rebuilt to be separated from the footpaths on both sides of Frome Road south of Victoria Drive and as a two-way cycleway on the westside of Frome Road north of Victoria Drive. This will provide a safer location for the north-south cycling route with the hazards with pedestrians sharing the path.
- The high school to complete the landscaping project on the northern side of the school to include a sealed footpath from Frome Road at Victoria Drive for a safer walk route to the student entrance on the northern side of the school.



Figure 4.2 Recommended Initiatives at Adelaide Botanic High School

Other initiatives proposed to improve the safety and access and support the higher use of public transport and active transport modes to the high school are:

- Maintain the clearance of debris, fallen tree branches and leaves from the footpath in front of the entire school building, especially during the autumn and winter months when wet leaves are a trip hazard for pedestrians and cyclists.
- Develop ongoing travel demand management education and training with regular activities and promotions to encourage more students to walk, cycle and use public transport modes instead of the private vehicle.
- Opportunities to adjust the bus arrival times or add additional bus services 10 minutes before the AM school start time and 10 minutes after the 4 pm departure time exist if the growth in the bus demand supports the need for extra services. The timetables that more conveniently suit the student arrival



times in the AM period and to minimise the waiting times and queuing for bus services after the 4 pm departure time would attract higher bus patronage. Some of the timetables on the existing bus routes in Frome Road arriving before 9:25 am (10:15 am on Wednesdays) and after 4 pm are proposed to be reviewed by South Australia Public Transport Authority (SAPTA) bus planners.

- Consider promoting safe travel to school with the preparation of a School Travel Access Guide that includes the school building entry locations, bus route and timetable information, other public transport information, safe walking and cycling routes and tips for safe cycling. An example of the type of information provided a Travel Access Guide for a high school in Sydney is included in **Appendix B**.

4.3 Assessment and Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.2. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- I for information to the school community with signage or online promotional brochure.

Table 4.2 Indicative Cost Estimates for the Travel Safety Options at North Adelaide Primary School

Option ID	Description	Indicative Cost Estimate	Comments
T1	Southbound bus stop 1A will be relocated north of Victoria Drive.	In the Frome Bikeway project	Part of the Frome Bikeway project that will be completed by November 2024.
T2	Remove the left turn slip lane from Victoria Drive for northbound traffic into Frome Road.	In the Frome Bikeway project	Part of the Frome Bikeway project that will be completed by November 2024.
T3	Rebuild the bicycle lanes in Frome Road.	In the Frome Bikeway project	Part of the Frome Bikeway project that will be completed by November 2024.
T4	Complete the landscaping project on the northern side of the school to include a sealed footpath from Frome Road at Victoria Drive for a safer walk route to the student entrance on the northern side of the school.	Not a cost for the City of Adelaide	This is a project for the Department for Education to complete on the school grounds.
I1	Consider promoting safe travel to school with the preparation of a School Travel Access Guide	Internal cost to the school	This is an initiative for the school to consider.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024
- Adelaide Botanic High School, Traffic Impact Assessment Report, Stantec, September 2022
- Adelaide Bicycle Extension in Frome Road to the River Torrens, 2024



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE		
School Travel Survey for Students		
School:		Adelaide Botanic High School
<i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i>		
Questions for the Teacher		
Date (day/month/year):		
Weather (Daytime temperature and sky conditions):		
Please enter the name or number of your class or year group.		
How many students are absent today in your class?		
Questions for the Students in Your Class / Year Group		
<i>Please ask the students with a 'hands-up' survey in the classroom.</i>		
AM Period Travel		
<i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the AM Period	Number of Students	
Car (as driver)		
Car (as passenger with drop-off)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
PM Period Travel		
<i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the PM Period	Number of Students	
Car (as driver)		
Car (as passenger with pick-up)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
If you travelled by car, would you prefer any of these modes? (multiple answers)		
Walking for the entire trip		
Bicycle, e-bike or scooter		
Public Transport (bus, tram or train)		



Appendix B – NSW School Travel Access Guide

NSW Department of Education – School Infrastructure



Marsden High School Travel Access Guide

Effective: January 2023

Introduction

Our school community of parents/carers, staff and students live within a reasonable walk, cycle or bus trip of the school. This Travel Access Guide provides suggested safe and accessible options for travelling to and from school.

Active ways to get to school



Walking to and from school

- Walking is a fun way to keep active and healthy.
- Stay alert and watch out for any potential hazards, including cars reversing out of driveways, bikes and other pedestrians.
- Remember to STOP, LOOK, LISTEN and THINK every time you cross the road.



Ride your bike

- 278 bike racks are available for everyone.
- All bicycle riders are required by law to wear a correctly fitted Australian standards approved helmet and is highly recommended when riding a scooter.
- Children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.

Kiss and drop expectations

- For parents/carers who drive their child/ren to school, the kiss and drop zone is located along Rhodes Street starting from Hermitage Road.
- This space is a 'No Parking' zone, meaning that you may stop for up to a maximum of 2 minutes and move no more than 3 metres from the vehicle.

Message from our principals

- Marsden High School supports sustainable and environmentally friendly transport practices.
- We strongly encourage our school community to walk or ride to school either independently or with parental supervision.

School bell times

Start Times

9:00 am

End Times

3:00 pm

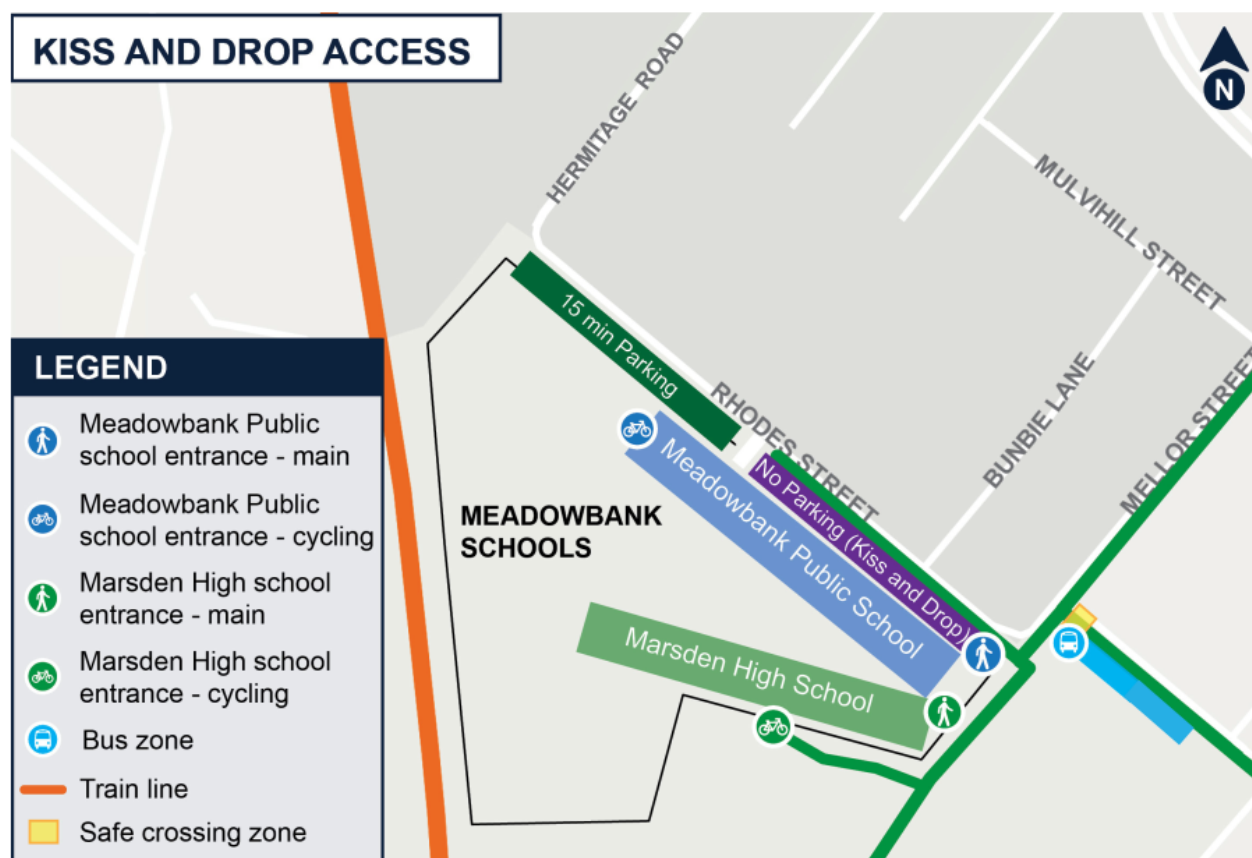
For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





NSW Department of Education – School Infrastructure

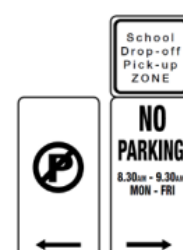


Safety tips for drivers using the Kiss and Drop zone

- Always drop off or pick up your child from the designated zone and follow the school's procedures.
- Drivers should remain in their vehicles **at all times** in the Kiss and Drop zone.
- Make sure children use the Safety Door (the rear footpath side door) to get in and out of the car.
- Always park legally.
- U-turns and three-point turns are banned **at all times** in Rhodes Street in front of the school.

Safety tips for students

- Always get in and out of the vehicle through the Safety Door, the rear footpath-side door.
- Stay buckled up until the vehicle has stopped in the Kiss and Drop area.
- Make sure your school bag and other items are in a safe position, such as on the floor.
- Be ready to get out of the vehicle with your belongings when the car has stopped and you have unbuckled your seatbelt



Kids and Traffic Safety
Door sticker
RTA45091021K

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





Walking Route

WALK ROUTE TO MEADOWBANK TRAIN STATION AND BUS STOPS ON BOWDEN STREET AND VICTORIA ROAD



For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au



NSW Department of Education – School Infrastructure

Where do you ride?

Footpath/shared path/cycleway:

- Children under 16 can ride on a footpath.
- Adults supervising children under 16 can also ride on the footpath.
- Be careful of cars entering and exiting driveways.
- Watch out for pedestrians, other riders and animals.

Look out for pedestrians on shared paths.



Crossing the road:

- Be extra careful.
- Walk your bicycle when you cross at a pedestrian crossing.

Give a metre:

Give pedestrians 1 metre of space when riding past.



3 steps to follow when riding a bike:

Clip, check, chime.

Clip your helmet

1



You must always wear a helmet when riding your bike.

Check your brakes

2



Make sure your brakes are working.

Chime your bell

3



If you pass another rider or pedestrian, chime your bell.

Things to remember

- Always ask your parents permission to ride.
- Loose clothing and items can get caught in your wheels. Secure any loose items, like backpack straps.



- Shoes with a good tread on the soles will help you grip the pedals and protect your feet. Make sure your laces are tied.



Always remember to watch out for hazards



- 1 Wet leaves
- 2 Big puddles
- 3 Storm grates
- 4 Gravel or rocks
- 5 Little kids
- 6 Animals
- 7 Changes in the road/footpath/cycleway surfaces

For more information contact:

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Adelaide High School

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
12 June 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	James Arnold	John Devney	John Devney	12 June 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Appendix A – Student Travel Survey Form

Appendix B – AHS Student Travel Information Flyer



Executive Summary

Overview

Adelaide High School (AHS) is a State Government public school that is located on the western side of West Terrace south of Glover Avenue. The school enrolment in Term 2 2024 was for 1,554 students.

The AHS catchment boundary area includes all the City of Adelaide and parts of the City of Prospect, Town of Walkerville, City of Norwood Payneham & St Peters Council, City of Unley, City of West Torrens Council and City of Charles Sturt. AHS shares an enrolment zone with Adelaide Botanic High School which allows parents within the zone to nominate their preferred city high school. Where demand from families living in the shared area exceeds places available, applications will be ranked and if necessary, students may be shared between the two high schools.

Key Findings

In Term 2 2024, 144 students lived in the City of Adelaide which was 7.8 per cent of the students in the six years. 1,602 students or 86.4 per cent of the students lived in the inner suburbs mostly within the enrolment area. 109 students lived in the outer suburban Councils that are not in the enrolment area.

From the student transport mode surveys, the PM departure period had nine per cent more students using public transport than in the AM period, and 11 per cent fewer using private vehicles. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. Travel via bike, scooter and walking remained fairly similar within both peak periods.

Key insights from the student transport survey results are:

- Six per cent more students were driven to school in Years 7 to 9 than in Years 10 to 12.
- Travel by train was the highest transport mode for all students at about 46 per cent in the AM period and 53 per cent in the PM period. Nine per cent more students in Years 10 to 12 travelled by train than Years 7 to 9 in the AM period and six per cent more students in Years 10 to 12 travelled by train than Years 7 to 9 in the PM period.
- About 10 to 12 per cent students travelled by bus with little difference between year groups.
- Cycling to school was up to five per cent for Years 7 to 9 and about two per cent for Years 10 to 12.
- Walking to school was under four per cent of the students in the AM period and about five per cent in the PM period for all year groups.

Issues for pedestrian and vehicular movements at AHS are summarised as follows:

Glover Avenue

Double Parking on Glover Avenue

The existing kiss and drop area present inadequate capacity issues and increased likelihood factors of rear end crashes. During site observations, this behaviour was not enforced. One must not forget the importance of movement on Glover Avenue and high function it provides for east-west connectivity from/to the CBD.

Shared use path obstruction in Glover Avenue

Minor Issues of pedestrian storage/queuing at the bus stop encroaches onto the Shared use path, potentially presenting issues for cyclist and pedestrian conflict.



Uncontrolled Pedestrian Movements crossing Glover Avenue

Minor instances of pedestrians crossing Glover Avenue to travel to/from the school without using the signalised crossing at West Terrace. This involves crossing over a significant distance with more than four lanes of traffic and exposure to vehicle speeds over 50 km/h.

Service Road with Egress onto West Terrace

Vehicles traversing across four lanes of West Terrace, to travel to Waymouth or perform a U-turn manoeuvre, presents increased likelihood factors for right angle crashes.

West Terrace

Shared Use Path Obstruction/School Bus Stop in West Terrace

The school bus stop located adjacent to the main entrance to the school is unsealed resulting in an obstructed shared use path along West Terrace.

Missing or Faded Line marking at the access roads on West Terrace

Observations indicated faded and absent line marking in some locations along the shared use path on West Terrace.

Pedestrian Safety at West Terrace/Glover Avenue and Currie Street

Movements for vehicles were prioritised over the safe movement for students who choose to walk & cycle from the school during the PM peak periods. Due to the school's location and the overall volume of student enrolments at AHS, results in a high concentration of students fixed to a north/northeast travel pattern. This results in extreme road safety concerns for pedestrians wishing to store and cross at the intersection of West Terrace/Glover Avenue and Currie Street, which acts as the main issue for the school.

With regards to a DIT policy for installing a pedestrian scramble crossing, the maximum allowable crossing distance is 35 m, and for this intersection would require significant geometric alterations which is 55 m at this West Terrace intersection which will likely reduce the number of vehicle lanes on West Terrace, Glover Avenue and Currie Street respectively. Unless the future cross section for West Terrace was to change significantly, this type of crossing is not recommended.

Key Recommendations

The key recommendation to improve school travel safety are summarised as follows:

Glover Avenue

- Create a separate storage area between the bus stop and the shared use path that is known as the floating bus stop. This will provide separation between cyclists on the shared use path, pedestrians and the students waiting to be collected at Stop X1.
- Implement corralling measures such as landscaped medians (e.g West Terrace) or physical obstructions on Glover Avenue from West Terrace to the Karen Rolton Oval access.

Service Road

- a) Consider Keep Clear adjacent to the service road to accommodate for safe unobstructed movements to the right turn lane onto Waymouth Street. This would reduce the right-angle crash likelihood factors, however, not eliminate them.
- b) Consider restricting movements to left in/left out movements only through physical infrastructure. This may cause inadvertent impacts by restricting the southbound desire lines resulting in the service road no longer being an attractive kiss and drop area for parents. By restricting movements to Left in/Left out, additional pressure may also be placed on Glover Avenue for kiss and drop, which already has demonstrated issues during peak periods.



- c) As suggested by the AHS staff, a new public road could be built to assist with a one-way (westbound) configuration for the service road. This option would need to be tested for feasibility due to the associated benefits/cost of constructing a public road, changing existing road cross sections, and addressing the likely impacts at the intersection of Sir Donald Bradman Drive. Liaison would also need to be sought with the relevant stakeholders to consider this (Adelaide Comets, Parklands Authority etc.)

West Terrace

- a) The existing bus stop appears to be limited in terms of sealing due to the proximity of the high-pressure gas main. However, this should be explored further to ensure that a DDA compliant bus pad could be feasible for students at this location. Similar to the Glover Avenue opportunity, a floating bus stop could also be considered.
- b) The bus stop could be relocated further north to the formal Stop X1 on West Terrace, which is considered within an acceptable walking distance from the school (less than 150 m).
- c) The stop for the school special bus could be relocated to use the entrance slip road on the school grounds in front of the main entrance.

West Terrace School Access

- Re-line mark the existing shared use path adjacent to the school to ensure adequate delineation and definition in accordance with DIT Pavement Marking Manual. Give Way holding line to be placed at the entry to the school access road to supplement the existing Give Way sign, reducing vehicle/cyclist and pedestrian confusion.

West Terrace/Glover Avenue/Currie Street

- a) Additional storage areas can be accommodated for on the southeast and southwest corner of the intersection to avoid pedestrian spillage onto the vehicle carriageway. Corraling measures, such as bollards or fencing, could be introduced on the southeastern intersection leg to replicate what were done on the southwestern leg. This recommendation should not be considered in isolation, as queuing and delays to pedestrian movements would still need to be managed.
- b. New phase time arrangement is to be explored during PM school peak periods to increase pedestrian green time for all intersection legs. This will need to be managed with DIT's Network Management Services (NMS) to ensure they are aware of the vehicle impacts. This recommendation would still not solve the capacity issues for pedestrian storage as per recommendation above.
- c. A recommendation for a pedestrian bridge could be considered suitable if a. and b. do not yield the intended improvements for pedestrian safety. A bridge spanning Glover Avenue would be suggested due to the lack of space on the eastern side of West Terrace. This would assist in diluting pedestrians away from the West Terrace intersection and provide uninterrupted North-South movements across from/to the school.

Glover Avenue

- Implementing an effective enforcement strategy or reconsidering the placement of kiss and drop facilities adjacent to Glover Avenue should be considered to prevent double parking.

West Terrace Intersection

- Based on the lack of meaningful options for improving amenities for pedestrians at this intersection it is recommended that a movement strategy is developed. This should be performed by undertaking origin destination surveys of students to determine formal desire lines. Based on the outcomes of this strategy, a 'green wave' approach could be then accommodated during the peak periods which supports uninterrupted movements for students and pedestrians. The green wave occurs when a series of traffic lights, that is usually three or more, are coordinated to allow continuous traffic flow over several intersections in one main direction.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.

The following tasks were completed for this school travel safety review:

- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a student travel mode survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:

Existing pick up and drop off areas.

Existing school zones and other speed limits, including signs.

Existing crossings by type and informal crossing points and pedestrian desire lines.

Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.

- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

Adelaide High School is located on the southwest corner of West Terrace and Glover Avenue within the Adelaide Park Lands. The school site and the existing surrounding environs are shown in Figure 1.1.

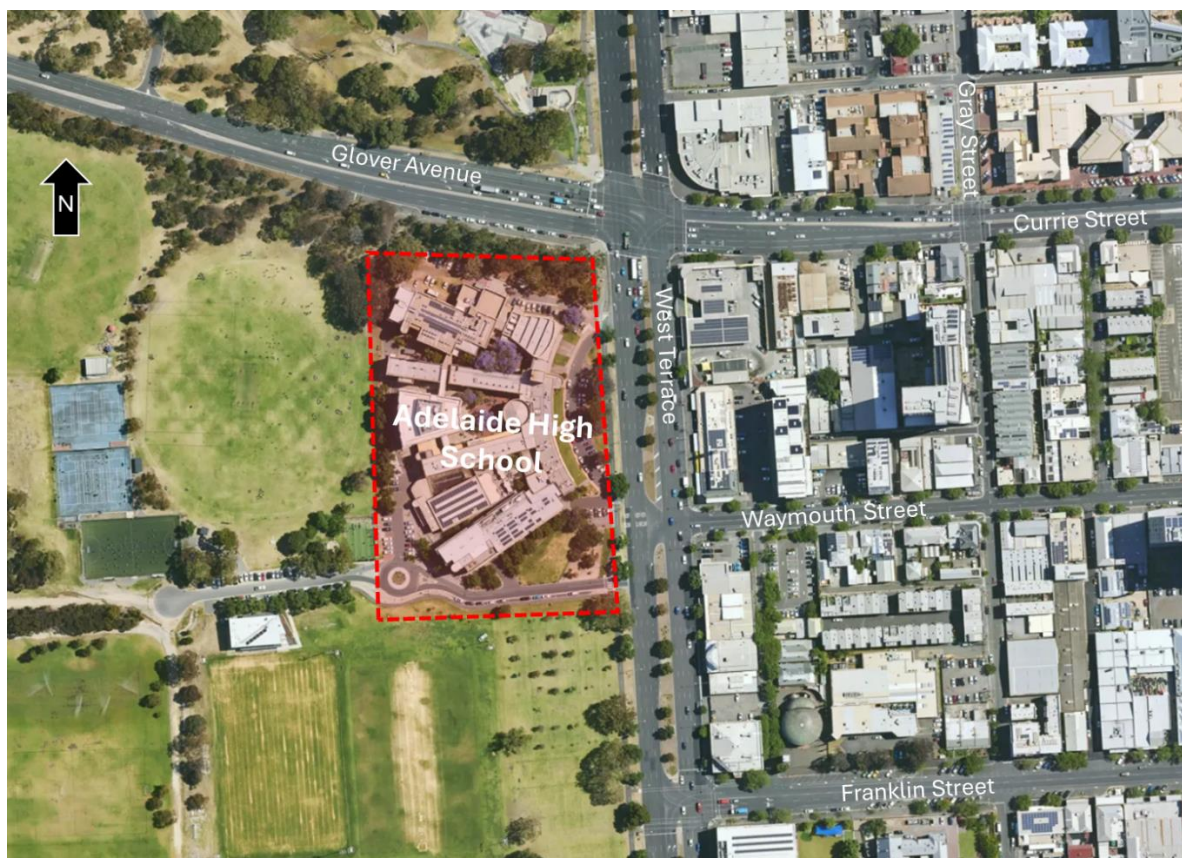


Figure 1.1 Adelaide High School Location

North Adelaide Primary School has the main student entrance on Tynte Street and a rear access from Gover Street as shown in Figure 1.2.



Main student entrance is provided with access from West Terrace.



Vehicles and pedestrians can enter the side entrance with access from West Terrace.

Figure 1.2 Entrance to Adelaide High School



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

Adelaide High School (AHS) is a State Government public school that comprises Years 7 to 12. The school office hours are consistently from 8 am to 4 pm. Bell times are staged on most days for Years 7 to 10 with an earlier start and finish, and Years 11 to 12 students have a later start and finish). Bell times are the same for all years on Wednesday's due to professional learning placeholders for AHS staff. Bell times are based on the timetable times that vary by day of the week as shown in Figure 2.1.

	Monday	Tuesday	Wednesday	Thursday	Friday
Lesson 1 (7-10) 8:30 – 9:20 AM	6 50	7 50	8:30 – 9:20 AM 3 50	2 50	1 50
Lesson 2 9:20 – 10:35AM	2 75	5 75	9:20 – 10:10AM 4 50	7 75	4 75
Recess 10:35 – 11:05AM			10:10 – 10:40AM		
Lesson 3 11:05 – 12:25PM	4 80	2 80	10:40 – 11:55AM 6 75	3 80	7 80
Lesson 4 12:25 – 1:00PM	MG	MG	11:55 – 1:10PM 1 75	MG	MG
Lunch 1:00 – 1:30PM			1:10-1:50PM		
Lesson 5 1:30 – 2:50PM	1 80	3 80	1:50-2:40PM 5 50	5 80	6 80
Lesson 6 (11-12) 2:50-3:40PM	6 50	7 50	2:55-4:40PM	2 50	1 50
3:45-5:00PM	Leader's Collaboration		Professional Learning		

Figure 2.1 Adelaide High School Class Timetable

Lesson times for students in Years 11-12 are structured based on ensuring that students can check their parking arrangements if they have travelled to school by car.

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 is for 1,554 students with a distribution by year as follows:

- 311 students in Year 7
- 294 students in Year 8
- 326 students in Year 9
- 298 students in Year 10
- 325 students in Year 11
- 301 students in Year 12

As shown in Figure 2.2, Adelaide High School shares an enrolment zone with Adelaide Botanic High School which allows parents within the zone to nominate their preferred city high school. Where demand from families living in the shared area exceeds places available, applications will be ranked and if necessary, students may be shared between the two high schools.

From 2024, the shared zone will include previously zoned suburbs or parts of Glandore, Hilton, Kurralta Park, Marleston, Mile End, Richmond, Torrensville, Black Forest and Clarence Park.

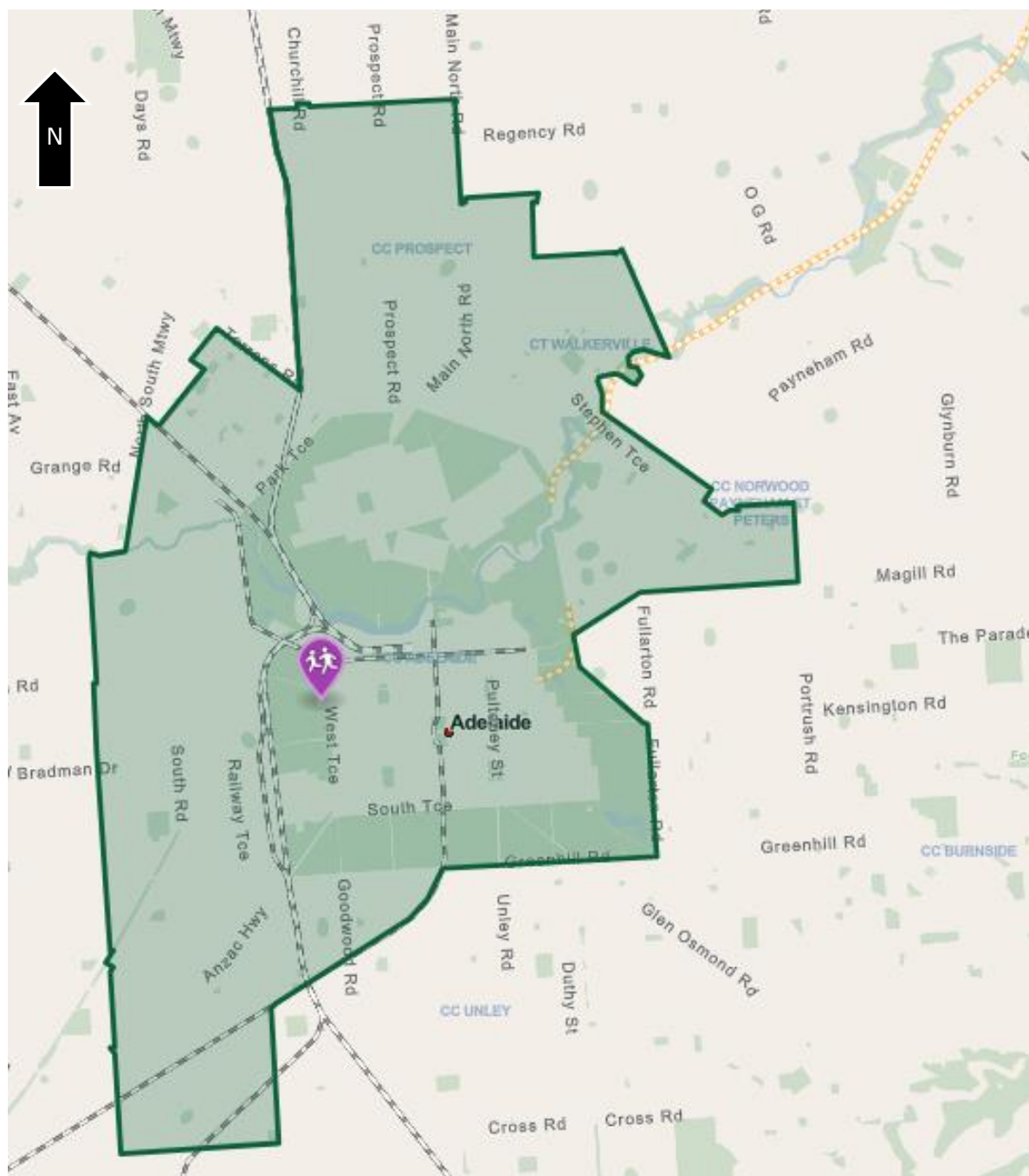


Figure 2.2 School Enrolment Area for Adelaide High School

The Adelaide High School catchment boundary area includes all the City of Adelaide and parts of the City of Prospect, Town of Walkerville, City of Norwood Payneham & St Peters Council, City of Unley, City of West Torrens Council and City of Charles Sturt. The number of households by sub areas of each suburb is shown in Figure 2.3.

In Term 2 2024, 144 students lived in the City of Adelaide which was 7.8 per cent of the students in the six years. 1,602 students or 86.4 per cent of the students lived in the inner suburbs mostly within the enrolment area. 109 students lived in the outer suburban Councils that are not in the enrolment area.

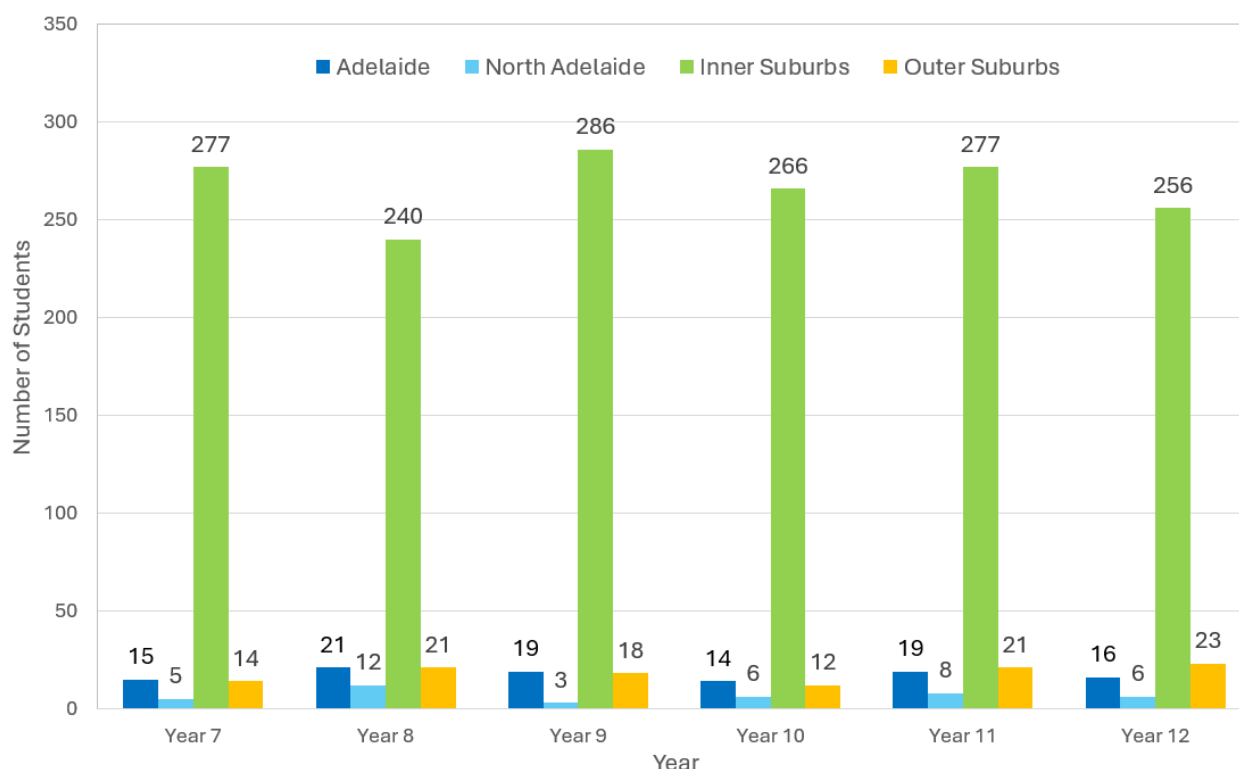


Figure 2.3 Adelaide High School Student Residence Location Analysis

2.3 Student Travel Demand

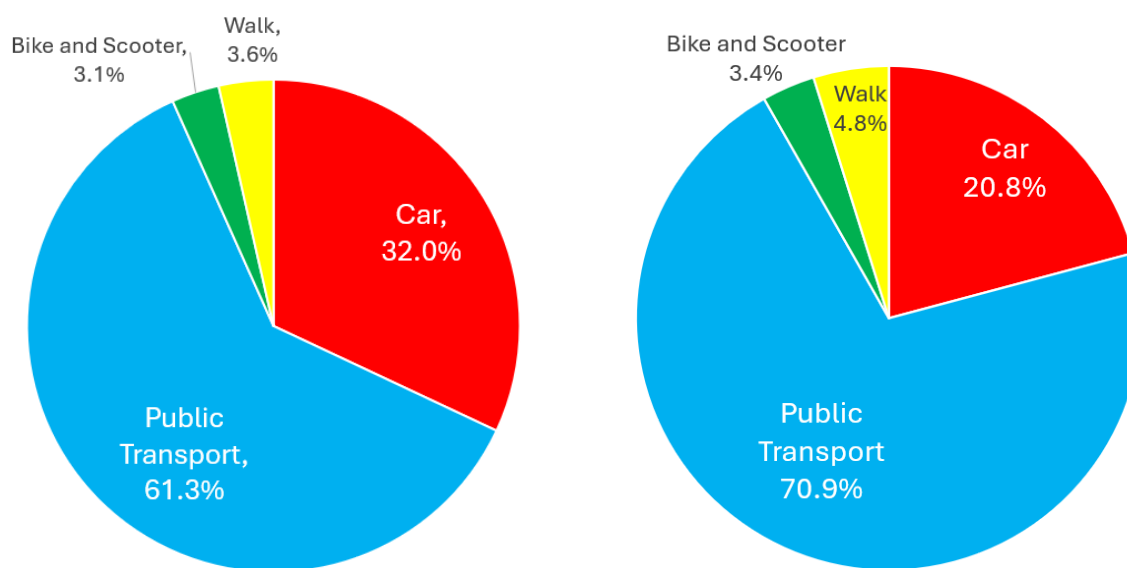
The existing school travel activity to and from the Adelaide High School was reviewed through site observations and a student travel mode survey on a typical school day. A copy of the student travel mode survey form is included in **Appendix A**.

The student travel survey was conducted during the first morning class across a 5-day period from Monday 3 June 3 to Friday 7 June 2024. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus, Train or Tram
- Bicycle or e-bike
- Scooter

An average of 901 students were surveyed each day ranging from 773 students on Friday 7 June to 1,121 students on Tuesday 4 June with the highest participation of the five days.

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.4. The PM departure period had nine per cent more students using public transport than in the AM period, and 11 per cent fewer using private vehicles. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. Travel via bike, scooter and walking remained fairly similar within both peak periods.



AM Period Arrival Transport Mode Share PM Period Departure Transport Mode Share

Figure 2.4 Adelaide High School Student Transport Mode Shares in May 2024

A breakdown of the student mode shares by year group for the AM arrivals and PM departures from the survey conducted in June 2024 is provided in Table 2.1. Key insights from the survey results are:

- Six per cent more students were driven to school in Years 7 to 9 than in Years 10 to 12.
- Travel by train was the highest transport mode for all students at about 46 per cent in the AM period and 53 per cent in the PM period. Nine per cent more students in Years 10 to 12 travelled by train than Years 7 to 9 in the AM period and six per cent more students in Years 10 to 12 travelled by train than Years 7 to 9 in the PM period.
- About 10 to 12 per cent students travelled by bus with little difference between year groups.
- Cycling to school was up to five per cent for Years 7 to 9 and about two per cent for Years 10 to 12.
- Walking to school was under four per cent of the students in the AM period and about five per cent in the PM period for all year groups.

Table 2.1 Student Transport Mode Shares for the AM Arrivals by Year Group in May 2024

Transport Mode	AM Arrivals 7 to 9	AM Arrivals 10 to 12	AM Arrivals Total	PM Departures 7 to 9	PM Departures 10 to 12	PM Departures Total
Car	34.8%	28.6%	32.0%	21.5%	20.0%	20.8%
Train	42.0%	50.8%	45.9%	50.3%	56.5%	53.0%
Bus	10.4%	11.3%	10.8%	12.2%	12.2%	12.2%
Tram	5.4%	3.7%	4.6%	6.5%	4.6%	5.7%
Bike and Scooter	3.8%	2.3%	3.1%	4.5%	2.0%	3.4%
Walk	3.8%	3.4%	3.6%	5.0%	4.6%	4.8%



2.4 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.4.1 Road Network

The streets in the local road network at AHS are provided in Table 2.2. The main access to the school fronts West Terrace, with localised minor entry/exit points at the rear of the school. These minor entry/exit points predominantly provide access to the car parks and sports facilities that runs adjacent with the AHS service road and Adelaide Parklands (Ellis Park/Park 24 – Adelaide Parklands Authority).

Table 2.2 Local Streets at Adelaide High School

Road	Classification	Relevance to School
West Terrace	Metropolitan	Front Entrance
Glover Avenue	District	50 m from front entrance
Currie Street	Regional	50 m opposite school entrance
Waymouth Street	Neighbourhood	50 m opposite school entrance
Ellis Park Service Road	Not applicable	50 m south of the school entrance, provides internal connectivity

The attributes of the local road network at Adelaide High School are provided in Table 2.3. West Terrace with a posted speed limit of 60 km/h is the busiest road in Adelaide CBD with over 52,100 per day.

Table 2.3 Local Road Network Attributes at Adelaide High School

Road	Number of Lanes	Daily Traffic Volumes	Posted Speed (km/h)
West Terrace	8	52,100	60
Glover Avenue	4	22,300	60
Currie Street	4	20,700	50
Waymouth Street	2	6,000	50

The surrounding road network does not include a 25 km/h school zone during AM and PM peak times. A signalised pedestrian crossing is part of the traffic signal phases at the West Terrace/Currie Street/Glover Avenue intersection.

Table 2.4 School Zones and Pedestrian Crossings at Adelaide High School

Road	25 km/h School Zone in Street	Type of Crossing in Street
West Terrace	No	Signalised crossing at Glover Avenue and Currie Street
Glover Avenue	No	Signalised crossing at West Terrace and Currie Street
Currie Street	No	Signalised crossing at West Terrace and Glover Avenue
Waymouth Street	No	N/A



2.4.2 Crash Analysis

A review of the latest crash data from 2018 to 2022 were sourced from DataSA with the crash locations close to the school shown in Figure 2.5. During the five-year period, the following crashes occurred close to the school:

- West Terrace: 9 property damage crashes and 1 minor injury crash
- Intersection with Glover Avenue and Currie Street: 1 property damage crash and 2 minor injury crashes
- Glover Avenue: 1 property damage crash and 2 minor injury crashes

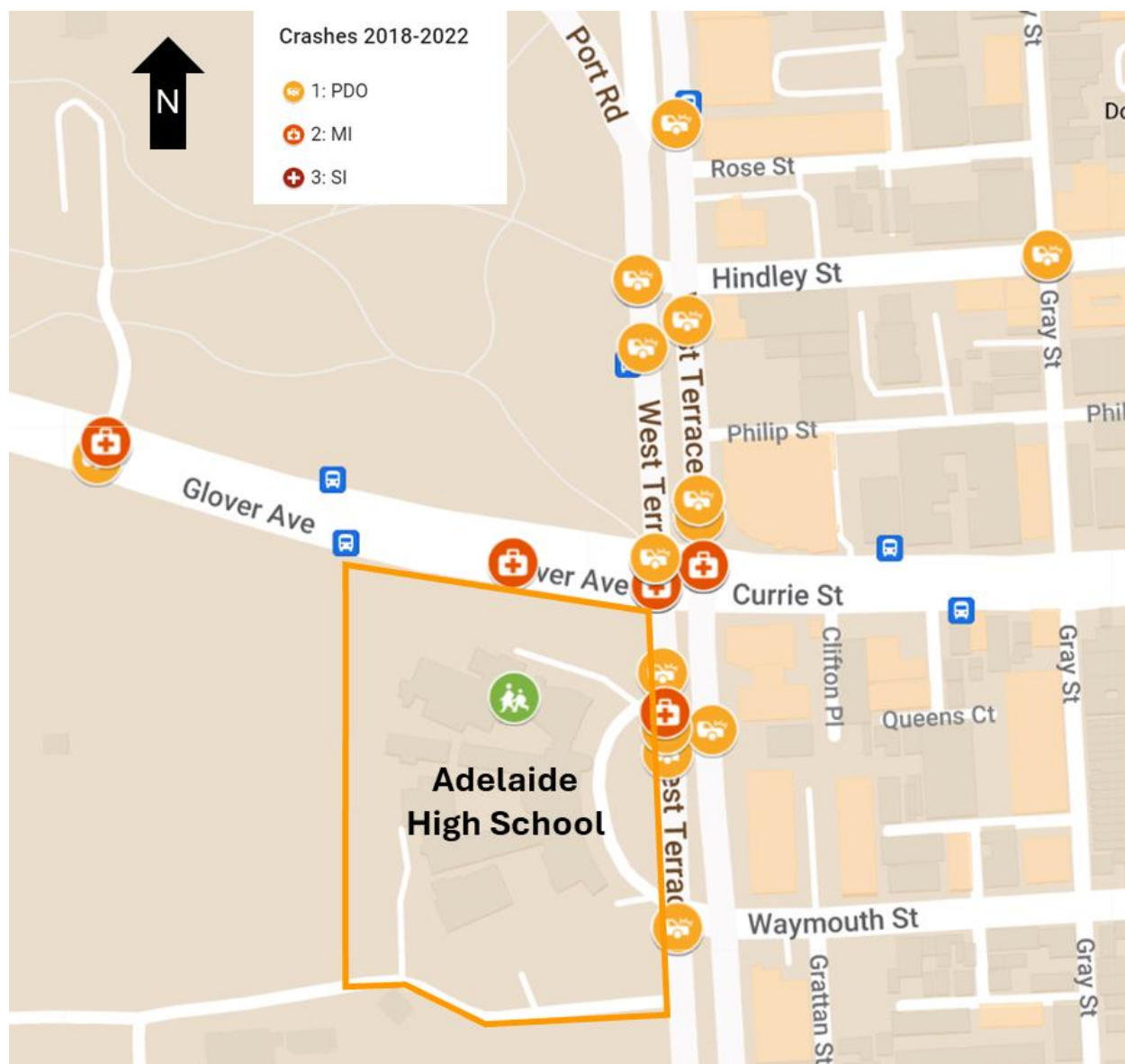


Figure 2.5 Crashes on School Days at Adelaide High School



2.4.3 Parking and Kiss and Drop Areas

On-street parking is available in areas surrounding the school on Glover Avenue and private roads (south and at the front entrance). The primary parking arrangements are summarised in Table 2.5. The on-street car parking controls along the streets in the vicinity of the school are shown in Figure 2.6.

Table 2.5 Parking Types at Adelaide High School

Road	Type of Parking
West Terrace	No Stopping All Times
Glover Avenue	No Parking on Monday to Friday from 8 am to 9 am and 2:30 pm to 4 pm
Currie Street	No Stopping at all times
Waymouth Street	Parallel Timed for 30 minutes and 2-hour parking

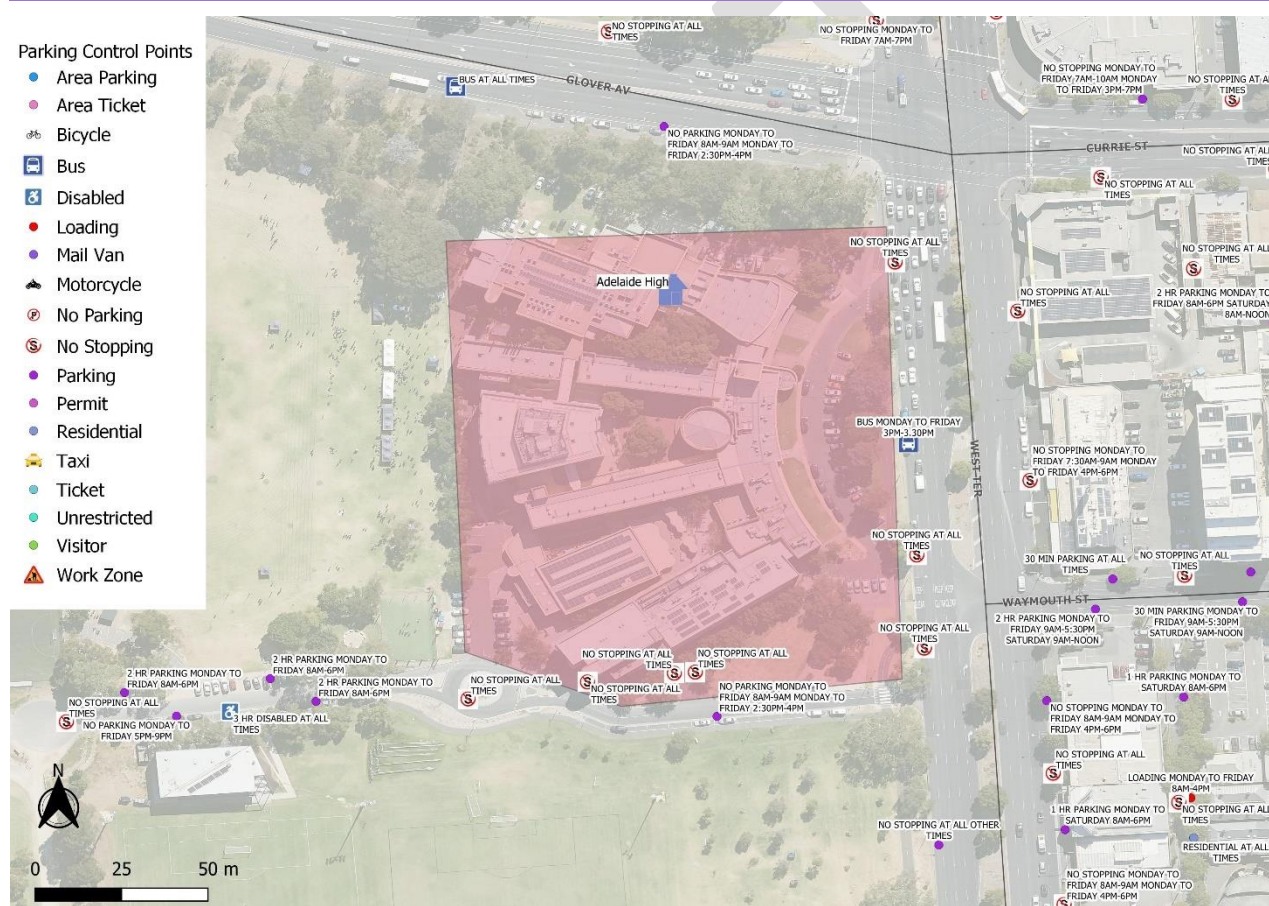


Figure 2.6 On-street Parking and Kiss and Drop Areas for Adelaide High School

The school promotes Kiss and Drop areas in the parking bays on Glover Avenue and the service road south of the school as shown in Figure 2.7. No parking restrictions are in operation in these areas from 8-9am and 2:30-4pm on Monday to Friday. The total capacity for vehicles in these areas is 25 carparks.



Kiss and Drop area in Glover Avenue looking west from West Terrace



Park Lands shared use path next to the Kiss and Drop area along Glover Avenue looking west

Figure 2.7 Kiss and Drop Areas in Glover Avenue

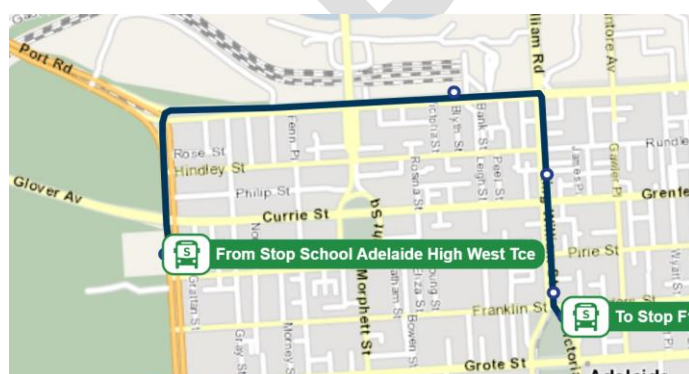
2.4.4 Public Transport

Adelaide CBD is the focus of the bus, tram and train network with the walkable access from Adelaide High School at the locations provided in Table 2.6. This can also be viewed in Figure 2.8.

Table 2.6 Public Transport Services at Adelaide High School

Road	Bus Routes	Closest Bus or Tram Stops	Walk Distance to Closest Bus or Tram Stop (m)
West Terrace	610, 611 PM services from AHS West Terrace to Adelaide railway station and King William Street	Stop School Adelaide High West Terrace south of Glover Avenue	20 m
Glover Avenue	163, 616, H20, H22, H30, H32, H33, J1, J2, N30	Stop X1 Glover Avenue - South side	50 m
Currie Street	163, 167, 168, 616, H20, H22, H30, H32, H33, J1, J2, M44, N30	Stop Y2 Currie Street - South side	100 m

Routes 610 and 611 are school special services that depart from the West Terrace bus stop in the PM departure period to Adelaide railway station and Victoria Square via West Terrace, North Terrace and King William Street as shown in this map.



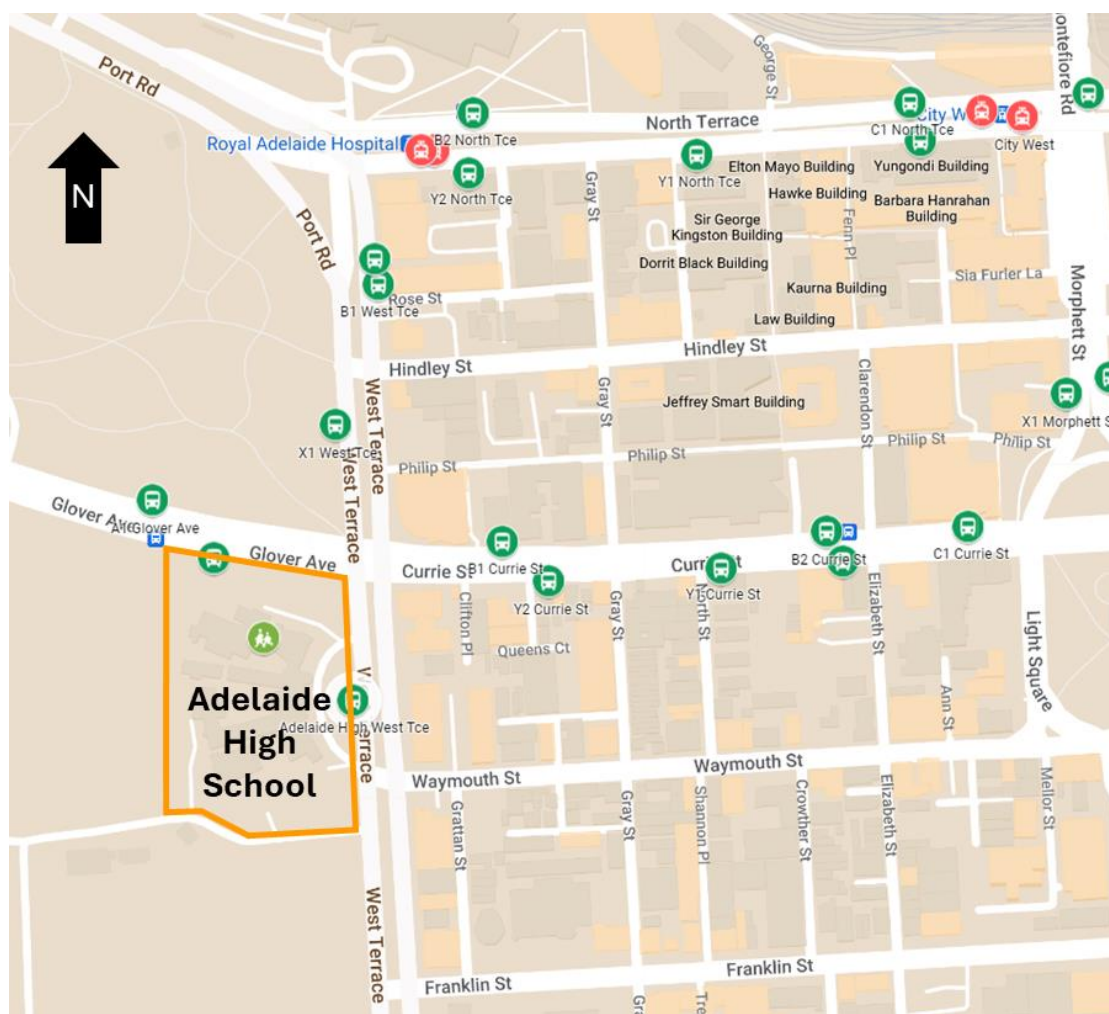


Figure 2.8 Public Transport Services to Adelaide High School

The school bus stop in West Terrace is shown next to the Park Lands shared used path in .Figure 2.9.



School bus stop in West Terrace looking north is next to the Park Lands shared use path.



The school bus stop in West Terrace looking south has no hard stand on the verge for students to wait.

.Figure 2.9 School Bus Stop in West Terrace



2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.10. West Terrace has an on-road bicycle lanes and off-road bike lanes are provided on the northern and southern sides of the school.

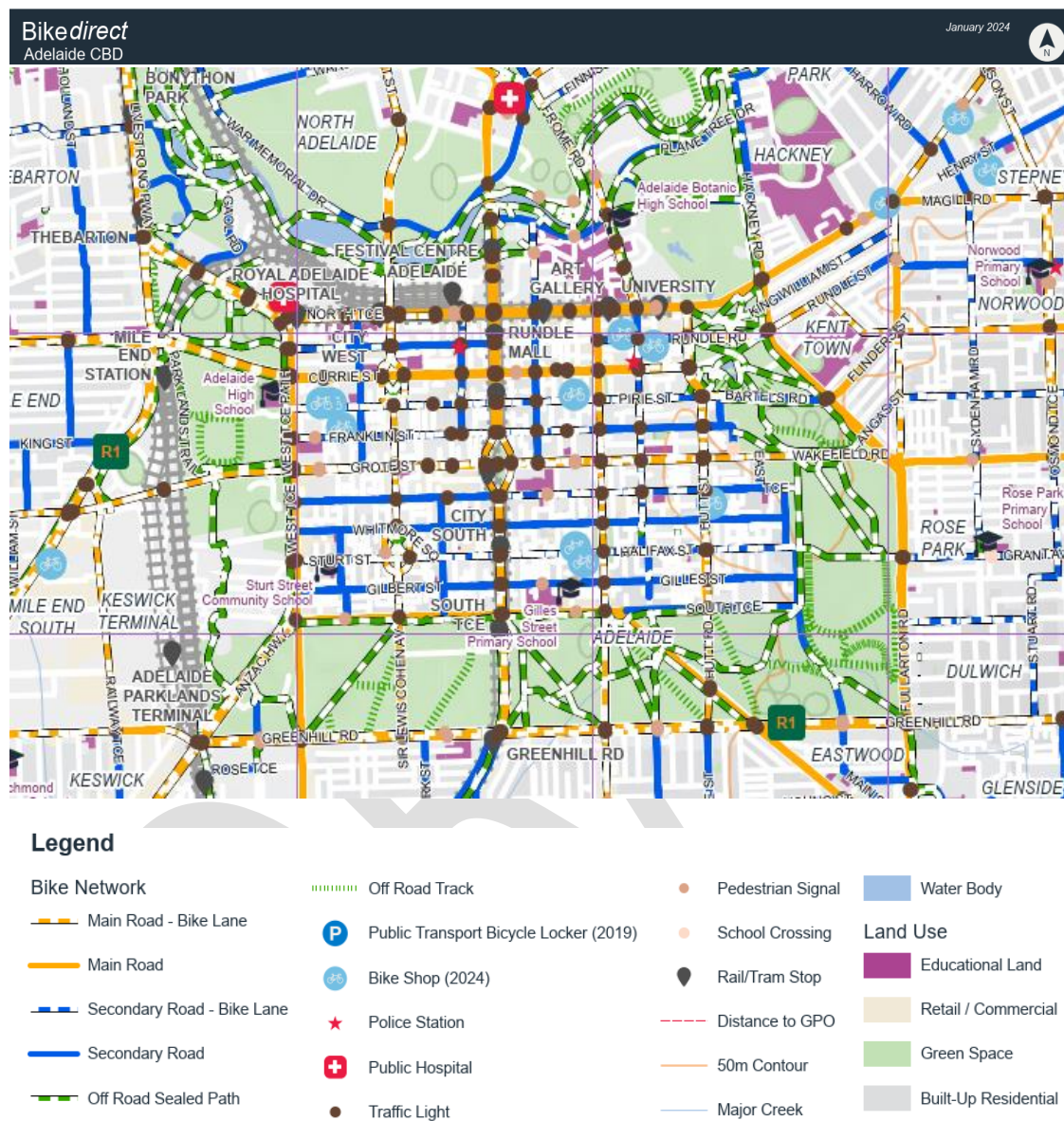


Figure 2.10 Cycling Network to Adelaide High School

Bicycle storage is provided 20 m south of the school entrance with 11 spaces allocated for students as shown in Figure 2.11. Secure bike storage is also provided within the school premises.



Bicycle racks outside at Adelaide High School



Outdoor bicycle parking next to the Park Lands shared use path

Figure 2.11 Bicycle Racks at Adelaide High School

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff and visitors who walk for their entire trip or as an access mode to the bus stops in Grover Avenue and Currie Street.

The high school has good pedestrian access from all directions from Adelaide CBD. A signalised intersections with pedestrian crossings 100 m from the main school entrance is provided as shown in Figure 3.24. Pedestrian access routes to the high school are via sealed footpaths along on both sides of Currie Street and West Terrace.

An 800m catchment area to Adelaide High School is shown in Figure 2.12. Students who walk their entire trip to school are likely walking from Adelaide city centre or the Mile End train station.

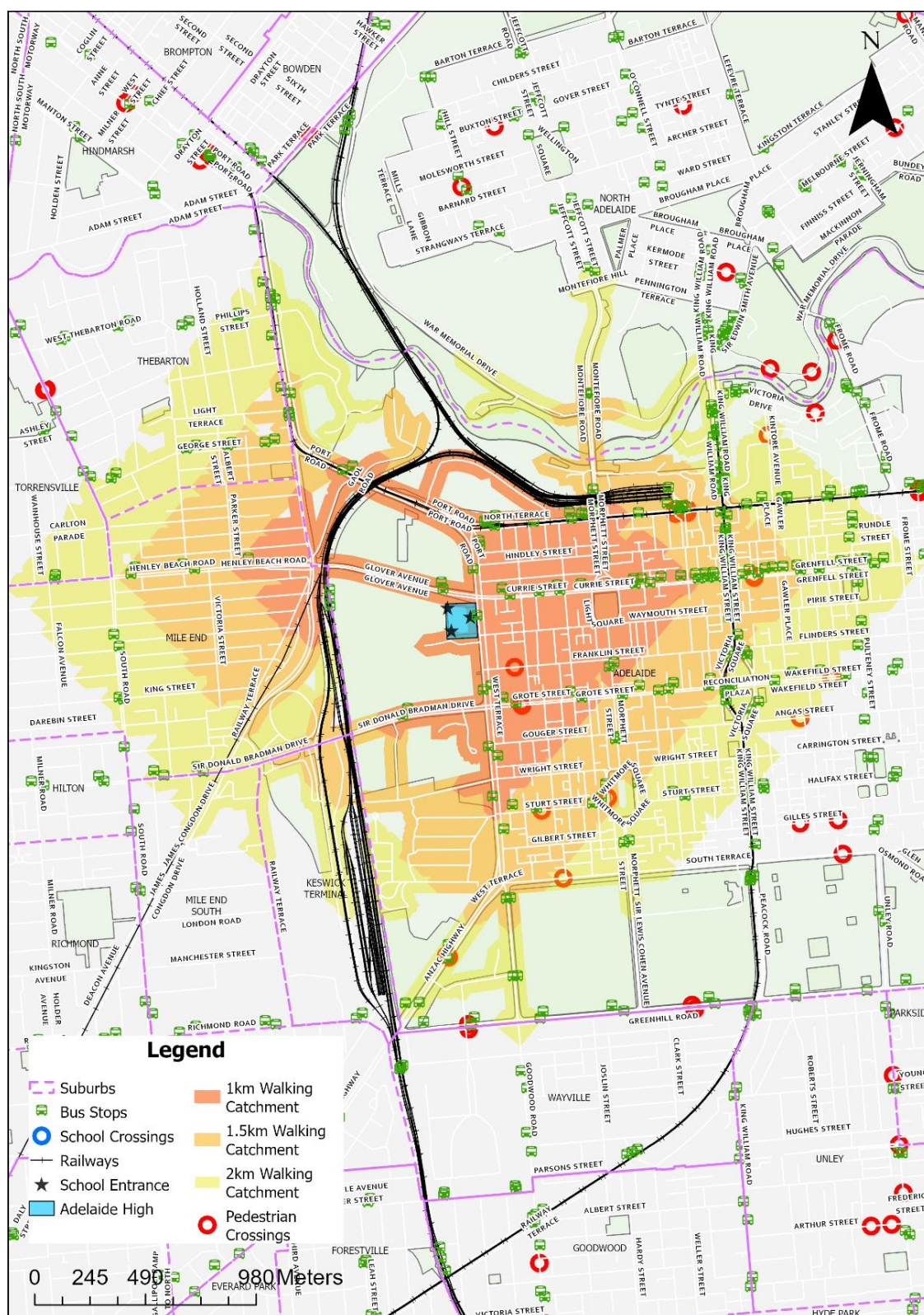


Figure 2.12 Walkable Access Catchment to Adelaide High School



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with the school Principal on Monday 27 May 2024 from 2:15 pm to 3:45 pm.

- In response to the Year 7 transition in 2022, the school with the Department for Education prepared a transport information flyer to promote and encourage more sustainable transport to the school and to reduce the traffic congestion during the school peak times. The brochure that is published on the school website for parents and students provides information about the school transport options. The full brochure is included in **Appendix B**. The brochure includes a map with the locations for cars, bus, train and tram stops and walk and cycling routes as shown in Figure 3.1.



Figure 3.1 Adelaide High School Transport Information

Some of the challenges and concerns from the school administration are:

- Based on discussions with AHS staff, their current enrolment numbers are expected to increase to the school capacity for 1,850 students. The school has limited provision for any expansion of buildings with the existing land because it is in the Adelaide Park Lands.
- The public infrastructure surrounding the school was seen by AHS staff as inadequate to cater for the volume of students that egress in the PM peak periods. The predominant egress method for students was the main entrance facing West terrace which observed multiple pinch points for the high concentrations of students egressing at the same time (>500 students). This is shown in Figure 3.2.

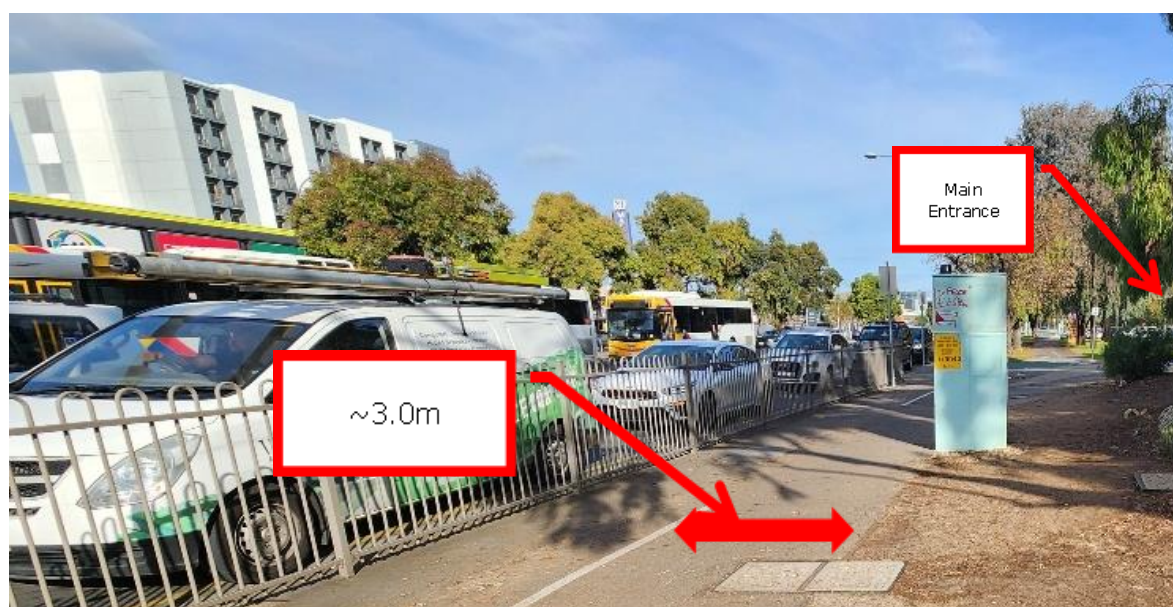


Figure 3.2 Pinch Points adjacent to the AHS School Entrance

Significant safety concerns were mentioned about students crossing at the signalised intersection of West Terrace/ Glover Avenue and Currie Street. Based on the volumes of students seeking to travel north-east of the school, the existing crossing is inadequate to accommodate for students during storage and when crossing. Often, students are forced to wait on the footpath for several minutes to cross one leg of the intersection. This has resulted in an obstructed shared use path on West Terrace/Glover Avenue which is used by recreational and commuter cyclists as shown in Figure 3.3. Teachers are also nominated to stand on all crossing legs of the intersection to ensure students are crossing during the pedestrian cycle times. Teachers want an overpass which they perceive would address the issues.



Figure 3.3 Signalised Intersection of West Terrace and Glover Avenue



- Concerns were raised by the school the Waymouth Street/West Terrace Intersection due to the frequency of vehicles performing U-Turns and Right Turns into the school entrance unsafely. Subsequently a No U-Turn sign was implemented to prevent this occurring at the intersection. This was considered by the school as successful in managing peak time school safety at this location.



Figure 3.4 No U Turn Facility in West Terrace at Waymouth Street (looking east)

- Bicycle lockers have been provided by the school within the site to accommodate for student storage. The existing Council bicycle racks on West Terrace have often resulted in theft occurring (Refer 2.10).
- The service road adjacent to the school was raised by the school as an issue due to the presence of queuing vehicles wishing to egress onto West Terrace. Vehicles were noted by AHS staff as waiting over the raised wombat crossing and obstructing pedestrians. They noted that the main delays responsible for the queuing was the desire to cross four lanes of West Terrace to travel into the right turn lane onto Waymouth Street (to perform a right turn/U-turn).



Figure 3.5 Delays for Service Road Egress (Right Turn Waymouth Street)

- Glover Avenue kiss and drop area was raised by AHS staff for illegal parking behaviour. Concerns raised by the school illustrated the prevalence of cars double parking adjacent to the indented kiss and drop area to pick up students.
- AHS staff also raised that the shared use path running adjacent to the school has some inconsistency associated with line marking and signs where traversing across the access points adjacent to the school entrance.

3.2 Site Observations

The existing staff and student transport mode activity to and from the Adelaide High School were observed during the AM peak arrival period and the PM peak departure period on typical school days in 2024. Three site visits were undertaken between Monday 27 May 2024 and Wednesday 12 June 2024. These visits occurred at both AM and PM peak school times.

3.2.1 AM and PM peak periods

These observations were made at both the AM and PM peak periods. Based on the concerns raised by the school the predominant issues occurred during the PM peak periods. General observations made at both AM and PM peak periods were as follows:

Glover Avenue

Parking Issues

Kiss and Drop is challenging due to the availability for the indented kiss and drop bay to accommodate for only approximately 12 vehicles at a time. There was evidence of double parking occurring. As vehicles double parked in the leftmost westbound lane, there was an increased likelihood of rear end crashes. This area also precedes the bus stop located further west of the kiss and drop area, and the parking overflow of this area results in illegal parking adjacent to the bus stop.

With exception to the Karen Rolton oval access located in the right turn lane, the above behaviour is likely occurring due to the inability to perform a U-turn manoeuvre during peak periods on Glover Avenue. Parents/Guardians would need to detour 2 km if they were unable to pick up students on Glover Avenue. The evidence of double parking in Glover Avenue is shown in Figure 3.6.



Figure 3.6 Evidence of Double Parking in Glover Avenue



Shared Path Obstruction

The shared use path located on the south side of Glover Avenue was obstructed by students waiting for the bus at Stop X1 (south side of Glover Avenue). This observation did not cause any immediate road safety issues and adequate site distance is afforded to cyclists travelling east-west.

Uncontrolled Pedestrian Movements

Students were observed crossing Glover Avenue between the Karen Rolton and the intersection of West Terrace. This is a significant crossing distance to traverse across, and without proper corralling measures, could result in a pedestrian/vehicle conflict.

Service Road

Parking Issues

During both Kiss and Drop periods, the Service Road did not observe significant issues. There were minor instances (1 vehicle) of a vehicle illegally parking within the circulation roadway of the internal roundabout during the PM peak period.

West Terrace Intersection

As discussed with the AHS staff, vehicles were observed traversing from the service road across several lanes of traffic on West Terrace to perform at U-Turn at the intersection of Waymouth Street, however there was sufficient gaps in traffic to perform this manoeuvre at the time of observation.

West Terrace

Shared Use Path

The shared use path that extends adjacent to the school is a challenge to utilise for cyclists during peak periods in ensuring it is unobstructed when student bell times occur. Students were observed in the AM peaks sometimes congregating on the shared use path, causing some concerns for commuter cyclists. This is predominantly based on the eastern side of the school being the main entry/egress point for school students.

Line marking

The shared use path also found some issues with inconsistent line marking with the Give Way sign as shown in Figure 3.7, The holding line on the entry point for the vehicle give way sign is absent. The give way sign may not provide enough notice to vehicles, increasing the likelihood of vehicles conflicting with cyclists/pedestrians who, under the current configuration have right of way. Shared use path line marking also appeared faded in some locations along the path and lacked delineation in some areas.



Figure 3.7 Inconsistent Line marking at the School Access and Shared Use Path



School Bus Stop

A school bus service also operates directly adjacent to the school main entrance, collecting students during the PM peak times and travelling to King William Street via North Terrace to Adelaide Railway Station. Students waiting for the bus congregate on the verge adjacent to the bus stop which is not a formal bus pad/sealed storage area. During site observations, students were found waiting on the shared use path to avoid waiting on soft/wet grass on the kerb. The presence of the high-pressure gas line on this side of West Terrace appears to be the main challenge for ensuring a formal bus pad can be provided at this location, however based on the proximity of the formal bus stop (Stop X1) 140m north of this one, the merit of having a bus stop at this location should be questioned.



Figure 3.8 School Bus Stop Location

Intersection of Currie Street/West Terrace/Glover Avenue

The observations undertaken during the PM peak periods on both Monday (staggered bell times) and Wednesday (same bell times) raised some critical issues at the intersection of West Terrace/Glover Avenue and Currie Street. Travel patterns indicate students are travelling north/northeast of the school to utilise nearby public transport and the Adelaide Train station. 8 teachers are responsible for the safety of children, stationed at all intersection legs (Figure 19)

Insufficient Storage Area for Students on the Footpath

The magnitude of students that store and cross at this intersection was significant (>500 students) often storing at the southwestern leg of the intersection at the conclusion of the school bell. This area is inadequate to cater for this many students at once, with only 50m² of the footpath able to accommodate for students before they fully obstruct the shared use path and spill into the road carriageway. Fortunately fencing is provided on approaches to the intersection for pedestrian protection, however AHS staff nominated to patrol the legs of these intersections are often left with little room and protection from vehicles. This inadequate storage area also applies to the southeastern side of the intersection with similar issues occurring as the southwestern leg as above. E-scooters, bicycle racks contributed to the lack of room to store pedestrians in this location, with students observed spilling onto the road carriageway where vehicles would turn left from Currie Street onto West Terrace.



Figure 3.9 Inadequate Storage Area for Students on the Footpaths in the PM Period
Pedestrian Crossing Times

Pedestrian crossing times were also considered inadequate to cater for the number of students wishing to cross during PM peak times as shown in Figure 3.10. Cycle times for pedestrians catered for many students to cross over the 30m and 35m crossing distances for the western and southern crossing leg respectively, however AHS staff prevented a significant number of students to cross when the “Flashing Do Not Walk” phase interval occurred. This was predominantly a safety measure taken to ensure students were still not crossing at the “Do not Walk” phase. Overall, the operation of this intersection results in a poor Level of Service (LOS) for students with continuous queuing/delays during the PM peak periods. This behaviour occurred on both the south and west crossing leg during the PM peak periods, however was not as critical in the mornings legs where student arrival times are typically more staggered.



Figure 3.10 Inadequate Crossing Phase Times at West Terrace/Glover Avenue/Currie Street



3.3 Summary of the Issues and Opportunities

Issues for pedestrian and vehicular movements surrounding the school are discussed as follows:

3.3.1 Glover Avenue

Double Parking on Glover Avenue

The existing kiss and drop area present inadequate capacity issues and increased likelihood factors of rear end crashes. During site observations, this behaviour was not enforced. One must not forget the importance of movement on Glover Avenue and high function it provides for east-west connectivity from/to the CBD.

Shared use path obstruction in Glover Avenue

Minor Issues of pedestrian storage/queuing at the bus stop encroaches onto the Shared use path, potentially presenting issues for cyclist and pedestrian conflict.

Uncontrolled Pedestrian Movements crossing Glover Avenue

Minor instances of pedestrians crossing Glover Avenue to travel to/from the school without using the signalised crossing at West Terrace. This involves crossing over a significant distance with more than four lanes of traffic and exposure to vehicle speeds over 50 km/h.

3.3.2 Service Road

Egress onto West Terrace

Vehicles traversing across four lanes of West Terrace, to travel to Waymouth or perform a U-turn manoeuvre, presents increased likelihood factors for right angle crashes.

3.3.3 West Terrace

Shared Use Path Obstruction/School Bus Stop in West Terrace

The school bus stop located adjacent to the main entrance to the school is unsealed resulting in an obstructed shared use path along West Terrace.

Missing or Faded Line marking at the access roads on West Terrace

Observations indicated faded and absent line marking in some locations along the shared use path on West Terrace.

3.3.4 Intersection of West Terrace/Glover Avenue and Currie Street

Pedestrian Safety

Movements for vehicles were prioritised over the safe movement for students who choose to walk & cycle from the school during the PM peak periods. Due to the school's location and the overall volume of student enrolments at AHS, results in a high concentration of students fixed to a north/northeast travel pattern. This results in extreme road safety concerns for pedestrians wishing to store and cross at the intersection of West Terrace/Glover Avenue and Currie Street, which acts as the main issue for the school.

With regards to a DIT policy for installing a pedestrian scramble crossing, the maximum allowable crossing distance is 35 m, and for this intersection would require significant geometric alterations which is 55 m at this West Terrace intersection which will likely reduce the number of vehicle lanes on West Terrace, Glover Avenue and Currie Street respectively. Unless the future cross section for West Terrace was to change significantly, this type of crossing is not recommended.



4 Travel Safety Options and Assessment

4.1 Student Travel Safety Options

Options to improve the travel safety for students were developed under two categories, namely:

- Infrastructure treatments requiring civil works with changes to devices, signs/line marking, signals or pedestrian crossings.
- Operational efficiencies requiring Council's team to consider operationally to improve issues.

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options for Adelaide High School

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Glover Avenue - Create a separated storage area between the bus stop and the shared use path – floating bus stop	Conflict between waiting students and moving pedestrians and cyclists.
	Glover Avenue - Implement corralling measures such as landscaped medians (e.g West Terrace) or physical obstructions on Glover Avenue from West Terrace to the Karen Rolton Oval access	Uncontrolled crossing movements
	Service Road a) Keep Left b) Left In/Left Out c) One Way Road	Unsafe egress onto West Terrace
	West Terrace a) Consider a DDA compliant bus pad / floating bus stop for students at West Terrace adjacent to the school bus stop. As per Glover Avenue opportunity, a floating bus stop could also be considered to accommodate for a dedicated bus stop, shared use path and storage area. b) Relocate the school bus stop to be further north to the formal Stop X1 on West Terrace. c) Provide a bus stop in front of the school entrance on the school grounds.	Obstruction of the bus stop and shared use path during peak periods
	West Terrace a) Re-line mark the existing shared use path adjacent to the school to ensure adequate delineation and definition in accordance with DIT Pavement Marking Manual. <i>And</i> b) Give Way holding line to be placed at the entry to the school access road to supplement the existing Give Way sign, reducing vehicle/cyclist and pedestrian confusion.	Faded line marking and confusion at school access between vehicles and cyclists.



Type of Option	Description	Issue Addressed
	West Terrace/Glover Avenue/Currie Street a) Provide additional storage areas on the southeast and southwest corner of the intersection to avoid pedestrian crowding and risks onto the vehicle carriageway. Corraling measures (such as bollards or fencing) need to be introduced on the southeastern intersection leg to replicate what were done on the southwestern leg. This recommendation should not be considered in isolation, as queuing and delays to pedestrian movements would still need to be managed. b) Review the traffic signal phasing time arrangement is to be explored during PM school peak periods to increase pedestrian green time for all intersection legs. This will need to be managed with DIT's Network Management Services (NMS) to ensure that acceptable impacts to vehicle traffic is managed. This recommendation would still not solve the capacity issues for pedestrian storage. c) Consider the planning for a pedestrian bridge if Options a. and b. do not yield the intended improvements for pedestrian safety. A bridge spanning Glover Avenue would be suggested due to the lack of space on the eastern side of West Terrace. This would assist in diluting pedestrians away from the West Terrace intersection and provide uninterrupted movements across from/to the school.	Pedestrian safety and delays at the intersection of West Terrace/Currie Street/Glover Avenue.
Operational Efficiencies	Glover Avenue Implement an effective enforcement strategy or reconsidering the placement of kiss and drop facilities adjacent to Glover Avenue should be considered.	Double Parking on Glover Avenue
	Adelaide High School Develop a movement and green wave strategy	Continued commitment to safe movement and efficiency surrounding the school



4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives are explained with more detail as follows:

4.2.1 Infrastructure Treatments

Glover Avenue

- Create a separate storage area between the bus stop and the shared use path that is known as the floating bus stop as shown in Figure 4.1. This will provide separation between cyclists on the shared use path, pedestrians and the students waiting to be collected at Stop X1.



Figure 4.1 Example of a "Floating" Bus Stop

- Implement corraling measures such as landscaped medians (e.g West Terrace) or physical obstructions on Glover Avenue from West Terrace to the Karen Rolton Oval access.

Service Road

- d) Consider Keep Clear adjacent to the service road to accommodate for safe unobstructed movements to the right turn lane onto Wymouth Street. This would reduce the right-angle crash likelihood factors, however, not eliminate them.
- e) Consider restricting movements to left in/left out movements only through physical infrastructure. This may cause inadvertent impacts by restricting the southbound desire lines resulting in the service road no longer being an attractive kiss and drop area for parents. By restricting movements to Left in/Left out, additional pressure may also be placed on Glover Avenue for kiss and drop, which already has demonstrated issues during peak periods.
- f) As suggested by the AHS staff, a new public road could be built to assist with a one-way (westbound) configuration for the service road. This option would need to be tested for feasibility due to the associated benefits/cost of constructing a public road, changing existing road cross sections, and addressing the likely impacts at the intersection of Sir Donald Bradman Drive. Liaison would also need to be sought with the relevant stakeholders to consider this (Adelaide Comets, Parklands Authority etc.)

West Terrace

- d) The existing bus stop appears to be limited in terms of sealing due to the proximity of the high-pressure gas main. However, this should be explored further to ensure that a DDA compliant bus pad could be feasible for students at this location. Similar to the Glover Avenue opportunity, a floating bus stop could also be considered.
- e) The bus stop could be relocated further north to the formal Stop X1 on West Terrace, which is considered within an acceptable walking distance from the school (less than 150 m).
- f) The stop for the school special bus could be relocated to use the entrance slip road on the school grounds in front of the main entrance.

The access road to the AHS main entrance is proposed as a bus waiting area for Routes 610 and 611 as shown in Figure 4.2.



Proposed location for the school special bus services for boarding students in the PM period



Proposed location for school special buses in front of the main entrance to Adelaide High School

Figure 4.2 Use Main Entrance of Adelaide High School for School Special Buses

West Terrace School Access

- Re-line mark the existing shared use path adjacent to the school to ensure adequate delineation and definition in accordance with DIT Pavement Marking Manual. Give Way holding line to be placed at the entry to the school access road to supplement the existing Give Way sign, reducing vehicle/cyclist and pedestrian confusion. This location for the line marking is shown in Figure 4.3



Figure 4.3 Recommended Location for Line marking at the Access Entrance from West Terrace

West Terrace/Glover Avenue/Currie Street

- a) Additional storage areas can be accommodated for on the southeast and southwest corner of the intersection to avoid pedestrian spillage onto the vehicle carriageway as shown in Figure 4.4. Corraling measures, such as bollards or fencing, could be introduced on the southeastern intersection leg to replicate what were done on the southwestern leg. This recommendation should not be considered in isolation, as queuing and delays to pedestrian movements would still need to be managed.

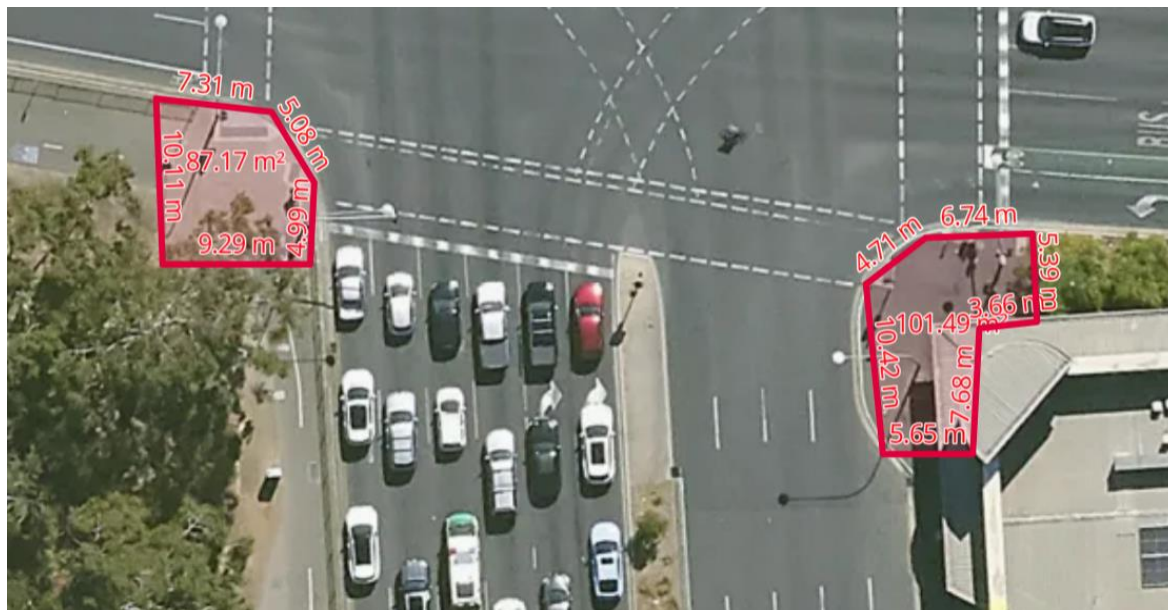


Figure 4.4 Recommended Improvement areas for Pedestrian Waiting Area

- b. New phase time arrangement is to be explored during PM school peak periods to increase pedestrian green time for all intersection legs. This will need to be managed with DIT's Network Management Services (NMS) to ensure they are aware of the vehicle impacts. This recommendation would still not solve the capacity issues for pedestrian storage as per recommendation above.
- c. A recommendation for a pedestrian bridge could be considered suitable if a. and b. do not yield the intended improvements for pedestrian safety. A bridge spanning Glover Avenue would be suggested due to the lack of space on the eastern side of West Terrace. This would assist in diluting pedestrians away from the West Terrace intersection and provide uninterrupted North-South movements across from/to the school.



Figure 4.5 Pedestrian Footbridge at Mawson Lakes Primary School



4.2.2 Operational Efficiencies

Glover Avenue

- Implementing an effective enforcement strategy or reconsidering the placement of kiss and drop facilities adjacent to Glover Avenue should be considered to prevent double parking.

West Terrace Intersection

- Based on the lack of meaningful options for improving amenities for pedestrians at this intersection it is recommended that a movement strategy is developed. This should be performed by undertaking origin destination surveys of students to determine formal desire lines. Based on the outcomes of this strategy, a 'green wave' approach could be then accommodated during the peak periods which supports uninterrupted movements for students and pedestrians. The green wave occurs when a series of traffic lights, that is usually three or more, are coordinated to allow continuous traffic flow over several intersections in one main direction.

4.3 Assessment and Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.2. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- S for Signal timing changes at an intersection.
- P for Parking control with new signage or pavement markings for on-street parking or a school zone.

Table 4.2 Indicative Cost Estimates for the Travel Safety Options at Adelaide High School

Option ID	Description	Indicative Cost Estimate	Comments
T1	Glover Avenue - Floating Bus Stop	\$50,000	DIT and SAPTA to be consulted about the location of the school bus stop
T2	Glover Avenue - Landscaped Median/Fencing	\$25,000	DIT to be consulted
T3a	Service Road – Keep Clear Markings	\$5,000	Council to be consulted
T3b	Service Road – Left in Left Out	\$25,000	
T3c	Service Road – One Way Arrangement	>\$500,000	
T4a	West Terrace – DDA Bus Stop	\$25,000	DIT and SAPTA to be consulted about the location of the school bus stop; Council to implement the preferred solution
T4b	West Terrace – Relocate Bus Stop	<\$5,000	
T4c	West Terrace – Allow School Special bus to use the access road in front of the main entrance of the school		
T5	West Terrace – Share use path Line marking	\$2,500	Council to implement
T6a	Intersection - Improve storage areas	\$100,000	DIT to be consulted
S6b	Intersection – Pedestrian Green Time	\$20,000	
T6c	Intersection – Footbridge	\$2million	





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024



Appendix A – Student Travel Survey Form

	CITY OF ADELAIDE	
School Travel Survey for Students		
School:		Adelaide High School
<i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i>		
Questions for the Teacher		
Date (day/month/year):		
Weather (Daytime temperature and sky conditions):		
Please enter the name or number of your class or year group.		
How many students are absent today in your class?		
Questions for the Students in Your Class / Year Group		
<i>Please ask the students with a 'hands-up' survey in the classroom.</i>		
AM Period Travel		
<i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the AM Period	Number of Students	
Car (as driver)		
Car (as passenger with drop-off)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
PM Period Travel		
<i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the PM Period	Number of Students	
Car (as driver)		
Car (as passenger with pick-up)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
If you travelled by car, would you prefer any of these modes? (multiple answers)		
Walking for the entire trip		
Bicycle, e-bike or scooter		
Public Transport (bus, tram or train)		



Appendix B – AHS Student Travel Information Flyer



School travel: Adelaide High School

There are lots of ways to get your child to and from **Adelaide High School**.

With the arrival of Year 7 students in 2022, we are keen to alleviate traffic congestion around the school.

Every family must make decisions about transport that best suit their individual circumstances, but we encourage independence where it is appropriate.

Travelling by foot, bike, bus, or train develops your child's confidence, organisation, and self-reliance skills.

Below are some options you may like to consider, along with safety guidelines which have been developed by the school in consultation with the State Government.



Walking to and from school

Walking has a range of health benefits and we are fortunate to be located close to the Adelaide Park Lands, meaning students can enjoy open reserves.

If you are driving, we encourage you to drop your child off a short walk away from school where possible.

All major intersections around the school have pedestrian activated crossings, which students must use to ensure their safety.

Scooters and skateboards are also welcome - they can be stored securely on campus during the day.



Using bicycles or scooters

Bikes can also be stored safely on the school campus during the day.

The Park Lands have shared-use paths for cyclists and pedestrians which connect through to suburban streets that have low speed limits.

Students must avoid riding on main roads during peak time. They must also use separated bike pathways whenever they are provided.



Catching the bus

Adelaide High School is serviced by several busses, including some designated school services that are for students only, along with the teachers, parents and carers who are accompanying them.

Visit the Adelaide Metro's [travel to school](#) page for information on timetables, fares, and safety.

The school bus zones are supervised by staff before and after school. Students must cross any roads at the pedestrian crossings points located at traffic light intersections.

A map showing bus stops around the school is also attached to this message.



Government of South Australia
Department for Education



Catching the tram or train

Students catching the train to Adelaide High School can come and go via the Mile End train station (a 600m walk across the Park Lands) or the Adelaide Train Station on North Terrace.

If your child is using the Adelaide Train station, they can catch a free connector tram or the City Loop bus if they don't want to walk between the station and school.

Students must cross all roads at pedestrian crossings.

Train and bus service details are also available on the [Adelaide Metro](https://www.adelaidemetro.com.au/) website.



Driving to school and drop off zones

Student drop off and pick in Adelaide High School's main driveway is not allowed unless your child has a recognised mobility issue.

Instead, families in cars can use two drop off zones. One is on Glover Avenue and the other is accessible via the central school road. These zones are supervised.

The expectation is that cars stop in the zones for less than 30 seconds.

Parents and carers are asked to ensure their child is ready for collection before entering the drop off zones after school, and to park in the furthest space possible to assist with traffic flow.

In the morning, students need to exit cars to the nearest footpath, rather than walking across the zones.

Please be aware that you cannot park in the drop off zones. This means they are not suitable spaces for early arrivals to sit and wait for school pick up.

If you do arrive early for school pick up, you will need to wait in surrounding streets as stationary cars block traffic and pedestrian flow.





Christian Brothers College – Junior Campus

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
12 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	Eli Alabaster	John Devney	John Devney	12 July 2024

DRAFT



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Ref: 240706

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- Appendix A – Student Travel Survey Form
- Appendix B – CBC Junior Campus Parking Information
- Appendix C – School Travel Access Guide in NSW



Executive Summary

Overview

The Christian Brothers College (CBC) Junior Campus is a private school located in Wakefield Street between Hutt Street and East Terrace. The college has classes from Reception to Year 6 with an enrolment of 266 students in Term 2 2024 with 118 students in Reception to Year 3 and 148 students in Years 4 to 6.

Key Findings

The CBC Junior Campus does not have an enrolment restriction area and students live in wide range of locations in Greater Adelaide. However, most students reside in inner east or north-west Adelaide suburbs.

The student travel surveys that were conducted in June 2024 showed the following:

- The AM and PM periods are not significantly different between different travel modes indicating that students travel to and from school using the same transport modes.
- The primary travel mode is private vehicle, with 93 per cent of children being driven to and from school attending Reception to Year 3 and only five per cent by bus. This car mode share decreases to over 82 per cent in the older students in Years 4-6. The parents of the younger students mostly dropped off and picked up their children by private vehicle.
- Over 82 per cent of students in Years 4 to 6 were driven to school. 14 per cent of the students in Years 4 to 6 travelled by bus in the AM period and 13 per cent in the PM period.
- Less than two per cent of the students travelled by train or tram.
- The bicycle and walking mode share is less than two per cent which indicates a very low interest in travelling by active transport modes.

From the discussions with the school and the site observations, the following student travel safety issues were identified:

- Travel across Wakefield Street is limited to the signalised crossing at the Hutt Street
- Several near misses have been observed at the koala crossing in East Terrace with drivers not stopping.
- Heavy vehicles short-cut from Wakefield Street to Bartels Road using East Terrace.
- Vehicles are travelling at speeds on Wakefield Street not typically associated with school zones.
- The no-parking requirements on Wakefield Street and the eastern side of East Terrace between 3 pm and 4 pm was disobeyed by over 20 vehicles during the 30-minute period of pick-up time.
 - If the parking controls were followed by drivers in East Terrace, the parking supply would not be sufficient for overall pick up activities.
- A dedicated Kiss and Drop (15-minute zone) in Wakefield Street with parallel (not angle) parking.
- The bicycle lanes in Wakefield Street are a hazard for motorist's parking and reversing out.

Key Recommendations

Infrastructure Treatments

- Reinvestigate the inclusion of a signalised pedestrian crossing (PAC) east of Wakefield Street in East Terrace immediately south of the Glover (East) Playspace. It is not proposed in front of the school entrance to avoid the impact of the removal of car parking.
- Install a pedestrian refuge in Wakefield Street between Hutt Street and East Terrace.



Operational Efficiencies

- Change the parking controls on Wakefield Street at the main school entrance to allow for 15-minute Kiss and Drop activities during critical peak school periods.
- Change the parking controls in East Terrace (eastern side) to allow for 15-minute kiss and drop activities during critical peak school periods.
- Consider changing the posted speed in Wakefield Street between Frome Street and East Terrace from 50 km/h to a slower speed limit, such as 40 km/h. This would extend to Frome Street to provide a continuous environment across the Senior and Junior campuses.
- Enforce stricter rules on providing heavy vehicles permit based activity along East Terrace. This could be implemented during peak periods to avoid conflicts with pedestrians.

Safety Promotions

- Install additional signage to promote the school area for traffic approaching the school zones at East Terrace and Wakefield Street.
- Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.

The following tasks were completed for this school travel safety review:

- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a student travel mode survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

The Christian Brothers College (CBC) Junior Campus is located in Wakefield Street west of East Terrace and south of Nil Street. The school site and the existing surrounding environs are shown in Figure 1.1.

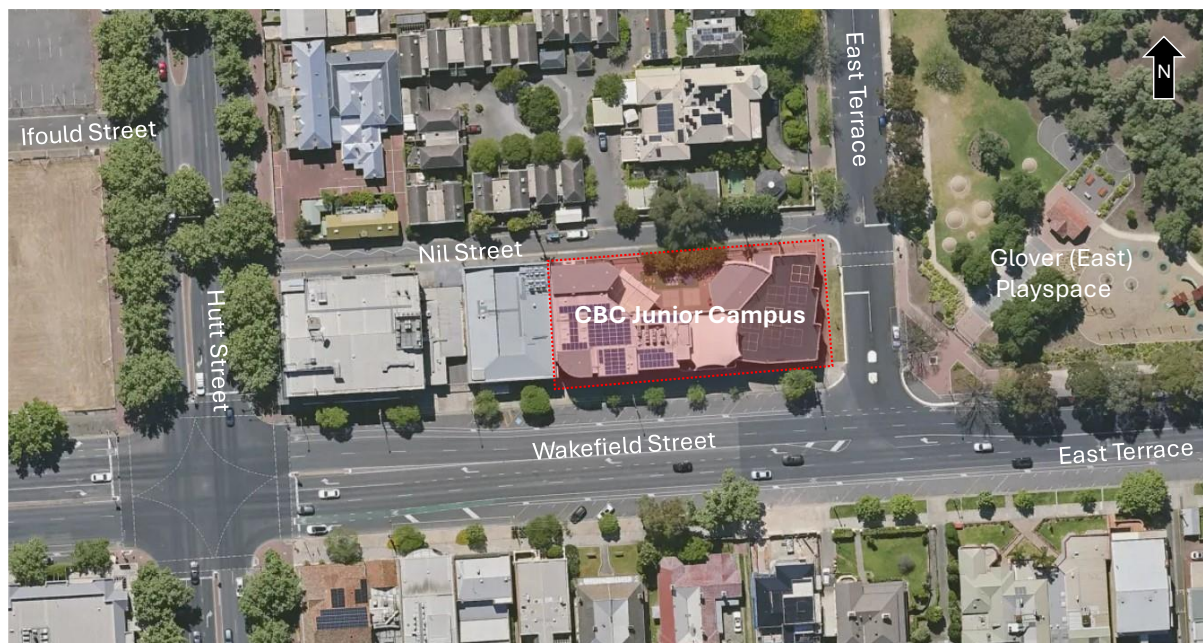


Figure 1.1 Christian Brothers College Junior Campus Location

The CBD Junior Campus has the main student entrance on Wakefield Street and a rear access in Nil Street as shown in Figure 1.2.



Main student entrance on Wakefield Street west of East Terrace



Rear entrance to the school in Nil Street west of East Terrace

Figure 1.2 Entrances to the CBC Junior Campus



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

The Christian Brothers College (CBC) Junior Campus comprises years R to 6. The school building opens at 8:25 am on school days. The bell times are:

- AM Bell time of 8:48 am for the start of classes at 9:05 am
- PM Bell time of 3:15 pm for all students

The school office hours are:

- Monday to Friday from 8.20 am to 4.00 pm
- Out of School Care school is open at 7:15 am and ends at 6:00 pm

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 is for 266 students with a distribution by year as follows:

- 19 students in Year R
- 33 students in Year 1
- 29 students in Year 2
- 37 students in Year 3
- 40 students in Year 4
- 51 students in Year 5
- 57 students in Year 6

By year group, 118 students are in Reception to Year 3 and 148 students are in Years 4 to 6.

The current enrolment is 280 students with a maximum capacity for 310 students. The annual enrolment ranges from 280 to 310 students.

The CBC Junior Campus does not have an enrolment boundary. Students can live anywhere in Greater Adelaide. The number of students by sub areas of suburbs in Adelaide is shown in Figure 2.1.

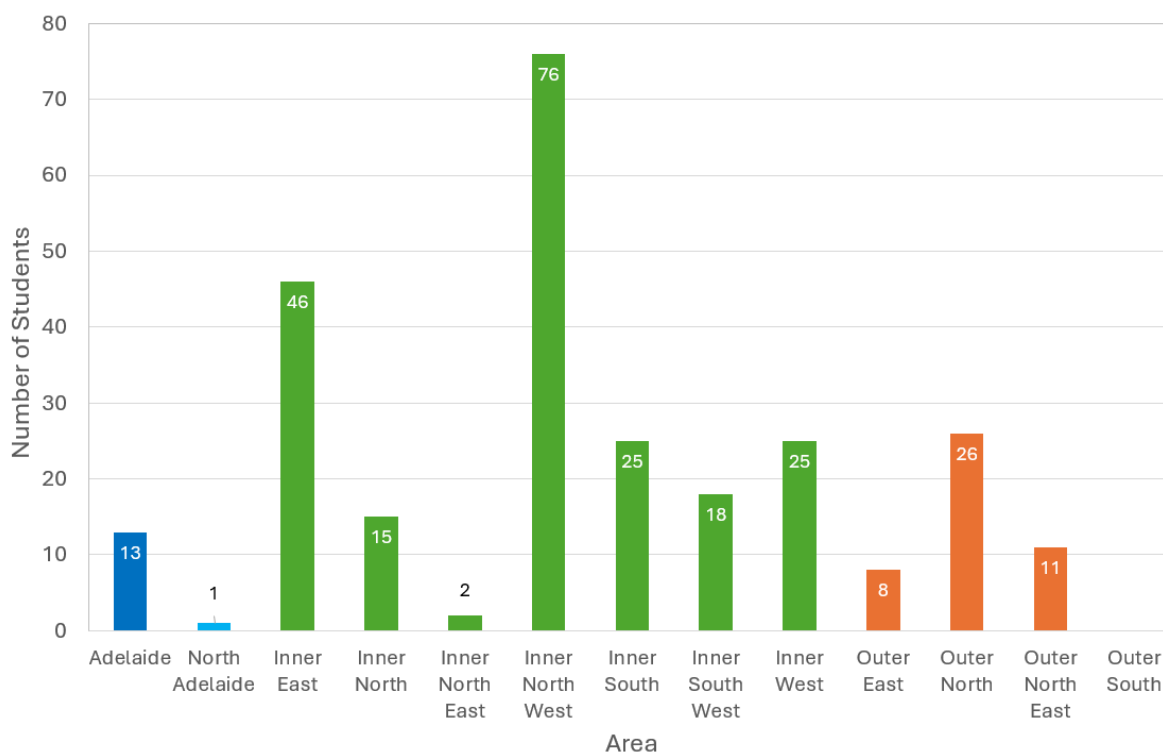


Figure 2.1 CBC Junior Campus Student Residence Location Analysis

The student residence data was used to determine the distribution of the total student population in sub-areas of suburbs in metropolitan Adelaide with the results shown in Figure 2.2. 78 per cent of the students live in the inner suburbs and 17 per cent live in the outer metropolitan suburbs. About five per cent of the students live in the City of Adelaide.

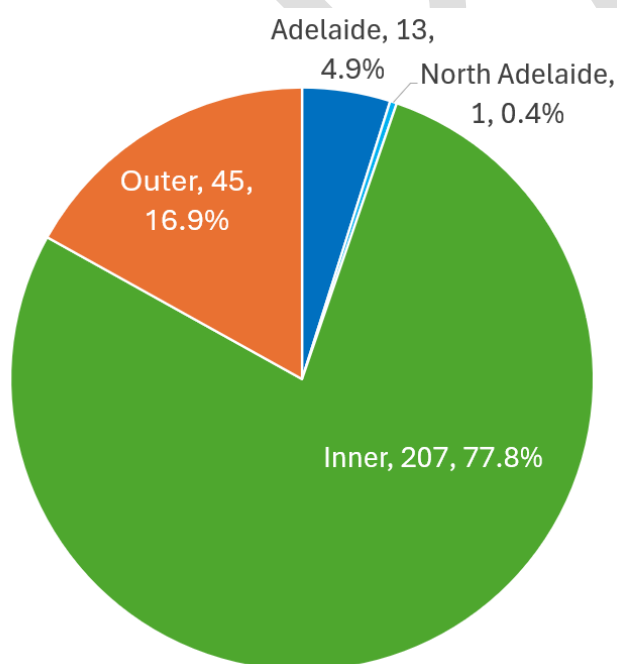


Figure 2.2 CBC Junior Campus Student Residence Area Analysis



2.3 Student Travel Demand

The existing school travel activity to and from the the CBC Junior Campus was reviewed through site observations and a student travel mode survey on typical school days. The student travel mode survey form is included in **Appendix A**.

The student travel mode survey was conducted during the first morning class during the week of Monday June 3rd to Friday June 7th. The findings from the surveys were used to confirm the existing transport mode shares for:

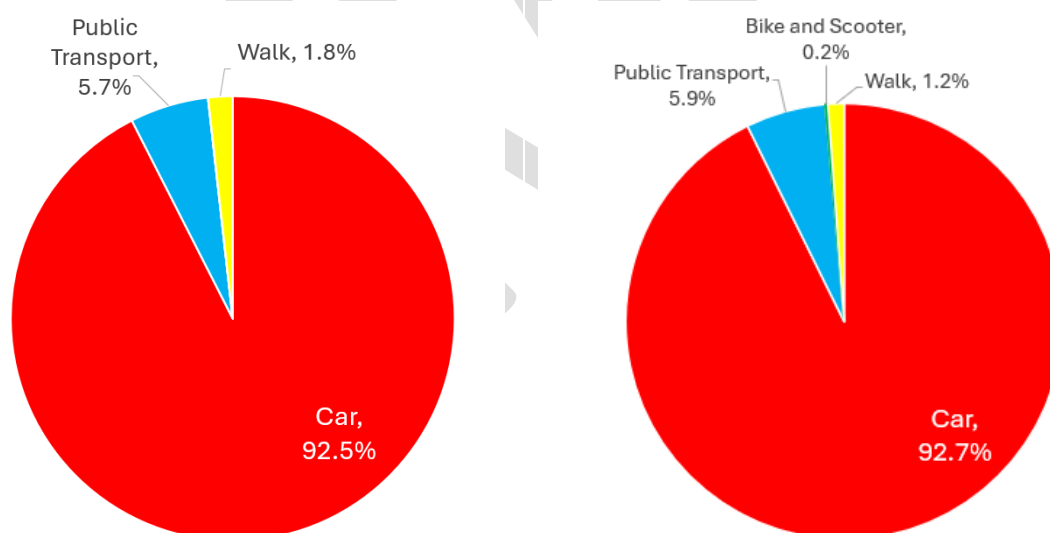
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus, Train or Tram
- Bicycle or e-bike
- Scooter

A total of 1316 student entries were conducted during the morning session of the school week.

The student travel mode shares to school in the AM period and from school in the PM period are shown for the students in Reception to Year 3 and Years 4 to 6 in Figure 2.3 and Figure 2.4 respectively.

The AM and PM periods are not significantly between different travel modes indicating that students travel to and from school using the same transport modes. The parents of the younger students mostly dropped off and picked up their children by private vehicle.

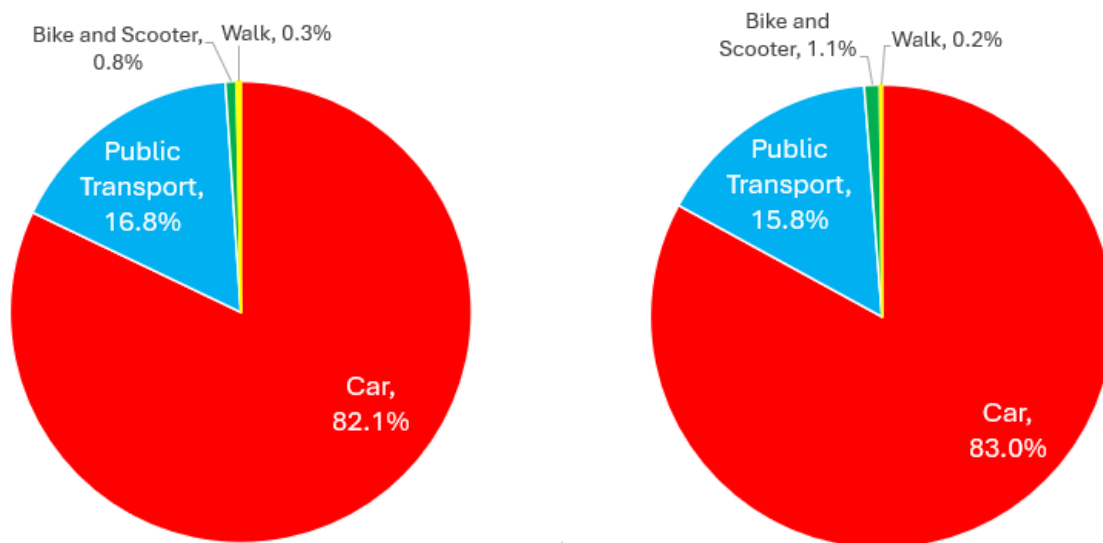
For the students in Reception to Year 3, the primary travel mode is by private vehicle with 93 per cent of children being driven to and from school and only five per cent by bus. This car mode share decreases to over 82 per cent in the older students in Years 4-6.



AM Period Arrival Transport Mode Share

PM Period Departure Transport Mode Share

Figure 2.3 CBC Junior Campus R to Year 3 Students Transport Mode Shares in June 2024



AM Period Arrival Transport Mode Share

PM Period Departure Transport Mode Share

Figure 2.4 CBC Junior Campus Years 4-6 Students Transport Mode Shares in June 2024

A breakdown of the student mode shares by year group for the AM arrivals and PM departures from the survey conducted in June 2024 is provided in Table 2.1. Key insights from the survey results are:

- The students in Reception to Year 3 were mostly driven to school at 93 per cent with about five per cent travelling by bus.
- Over 82 per cent of students in Years 4 to 6 were driven to school. 14 per cent of the students in Years 4 to 6 travelled by bus in the AM period and 13 per cent in the PM period.
- Less than two per cent of the students travelled by train or tram.
- Cycling to school for the boys was very low for all year groups.

Table 2.1 Student Transport Mode Shares by Year Group in June 2024

Transport Mode	AM Arrivals R to 3	AM Arrivals 4 to 6	AM Arrivals Total	PM Departures R to 3	PM Departures 4 to 6	PM Departures Total
Car	92.5%	82.1%	87.3%	92.7%	83.0%	87.8%
Train	0.8%	2.1%	1.5%	1.6%	2.5%	2.0%
Bus	4.7%	14.1%	9.4%	4.3%	12.7%	8.5%
Tram	0.2%	0.6%	0.4%	0.0%	0.6%	0.3%
Bike and Scooter	0.0%	0.8%	0.4%	0.2%	1.1%	0.6%
Walk	1.8%	0.3%	1.0%	1.2%	0.2%	0.7%



2.4 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.4.1 Road Network

The streets in the local road network at the CBC Junior Campus are provided in Table 2.2. The front entrance and rear entrance to the school are provided on Wakefield Street and Nil Street respectively.

Table 2.2 Local Streets at the CBC Junior Campus

Road	Classification	Relevance to School
Wakefield Street	District	Front entrance, informal Kiss and Drop area
East Terrace	Local	50 m from school, informal Kiss and Drop area
Nil Street	Local	Rear entrance, Kiss and Drop area
Hutt Street	Regional	100 m from school

The attributes of the local road network at the CBC Junior Campus are summarised in Table 2.3. In areas where no data was provided, the field was labelled as not applicable (n/a).

Table 2.3 Local Road Network Attributes at the CBC Junior Campus

Road	Number of Lanes	Daily Traffic Volumes	Posted Speed (km/h)	Average Speed	85 th Percentile Speed
Wakefield Street	4	15,200	50	n/a	n/a
East Terrace	2	21,000	50	n/a	n/a
Nil Street	2	n/a	50	n/a	n/a
Hutt Street	4	9,887	50	38.1	47.5

The surrounding road network does include a 25km/h school zone during AM and PM peak times on East Terrace and Nil Street. An emu crossing is provided at East Terrace, which is heavily utilises for kiss and drop activities and also for excursions across in the parklands. A signalised pedestrian crossing is provided at the Wakefield Street/Hutt Street intersection.

Table 2.4 Local Road Network Attributes at the CBC Junior Campus

Road	25 km/h School Zone in Street	Type of Crossing in Street
Wakefield Street	No	Signalised at Hutt Street/Wakefield Street
East Terrace	Yes	Koala crossing
Nil Street	Yes	N/A
Hutt Street	No	Signalised at Wakefield Street

The CBC Junior Campus has a koala pedestrian crossing in East Terrace north of Wakefield Street that is used for students to safely cross to the Glover (East) Playground and to parents with Kiss and Drop activity in East Terrace. The koala crossing and 25 km/h school zone is shown in Figure 2.5.



Koala pedestrian crossing in East Terrace looking towards Wakefield Street from Nil Street



Koala crossing and the 25 km/h school zone in East Terrace looking north

Figure 2.5 Koala Pedestrian Crossing and 25 km/h School Zone in East Terrace

2.4.2 Crash Analysis

The latest crash data from 2018 to 2022 was sourced from DataSA. Over the five-year period, the crashes that occurred close to the college are:

- Hutt Street / Wakefield Street intersection: 2 minor injury crashes
- Wakefield Street: 2 property damage crashes and 2 minor injury crashes

The location of the crash statistics in the vicinity of the school are shown in Figure 2.6.

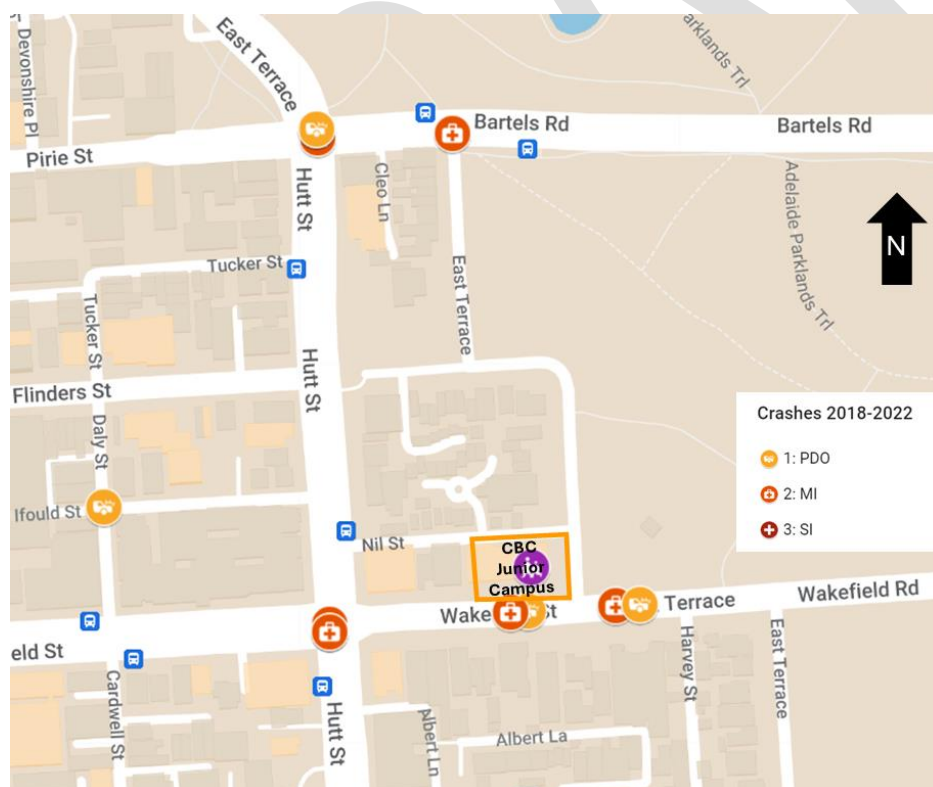


Figure 2.6 Crashes from 2018 to 2022 near the CBC Junior Campus



2.4.3 Parking and Kiss and Drop Areas

On-street parking is available in all streets surrounding the school on. The primary parking arrangements are summarised in Table 2.5. The on-street car parking controls along the streets in the vicinity of the school are shown in Figure 2.7.

Table 2.5 Parking Types at Adelaide High School

Road	Type of Parking
Wakefield Street	Angled Timed with 15-minute, 1-hour and 2-hour parking restrictions
East Terrace	Parallel Timed with 2-hour parking limits
Nil Street	Parallel Timed with 15-minute parking Monday to Friday from 8 am to 6 pm
Hutt Street	Parallel Timed with 2-hour paid parking and 3-hour disabled parking



Figure 2.7 On-street Parking and Kiss and Drop Areas for the CBC Junior Campus

The school facilitates informal Kiss and Drop activity on East Terrace and Nil Street in:

- East Terrace
 - No parking between 8 am-9 am and 3 pm-4 pm with 12 spaces
 - 2-hour parking between 8 am – 6 pm with 14 spaces
- Nil Street
 - 15-minute parking between 8 am-6 pm with 3 spaces
 - No parking between 8 am-9 am and 3 pm-4 pm with 4 spaces



Kiss and Drop activity occurs at the front entrance on Wakefield Street, however this is an informal area for short-term parking and vehicle movements with the angle parking arrangement. The total capacity for vehicles in this area is 20 car parks.

CBC Junior School has short term parking available in Wakefield Street and East Terrace that is shown in Figure 2.8. Short term parking is also on the northside of Nil Street on the northern side of the college.



2-hour angled parking spaces in Wakefield Street

2-hour parallel parking spaces in East Terrace

Figure 2.8 Timed Parking Spaces at the CBC Junior Campus

The CBC Junior Campus has prepared a car parking information with the map shown in Figure 2.9. The full brochure that is on the college website is included in **Appendix B**.



Figure 2.9 CBC Junior Campus Parking Brochure Map



2.4.4 Public Transport

Adelaide CBD is the focus of the bus, tram and train network with the walkable access from the CBC Junior Campus at bus stops in Wakefield Street and Hutt Street.

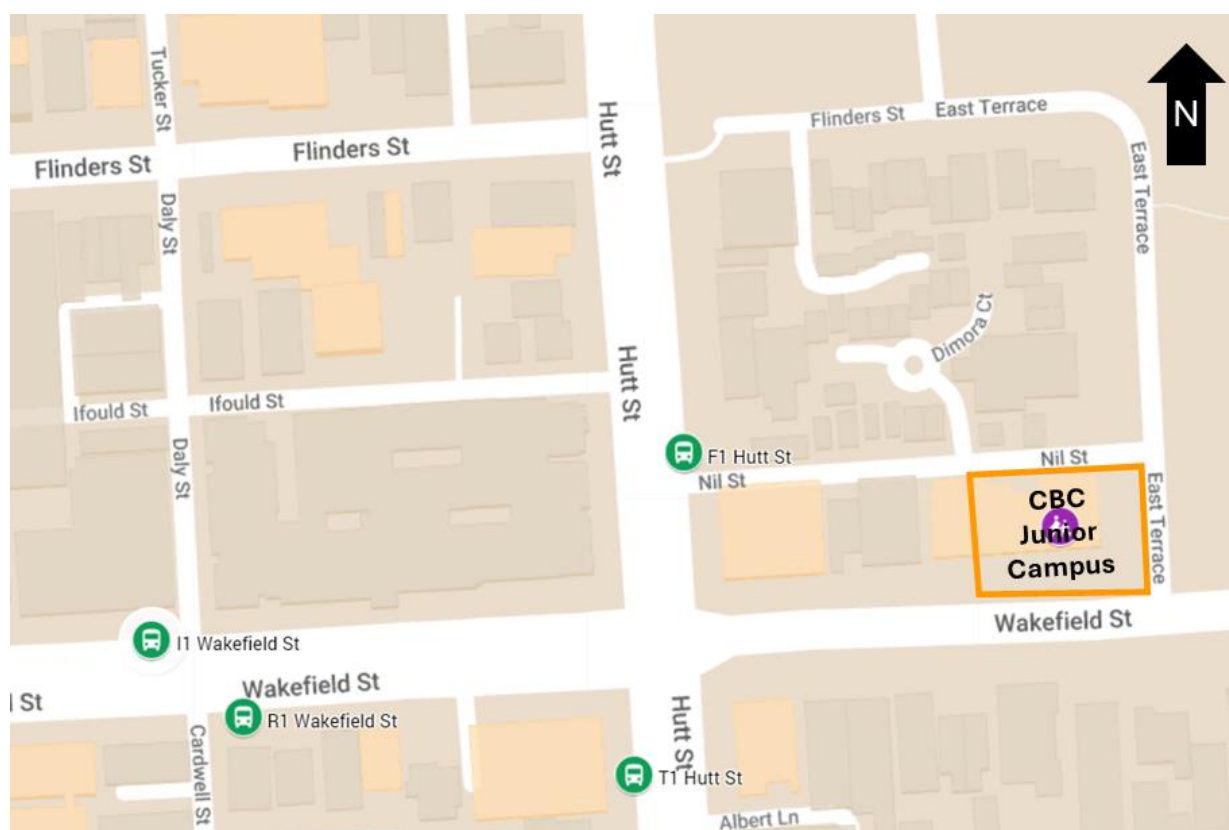


Figure 2.10 Public Transport Services to the CBC Junior Campus

The Adelaide Metro bus services in Wakefield Street and Hutt Street are considered sufficient for the demand based on the site observations. Less than 30 students are using public transport on a typical school day.



2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.11. Wakefield Street has an on-road bicycle lane on both sides of the road. Sealed shared paths exist throughout the Adelaide Park Lands. The Frome Street Bikeway is about 500 m west of the school.

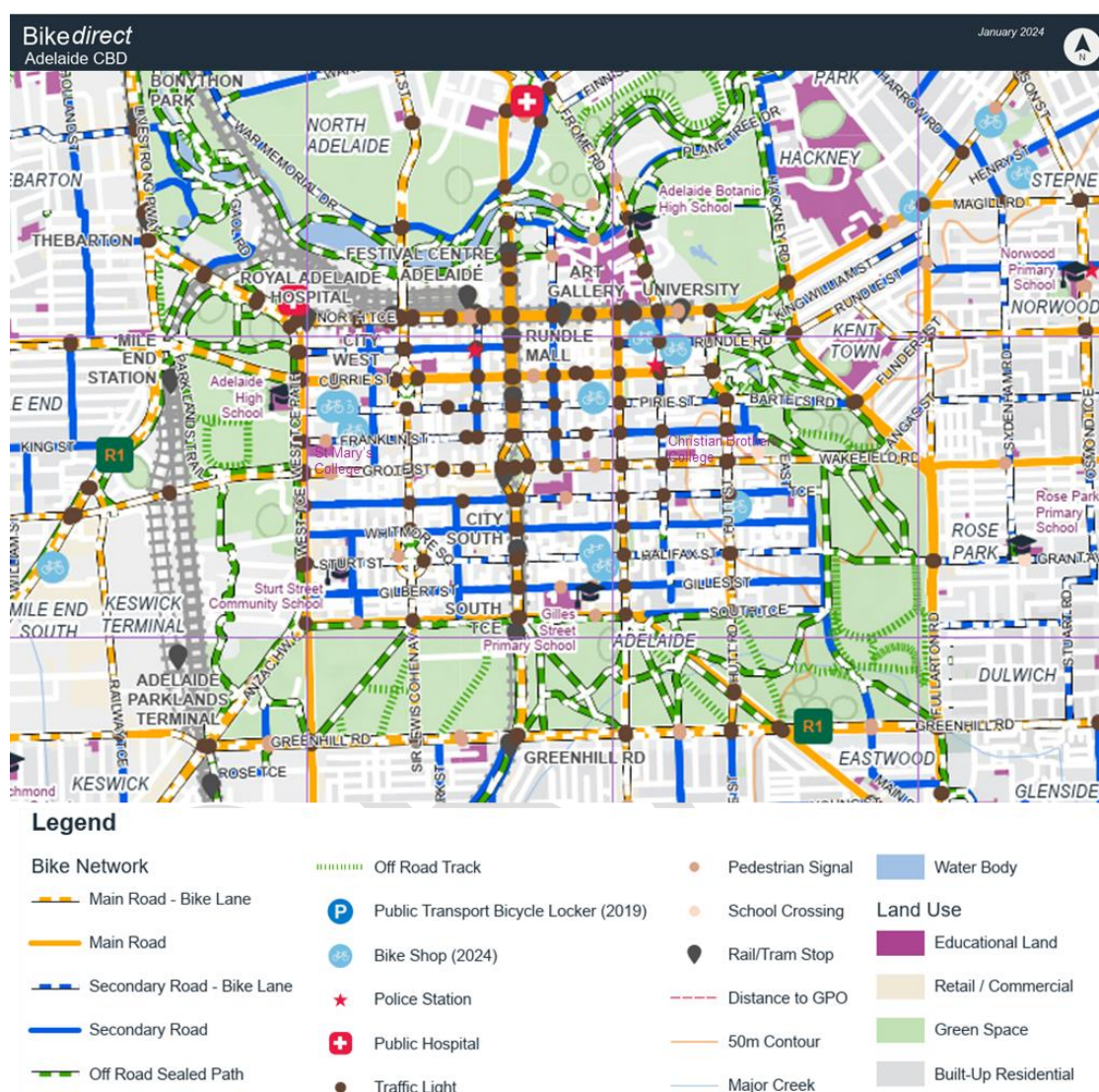


Figure 2.11 Cycling Network to the CBC Junior Campus

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff and visitors who walk for their entire trip or as an access mode to the bus stops in Wakefield Street and Hutt Street. The footpath network along Wakefield Street and East Terrace is used by students in both the AM and PM school periods travelling between the Kiss and Drop areas.

The school has good pedestrian access from all directions from Adelaide CBD. The signalised intersection at Hutt Street and Wakefield Street has pedestrian crossings. Sealed footpaths are along on both sides of Wakefield Street and Hutt Street.



The 1 km, 1.5 km and 2 km walkable access catchment areas to the CBC Junior Campus that were calculated using the footpath network are shown in Figure 2.12. Students who walk their entire trip to school are likely walking from the Adelaide CBD, coming from the nearby bus stops or other public transport modes.

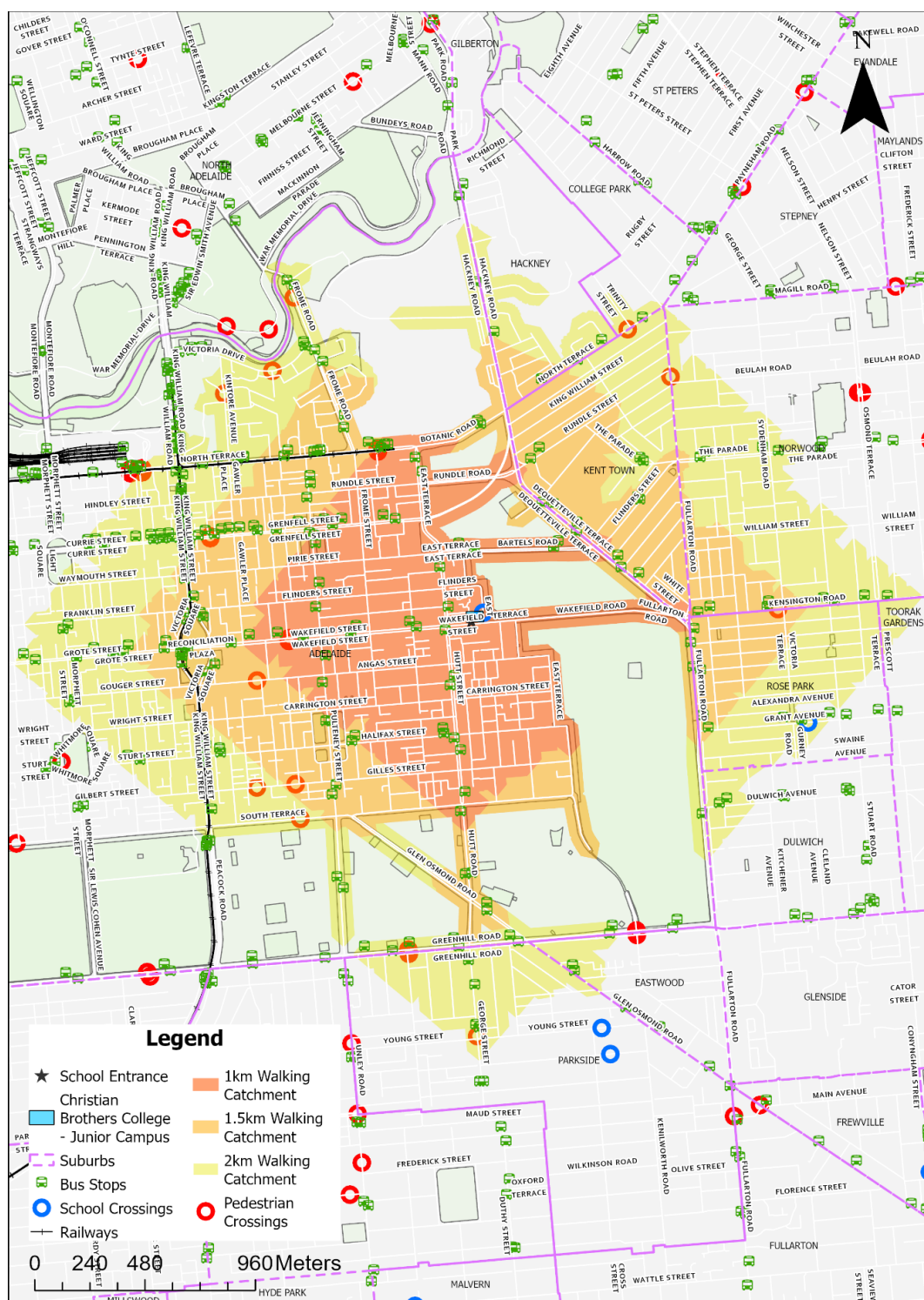


Figure 2.12 Walkable Access Catchment to the CBC Junior Campus



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with the school Principal on Monday 23 May 2024. The issues that affect student safety for travelling to school are provided as follows:

- The Adelaide Supercars race disrupts the school for 2 weeks every year with the entire school to co-locate into the Senior Campus at the end of November with the roads east of Hutt Street are closed for the race set-up and activities. The koala crossing in East Terrace is also removed for the race period. It would be good if the race could be held during the school holidays, but that is unlikely with the Tour Down Under in January and it does not suit the national supercars race calendar.
- It was proposed to install a pedestrian island in Wakefield Street, but Council did not implement it.
- Wakefield Street is 50 km/h west of East Terrace and 60 km/h east of East Terrace. A slower speed would be welcome.
- Parents parking in the angle car parks in Wakefield Street compete with other local businesses and a medical centre for parking.
- Parents are observed double parking in Wakefield Street, making U-turns and other dangerous manoeuvres.
- The safest time of the year is immediately after the Supercars race when Wakefield Street is closed east of East Terrace for the removal of the race event fencing. Wakefield Street is effectively a cul-de-sac, and parents drop off on the north side and U-turn to return to Hutt Street.
- Heavy vehicles short-cut from Wakefield Street to Bartels Road using East Terrace. Heavy vehicles and semis should be banned from using East Terrace.
- Several near misses have been observed at the koala crossing in East Terrace with drivers not stopping.
- Students cross East Terrace to the Park Lands for sports.
- The bicycle lanes in Wakefield Street are a hazard for motorist's parking and reversing out.
- A dedicated Kiss and Drop (2-minute zone) in Wakefield Street with parallel (not angle) parking was suggested.
- High visibility and recognition to motorists that Wakefield Street has a junior school on it.
- Advocate to the State Government for a 40 km/h special school zone. This was in the news on Sunday 2 June 2024.
- No further school building expansion is planned with the school on a constrained site.
- The school has access to use the Glover Playground east of East Terrace and the ovals in the Park Lands is used by the school for outdoor activities and sporting events.

3.2 Site Observations

The existing staff and student transport mode activity to and from the the CBC Junior Campus were observed during the AM peak arrival period and the PM peak departure period on Wednesday 12 June 2024.

3.2.1 AM Arrival Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during AM arrival period from 8:00 am to 9:00 am. The AM period arrival profile was relatively distributed over the hour before the school start time, with the peak activity of arrivals between 8:30 am and 8:40 am. The key findings from the observations are shown in Figure 3.1.

Other findings from the AM observations are:

- Most of the drop off activity for students occurred on from the Wakefield Street with some vehicle movement also occurring in East Terrace
- A low level of drop off activity was observed in Plane Tree Drive with less than 20 vehicles.
- The koala crossing on East Terrace was used for parents accompanying students across either side of East Terrace to the school entrance
- Some instances of double parking was observed in Wakefield Street in front of the school entrance.



Parking in Wakefield Street



Parking in East Terrace during the AM period

Figure 3.1 AM Peak Conditions at the CBC Junior Campus

3.2.2 PM Departure Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during PM departure period from 2:45pm to 3:30 pm. The PM period departure profile was distributed over the 20 minutes after the school bell, with the peak activity of departures from 3:00 pm to 3:20 pm. The key findings from the observations are shown in Figure 3.2.



PM period parking in East Terrace with parents waiting for students to finish school



Parking in Nil Street with parents waiting for their children

Figure 3.2 PM Peak Conditions at the CBC Junior Campus



Other findings from the PM observations are:

- The Koala Crossing was utilised for over 30 students returning from out of school activities in the eastern parklands, accompanied by teachers.
- The Koala crossing flashing lights turned on at the school bell time of 3:15 pm
- A significant number of students used the Koala crossing on East Terrace after the end of the school day. A minor proportion of these movements were from parents picking up their children on East Terrace and the remaining majority were heading to out-of-school events with teachers.
- The no-parking requirements on the eastern side of East Terrace (between 3 pm and 4 pm) was disobeyed by over 20 vehicles during the 30 minute period of pick-up time.
 - If the parking controls were followed by drivers on East Terrace, the parking supply would not be sufficient for overall pick up activities.
- Pick-up activity occurred on Nil Street within parking control requirements
- Issues were noted with pick up activity on Wakefield Street due to the angled parking arrangement in front of the school.

3.3 Summary of the Issues and Opportunities

Issues for students accessing the Junior School are mostly for the City of Adelaide to address and are:

- Travel across Wakefield Street is limited to the signalised crossing at the Hutt Street
- Several near misses have been observed at the koala crossing in East Terrace with drivers not stopping.
- Heavy vehicles short-cut from Wakefield Street to Bartels Road using East Terrace.
- Vehicles are travelling at speeds on Wakefield Street not typically associated with school zones.
- The no-parking requirements on Wakefield Street and the eastern side of East Terrace between 3 pm and 4 pm was disobeyed by over 20 vehicles during the 30 minute period of pick-up time.
 - If the parking controls were followed by drivers on East Terrace, the parking supply would not be sufficient for overall pick up activities.
- A dedicated Kiss and Drop (15-minute zone) in Wakefield Street with parallel (not angle) parking
- The bicycle lanes in Wakefield Street are a hazard for motorist's parking and reversing out.



4 Travel Safety Options and Assessment

4.1 Student Travel Safety Options

Options to improve the travel safety for students at the school were developed under three categories, namely:

- Infrastructure treatments requiring civil works with changes to signals or pedestrian crossings.
- Operational efficiencies, with changes to parking controls, Kiss and Drop areas or school zones.
- Safety promotions to increase awareness of the school with warning signage or information.

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options for the CBC Junior Campus

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Reinvestigate the inclusion of a pedestrian crossing on Wakefield Street. This would likely need to be implemented east of East Terrace.	Travel across Wakefield Street is limited to the signalised crossing at the Hutt Street.
Operational Efficiencies	Change the parking controls on Wakefield Street (school entrance) to allow for 15-minute kiss and drop activities during critical peak school periods.	The existing no-parking requirements on Wakefield Street (between 3-4pm) was disobeyed during the school pick up time.
	Change the parking controls in East Terrace (eastern side) to allow for 15-minute kiss and drop activities during critical peak school periods.	The existing no-parking requirements on the eastern side of East Terrace between 3 pm and 4pm was disobeyed by over 20 vehicles during the 30-minute period of pick-up time.
	Consider changing the posted speed in Wakefield Street between Frome Street and East Terrace from 50 km/h to a slower speed limit eg. 40 km/h. This would extend to Frome Street to provide a continuous environment across the Senior and Junior campuses.	Vehicles are travelling at speeds on Wakefield Street not typically associated with school zones.
	Enforce stricter rules on providing heavy vehicles permit based activity along East Terrace. This could be implemented during peak periods to avoid conflicts with pedestrians.	Heavy vehicles short-cut from Wakefield Street to Bartels Road using East Terrace.



Type of Option	Description	Issue Addressed
Safety Promotions	Install additional signage to promote the school area for traffic approaching the school zones at East Terrace and Wakefield Street.	Several near misses have been observed at the koala crossing in East Terrace with drivers not stopping.
	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	Students and parents may not be aware of their travel choices for bicycle routes, facilities at the school or public transport services.



4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives are shown on Figure 4.1. They include:

- Reinvestigate the inclusion of a signalised pedestrian crossing east of Wakefield Street in East Terrace immediately south of the Glover (East) Playspace. It is not proposed in front of the school entrance to avoid the impact of the removal of car parking.
- Install a pedestrian refuge in Wakefield Street between Hutt Street and East Terrace.
- Change the parking controls on Wakefield Street (school entrance) and East Terrace (east side) to allow for 15-minute Kiss and Drop activities during critical peak school periods.
- Investigate options for safer pedestrian movements by parents and students in Wakefield Street opposite the student entrance
- Reduce the speed limit on Wakefield Street from 50 km/h to 40 km/h between Frome Street and East Terrace.
- Enforce stricter rules on providing heavy vehicles permit based activity along East Terrace. This could be implemented during peak periods to avoid conflicts with pedestrians.
- Install additional signage to promote the school area for traffic approaching the school zones East Terrace and Wakefield Street.



Legend



Change carparking requirements to include 15-minute kiss and drop



Rearrangement of parking alignment



New pedestrian crossing opportunities



Posted speed reduction



Existing Koala Crossing



Install new School Zone warning sign at street entry point

Figure 4.1 Recommended Initiatives at the CBC Junior Campus



4.2.1 Options to Improve Pedestrian Crossing Safety in Wakefield Street

In order to improve the pedestrian crossing safety to the school entrance in Wakefield Street, several options are provided for further consideration. These options are provided with the advantages and disadvantages in Table 4.2. They require further site observations, data collection for pedestrian volumes crossings during the AM and PM school peak hours and a more detailed assessment.

Table 4.2 Options to Improve Pedestrian Crossing Safety in Wakefield Street

Option ID	Description	Advantages	Disadvantages
A	Install a PAC east of Wakefield Street in East Terrace immediately south of the Glover (East) Playspace. It is not proposed in front of the school entrance to avoid the impact of the removal of car parking.	Significantly improves safety for pedestrians crossing Wakefield Street with one crossing located where most pedestrians want to cross.	Costly up to \$500,000 to move and reinstate on street parking near the main entrance to the school. May not be installed due to pedestrian demand and proximity to other crossings.
B	Install a pedestrian refuge in Wakefield Street between Hutt Street and East Terrace.	Allows for safe storage for pedestrians on the already popular crossing point. This is less costly than the PAC option. Under \$50,000.	Pedestrians are still required to cross two traffic lanes on either side of Wakefield Street. Issues with sight distance from parked cars may also obscure pedestrians.



4.2.2 Signage to Increase the Awareness of the School for Motorists

An issue for school student travel safety is many motorists in East Terrace and Wakefield Street are not aware that the CBC Junior Campus is located here when approaching the front entrance. It is proposed to install larger and more prominent information signage (not regulatory signage) to increase the awareness of the school. The signs could be installed at either end of East Terrace and Wakefield Street.

Examples of signage at the entry points to a school precinct are shown in Figure 4.2. These information and advisory advance warning signs are not standard for the DIT guidelines. Council will need to discuss with DIT about these types of signs that are intended to increase awareness to traffic in Terrace and Wakefield Street.



Large entry signage that is visible to traffic on the street



Advanced warning sign for a school zone

Figure 4.2 Alternative School Precinct Warning Signage

4.2.3 Information to Promote Safer Student Travel to the School

The school provides limited information to promote safer student travel to school. Examples of the types of information brochures, known as school Travel Access Guides in NSW, are provided for a primary school in **Appendix C**. The Travel Access Guide is prepared with a consistent template for all government schools in NSW in collaboration with the school principals and a school travel coordinator.



4.3 Assessment and Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.3. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- P for Parking control with new signage or to pavement markings for the on-street parking or a school zone.
- I for information to the school community with signage or online promotional brochure.

Table 4.3 Indicative Cost Estimates for the Travel Safety Options at the CBC Junior Campus

Option ID	Description	Indicative Cost Estimate	Comments
T1	Investigate a PAC in East Terrace east of Wakefield Street south of the Glover (East) Playspace. This is proposed east of the school entrance in Wakefield Street to avoid the impact on the parking spaces in front of the school.	Up to \$500,000	Council to prepare evidence to support the warrant for a crossing and liaise with DIT for the approval to install. Council responsible for the design and installation if approved.
T2	Install a pedestrian refuge in Wakefield Street between Hutt Street and East Terrace.	Up to \$20,000	Council responsible for the design and installation if approved.
P1	Change the parking controls on Wakefield Street (school entrance) and East Terrace (east side) to allow for 15-minute kiss and drop activities during critical peak school periods.	Less than \$50,000	The parking controls in front of the school are under the control of Council to design and implement.
P2	Consider changing the posted speed in Wakefield Street between Frome Street and East Terrace from 50 km/h to a slower speed limit eg. 40 km/h. This would extend to East Terrace to provide a continuous environment across the Senior and Junior campuses.	Less than \$1,000	The speed limits are under the control of DIT.
I1	Install additional signage and promotion of the school area for traffic approaching the school zones at Wakefield Street and East Terrace	Less than \$1,000	The selection of information signage and installation in Wakefield Street and East Terrace is under the control of Council.
I2	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	No cost to Council	This would be prepared and promoted by the school administration.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE		
School Travel Survey for Students		
School:		Christian Brothers College Junior Campus
<i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i>		
Questions for the Teacher		
Date (day/month/year):		
Weather (Daytime temperature and sky conditions):		
Please enter the name or number of your class or year group.		
How many students are absent today in your class?		
Questions for the Students in Your Class / Year Group		
<i>Please ask the students with a 'hands-up' survey in the classroom.</i>		
AM Period Travel		
<i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the AM Period	Number of Students	
Car (as passenger with drop-off)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
PM Period Travel		
<i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the PM Period	Number of Students	
Car (as passenger with pick-up)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
If you travelled by car, would you prefer any of these modes? (multiple answers)		
Walking for the entire trip		
Bicycle, e-bike or scooter		
Public Transport (bus, tram or train)		



Appendix B – CBC Junior Campus Parking Information

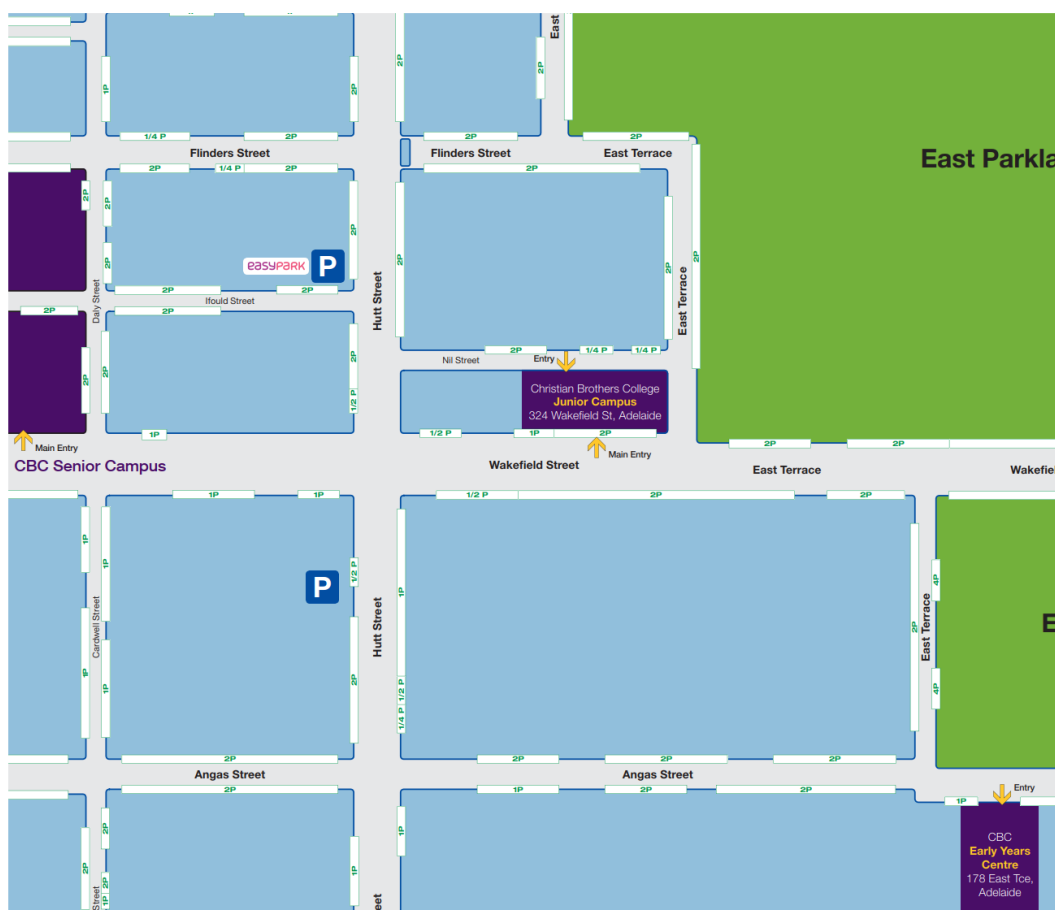


Junior Campus Parking Map

Welcome to Christian Brothers College

Most car parking around the college are 1–2 hour ticketed bays with extended times for weekends. Please note parking availability varies depending on certain times of the day with some car parks unavailable during peak hour periods.

There are also a number of local parking facilities nearby and a free Park Adelaide App is available from Adelaide City Council.





Appendix C – School Travel Access Guide in NSW

| NSW Department of Education – School Infrastructure



Meadowbank Public School Travel Access Guide

Effective: September 2023

Introduction

Our school community of parents/carers, staff and students live within a reasonable walk or cycle trip of the school. This Travel Access Guide provides suggested safe and accessible options for travelling to and from school.

Active ways to get to school



Walking to and from school

- Walking is a fun way to keep active and healthy.
- Stay alert and watch out for any potential hazards, including cars reversing out of driveways, bikes and other pedestrians.
- Remember to STOP, LOOK, LISTEN and THINK every time you cross the road.



Ride your bike

- 278 bike racks are available for everyone and 42 scooter racks for K-6 students.
- All bicycle riders are required by law to wear a correctly fitted Australian standards approved helmet and is highly recommended when riding a scooter.
- Children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.

Kiss and drop expectations

- For parents/carers who drive their child/ren to school, the kiss and drop zone is located along Rhodes Street starting from Hermitage Road.
- This space is a 'No Parking' zone, meaning that you may stop for up to a maximum of 2 minutes and move no more than 3 metres from the vehicle.

Message from our principal

- Meadowbank Public School supports sustainable and environmentally friendly transport practices.
- Students up to 8 years of age should hold the hand of an adult when walking or be accompanied by an adult when riding
- Students from 8 to 10 years of age should be actively supervised by an adult

School bell times

Start Times

8:45 am

End Times

2:45 pm

The outside school hour times for the primary school are: 7:00 am - 8:45 am and 2:45 pm - 6:00 pm.

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





NSW Department of Education – School Infrastructure

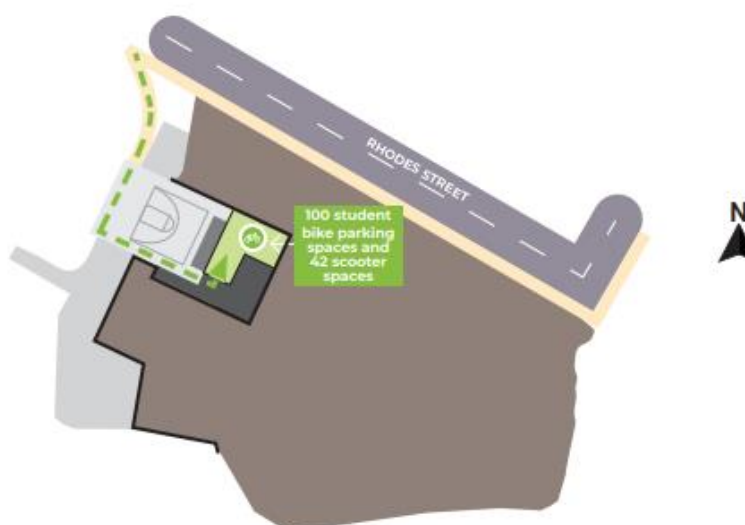


Please use the Trip Planner at transportnsw.info/ for additional information about cycling routes to the school.

End of trip facilities



Playground level:
For students attending
Meadowbank Public School





NSW Department of Education – School Infrastructure

Where do you ride?

Footpath/shared path/cycleway:

- Children under 16 can ride on a footpath.
- Adults supervising children under 16 can also ride on the footpath.
- Be careful of cars entering and exiting driveways.
- Watch out for pedestrians, other riders and animals.

Look out for pedestrians on shared paths.



Crossing the road:

- Be extra careful.
- Walk your bicycle when you cross at a pedestrian crossing.

Give a metre:

Give pedestrians 1 metre of space when riding past.



3 steps to follow when riding a bike:

Clip, check, chime.

Clip your helmet

1



You must always wear a helmet when riding your bike.

Check your brakes

2



Make sure your brakes are working.

Chime your bell

3



If you pass another rider or pedestrian, chime your bell.

Things to remember

- Always ask your parents permission to ride.
- Loose clothing and items can get caught in your wheels. Secure any loose items, like backpack straps.



- Shoes with a good tread on the soles will help you grip the pedals and protect your feet. Make sure your laces are tied.



Always remember to watch out for hazards



- 1 Wet leaves
- 2 Big puddles
- 3 Storm grates
- 4 Gravel or rocks
- 5 Little kids
- 6 Animals
- 7 Changes in the road/footpath/cycleway surfaces

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





Christian Brothers College – Senior Campus

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
12 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	Eli Alabaster	John Devney	John Devney	12 July 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Executive Summary

Overview

The Christian Brothers College Senior Campus is a private school located in Wakefield Street between Frome Street and Daly Street. The college has classes from Years 7 to 12 with an enrolment of 686 students in Term 2 2024 with 361 students in Years 7 to 9 and 325 students in Years 10 to 12.

Key Findings

The Christian Brothers College does not have an enrolment restriction area and students live in wide range of locations in Greater Adelaide. However, most students reside in inner east or north-west Adelaide suburbs.

The student travel surveys that were conducted in May 2024 showed the following:

- The car mode share is 55 per cent in the AM period and 45 per cent in the PM period so that most students are travelling by car in the AM period.
- The public transport mode share is 43 per cent in the AM period and 53 per cent in the PM period so that most students are travelling by public transport in the PM period.
- This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period.
- The bicycle and walking mode share is less than three per cent which indicates a very low interest in travelling by active transport modes.

From the discussions with the school and the site observations, the following student travel safety issues were identified:

- Rearrange the car spaces in Molesworth Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the student entrance
- Investigate options for safer pedestrian movements by parents and students in Wakefield Street opposite the student entrance
- Fill in the gap in the Wakefield Street central median to reduce U-turn manoeuvres.
- New infrastructure on Ifould Street to change the priority of the street to a pedestrian friendly arrangement.
- Reducing the speed limit on Wakefield Street from 50 km/h to 40 km/h between Frome Street and East Terrace.

Key Recommendations

Infrastructure Treatments

- Investigate options for safer pedestrian movements by parents and students in Wakefield Street opposite the student entrance such as a PAC or pedestrian refuge at the midblock location where the existing gap in the median is located at the main entrance for students to the college.
- Fill in the gap in the Wakefield Street central median to stop U-turn manoeuvres.
- Rearrange the car spaces in Wakefield Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the student entrance.
- New infrastructure on Ifould Street to change the priority of the street to a pedestrian friendly arrangement.



Operational Efficiencies

- Consider changing the posted speed in Wakefield Street between Frome Street and East Terrace from 50 km/h to a slower speed limit, such as 40 km/h. This would extend to East Terrace to provide a continuous road environment across the Senior and Junior campuses.

Safety Promotions

- Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in additional to the school newsletter.

DRAFT



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.

The following tasks were completed for this school travel safety review:

- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a student travel mode survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

The Christian Brothers College (CBC) Senior Campus is located in Wakefield Street east of Frome Street and west of Daly Street. The school has access from Wakefield Street and Ifould Street from Hutt Street and Frome Street. The school site and the existing surrounding environs are shown in Figure 1.1.



Figure 1.1 Christian Brothers College Senior Campus Location

The CBC Senior Campus has the main student entrance on Wakefield Street and rear access entry from Ifould Street as shown in Figure 1.2.



Main student entrance on Wakefield Street looking east towards Hutt Street



Rear entrance to the CBC Senior Campus in Ifould Street looking east from Frome Street

Figure 1.2 Entrances to the CBC Senior Campus



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

the CBC Senior Campus comprises years 7 to 12. The school building opens at 8:00 am on school days. The bell times are:

- AM Bell times 8:37 am for movement to class and 8:42 am to be in the first class with lessons starting at 9:00 am
- PM Bell time of 3:10 for all students

The school office hours are:

- Monday to Friday - 8.00 am to 4.00 pm

Outside of typical classes, other activities include:

- Sports activities continue until 5 pm and until 8 pm on Tuesdays and Wednesdays depending on the activity
- Language courses are held on Saturdays and Sundays from 8 am to 6 pm.

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 is for 686 students with Senior Campus capacity for 770 students. The distribution by year is as follows:

- 113 students in Year 7
- 115 students in Year 8
- 133 students in Year 9
- 114 students in Year 10
- 113 students in Year 11
- 98 students in Year 12

By year group, 361 students are in Years 7 to 9 and 325 students are in Years 10 to 12.



The Christian Brothers College does not have an enrolment restriction area and students can live anywhere in Greater Adelaide. The number of students by sub areas of suburbs are shown in Figure 2.1.

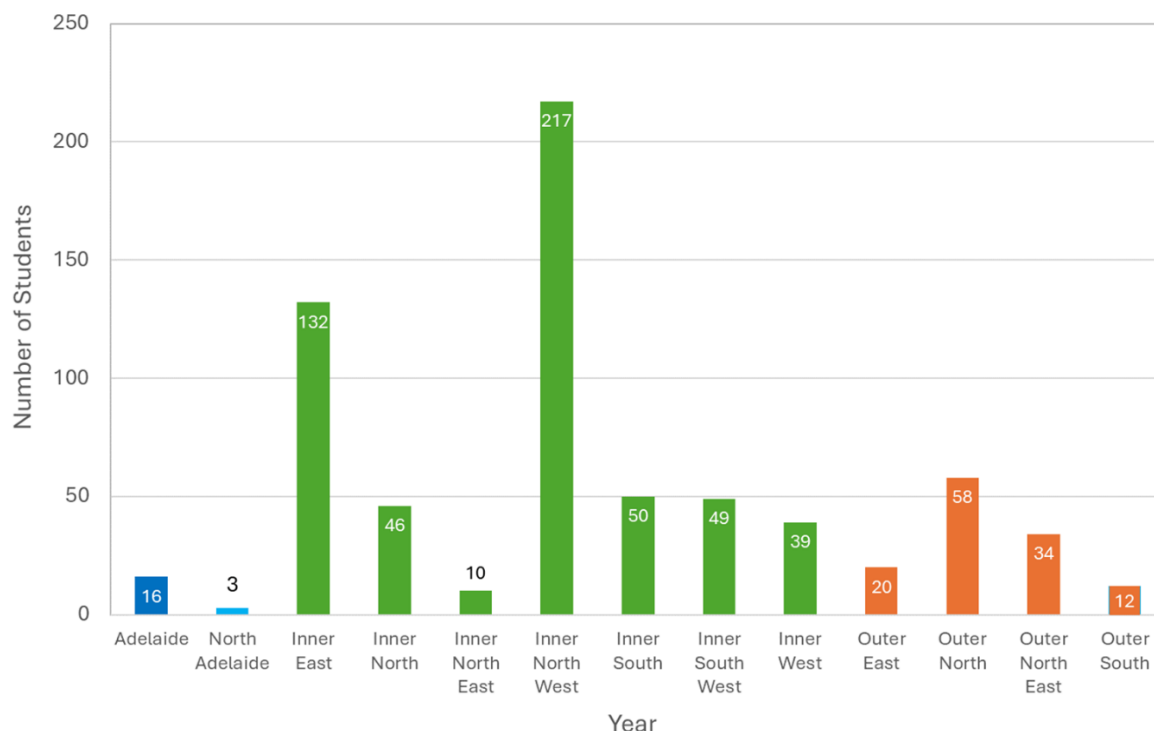


Figure 2.1 CBC Senior Campus Student Residence Location Analysis

The student residence data was used to determine the distribution of the total student population in sub-areas of suburbs in metropolitan Adelaide with the results shown in Figure 2.2. 79 per cent of the students live in the inner suburbs and 18 per cent in the outer metropolitan suburbs. Only three per cent of the students live in in the City of Adelaide.

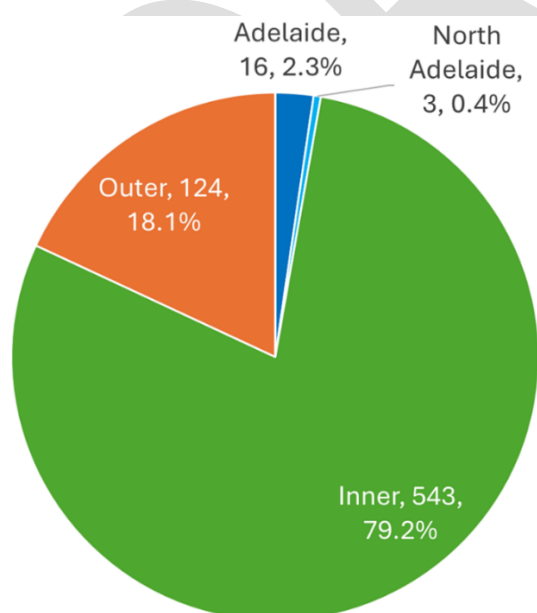


Figure 2.2 CBC Senior Campus Student Residence Area Analysis



2.3 Student Travel Demand

The existing school travel activity to and from the the CBC Senior Campus was reviewed through site observations and a student travel mode survey on a typical school day. The student travel mode survey form is included in **Appendix A**. The student travel mode survey was conducted during the first morning class during the week of Monday June 3rd to Friday June 7th. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus, Train or Tram
- Bicycle or e-bike
- Scooter

A total of 1,912 student entries were conducted during the morning session of the school week.

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.3 and Figure 2.4. The PM departure period for both the Years 7-9 and 10-12 has 10 per cent more students using public transport than in the AM period, and a proportional decrease in the use of private vehicles. This result is likely because parents drop of their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. The location of nearby public transport options allows for older students, who are more independent, to travel on these modes.

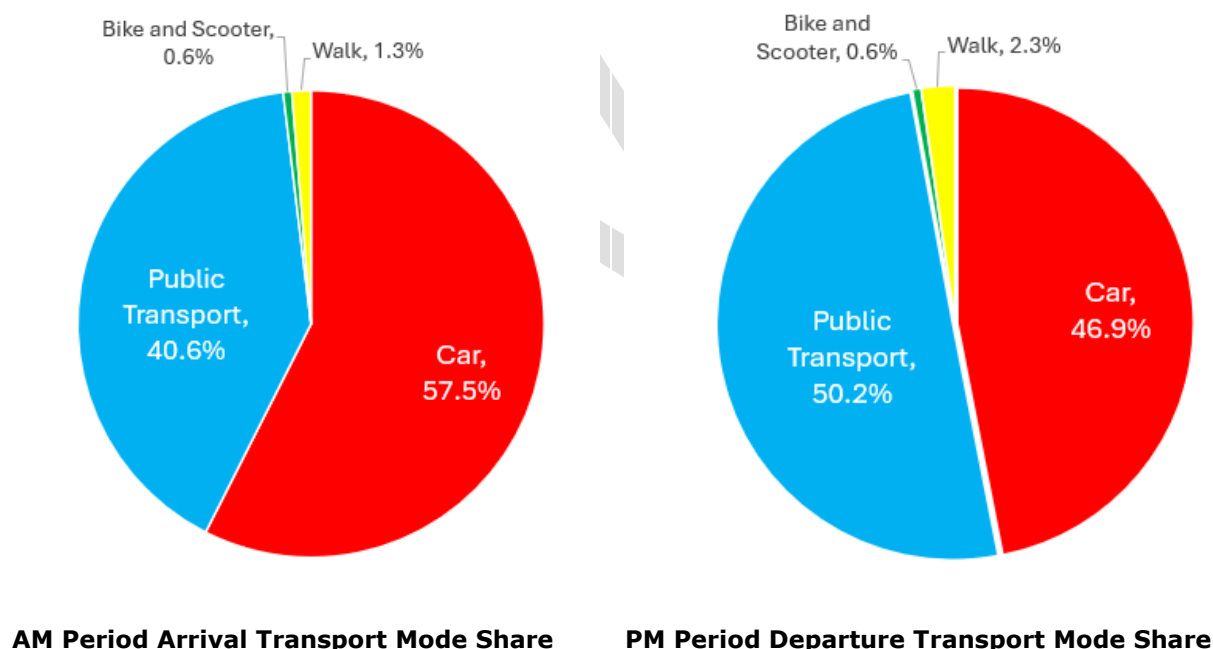


Figure 2.3 CBC Senior Campus Year 7-9 Students Transport Mode Shares in June 2024

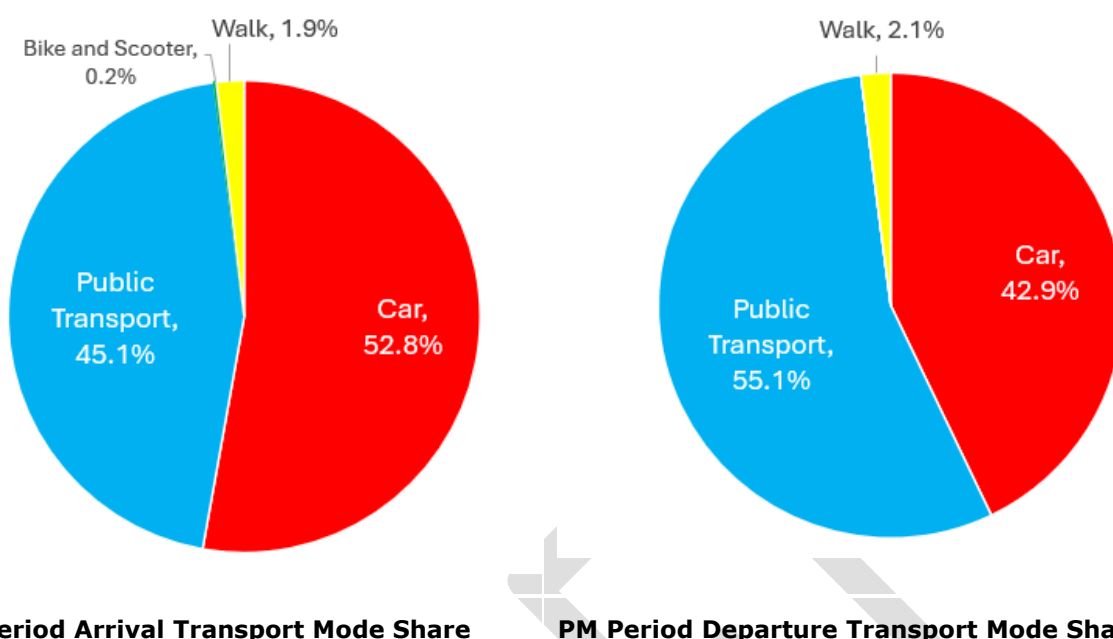


Figure 2.4 CBC Senior Campus Year 10-12 Students Transport Mode Shares in June 2024

A breakdown of the student mode shares by year group for the AM arrivals and PM departures from the survey conducted in June 2024 is provided in Table 2.1. Key insights from the survey results are:

- 10 per cent more students were driven to school in the AM period than in the PM period.
- Travel by bus was the most popular of the three public transport modes at 36 per cent in the AM period and 44 per cent in the PM period. Travel by train was about six per cent in the AM period and seven per cent in the PM period.
- Walking to school was about two per cent of the students in the AM and PM periods.
- Cycling to school for the boys was very low for all year groups.

Table 2.1 Student Transport Mode Shares for the AM Arrivals by Year Group in May 2024

Transport Mode	AM Arrivals 7 to 9	AM Arrivals 10 to 12	AM Arrivals Total	PM Departures 7 to 9	PM Departures 10 to 12	PM Departures Total
Car	57.5%	52.8%	55.1%	46.9%	42.9%	44.9%
Train	6.1%	5.1%	5.6%	7.0%	6.5%	6.8%
Bus	33.6%	39.5%	36.5%	40.3%	47.5%	43.9%
Tram	1.0%	0.5%	0.7%	2.9%	1.0%	2.0%
Bike and Scooter	0.6%	0.2%	0.4%	0.6%	0.0%	0.3%
Walk	1.3%	1.9%	1.6%	2.3%	2.1%	2.2%



2.4 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.4.1 Road Network

The streets in the local road network at the CBC Senior Campus are provided in Table 2.2. The front entrance and rear entrance to the school are provided on Wakefield Street and Ifould Street respectively.

Table 2.2 Local Streets at the CBC Senior Campus

Road	Classification	Relevance to School
Wakefield Street	District	Front entrance of school, informal kiss and drop area
Frome Street	District	Western boundary of school
Ifould Street	Local	Rear entrance, Kiss and Drop area
Daly Street	Local	50m east of school
Hutt Street	Regional	200m east of school entrance
Flinders Street	District	150m from rear entrance

The attributes of the local road network at Christian Brothers College Senior Campus are provided in Table 2.3. Where no data is available, the field was labelled as not applicable (n/a). Wakefield Street that is a major east-west traffic route through Adelaide CBD has over 13,7000 vehicles/day is a major safety risk for school Kiss and Drop activity.

Table 2.3 Local Road Network Attributes at the CBC Senior Campus

Road	Number of Lanes	Daily Traffic Volumes	Posted Speed (km/h)	Average Speed (km/h)	85 th Percentile Speed (km/h)
Wakefield Street	4	13,700	50	n/a	n/a
Frome Street	2	4,242	50	42.7	34.5
Ifould Street	2	n/a	50	n/a	n/a
Daly Street	2	n/a	50	n/a	n/a
Hutt Street	4	9,887	50	47.5	38.1
Flinders Street	2	9,900	50	n/a	n/a

25 km/h school zone exist during AM and PM peak times on Ifould Street and Daly Street. A signalised pedestrian crossing is provided at the Wakefield Street / Frome Street intersection and Hutt Street / Wakefield Street intersection. A pedestrian refuge is also provided on Wakefield Street, next the Cardwell Street. This enables student movement to the bus stop R! Wakefield Street – south side.



Table 2.4 Local Road Network Attributes at the CBC Senior Campus

Road	25 km/h School Zone in Street	Type of Crossing in Street
Wakefield Street	No	Signalised Crossing at Frome Street, Pedestrian Refuge
Frome Street	No	Signalised Crossing at Wakefield Street
Ifould Street	Yes	N/A
Daly Street	Yes	N/A
Hutt Street	No	Signalised Crossing at Wakefield Street
Flinders Street	No	N/A

2.4.2 Crash Analysis

A review of the latest crash data from 2018 to 2022 were sourced from DataSA with the crash locations shown in Figure 2.5. Over the five-year period, the following crashes occurred close to the school:

- Hutt Street/Wakefield Street intersection: 2 minor injury crashes
- Daly Street/Ifould Street intersection: 1 property damage crash.

The crash statistics in the vicinity of the senior school are shown in Figure 2.5.

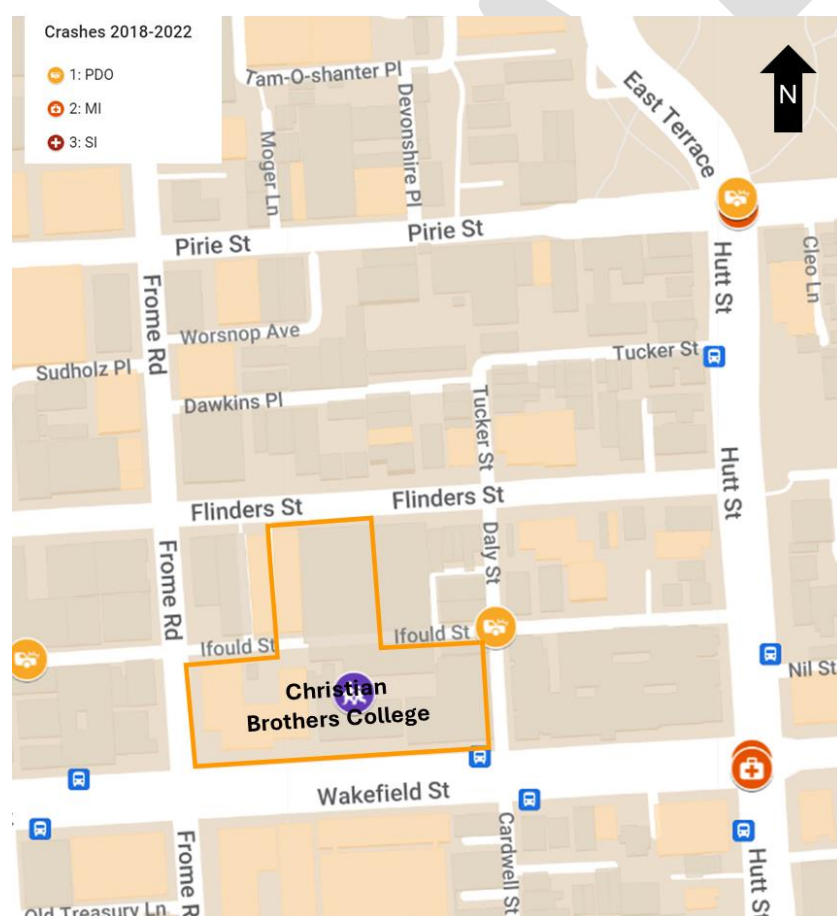


Figure 2.5 Crashes from 2018 to 2022 near CBC - Senior Campus



2.4.3 Parking and Kiss and Drop Areas

On-street parking is available in all streets surrounding the college that is mostly 1–2 hour ticketed bays with extended times on weekends. The CBC administration provides parking information for the Senior Campus that is available on the college website that shows the local parking facilities. The map from the CBD Senior Campus parking brochure is shown in Figure 2.6 with the full brochure is included in **Appendix B**. The City of Adelaide provides information about Park Adelaide with a mobile phone app for parents to use to find the available parking spaces.



Figure 2.6 CBC Senior Campus Parking Brochure Map

The types of parking arrangements in the streets surrounding the college are summarised in Table 2.5.

Table 2.5 Parking Types at Adelaide High School

Road	Type of Parking
Wakefield Street	Angled Timed for 1 hour, 2 hours and 3 hours on the northside; 2 hours on southside
Frome Street	Parallel Timed 2 hours
Ifould Street	Parallel Timed 2 hours
Daly Street	Parallel Timed 2 hours on both sides
Hutt Street	Angled Timed for 30 minutes and 2 hours
Flinders Street	Parallel and Angled Timed for 15 minutes and 2 hours

The car parking and loading zone restrictions on the streets surrounding the CBC Senior Campus are provided in Figure 2.7. These spaces are used for the informal Kiss and Drop activity.

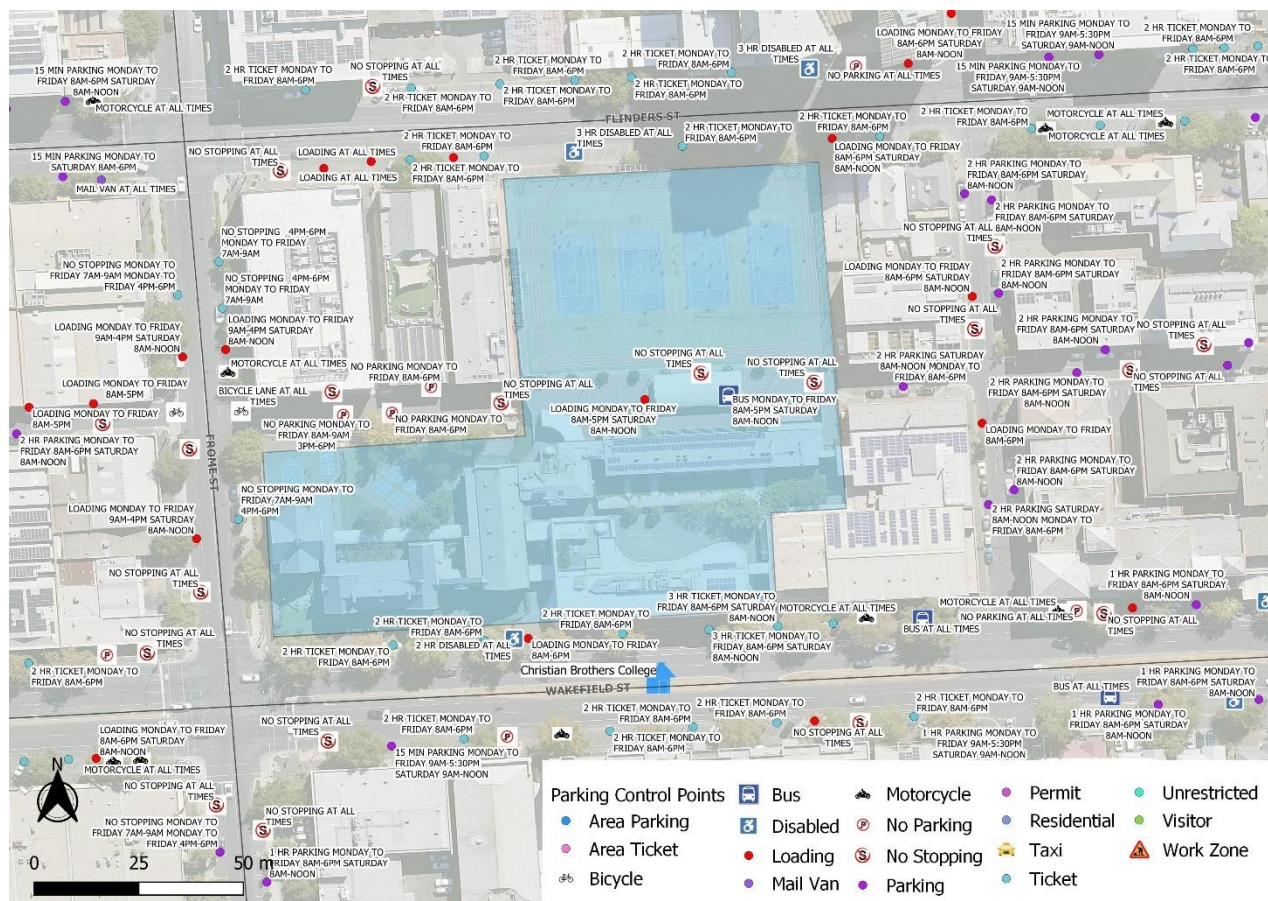
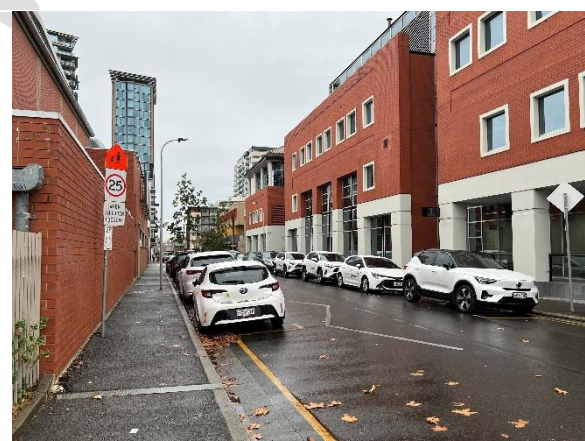


Figure 2.7 On-street Parking and Kiss and Drop Areas at the CBC Senior Campus

The types of on-street timed parking in Wakefield Street and Daly Street are shown in Figure 2.8.



Angle timed parking in Wakefield Street in front of the CBC Senior Campus main entrance



Parallel Timed parking in Daly Street in the 25 km/h school zone

Figure 2.8 Types of Timed Parking Spaces near the CBC Senior Campus



Kiss and Drop activity occurs at the front entrance on Wakefield Street, however this is an informal area for quick vehicle movements due to the angled parking arrangement. The total capacity for vehicles in this area is 30 carparks. Kiss and Drop spaces in Wakefield Street are shown in Figure 2.9.



Informal Kiss and Drop area in Wakefield Street looking east from Frome Street



Informal Kiss and Drop off area in Wakefield Street looking west from Daly Street

Figure 2.9 Kiss and Drop Area in Wakefield Street at the CBC Senior Campus

The school has a formal Kiss and Drop area in Ifould Street in the undercover parking section next to the private bus stop. Approximately 5 cars can be parked in this bay at any time and vehicles are restricted to 10 minutes of loading. A bus loading zone for special coach tours and sporting events is provided in Ifould Street as shown in Figure 2.10.



The short term parking is used for Kiss and Drop activity in Ifould Street west of Daly Street.



Grant's Coachlines bus waiting in the underpass area in Ifould Street in the bus only zone.

Figure 2.10 Short Term Parking and Loading Area at the CBC Senior Campus in Ifould Street



2.4.4 Public Transport

Adelaide CBD is the focus of the bus, tram and train network with the walkable access from the CBD Senior Campus with convenient walk access to public transport services at:

- Bus stops in Pulteney Street, North Terrace, Grenfell Street and Bartels Road with bus services from the O-Bahn and the East-West bus routes.
- Tram services on the Glenelg to Adelaide Entertainment Centre tram line with the closest stop at Victoria Square which is a 10-minute walk to the CBC Senior Campus.
- All trains in the Adelaide network at Adelaide Railway Station in North Terrace which 20-minute walk to CBC Senior Campus.

The walk distances to the closest bus, tram and train services from the CBC Senior Campus with the routes are provided in Table 2.6.

Table 2.6 Closest Bus, Tram and Train Services to the CBC Senior Campus

Location	Routes/Lines	Closest Stops/Station	Walk Distance to Closest Bus or Tram Stop (m)
Wakefield Street	170, 171, 172, 174, 178, 820, 821, 822	Stop I1 Wakefield Street - North side Stop R1 Wakefield Street - South side	20 m in front of the school west of Daly Street 75 m east of Caldwell Street
Hutt Street	147, 98, 99	Stop F1 Hutt Street - East side Stop T1 Hutt Street - West side	100 m east along Wakefield Street
Pulteney Street	861, 864, T840	Stops E1, U1	150 m west along Wakefield Street
Grenfell Street	O-Bahn and East-West routes	Stops H1, H2, S1, I1, R1	200 to 400 m north along Frome Street or Hutt Street
Victoria Square	Glenelg tram, North-South routes	Victoria Square tram stop Bus stops G2, T1, V1, U2	800 m west along Wakefield Street
Adelaide Railway Station	All train lines	North Terrace west of King William Road	600 m via the CBD streets and Rundle Mall

The closest bus stops to the CBC Senior Campus are Stop I1 and R1 as shown in Figure 2.11.



Bus Stop I1 on the northside of Wakefield Street next to CBD Senior Campus west of Daly Street



Bus Stop R1 on the southside of Wakefield Street east of Caldwell Street

Figure 2.11 Bus Stops in Wakefield Street at the CBC Senior Campus



The bus stops that are within a 400 to 600 m walk distance to the CBC Senior Campus are shown in Figure 2.12 .

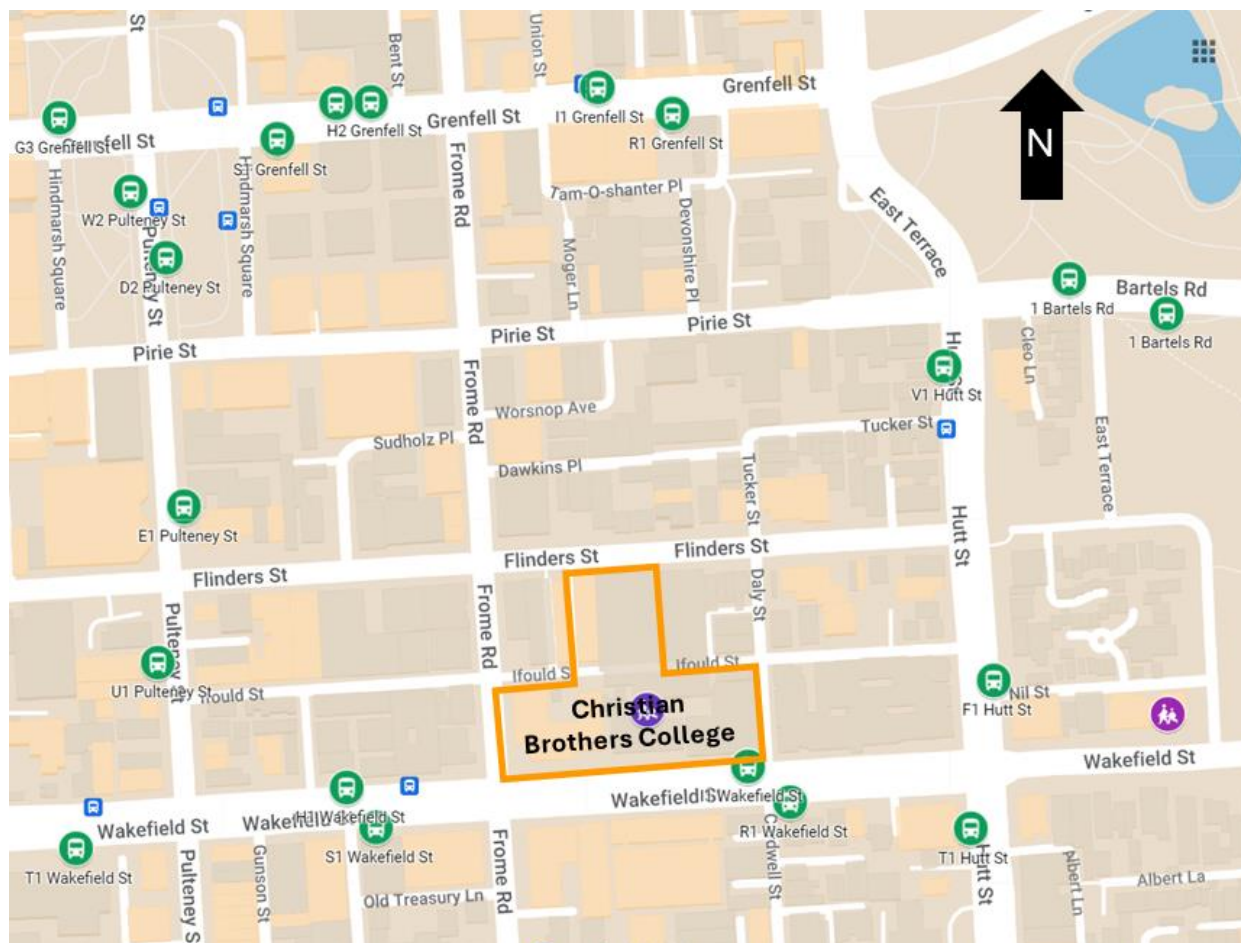


Figure 2.12 Public Transport Bus Stops close to the CBC Senior Campus



2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.13. Wakefield Street has an on-road bicycle lane on both sides of the road. Sealed shared paths exist throughout the Adelaide Park Lands. The Frome Street Bikeway that is about 100 m west of the school provides a north-south separated route.

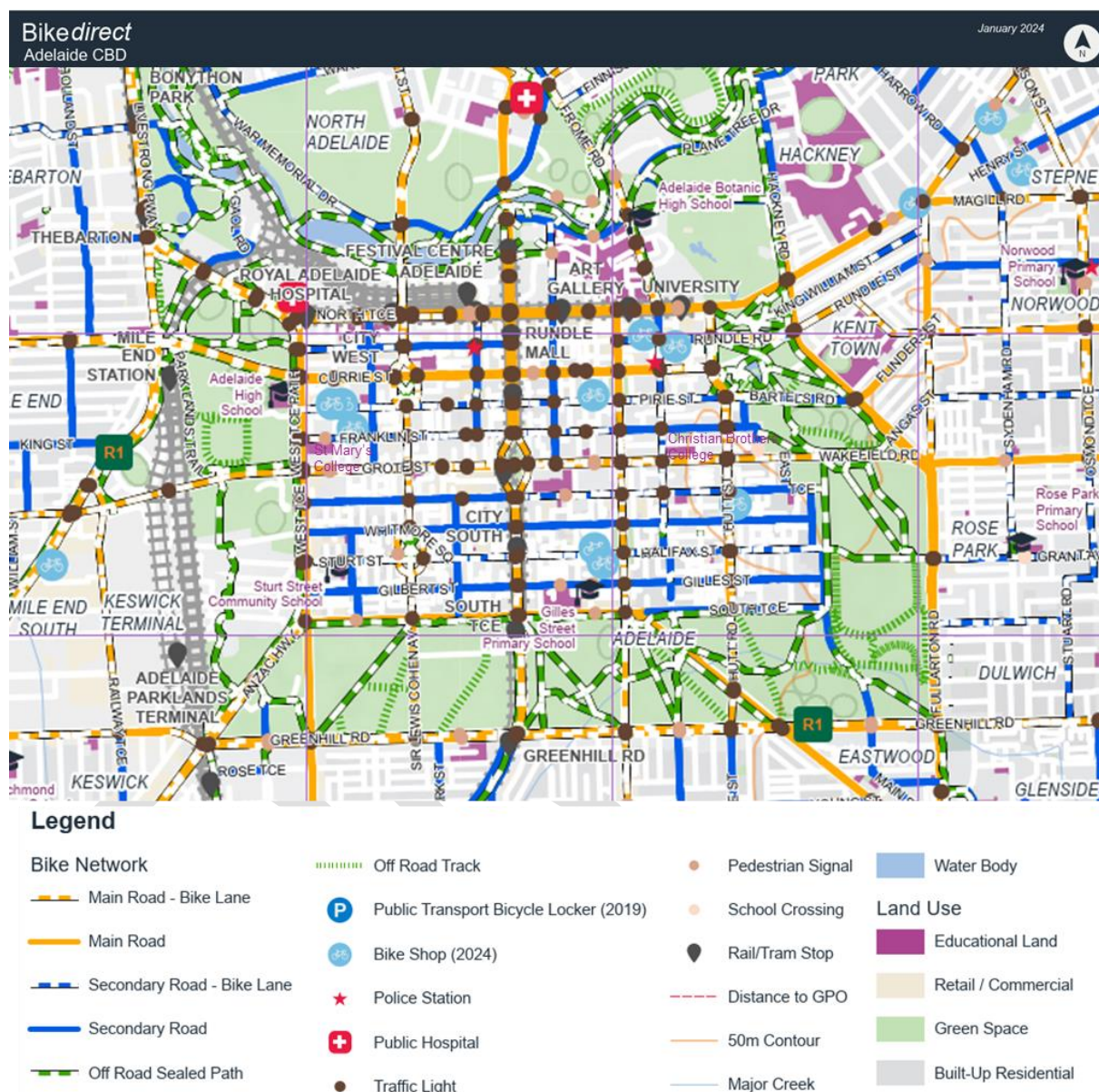
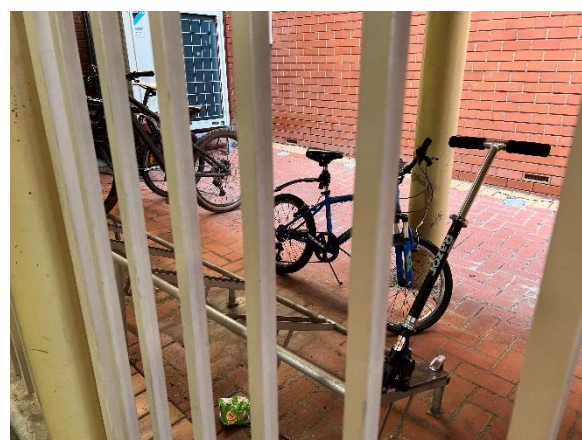


Figure 2.13 Cycling Network to the CBC Senior Campus

The secure bicycle storage area is accessed from Ifould Street with one fixed rack for several bicycles as shown in Figure 2.14. On Thursday 13 June 2024, only four students were using the facility. The CBC administration does not consider cycling an important transport mode for the students with the longer travel distances and the city streets that have busy traffic and insufficient separated bicycle infrastructure.



Bicycles parked on the secure area on Thursday 13 June 2024.



Bicycles in the secure parking area with access from Ifould Street

Figure 2.14 Bicycle Storage Area at the CBC Senior Campus in Ifould Street

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff and visitors who walk for their entire trip or as an access mode to the bus stops in Wakefield Street, Hutt Street and Pulteney Street. The footpath network along Frome Street, Wakefield Street and Hutt Street is thoroughly used by students in both the AM and PM periods.

The high school has good pedestrian access from all directions from Adelaide CBD. Students walking to the CBC Senior Campus have two signalised intersections with pedestrian crossings at the school and a pedestrian refuge is provided in the midblock location of Wakefield Street. Pedestrian access routes to the CBC Senior Campus are via sealed footpaths exist along on both sides of Wakefield Street, Daly Street and Frome Street.

The 1 km, 1.5 km and 2 km walkable access catchment areas to CBC (Senior Campus) that were calculated using the footpath network are shown in Figure 2.15. Students who walk their entire trip to school are likely walking from the Adelaide CBD, coming from the nearby bus stops or the tram line with the closest stop at Victoria Square or Adelaide railway station.

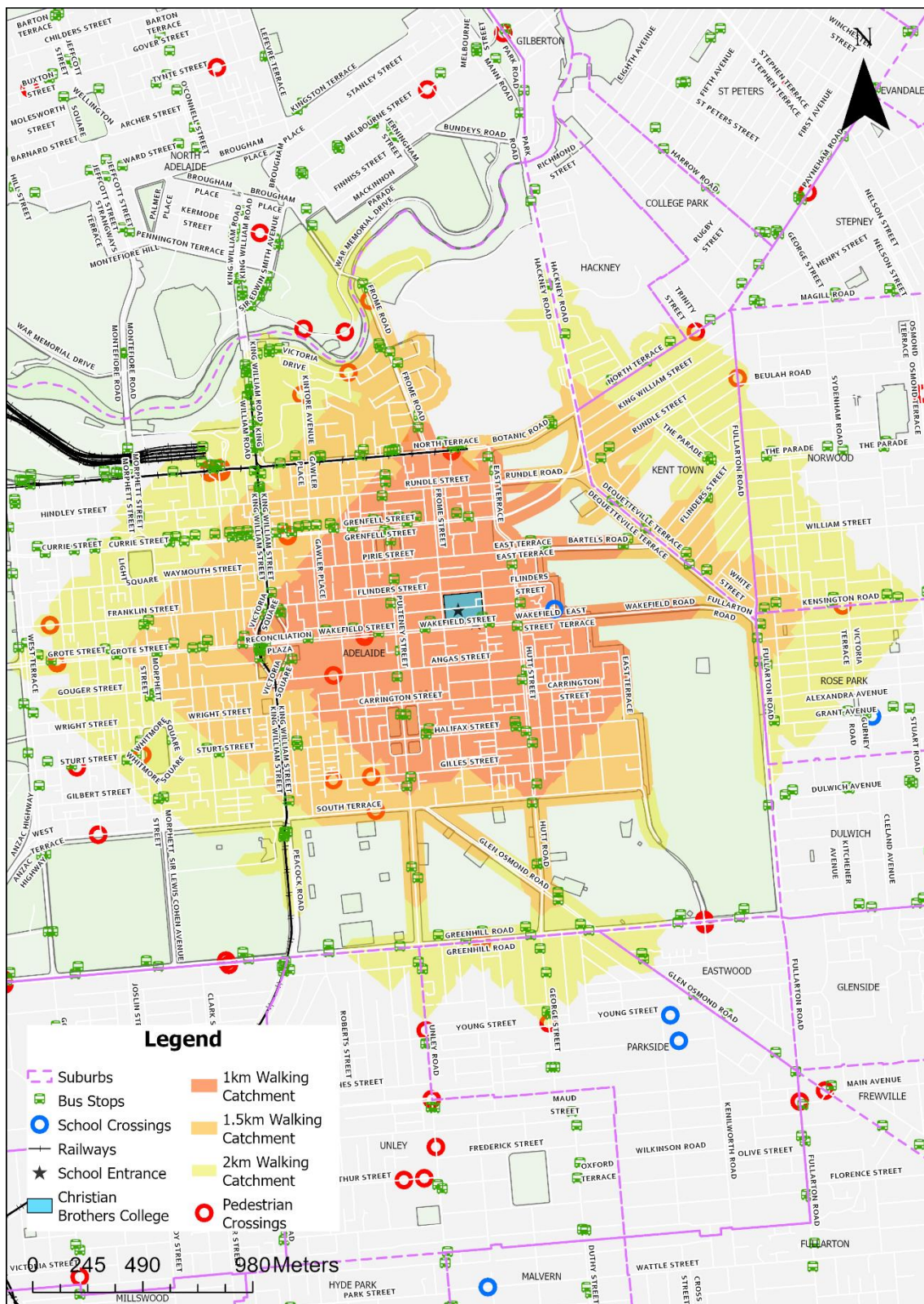


Figure 2.15 Walkable Access Catchment to the CBC Senior Campus



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with the school Head of House on Monday 23 May 2024. The issues that affect student safety for travelling to school are provided as follows:

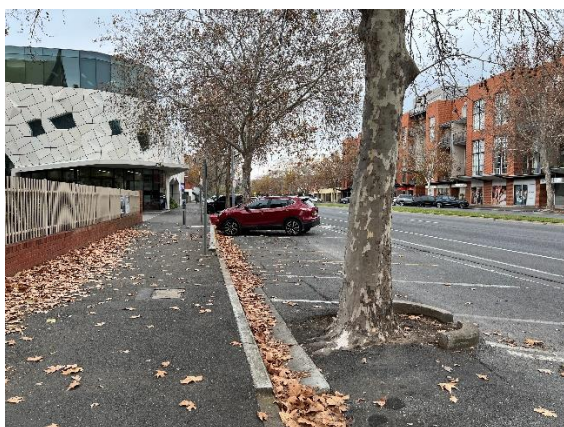
- The bus stop R1 on the south side of Wakefield Street is very popular with students in the PM period for the buses heading to Victoria Square to the tram stop, the more frequent bus routes and to Adelaide railway station. It is a high risk for students who walk midblock across Wakefield Street with no formal crossing and a wide median.
- The buses at Stop R1 in Wakefield Street east of Daly Street are often full very crowded.
- Wakefield Street is 50 km/h between Frome Street and East Terrace which is the current default speed in Adelaide CBD. A slower speed would be welcome.
- Implement flashing lights in Wakefield Street to alert motorists about a school zone. Many motorists are not aware that CBC exists in the street.
- Similar to the Junior Campus, Wakefield Street should have a slower speed limit during school drop-off and pick-up periods. Say 40 km/h.
- Consider a 25 km/h school zone in Wakefield Street with a flashing lights crossing in front of the school to encourage students to avoid jay-walking over Wakefield Street.
- The intersection of Ifould Street/Frome Street is a pedestrian hazard with many students crossing Frome Street midblock and for cyclists using the Frome bikeway.
- The intersection of Wakefield Street/Frome Street is a dangerous corner for cyclists with a blind spot on the southwest corner and motorists not seeing cyclists when making a left turn from Frome Street into Wakefield Street to head east.
- Very few students would likely bicycle to school due to the long distances and the busy city streets are considered dangerous for cycling. The school has some bicycle secure parking in Ifould Street.

3.2 Site Observations

The existing staff and student transport mode activity to and from the the CBC Junior Campus were observed during the AM peak arrival period and the PM peak departure period on Thursday 13 June 2024.

3.2.1 AM Arrival Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during the AM arrival period from 8:00 am to 9:00 am. The AM period arrival profile was relatively distributed over the 60 minutes before the school start time, with the peak activity of arrivals between 8:15 am and 8:30 am.



2P parking in Wakefield Street at the main entrance to the college



2P parking on both sides of Daly Street in the school zone

Figure 3.1 AM Peak Conditions at the CBC Senior Campus

Other findings from the AM observations are:

- Car parking was generally available across the peak hour in Wakefield Street with mostly Kiss and Drop activities at the front entrance. Vehicles typically stayed for less than two minutes.
- Kiss and drop activity did not occur regularly on Daly Street, Ifould Street or Frome Street due to the continuous use of carparking by vehicles already in the area.
- A significant option of students arrived from the north of the site and entered the gates at Ifould Street. They were travelling from various public transport stops to the north of the school.
- U-turn movements within the gap in the central median on Wakefield Street were common.
- Pedestrians were likely to walk across Ifould Street to enter the school.

3.2.2 PM Departure Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during PM departure period from 2:45 pm to 3:30 pm. The PM period departure profile included many vehicles within a 20-minute period after the school bell. Vehicles occupied most of the carparking spaces in front of the school in the 15-minute lead up to the school bell, with these vehicles typically moving on quickly.



Parents waiting for the bell time near the Wakefield Street school entrance



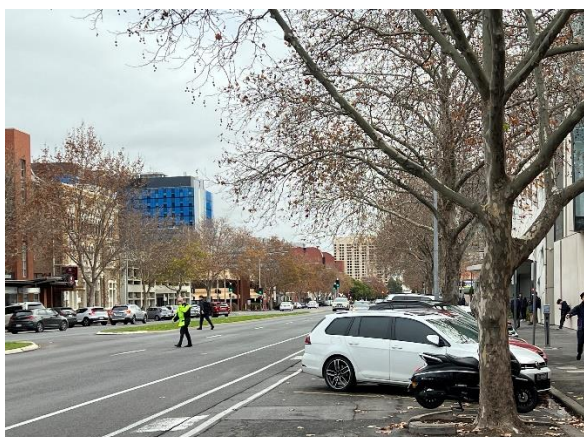
Vehicle making a U-turn in median of Wakefield Street to park in front of the school entrance

Figure 3.2 PM Peak Conditions at the CBC Senior Campus



Other findings from the PM observations are:

- Carparking was generally available across the peak hour in Wakefield Street and was the main area for kiss and drop activities due to its proximity to the front entrance. Vehicles typically stayed for less than 2 minutes.
- Kiss and drop activity did not occur regularly on Daly Street, Ifould Street or Frome Street due to the continuous use of carparking by vehicles already in the area.
 - Approximately 10 vehicles used the undercover section in Ifould Street to pick up students.
- A significant portion of students exited from the north of the school onto Ifould Street
- Pedestrians were likely to cross at a midblock location in Ifould Street to exit the school.
- The buses at stop R1 are often full and results in very crowded services to the CBD. Most students boarding at stop R1 with very few boarding the outbound buses at stop I1 on the northside west of Daly Street.
- U-turn movements within the gap in the central median on Wakefield Street were common.
- Students travelling to the southern side of Wakefield Street often walked across the central median and did not use the pedestrian refuge in Wakefield Street east of Daly Street.



Pedestrians were observed crossing Wakefield Street at the midblock west of Daly Street



Many students crossed Wakefield Street to the buses at stop R1 east of Caldwell Street

Figure 3.3 PM Peak Safety Issues in Gover Street at the CBC Senior Campus

Some students were observed walking to board buses at Stop R1 in Wakefield Street where a school supervisor monitoring the boarding activity. A significant number of students walked north along Frome Street to either catch the bus on either Pulteney Street or further north in Grenfell Street.

3.3 Summary of the Issues and Opportunities

The key issues for students and parents access the school are:

- U-turn movements within the gap in the central median on Wakefield Street were common.
- Pedestrians were likely to walk across Ifould Street and Wakefield Street in the AM and PM periods.
- The buses at stop R1 are often full and results in very packed trips to the city centre.
- Angled parking at the school entrance on Wakefield Entrance caused issues with sight distance for vehicles leaving the carparking area.
- Vehicles are travelling at speeds on Wakefield Street not typically associated with school zones.



4 Travel Safety Options and Assessment

4.1 Student Travel Safety Options

Options to improve the travel safety for students at the school were developed under three categories, namely:

- Infrastructure treatments requiring civil works with changes to signals or pedestrian crossings.
- Operational efficiencies, with changes to parking controls, Kiss and Drop areas or school zones.
- Safety promotions to increase awareness of the school with warning signage or information.

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options for the CBC Junior Campus

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Fill in the gap within the central median in front of the Wakefield Street school entrance.	U-turn movements within the gap in the central median on Wakefield Street were common.
	Rearrange the car spaces in Wakefield Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the entrance to the formal student entrance.	Angled parking at the school entrance on Wakefield Entrance caused issues with sight distance for vehicles leaving the carparking area
	Investigate options for safer pedestrian movements by parents and students in Wakefield Street opposite the student entrance immediately. This could include such treatments as a formalised PAC.	During the school drop-off and pick-up periods, parents and students who were crossing Wakefield Street often walked in the midblock sections that did not include the pedestrian refuge east of the school.
	Consider altering the priority for road users and pedestrians in the western section of Ifould Street (in front of the northern school entrance). This could include new line marking or pavement material to increase the awareness of drivers that they are entering a shared use environment.	Pedestrians were likely to walk across Ifould Street in the AM and PM periods to access the school gates. This occurred often during the vehicle pick up in the PM period.
Operational Efficiencies	Consider changing the posted speed in Wakefield Street between Frome Street and East Terrace from 50 km/h to a slower speed limit eg. 40 km/h. This would extend to East Terrace to provide a continuous environment across the Senior and Junior campuses.	Vehicles are travelling at speeds on Wakefield Street not typically associated with school zones.



Type of Option	Description	Issue Addressed
Safety Promotions	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	Students and parents may not be aware of their travel choices for bicycle routes, facilities at the school or public transport services.

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4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives are shown on Figure 4.1. They include:

- Investigate options for safer pedestrian movements by parents and students in Wakefield Street opposite the student entrance such as a PAC or pedestrian refuge at the midblock location where the existing gap in the median is located at the main entrance for students to the college.
- Fill in the gap in the Wakefield Street central median to stop U-turn manoeuvres.
- Rearrange the car spaces in Wakefield Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the student entrance.
- New infrastructure on Ifould Street to change the priority of the street to a pedestrian friendly arrangement.
- Reducing the speed limit on Wakefield Street from 50km/h to 40km/h between Frome Street and East Terrace.



Figure 4.1 Recommended Initiatives at the CBC Junior Campus



4.2.1 Options to Improve Pedestrian Crossing Safety in Wakefield Street

In order to improve the pedestrian crossing safety to the school entrance in Wakefield Street, several options are provided for further consideration. These options are provided with the advantages and disadvantages in Table 4.2. They require further site observations, data collection for pedestrian volumes crossings during the AM and PM school peak hours and a more detailed assessment.

Table 4.2 Options to Improve Pedestrian Crossing Safety in Wakefield Street

Option ID	Description	Advantages	Disadvantages
A	Install a PAC in Wakefield Street between the school entrance and Daly Street.	Significantly improves safety for pedestrians crossing Wakefield Street with one crossing located where most pedestrians want to cross with the main entrance for students into the college. Does not conflict with the Stop I1 west of Daly Street	Costly up to \$500,000 to move and reinstate on street parking in front of main entrance to the school. Removal of car parking spaces on both sides of Wakefield Street.
B	Install a second pedestrian refuge in Wakefield Street between Frome Street and Daly Street.	Allows for safe storage for pedestrians on the already popular crossing point with the main entrance for students into the college. Less costly than the PAC option. Under \$50,000. Does not conflict with the Stop I1 west of Daly Street	Pedestrians are still required to cross two traffic lanes on either side of Wakefield Street. Issues with sight distance from parked cars may also obscure pedestrians.
C	Fill in the midblock median gap in Wakefield Street	Lowest cost option under \$5,000 Does not conflict with the Stop I1 west of Daly Street	May divert traffic to use Frome Street to turn into the northside parking spaces in front of the school.

4.2.2 Information to Promote Safer Student Travel to the School

The school provides limited information to promote safer student travel to school. Examples of the types of information brochures, known as school Travel Access Guides in NSW, are provided for a primary school in **Appendix C**. The Travel Access Guide is prepared with a consistent template for all government schools in NSW in collaboration with the school principals and a school travel coordinator.



4.3 Assessment and Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.3. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- P for Parking control with new signage or to pavement markings for the on-street parking or a school zone.
- I for information to the school community with signage or online promotional brochure.

Table 4.3 Indicative Cost Estimates for the Travel Safety Options for CBC Senior Campus

Option ID	Description	Indicative Cost Estimate	Comments
T1	Remove the gap within the central median in front of the Wakefield Street school entrance.	Up to \$50,000	Council to prepare evidence to support the warrant for a koala crossing and liaise with DIT for the approval
T2	Investigate options for safer pedestrian movements by parents and students in Wakefield Street opposite the student entrance immediately. This could include such treatments as a formalised PAC or a pedestrian refuge.	Between \$50,000 and \$500,000	Council to prepare evidence to support the warrant for a koala crossing and liaise with DIT for the approval to install a koala crossing. Council responsible for the design and installation if approved. Requires additional data collection, site observations and further analysis to determine a preferred option
T3	Consider altering the priority for road users and pedestrians in the western section of Ifould Street in front of the northern school entrance. This could include new line marking or pavement material to increase the awareness of drivers that they are entering a shared use road environment.	Up to \$250,000	Council to review the traffic movements in Ifould Street.



Option ID	Description	Indicative Cost Estimate	Comments
T4	Consider changing the posted speed in Wakefield Street between Frome Street and East Terrace from 50 km/h to a slower speed limit such as 40 km/h. This would extend to East Terrace to provide a continuous road environment across the Senior and Junior campuses.	Less than \$1,000	The speed limits are under the control of DIT. DIT to be consulted on any proposed changes to speed limits.
P1	Rearrange the car spaces in Wakefield Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the entrance to the formal student entrance	Less than \$20,000	The parking controls in front of the former fire station are under the control of DIT.
I1	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	No cost to Council	This would be prepared and promoted by the school administration.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE		
School Travel Survey for Students		
School:		Christian Brothers College
<i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i>		
Questions for the Teacher		
Date (day/month/year):		
Weather (Daytime temperature and sky conditions):		
Please enter the name or number of your class or year group.		
How many students are absent today in your class?		
Questions for the Students in Your Class / Year Group		
<i>Please ask the students with a 'hands-up' survey in the classroom.</i>		
AM Period Travel		
<i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the AM Period	Number of Students	
Car (as driver)		
Car (as passenger with drop-off)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
PM Period Travel		
<i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>		
Main Mode of Travel in the PM Period	Number of Students	
Car (as driver)		
Car (as passenger with pick-up)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
If you travelled by car, would you prefer any of these modes? (multiple answers)		
Walking for the entire trip		
Bicycle, e-bike or scooter		
Public Transport (bus, tram or train)		



Appendix B – CBC Senior Campus Parking Information

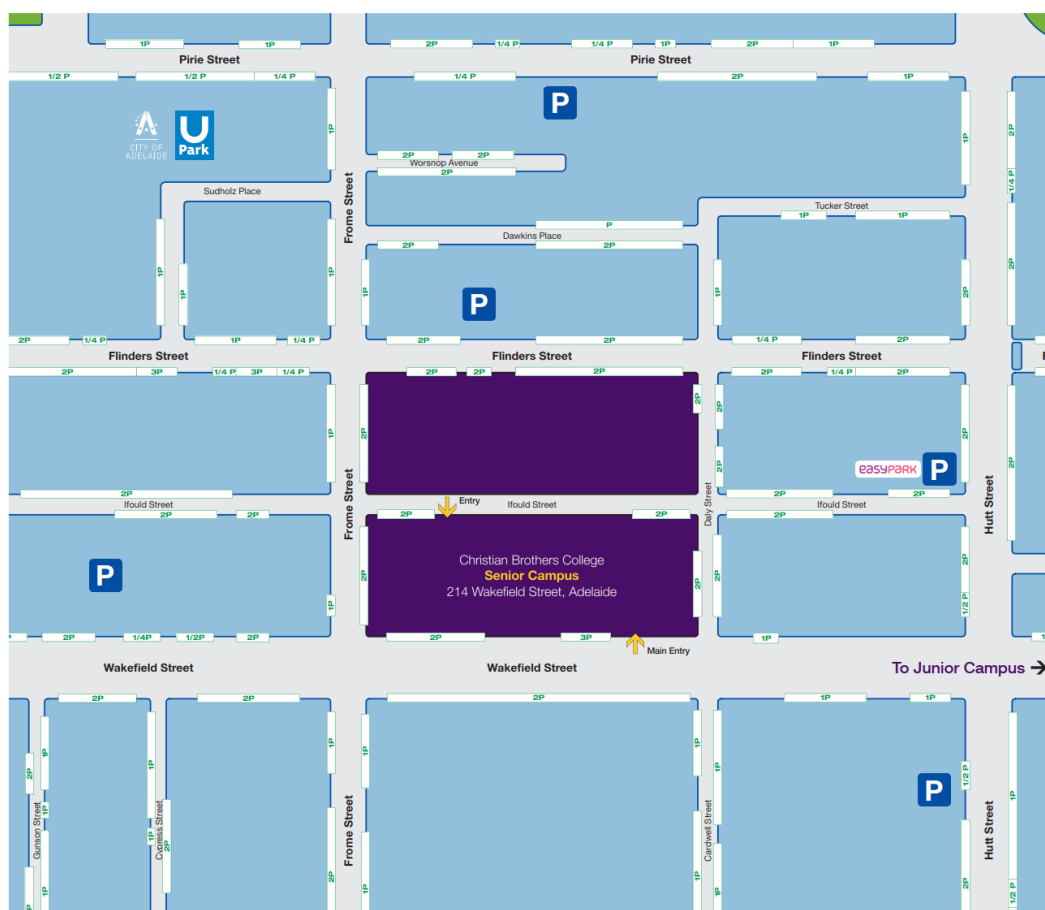


Senior Campus Parking Map

Welcome to Christian Brothers College

Most car parking around the college are 1–2 hour ticketed bays with extended times for weekends. Please note parking availability varies depending on certain times of the day with some car parks unavailable during peak hour periods.

There are also a number of local parking facilities nearby and a free Park Adelaide App is available from Adelaide City Council.





Appendix C – School Travel Access Guide in NSW

NSW Department of Education – School Infrastructure



Marsden High School Travel Access Guide

Effective: January 2023

Introduction

Our school community of parents/carers, staff and students live within a reasonable walk, cycle or bus trip of the school. This Travel Access Guide provides suggested safe and accessible options for travelling to and from school.

Active ways to get to school



Walking to and from school

- Walking is a fun way to keep active and healthy.
- Stay alert and watch out for any potential hazards, including cars reversing out of driveways, bikes and other pedestrians.
- Remember to STOP, LOOK, LISTEN and THINK every time you cross the road.



Ride your bike

- 278 bike racks are available for everyone.
- All bicycle riders are required by law to wear a correctly fitted Australian standards approved helmet and is highly recommended when riding a scooter.
- Children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.

Kiss and drop expectations

- For parents/carers who drive their child/ren to school, the kiss and drop zone is located along Rhodes Street starting from Hermitage Road.
- This space is a 'No Parking' zone, meaning that you may stop for up to a maximum of 2 minutes and move no more than 3 metres from the vehicle.

Message from our principals

- Marsden High School supports sustainable and environmentally friendly transport practices.
- We strongly encourage our school community to walk or ride to school either independently or with parental supervision.

School bell times

Start Times

9:00 am

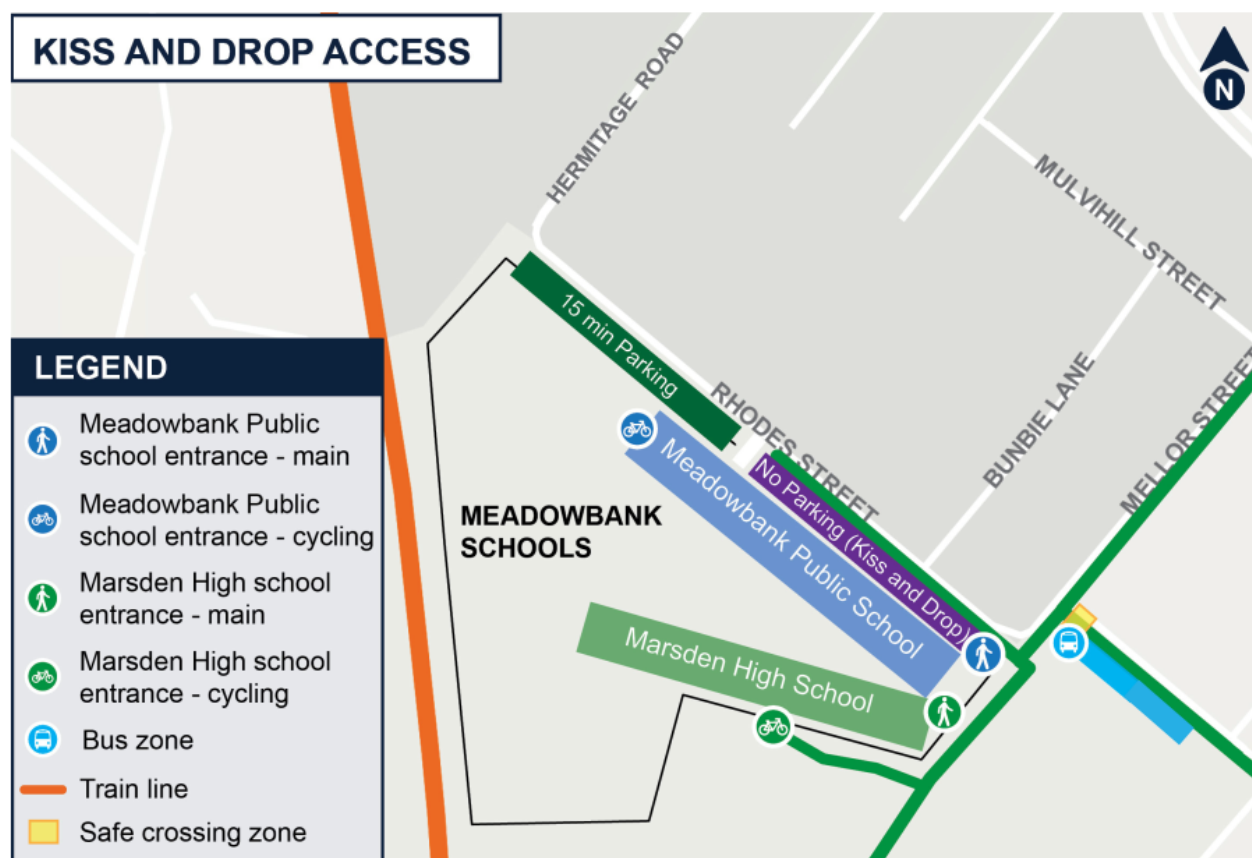
End Times

3:00 pm

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au



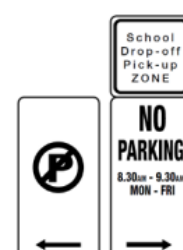


Safety tips for drivers using the Kiss and Drop zone

- Always drop off or pick up your child from the designated zone and follow the school's procedures.
- Drivers should remain in their vehicles **at all times** in the Kiss and Drop zone.
- Make sure children use the Safety Door (the rear footpath side door) to get in and out of the car.
- Always park legally.
- U-turns and three-point turns are banned **at all times** in Rhodes Street in front of the school.

Safety tips for students

- Always get in and out of the vehicle through the Safety Door, the rear footpath-side door.
- Stay buckled up until the vehicle has stopped in the Kiss and Drop area.
- Make sure your school bag and other items are in a safe position, such as on the floor.
- Be ready to get out of the vehicle with your belongings when the car has stopped and you have unbuckled your seatbelt



Kids and Traffic Safety
Door sticker
RTA45091021K

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au



Walking Route

WALK ROUTE TO MEADOWBANK TRAIN STATION AND BUS STOPS ON BOWDEN STREET AND VICTORIA ROAD



For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





Gilles Street Primary School

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
10 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	Kaitlin Neave	John Devney	John Devney	10 June 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Appendices

Appendix A – Student Travel Survey Form

Appendix B – School Travel Access Guide in NSW



Executive Summary

Overview

Gilles Street Primary School is a public school that comprises Reception to Year 6. The Gilles Street Primary School does not have an enrolment zone and therefore students can attend from anywhere in metropolitan Adelaide. The school enrolment in 2024 is for 301 students with 157 students in Reception to Year 3 and 143 students in Years 4 to 6.

Key Findings

Over 64 per cent of the students live in the City of Adelaide which is convenient for walking and cycling modes. 93 students or 31 per cent of the students live in the inner suburbs of metropolitan Adelaide with access to public transport. Only 14 students live in the outer suburbs.

The findings from the student travel mode share surveys are summarised as follows:

- About 33 per cent walk to school and over seven per cent cycle to school. Those that walk or cycle in the morning are likely to travel the same way in the afternoon.
- About 17 per cent of the students travel via public transport.
- The remaining 43 per cent of students are driven to school by car with similar percentage between the AM arrival and PM departure periods.

The traffic safety issues that mostly are for the City of Adelaide to address are:

- Reviewing the pedestrian wait time at the signalised crossing on Gilles Street.
- Enforcing 25 km/hr speed limit during school peak hours.
- Install flashing signs to enhance the school zone awareness.
- Enforcing the parking behaviour over the bus bay in front of the school in Gilles Street.

Key Recommendations

The school travel safety options that are recommended for the City of Adelaide in consultation with the school are:

- Install flashing lights with the existing school zone signs in Gilles Street.
- Review the signal timing at the signalised crossing in Gilles Street at Pulteney Street and improve the pedestrian green light waiting time during school peak hours.
- Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <p>every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday every 30 minutes between 6.30 pm and 10 pm, Monday–Friday every 30 minutes on Saturday, Sunday and South Australian public holidays.</p>



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.
- The following tasks were completed for this school travel safety review:
- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a “hands up” travel survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.

1.3 School Location

Gilles Street Primary School is located on Gilles Street, to the west of Pulteney Street in the southern part of Adelaide city centre. The school is positioned on Gilles Street and immediately east of Pulteney Grammar School. The school site and the existing surrounding environs are shown in Figure 1.1.



Figure 1.1 Gilles Street Primary School Location

The entrance to Gilles Street Primary School and PAC at the school entrance in Gilles Street are shown in Figure 1.2.



Main student entrance in Gilles Street



PAC at the school entrance in Gilles Street

Figure 1.2 Entrance and Pedestrian Crossing for Gilles Street Primary School



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

Gilles Street Primary School is a public school that was first established in 1900. Students attend classes from Reception to Year 6. The bell times are 8:55 am to 3:15 pm.

The school operating hours are:

- Before school: 7:00 am to 8:25 am
- After school care: 3:30 pm to 6:15 pm
- Vacation care: 8:00 am to 6 pm

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 was 301 students with a distribution by year as follows:

- 26 students in Reception
- 28 students in Year 1
- 58 students in Year 2
- 45 students in Year 3
- 53 students in Year 4
- 46 students in Year 5
- 45 students in Year 6

The Gilles Street Primary School does not have an enrolment zone and therefore students can attend from anywhere in metropolitan Adelaide. The number of students by sub areas of each suburb are shown in Figure 2.1. Over 64 per cent of the students live in the City of Adelaide which is convenient for walking and cycling modes. 93 students or 31 per cent of the students live in the inner suburbs of metropolitan Adelaide with access to public transport. Only 14 students live in the outer suburbs.

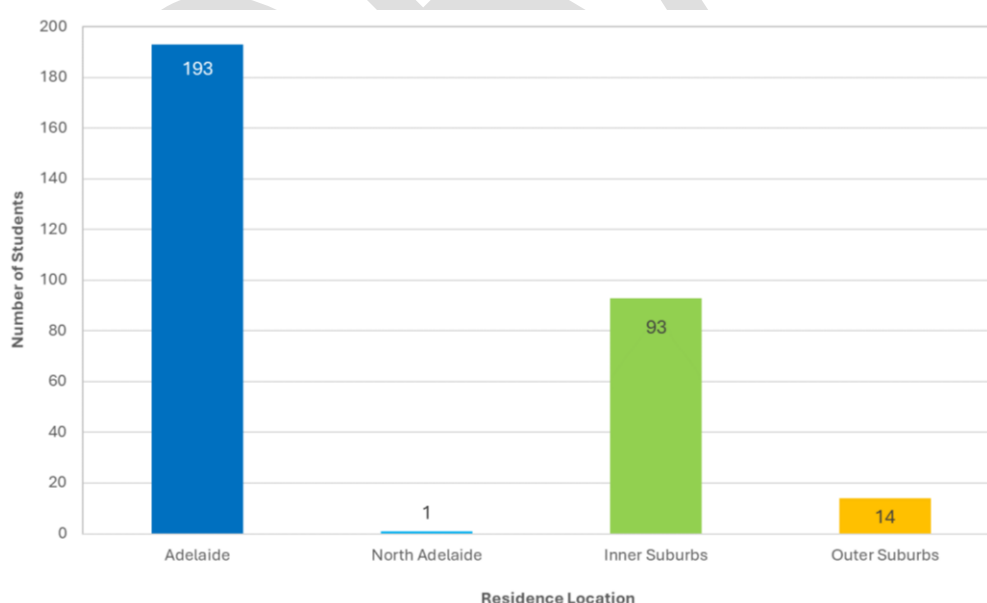


Figure 2.1 Gilles Street Primary School Student Residence Location Analysis



2.3 Student Travel Demand

The existing school travel activity to and from the Gilles Street Primary School was reviewed through site observations and a student travel mode survey on typical school days. The student travel mode survey form is included in Appendix A.

The student travel mode survey was conducted during school days from 29th May to 4th June. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus
- Train
- Tram
- Bicycle or e-bike
- Scooter

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.2. The findings are summarised as follows:

- About 33 per cent walk to school and over seven per cent cycle to school. Those that walk or cycle in the morning are likely to travel the same way in the afternoon.
- About 17 per cent of the students travel via public transport.
- The remaining 43 per cent of students are driven to school by car with similar percentage between the AM arrival and PM departure periods.

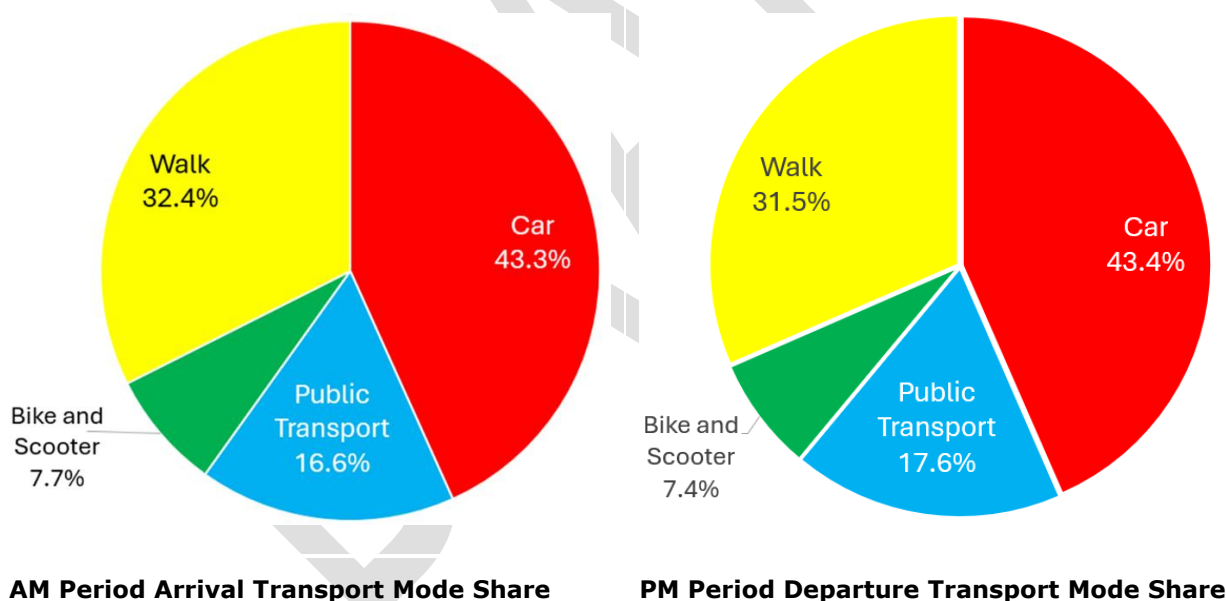


Figure 2.2 Gilles Street Primary School Student Transport Mode Shares in May 2024



2.4 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.4.1 Road Network

The school could only be accessed via Gilles Street.

Gilles Street

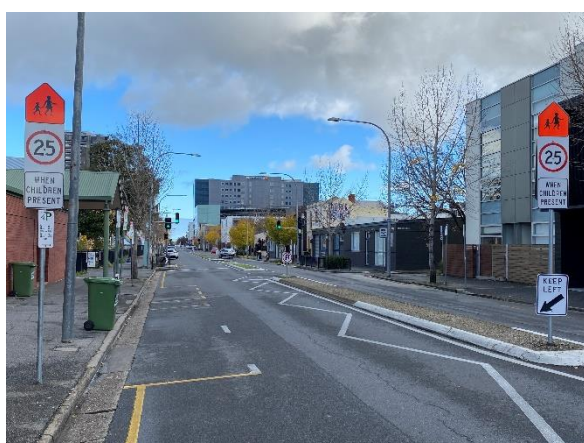
Gilles Street is a two-way two-lane Collector, aligned in an east-west direction. It is under the jurisdiction of the City of Adelaide.

Each lane is around 3.6 m to 3.7 m, with concrete central median islands intermittently placed in the proximity of the school and Pulteney Grammar School.

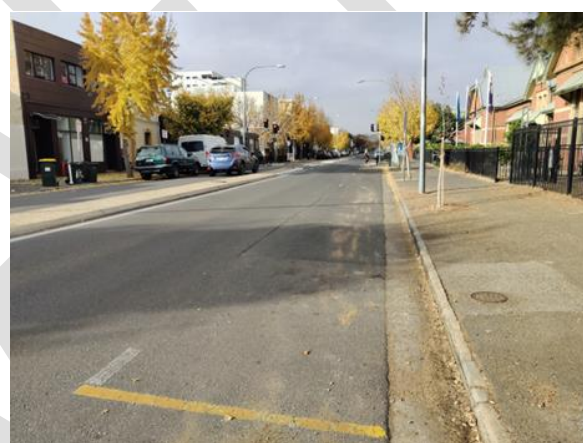
Sealed footpaths are available on both sides of the road.

A 25 km/hr school zone is in place on Gilles Street for both the school and Pulteney Grammar School.

The road layout in both directions towards Pulteney Grammar School and to Pultney Street is shown in Figure 2.3.



Gilles Street looking west from the start of the 25 km/h school zone to Pulteney Grammar School



Gilles Street looking east from the school entrance to Pulteney Street

Figure 2.3 Gilles Street at Gilles Street Primary School



2.4.2 Crash History

A review of the latest crash data from 2018 to 2022 was sourced from DataSA. Over this five-year period, the crashes by type are shown in Figure 2.4. The crashes in both Gilles Street and South Terrace near the school were for one minor injury and one property damage only.

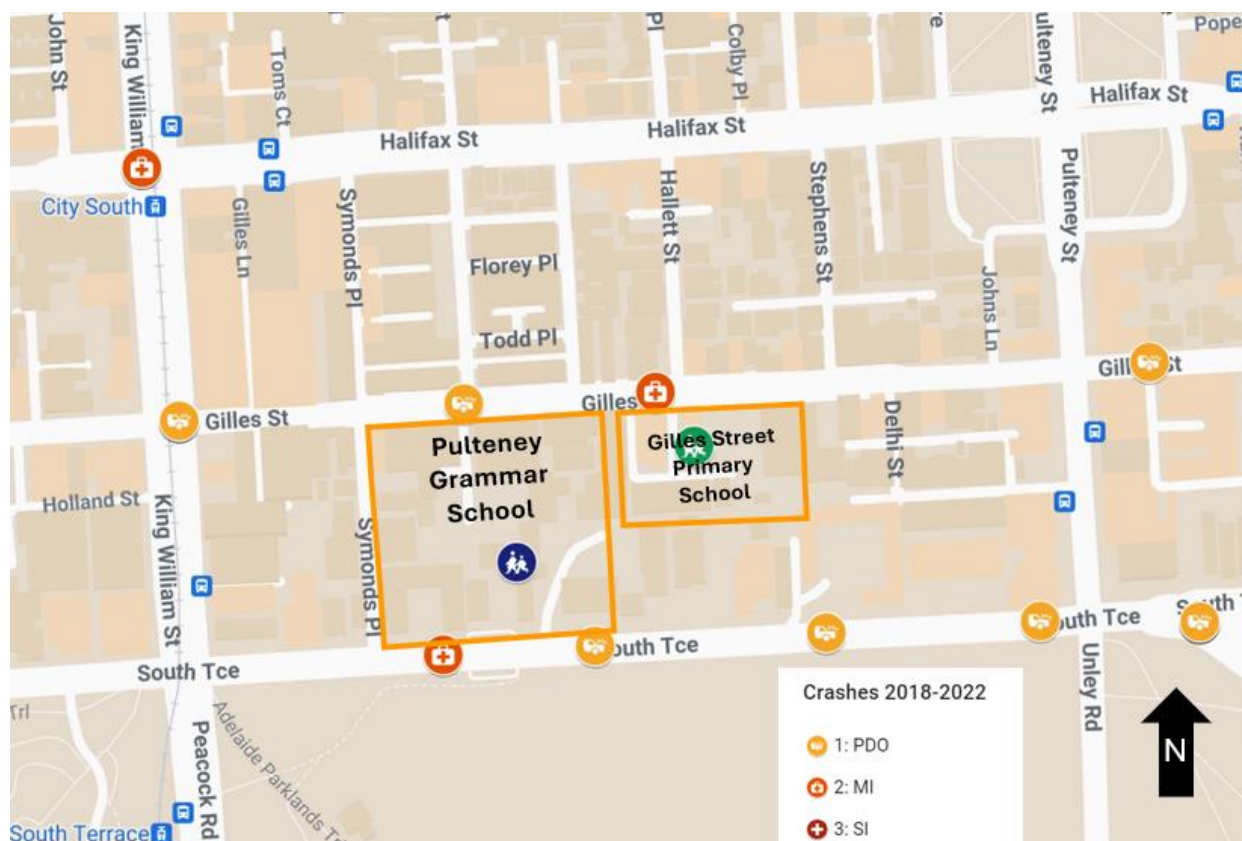


Figure 2.4 Crash History near Pulteney Grammar School



2.4.4 Public Transport

Adelaide CBD is the hub for the public transport in Adelaide with train, tram and bus services for students to travel to the school. The available public transport facilities within the walkable access from Pulteney Grammar School are bus stops on King Williams Street and Pulteney Street, and tramline on King William Street. The closest bus and tram stops that are within a 400 m walk distance to Gilles Street Primary School are shown in Figure 2.7.

Train services for all metropolitan train lines are at Adelaide Railway Station which is located 1.8 km north of the school and can be accessed by the free tram services from the City South tram stop in King William Street at Halifax Street that is 450 m from the south via Gilles Street and King William Street.

Gilles Street Primary School has a school bus service that operates at the school access on Gilles Street, to serve those living in outer suburbs.

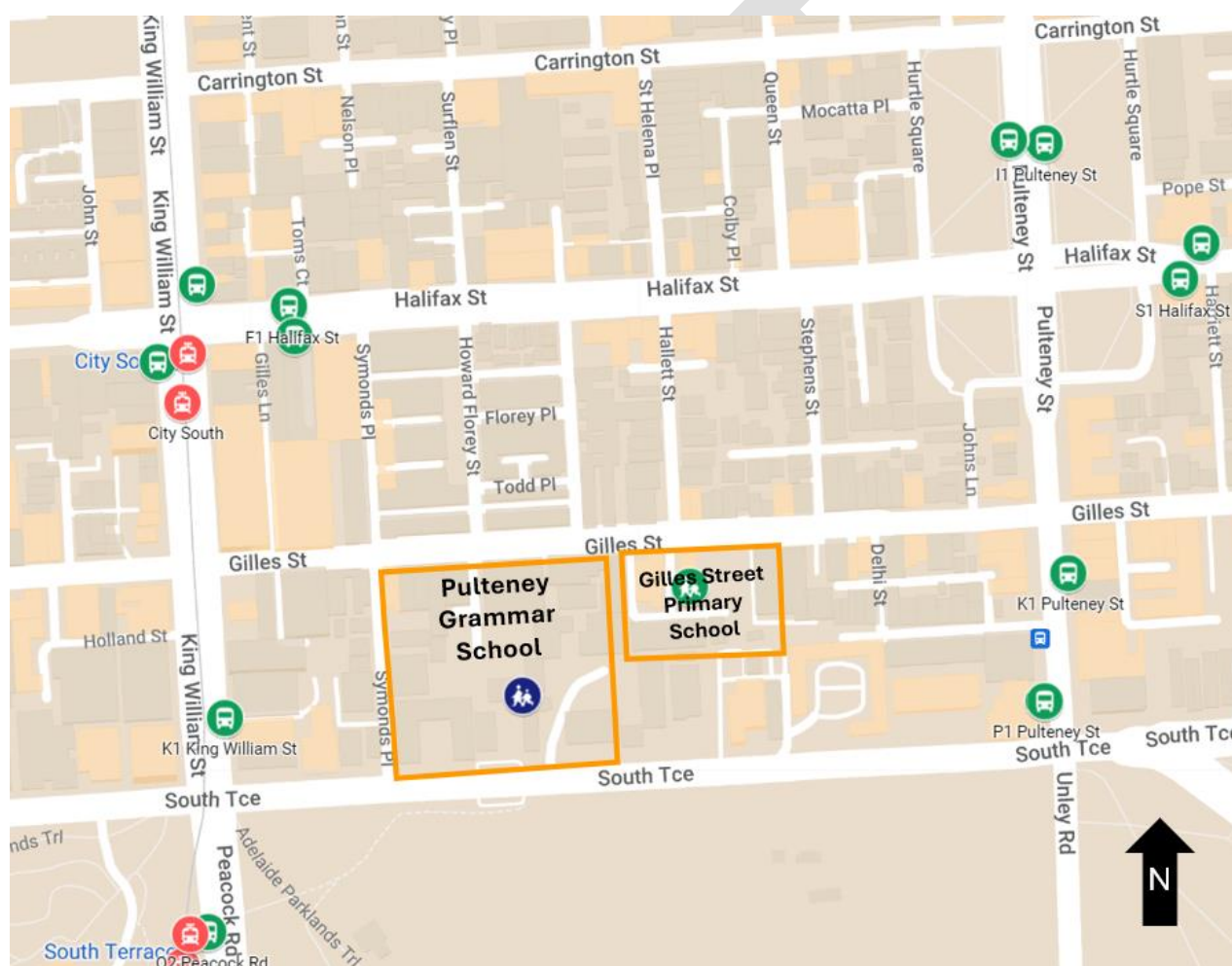


Figure 2.7 Public Transport Services to Pulteney Grammar School



2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to the adjacent south Park Lands and the inner metropolitan cycling network is shown in Figure 2.8.

Both Franklin Street and Grote Street have on-road bicycle lanes on both sides of the road. Sealed shared paths exist throughout Ellis Park. No cycle lanes are provided along Gilles Street.

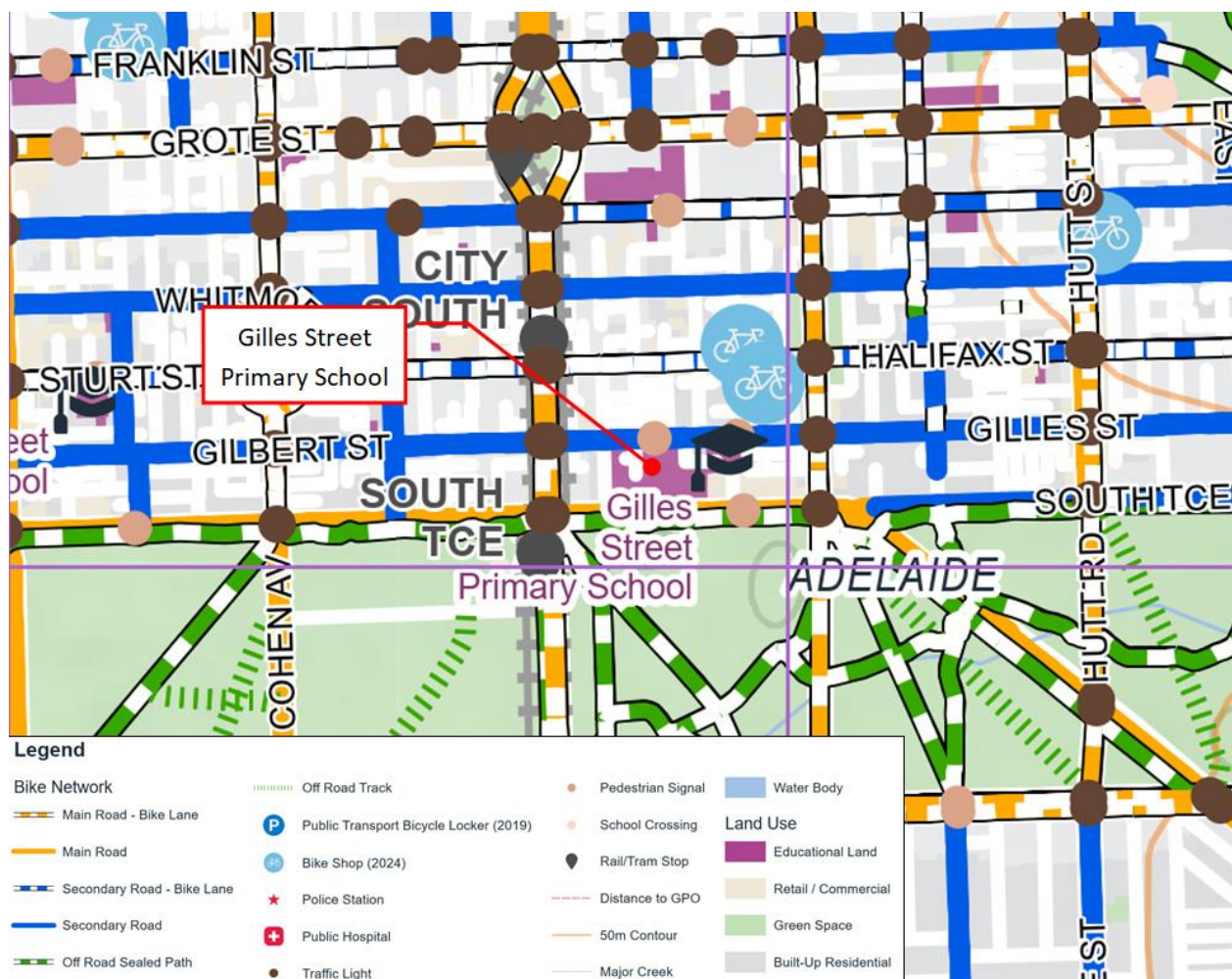


Figure 2.8 Cycling Network to Gilles Street Primary School

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff, and visitors who walk for their entire trip or as an access mode to the bus stops on King William Street, Pulteney Street, South Terrace, and tram stops on King William Street. The footpath network along Gilles Street needs to be well maintained and kept clear of fallen trees and debris by the City of Adelaide.

The school has good pedestrian access from all directions from Adelaide CBD, as shown in Figure 2.9, which has also shown a 5, 10, and 15-minute walkable catchment areas to Gilles Street Primary School. Students who walk their entire trip with their parents to school are likely walking from Adelaide city centre.

The signalised PAC in Gilles Street is located at the main crossing to the school entrance.

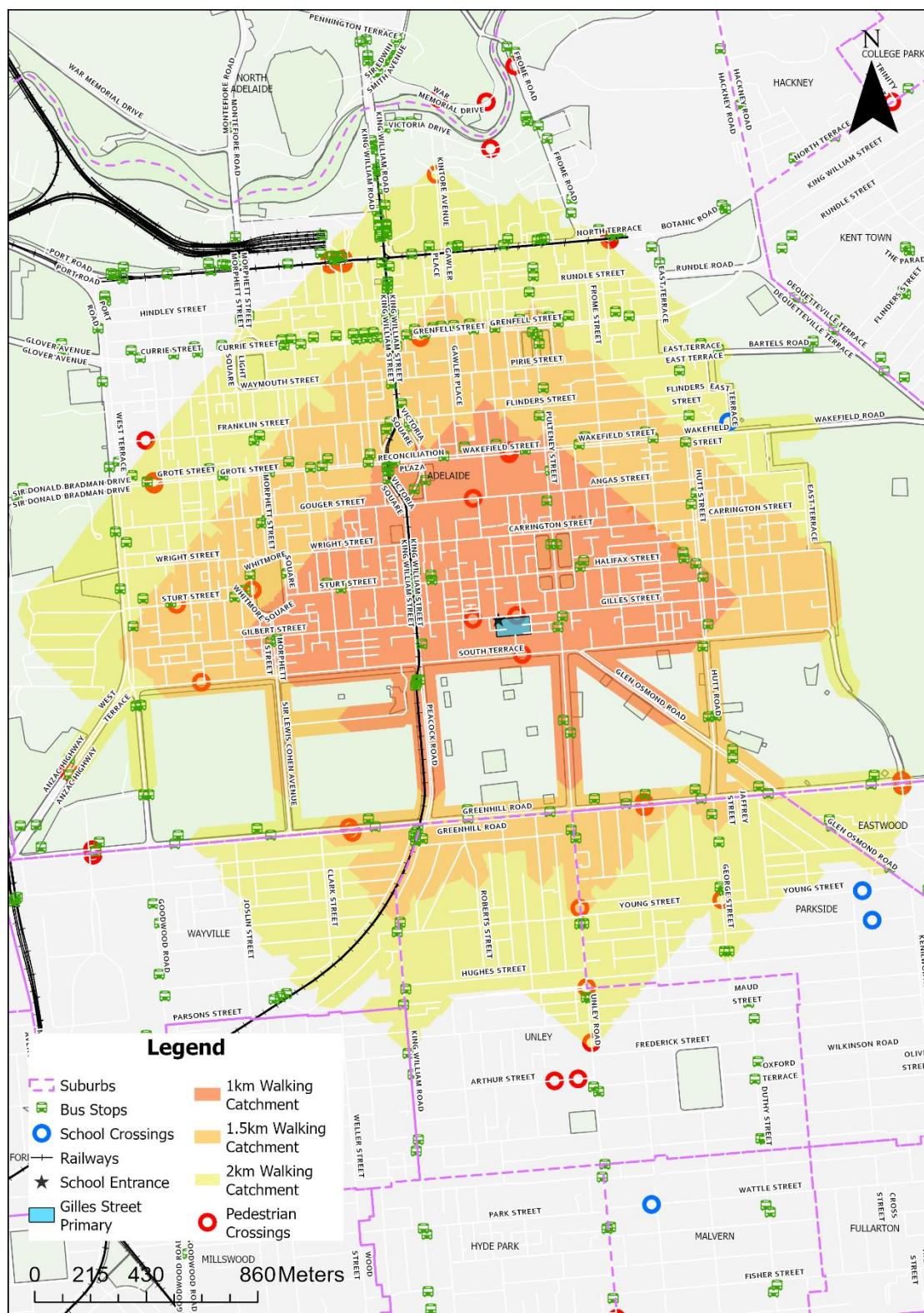


Figure 2.9 Walkable Access Catchment to Gilles Street Primary School

3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with Gilles Street Primary School's assistant principal on 29th May 2024 to discuss existing issues. These can be summarised as below:

- Because of the proximity of Pulteney Grammar School to Gilles Street Primary School, the traffic queues from Pulteney Grammar School are often extended to impact the traffic operation for Gilles Street Primary School, especially during the PM peaks.
- The two staff car parks, as shown in Figure 3.1, are often occupied by the public. With no formal signage installed, parking officers cannot enforce the illegal parking. The school has ordered the signage to be manufactured, however the process is taking longer than expected.



Figure 3.1 Two Staff Carparks at Gilles Street Primary School

- Some drivers were impatient to run across the signalised crossing, resulting in both abrupt braking and stopping over the crossing and obstructed pedestrians.
- Gilles Street Primary School was assigned to many students in outer suburbs from the Intensive English Language Program (IELP), which resulted in a high volume of school buses. In this current year the enrolment of IELP has significantly decreased due to the change in immigration policies. This has consequently reduced the school bus operation.
- Parents would occupy the frontage of the school for bus operation, and preventing buses from pulling into the bus bay and block the through traffic.
- The pedestrian waiting time at the signalised crossing is too long, in particular after 8:40 am.

3.2 Site Observations

The existing staff and student transport mode activity to and from the Gilles Street Primary School were observed during the AM peak arrival period and the PM peak departure period on a typical school day, on Wednesday 29th May 2024, 8 am to 9 am, and 3 pm to 4 pm.

3.2.1 AM Arrival Period

The key findings from the AM observations are summarised as below:

- The traffic on Gilles Street was in general in an orderly manner, as the central concrete median island prevented vehicles from speeding or overtaking.
- There is a 25 km/hr school zone in place, and most people were observed to be compliant.
- Parents were observed to occupy the southern side of Gilles Street, which are for bus operation only. This is shown in Figure 3.2.



Figure 3.2 Passenger Vehicles in the Bus Zone in Gilles Street

- Many parents were observed to walk, cycling, or push scooters.

3.2.2 PM Departure Period

The key findings from the PM observations are summarised as below:

- Much busier traffic than in the morning, therefore vehicles were in general moving at a slower pace.
- The concrete central islands prohibited vehicles from driving around those entering or exiting a roadside parking space.



3.3 Summary of the Issues and Opportunities

Issues for accessing the school were observed on Gilles Street. The traffic safety issues that mostly are for the City of Adelaide to address are:

- Reviewing the pedestrian wait time at the signalised crossing on Gilles Street.
- Enforcing 25 km/hr speed limit during school peak hours.
- Install flashing signs to enhance the school zone awareness.
- Enforcing the parking behaviour over the bus bay in front of the school in Gilles Street.

DRAFT



4 Travel Safety Options and Assessment

4.1 Options Development

Options to improve the travel safety for students were developed under two categories, namely:

- Operational efficiencies
- Increased awareness of the area

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 Travel Safety Options for Gilles Street Primary School

Type of Option	Description	Issue Addressed
Operational Efficiencies	Review the signal timing at the signalised crossing on Gilles Street and improve the pedestrian green light waiting time during school peak hours.	Improve the travel time for students and parents
Increased awareness of the area	Install flashing lights to accompany the existing school zone signs in Gilles Street.	Traffic speeding behaviour around the school zone in Gilles Street.

4.1.1 Information to Promote Safer Student Travel to the School

The school provides limited information to promote safer student travel to school. Examples of the types of information brochures, known as school Travel Access Guides in NSW, are provided for a primary school in **Appendix B**. The Travel Access Guide is prepared with a consistent template for all government schools in NSW in collaboration with the school principals and a school travel coordinator.



4.2 Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.2. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- S for Signal timing changes at an intersection.
- I for information to the school community with signage or online promotional brochure.

Table 4.2 Indicative Cost Estimates for the Travel Safety Options at Gilles Street Primary School

Option	Priority Assessment	Indicative Cost Estimate	Comments
T1	Install flashing lights with the existing school zone signs in Gilles Street.	\$50,000	Council to apply to DIT for installation of the cameras.
S1	Review the signal timing at the signalised crossing in Gilles Street at Pulteney Street and improve the pedestrian green light waiting time during school peak hours.	\$3,000	Requires consultation with DIT for approval
I1	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	No cost to Council	This would be prepared and promoted by the school administration.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114.
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105.
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones.
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024.
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34.
- School Transport Policy, Department for Education, South Australia, January 2024.



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE		
School Travel Survey for Students		
School:		Gilles Street Primary School
Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.		
Questions for the Teacher		
Date (day/month/year):		
Weather (Daytime temperature and sky conditions):		
Please enter the name or number of your class or year group.		
How many students are absent today in your class?		
Questions for the Students in Your Class / Year Group		
Please ask the students with a 'hands-up' survey in the classroom.		
AM Period Travel		
How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)		
Main Mode of Travel in the AM Period	Number of Students	
Car (as passenger with drop-off)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
PM Period Travel		
How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)		
Main Mode of Travel in the PM Period	Number of Students	
Car (as passenger with pick-up)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
If you travelled by car, would you prefer any of these modes? (multiple answers)		
Walking for the entire trip		
Bicycle, e-bike or scooter		
Public Transport (bus, tram or train)		



Appendix B – School Travel Access Guide in NSW

| NSW Department of Education – School Infrastructure



Meadowbank Public School Travel Access Guide

Effective: September 2023

Introduction

Our school community of parents/carers, staff and students live within a reasonable walk or cycle trip of the school. This Travel Access Guide provides suggested safe and accessible options for travelling to and from school.

Active ways to get to school



Walking to and from school

- Walking is a fun way to keep active and healthy.
- Stay alert and watch out for any potential hazards, including cars reversing out of driveways, bikes and other pedestrians.
- Remember to STOP, LOOK, LISTEN and THINK every time you cross the road.



Ride your bike

- 278 bike racks are available for everyone and 42 scooter racks for K-6 students.
- All bicycle riders are required by law to wear a correctly fitted Australian standards approved helmet and is highly recommended when riding a scooter.
- Children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.

Kiss and drop expectations

- For parents/carers who drive their child/ren to school, the kiss and drop zone is located along Rhodes Street starting from Hermitage Road.
- This space is a 'No Parking' zone, meaning that you may stop for up to a maximum of 2 minutes and move no more than 3 metres from the vehicle.

Message from our principal

- Meadowbank Public School supports sustainable and environmentally friendly transport practices.
- Students up to 8 years of age should hold the hand of an adult when walking or be accompanied by an adult when riding
- Students from 8 to 10 years of age should be actively supervised by an adult

School bell times

Start Times

8:45 am

End Times

2:45 pm

The outside school hour times for the primary school are: 7:00 am - 8:45 am and 2:45 pm - 6:00 pm.

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





NSW Department of Education – School Infrastructure

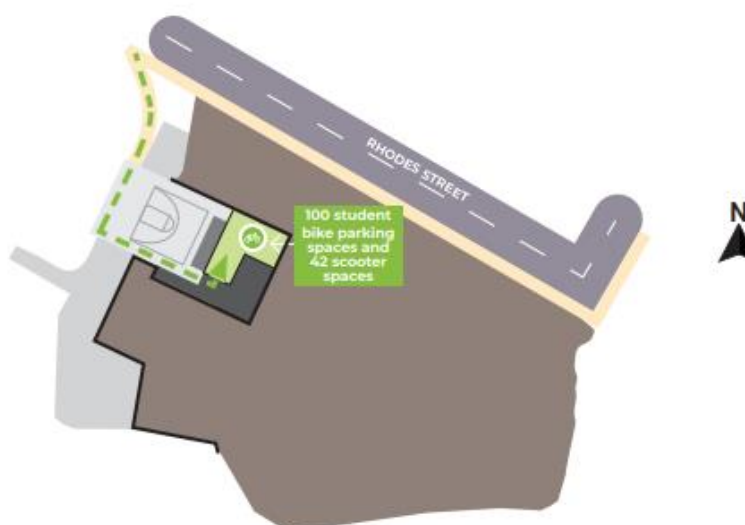


Please use the Trip Planner at transportnsw.info/ for additional information about cycling routes to the school.

End of trip facilities



Playground level:
For students attending
Meadowbank Public School





NSW Department of Education – School Infrastructure

Where do you ride?

Footpath/shared path/cycleway:

- Children under 16 can ride on a footpath.
- Adults supervising children under 16 can also ride on the footpath.
- Be careful of cars entering and exiting driveways.
- Watch out for pedestrians, other riders and animals.

Look out for pedestrians on shared paths.



Crossing the road:

- Be extra careful.
- Walk your bicycle when you cross at a pedestrian crossing.

Give a metre:

Give pedestrians 1 metre of space when riding past.



3 steps to follow when riding a bike:

Clip, check, chime.

Clip your helmet

1



You must always wear a helmet when riding your bike.

Check your brakes

2



Make sure your brakes are working.

Chime your bell

3



If you pass another rider or pedestrian, chime your bell.

Things to remember

- Always ask your parents permission to ride.
- Loose clothing and items can get caught in your wheels. Secure any loose items, like backpack straps



- Shoes with a good tread on the soles will help you grip the pedals and protect your feet. Make sure your laces are tied.



Always remember to watch out for hazards



- 1 Wet leaves
- 2 Big puddles
- 3 Storm grates
- 4 Gravel or rocks
- 5 Little kids
- 6 Animals
- 7 Changes in the road/footpath/cycleway surfaces

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North Adelaide Primary School

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
3 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	John Devney	James Arnold	James Arnold	3 July 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Executive Summary

Overview

North Adelaide Primary School is a public school that comprises Reception to Year 6 with an enrolment of 286 students with a maximum 330 student capacity. The distribution of students by year group is:

- 30 students in Year R
- 137 students in Years 1 to 3
- 131 students in Years 4 to 6

The school enrolment area is zoned and includes all of the suburb of North Adelaide in the City of Adelaide, parts of Ovingham, Fitzroy and Thorngate in the City of Prospect and Medindie in the Town of Walkerville. Over 44 per cent of the students live in North Adelaide with 15 per cent in the adjacent suburbs to the Ring Road or in Adelaide CBD.

Key Findings

The AM and PM periods are very similar with about 74 and 71 per cent arriving or departing by car respectively. The walk mode share is about 20 per cent and travel by public transport is about 3.5 per cent. The number of students who travelled by bicycle or scooter was very low with security issues with the bicycle storage area.

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during AM arrival period from 8:30 am to 9:30 am. The AM period arrival profile was relatively distributed over the hour before the school start time, with the peak activity of arrivals between 8:30 am and 9:00 am.

The key issues for students and parents access the school are:

- Carparking was limited during the 15-minute peak periods around both AM and PM peak times. This was largely attributed to staff and nearby worker demand in the area, especially on Tynte Street.
- Angled carparking in Tynte Street was also difficult to navigate for school drop off / pick up.
- Parents were observed making mid-block U-turn movements in Gover Street.
- Some issues with higher speeds and failure to give way at the Gover Street emu crossing.

Key Recommendations

Infrastructure Treatments

- Convert the emu school crossing to a koala crossing in Gover Street.
- Reconfigure the footpath and kerb in front of the former fire station entrance that is immediately west of the student entrance in Tynte Street to allow for short term 15-minute parking during the AM and PM school peak hours. The 'No Stopping' yellow line would be removed to allow for angle parking spaces to be implemented.
- Investigate options for safer pedestrian movements by parents and students in Tynte Street opposite the student entrance immediately east of the former fire station entrance.

Operational Efficiencies

- Implement changes to the timed angle parking on the north side of Tynte Street in front of the school to be 15-minute limits from 8 am to 9 am and 2:30 pm to 3:30 pm on school days, instead of the mixture of 15-minute and 1P parking spaces. This will provide additional parking capacity for the Kiss and Drop activity in Tynte Street.
- Organise for more staff to be available in the AM peak during the busiest period for student arrivals and in the PM departure period at the Tynte Street and Gover Street entrances.
- Staff parking measures with the provision of permits for areas on Gover Street. Changes to accommodate staff parking issues was not in the scope of the student travel safety review.



Safety Promotions

- Install additional signage and promotion of the school area for traffic approaching the school zones at the O'Connell Street and Lefevre Terrace ends of Gover Street and Tynte Street.
- A consolidated promotional travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in additional to the school newsletter.

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Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.

The following tasks were completed for this school travel safety review:

- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a student travel mode survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

North Adelaide Primary School is located on Tynte Street with a rear access on Gover Street on the block east of O'Connell Street and west of Margaret Street. The school site and the existing surrounding environs are shown in Figure 1.1.

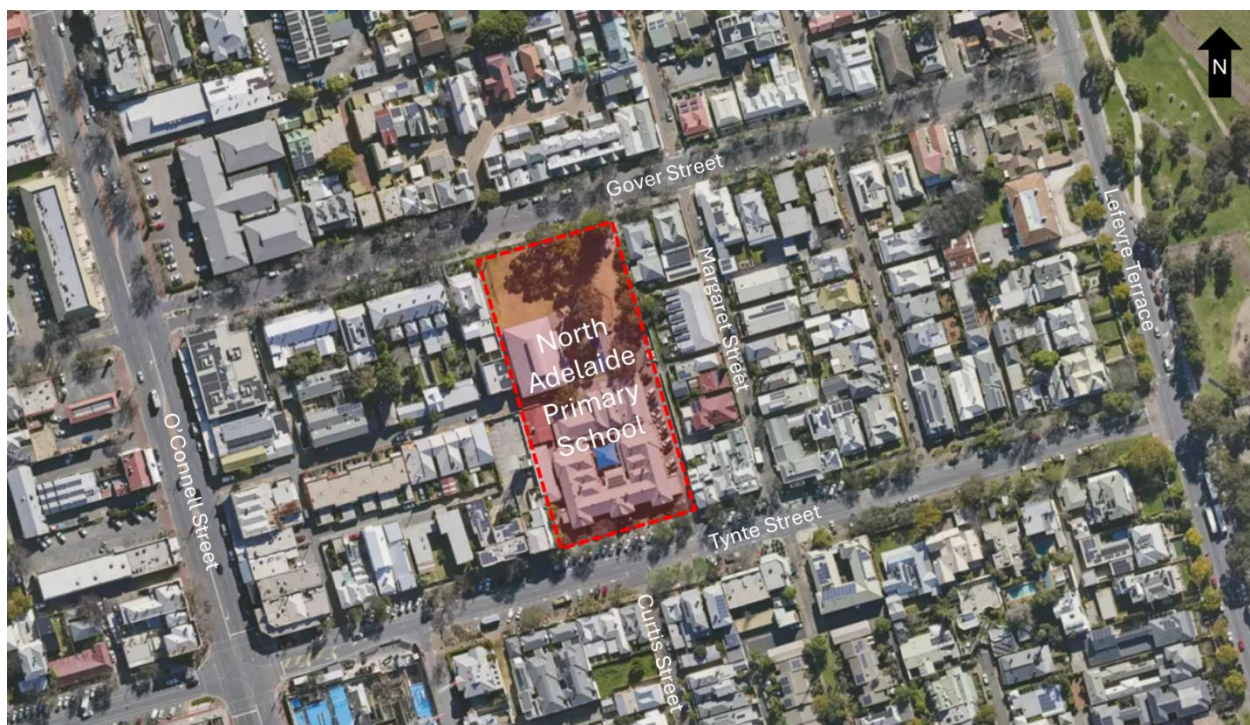
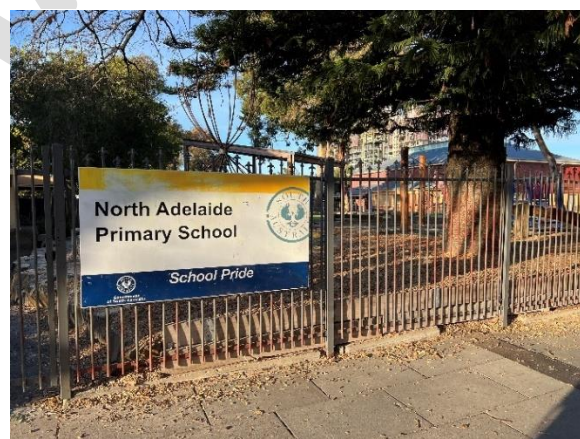


Figure 1.1 North Adelaide Primary School Location

North Adelaide Primary School has the main student entrance on Tynte Street and a rear access from Gover Street as shown in Figure 1.2.



Main student entrance on Tynte Street



Rear entrance to the school on Gover Street

Figure 1.2 Entrances to North Adelaide Primary School



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

North Adelaide Primary School is a State Government public school that is located in a heritage building built in 1877. A major redevelopment of the building was completed in 2003 to provide space for 13 classes and shared teaching spaces such as the resource centre, a computer suite, an art studio, gymnasium, music practice rooms and a dedicated OSHC centre. All areas within the school are fully air-conditioned, bright and very well maintained. Staff, parents and children have very comfortable environment in which to work and play. The school site is heritage listed and is within one of Adelaide's heritage-listed precincts.

North Adelaide Primary School comprises years Reception to 6. The front office opens at 8:40 am and closes at 3:30 pm. The bell times are:

- 8:50 am with the start of classes at 9:00 am
- The gate to the student entrance on Tynte Street is locked at 9:15 am and reopened at 2:55 pm
- 3:00 pm with the finish of classes.

2.2 Student Enrolment Analysis

The North Adelaide Primary School enrolment area is shown in Figure 2.1. It includes all of the suburb of North Adelaide in the City of Adelaide, parts of Ovingham, Fitzroy and Thorngate in the City of Prospect and Medindie in the Town of Walkerville.

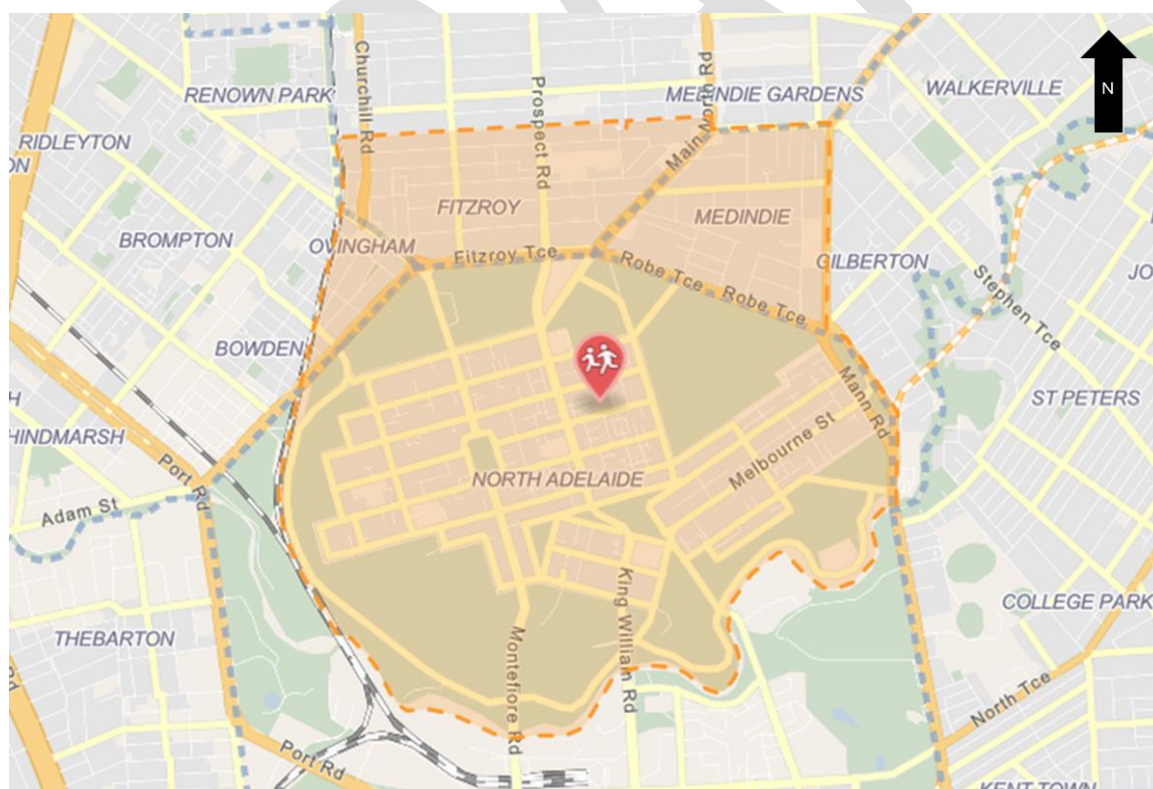


Figure 2.1 School Enrolment Area for North Adelaide Primary School



The school enrolment in Term 2 2024 is for 298 students out of a maximum 330 student capacity. The distribution of students by year is as follows:

- 30 students in Year R
- 137 students in Years 1 to 3
- 131 students in Years 4 to 6

The number of students by residence location and year is provided in Table 2.1 and is shown in the histogram in Figure 2.2. Over 44 per cent of the students live in North Adelaide with 15 per cent in the adjacent suburbs to the Ring Road or in Adelaide CBD.

Table 2.1 Student Residence per Location for North Adelaide Primary School

Location	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Percent
North Adelaide	13	16	23	17	26	20	17	132	44.3%
Fitzroy	4	3	2	3	4	4	0	20	6.7%
Thorngate	0	1	1	2	1	0	0	5	1.7%
Medindie	2	1	1	1	1	1	1	8	2.7%
Gilberton	0	0	3	0	0	1	0	4	1.3%
Adelaide	0	0	0	0	0	0	1	1	0.3%
Other Inner Councils	11	20	18	24	17	17	17	124	41.6%
Outer North	0	0	1	0	0	1	2	4	1.3%
Total	30	41	49	47	49	44	38	298	100.0%

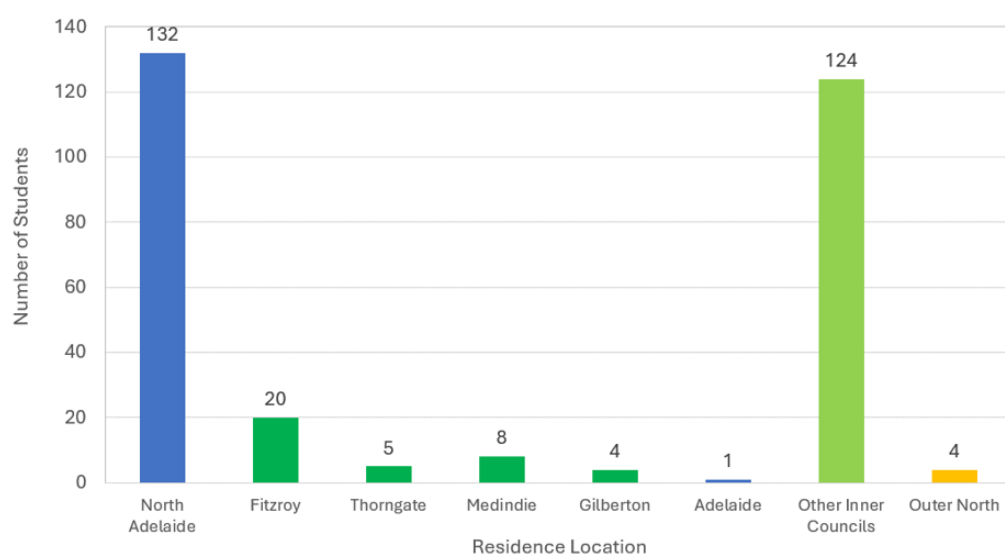


Figure 2.2 North Adelaide Primary School Student Residence Location Analysis



2.2.1 Student Travel Demand

The student travel mode survey was conducted during the first morning class on Wednesday 29 May 2024. A copy of the student travel mode survey form is included in Appendix A. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as passenger for drop-off in the morning and pick-up in the afternoon)
- Walk for the entire trip
- Bus
- Bicycle or e-bike
- Scooter

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.3. The AM and PM periods are very similar with about 74 and 71 per cent arriving or departing by car respectively. The walk mode share is about 20 per cent and travel by public transport is about 3.5 per cent.

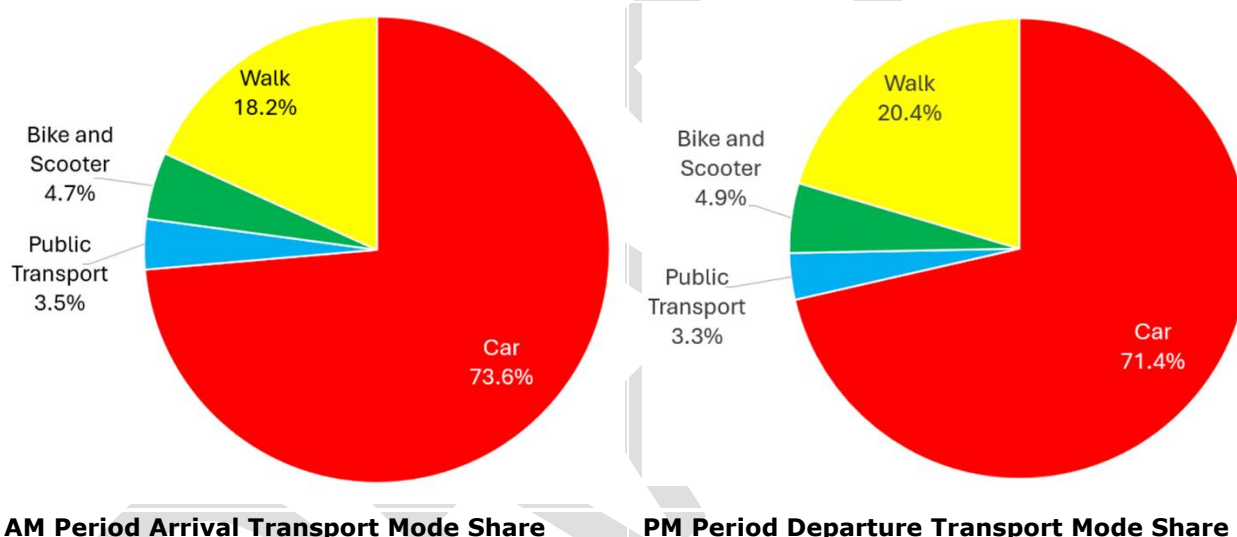


Figure 2.3 North Adelaide Primary School Student Transport Mode Shares in May 2024

A breakdown of the transport mode share results by year groups (Reception to Year 3 and Years 4 to 6) is provided in Table 2.2. The transport mode share for students in reception to Year 3 who are driven to school is about five per cent less than the students in Years 4 to 6 in the AM period versus two per cent more in the PM period.

Table 2.2 Student Mode Shares by Year Group at North Adelaide Primary School in May 2024

Transport Mode	AM Arrivals Reception to Year 3	AM Arrivals Years 4 to 6	PM Departures Reception to Year 3	PM Departures Years 4 to 6
Car	72.2%	76.9%	72.2%	69.6%
Public Transport	3.9%	2.6%	2.8%	4.3%
Bike and Scooter	5.0%	3.8%	5.1%	4.3%
Walk	18.9%	16.7%	19.9%	21.7%



2.3 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.3.1 Road Network

The streets in the local road network at North Adelaide Primary School are provided in Table 2.3. The front entrance and main office of the school is provided on Tynte Street. The rear entrances, and location of the informal kiss and drop area, is located on Gover Street.

Table 2.3 Local Streets at North Adelaide Primary School

Road	Classification	Relevance to the School
Tynte Street	Local street	2-way traffic in on the southern side of the school; PAC located approximately at main entrance to the administration office of the school
Gover Street	Local street	2-way traffic on the northern side of the school; rear entrance and informal kiss and drop area
O'Connell Street	Arterial road	North-south road corridor located 200m west from school entrance
Margaret Street	Local street	1-way traffic northbound between Tynte Street and Gover Street on the eastern side of the school
Lefevre Terrace	Collector road	North-south road corridor located 250m east from school entrance

The attributes of the local road network at North Adelaide Primary School are summarised in Table 2.4. In areas where no data was provided, the field was labelled as not applicable (n/a). Generally, the posted speed limit was obeyed by drivers in the area.

Table 2.4 Local Road Network Attributes at North Adelaide Primary School

Road	Number of Lanes	Daily Traffic Volumes	Posted Speed (km/h)	Average Speed (km/h)	85 th Percentile Speed (km/h)
Tynte Street	2	2,209	50	36.2	45.0
Gover Street	2	N/A	50	N/A	N/A
O'Connell Street	4	14,146	50	39.5	48.0
Margaret Street	1	N/A	50	N/A	N/A
Lefevre Terrace	2	8,913	50	44.1	49.5



2.3.2 Crash Analysis

A review of the latest crash data from 2018 to 2022 (five-year period) has been sourced from DataSA. During this time there has been the following crashes within direct vicinity of the school:

- Tynte Street: 2 minor injury and 1 property damage crash
- Gover Street: 1 property damage crash and 1 serious injury crash
- O'Connell Street
 - Intersection with Tynte Street: 2 property damage crashes
 - Intersection with Gover Street: 1 property damage crash
- Lefevre Terrace
 - Intersection with Tynte Street: 1 property damage crash

The crash statistics from 2018 to 2022 are shown by location in Figure 2.4.

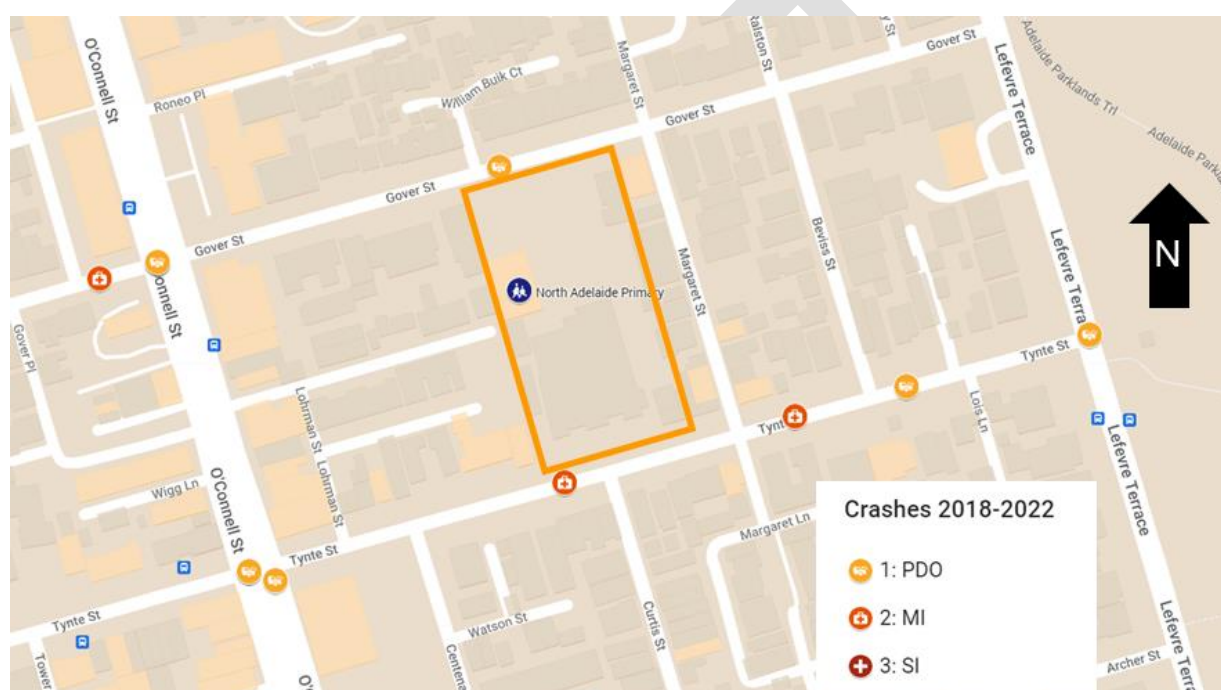


Figure 2.4 Crashes on School Days at North Adelaide Primary School

2.3.3 Parking and Kiss and Drop Areas

The on-street car parking controls along the streets in the vicinity of the school are shown in Figure 2.5.

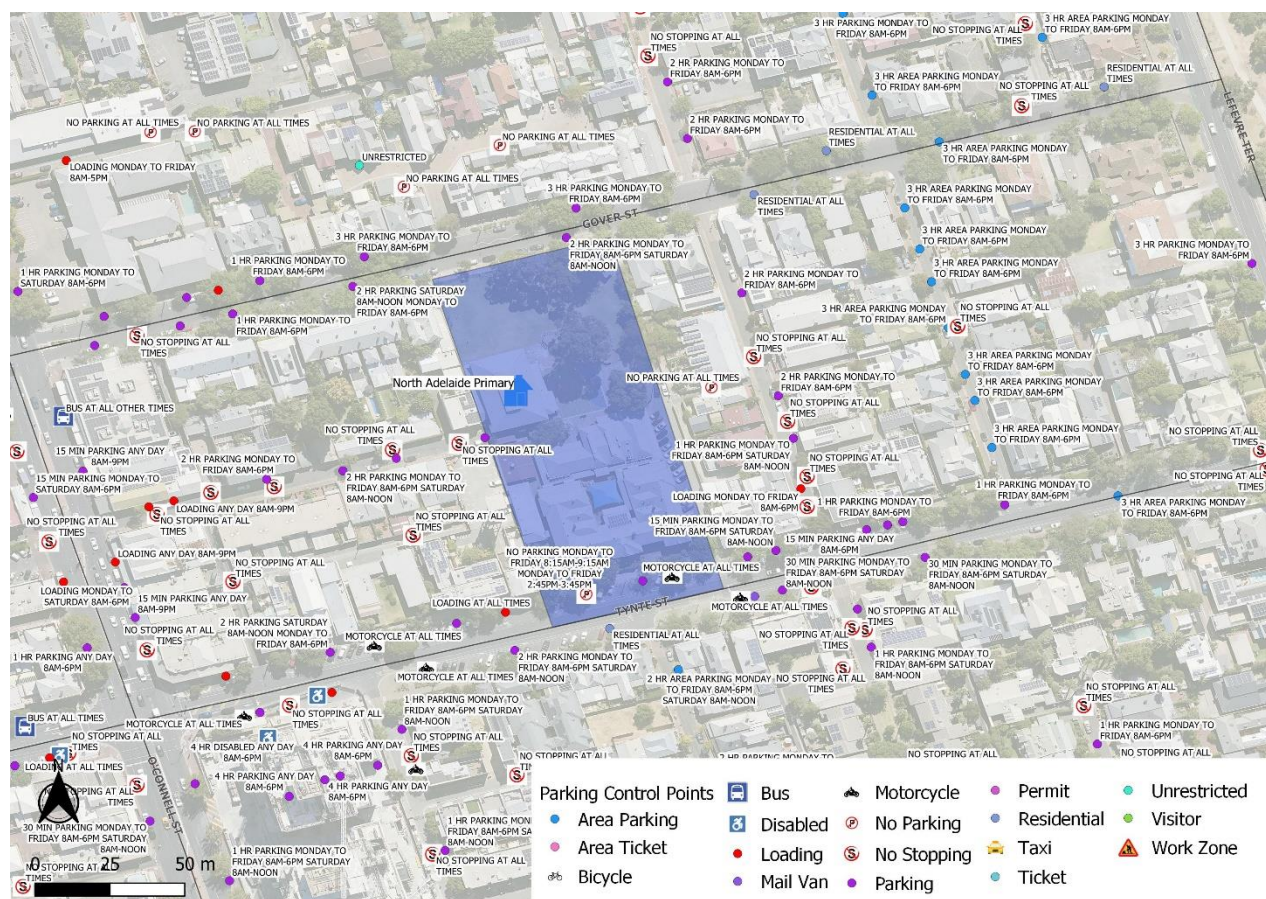
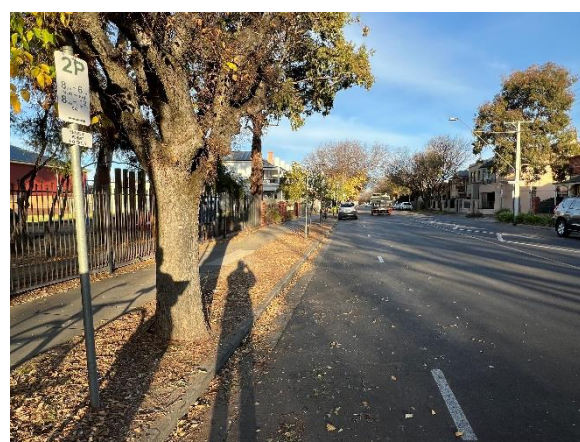


Figure 2.5 On-street Parking and Kiss and Drop Areas for North Adelaide Primary School

On-street parking on both sides of Tynte Street and Gover Street is used for Kiss and Drop activity as shown in Figure 2.6.



A mix of timed parking controls in Tynte Street

2P timed parking in Gover Street

Figure 2.6 On-street Parking Controls at North Adelaide Primary School

No formal Kiss and Drop areas are provided at the school. However, informal Kiss and Drop activity in the short-term parking zones occurs in Tynte Street and Gover Street as shown in Figure 2.7.



The timed angle parking in Tynte Street is used for the Kiss and Drop activity on both sides of the street.



The 2-hour parking areas in Gover Street in the school zone are used for the Kiss and Drop activity mostly on the southern side of the street.

Figure 2.7 Informal Kiss and Drop Areas at North Adelaide Primary School

2.3.4 Public Transport

Public transport services to North Adelaide Public School are provided with:

- the north-south bus services in O'Connell Street with two bus stops located 230 m west of the school. These bus stops have frequent bus routes that are in a Go Zone.
- Routes 98A/98C Connector Free bus with stops in Lefevre Terrace at Tynte Street and in Tynte Street at O'Connell Street.
- The Adelaide Metro bus services to the bus stops in O'Connell Street that is as Go Zone with frequent bus services between Adelaide CBD and the northern suburbs.
- The location of the bus stops that are within walking distance to the school are shown in Figure 3.14. Tram and train services are not used by students to travel to North Adelaide Primary School.

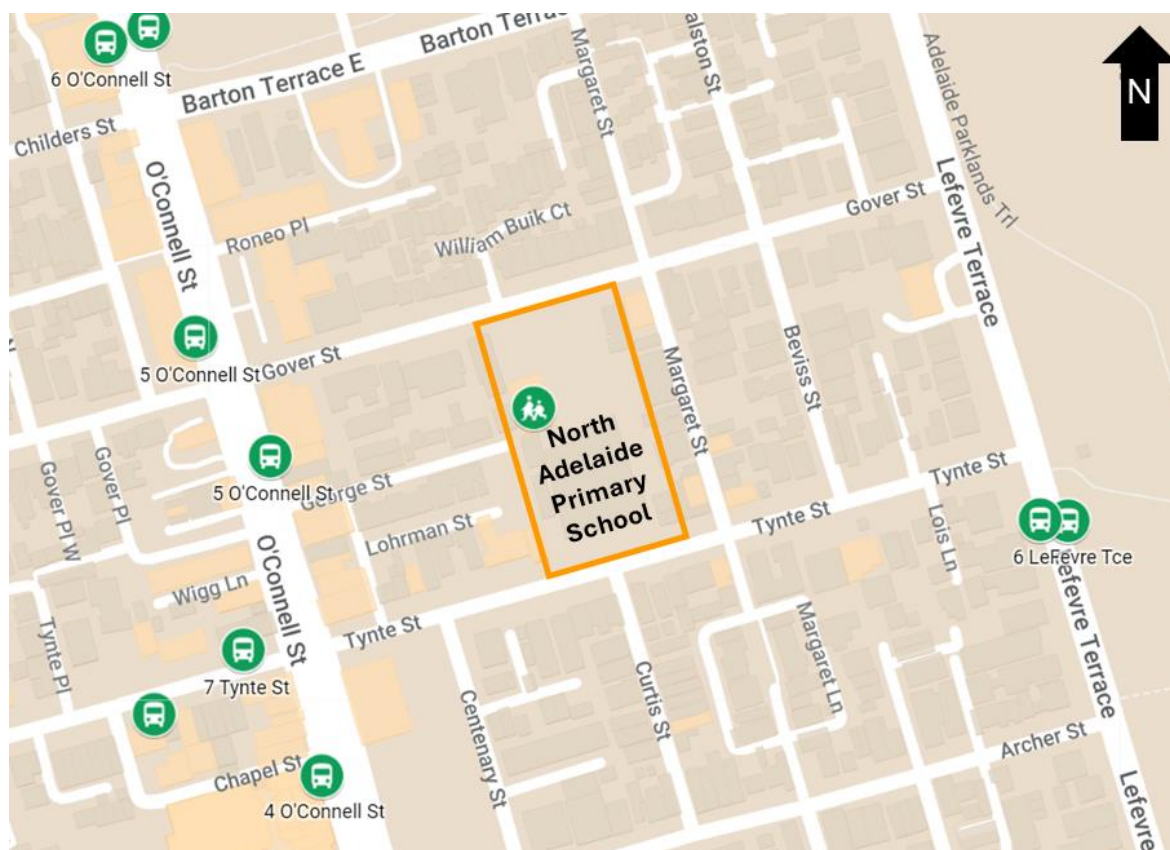


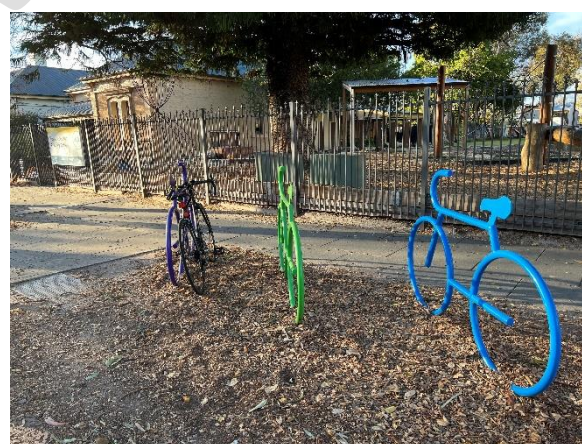
Figure 2.8 Public Transport Services to North Adelaide Primary School

2.3.5 Cycling

The secure bicycle storage area has 30 spaces available for students. The bicycle storage racks inside the secure locked area at the student entrance in Tynte Street and in the verge on the southside of Gover Street are shown in Figure 2.9. With the security and theft issues at the Tynte Street facility, the school is considering relocating the secure bicycle parking to a location internal to the school grounds.



Secure undercover bicycle parking with access from Tynte Street



Uncovered public bicycle parking in Gover Street

Figure 2.9 Bicycle Storage Areas at North Adelaide Primary School



The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.10. Lefevre Terrace has an on-road bicycle lane on the western side and an off-road 1.5 m wide bike lane on the eastern side. Sealed shared paths exist throughout the Adelaide Park Lands.

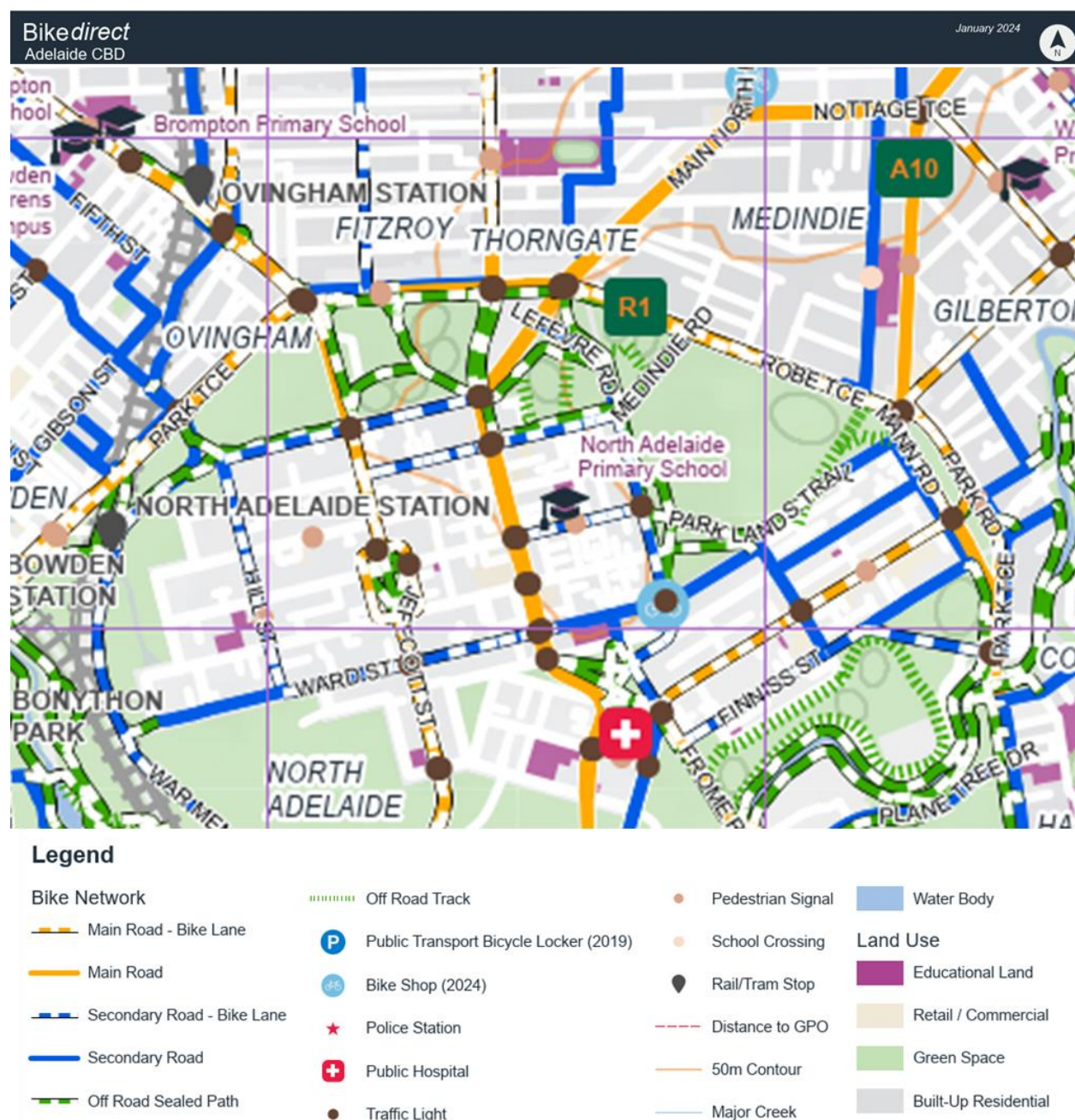


Figure 2.10 Cycling Network to North Adelaide Primary School



2.3.6 Pedestrian Access

Pedestrian crossings are located at North Adelaide Primary School in Tynte Street with a PAC and in Gover Street with an emu crossing as shown in Figure 2.11. Traffic signals are operational at the intersections of O'Connell Street/Tynte Street and Lefevre Terrace/Tynte Street. School zones for 25 km/h when children present are installed in Tynte Street between O'Connell Street and Lefevre Terrace and in Gover Street west of Lefevre Terrace.



Pedestrian Actuated Crossing in Tynte Street



Emu crossing in Gover Street

Figure 2.11 Pedestrian Crossings to North Adelaide Primary School

Walking to and from the school is an important transport mode for students who walk for their entire trip or as an access mode to the bus stops in O'Connell Street or Tynte Street on the Route 98 Connector bus. The footpath network in North Adelaide and through the Park Lands in Botanic Park needs to be well maintained and kept clear of fallen trees and debris by the City of Adelaide.

Footpaths are generally provided on both sides of the road within the North Adelaide suburbs built up suburbs. Multiple looping paths are typically seen within and surrounding the nearby the parklands. Pedestrian access to the school includes a pedestrian actuated crossing on Tynte Street and an emu crossing on Gover Street as shown in Figure 2.12.



Pedestrian crossing in Tynte Street that aligns with the main entrance to the school office



Pedestrian crossing in Gover Street that provides access to the rear entrance

Figure 2.12 Pedestrian Crossings at North Adelaide Primary School



The walkable catchment areas to North Adelaide Primary School are shown in Figure 2.13 based on an 800m walking distance along the footpath network. Students who walk their entire trip to school are likely walking from North Adelaide, Gilberton or the suburbs immediately to the north of Fitzroy Terrace and Robe Terrace.

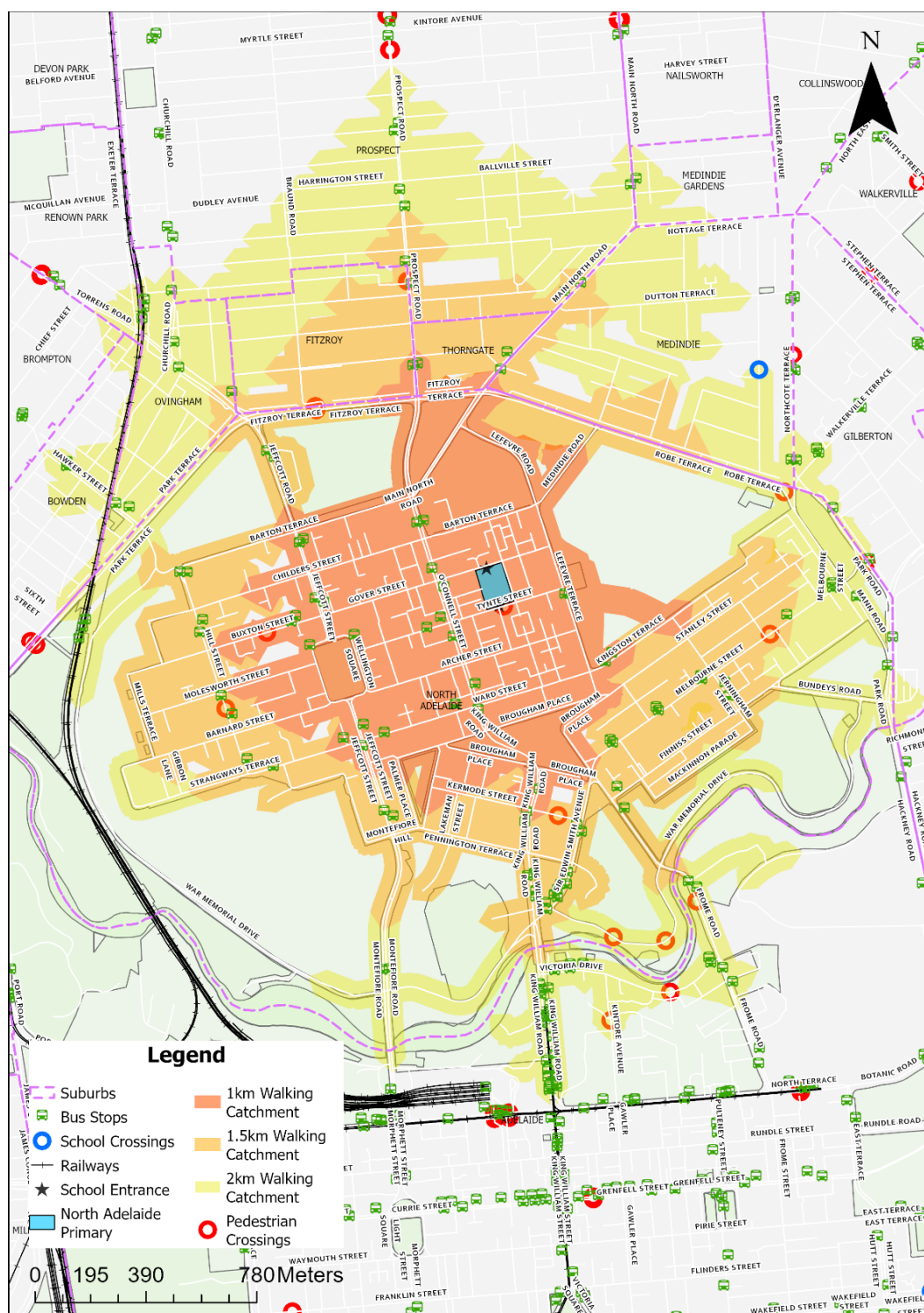


Figure 2.13 Walkable Access Catchment to North Adelaide Primary School



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with North Adelaide Primary School Principal and Deputy Principal on Thursday 23 of May to discuss existing issues and any suggestions for new infrastructure. These were as follows:

- Issues with speeding in Tynte Street and Gover Street.
- Bike rack theft resulting in a secure location being required at the front of the school site
- Bike storage at the rear entrance only included the on-street facilities in Figure 2.9. This was utilised by 2 students for the day.
- Informal kiss and drop area on Tynte Street was hard to use due to the angled parking
- The construction of 88 O'Connell Street development resulted in carparking being utilised by nearby workers.
- The construction of the development is scheduled to be completed by early 2025.
- Staff carparking is limited at the school. Many staff park on the nearby local streets with the time limit restrictions and limited spaces result in staff leaving classrooms to shift vehicles.

No school expansion is currently planned for as the buildings were upgraded in 2003. Internal renovations are underway for the heating and air conditioning and other repairs in the heritage building.

3.2 Site Observations

The existing student arrival and departure movements at the North Adelaide Primary School were observed on Thursday 23 May 2024 from 8 am to 9 am and from 2:30 pm to 3:30 pm.

3.2.1 AM Arrival Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during AM arrival period from 8:30 am to 9:30 am. The AM period arrival profile was relatively distributed over the hour before the school start time, with the peak activity of arrivals between 8:30 am and 9:00 am. The entrances that were observed are shown in Figure 3.1.



Car making an unsafe U-turn in Gover Street



Cars observed double parking in Gover Street

Figure 3.1 AM Peak Safety Issues in Gover Street at North Adelaide Primary School



Other findings from the AM observations are:

- Carparking was generally available across the peak hour in Tynte Street, with vehicles not staying for more than 5 minutes as shown in Figure 3.2. However, some of the construction workers and non-school visitors to the area were parking for more than an hour or longer.
- Some vehicles stayed longer as parents escorted their children within the school gates.
- Some instances of speeds over 25km/h on Gover Street.
- The signage does indicate that this only needs to occur when children are present.
- Some instances of failure to give way at Emu crossing on Gover Street.
- U-turn movements within the street on both Tynte and Gover Street.
- Drivers were attempting to change direction at the Gover Street / Margaret Street intersection and head back towards Lefevre Road.
- Pedestrians were likely to use the PAC provided at the front entrance on Tynte Street.
- Pedestrians on Gover Street where the traffic volume is low were more inclined to jaywalk on either side of the emu crossing.
- Likely due to the typically lower movements and road width.



A car entering the angle parking on Tynte Street that are delayed the through traffic



Cars use all of the spaces in the angle parking on the north side of Tynte Street in front of the school entrance

Figure 3.2 AM Parking in Tynte Street at North Adelaide Primary School



3.2.2 PM Departure Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during PM departure period from 2:30 pm to 3:30 pm. The PM period departure profile included a significant movement of vehicles within a 15-minute timeslot after the school bell. Vehicles occupied most of the carparking spaces in front of the school in the 30-minute lead up to the school bell, with these vehicles typically moving on quickly. Some parents in vehicles who stayed for over 30 minutes after the school bell, gathering in the courtyard near Gover Street.



Parking in Gover Street near the school entrance



Parking in Tynte Street near the school entrance

Figure 3.3 PM Peak Conditions at North Adelaide Primary School

Other findings from the PM observations are:

- Carparking was generally occupied before the school bell and for 10 minutes after the school bell.
- Workers on O'Connell Street were seen getting into their cars on Tynte Street during the PM peak period
- Some instances of failure to give way at Emu crossing on Gover Street
- U-turn movements within the street on both Tynte and Gover Street
- Drivers were attempting to change direction at the Gover Street / Margaret Street intersection and head back towards Lefevre Road.
- Pedestrians were likely to use the PAC provided at the front entrance on Tynte Street
- Some situations were observed where parents crossed over Tynte Street mid-block with their children
- Pedestrians on Gover Street (where the road volume is anticipated to be low) were more inclined to jaywalk on either side of the Emu Crossing.
- Likely due to the typically lower movements and road width

3.3 Summary of the Issues and Opportunities

The key issues for students and parents access the school are:

- Carparking was limited during the 15-minute peak periods around both AM and PM peak times. This was largely attributed to staff and nearby worker demand in the area, especially on Tynte Street.
- Angled carparking in Tynte Street was also difficult to navigate for school drop off / pick up.
- Parents were observed making mid-block U-turn movements in Gover Street.
- Some issues with higher speeds and failure to give way at the Gover Street emu crossing.



4 Travel Safety Options and Assessment

4.1 Student Travel Safety Options

Options to improve the travel safety for students at the school were developed under three categories, namely:

- Infrastructure treatments requiring civil works with changes to signals or pedestrian crossings.
- Operational efficiencies, with changes to parking controls, Kiss and Drop areas or school zones.
- Safety promotions to increase awareness of the school with warning signage or information.

The options for the assessment are provided in **Error! Reference source not found.** with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options for North Adelaide Primary School

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Convert the emu crossing in Gover Street to a koala crossing with flashing warning lights during the AM arrival and PM departure periods.	Drivers do not slow down in the school zone in Gover Street because the emu crossing is not obvious with the on-street parking and treed street
	Reconfigure the footpath and kerb in front of the former fire station entrance that is immediately west of the student entrance in Tynte Street to allow for short term 15-minute parking during the AM and PM school peak hours. The 'No Stopping' yellow line would be removed to allow for angle parking spaces to be implemented. This would require minor changes to the footpath and kerbing in front of the former fire station entrance.	Illegal parking in front of the former fire station entrance that is currently a no stopping zone. This would provide spaces for short term 15-minute parking close to the student entrance for the Kiss and Drop activity.
	Investigate options for safer pedestrian movements by parents and students in Tynte Street opposite the student entrance immediately east of the former fire station entrance.	During the school drop-off and pick-up periods, parents and students who are walking from the south side of Tynte Street west of the school are crossing Tynte Street opposite the student entrance.
Operational Efficiencies	Change the 1P timed parking areas in Tynte Street in front of the school to 15-minute parking for the AM and PM school periods. This parking change will need to be enforced on a regular basis.	The workers and non-school visitors to the area are parking in the spaces on the north side of Tynte Street in front of the school for extended periods. These angle parking spaces are needed for the Kiss and Drop activity at the school because they are the safest and most convenient to the school entrance.



Type of Option	Description	Issue Addressed
	Organise for more staff to be available in the AM peak during the busiest period for student arrivals and in the PM departure period at the Tynte Street and Gover Street entrances.	The pedestrian activity for the 15-minute periods in the AM and PM school peaks is very busy with safety risks to students. Students in the AM period are not organised into queues and in the PM period they are blocking the footpaths.
	Staff parking improvements with the provision of permits for staff in the local streets, including Gover Street. This is not in the scope of this school travel safety review.	With the limited on-site parking for staff and the timed parking controls in the local streets close to the school, many teachers leave their class to move their cars during the school day leaving students unattended for short periods. This is a safety issue for students because they are left unaccompanied in the classroom.
Safety Promotions	Install additional signage to promote the school area for traffic approaching the school zones at the O'Connell Street and Lefevre Terrace ends of Gover Street and Tynte Street.	Reinforce the awareness for drivers entering a "school precinct area"
	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	Students and parents may not be aware of their travel choices for bicycle routes, facilities at the school or public transport services.

4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives are shown on Figure 4.1. They include:

- Convert the emu school crossing to a koala pedestrian crossing in Gover Street.
- Reconfigure the footpath and kerb in front of the former fire station entrance that is immediately west of the student entrance in Tynte Street to allow for short term 15-minute parking during the AM and PM school peak hours. The 'No Stopping' yellow line would be removed to allow for angle parking spaces to be implemented.
- Implement changes to the timed angle parking on the north side of Tynte Street in front of the school to be 15-minute limits from 8 am to 9 am and 2:30 pm to 3:30 pm on school days, instead of the mixture of 15-minute and 1P parking spaces. This will provide additional parking capacity for the Kiss and Drop activity in Tynte Street.
- Investigate options for safer pedestrian movements by parents and students in Tynte Street opposite the student entrance immediately east of the former fire station entrance.
- Installing new unique different school zone advance warning signage at the entry points in Gover Street and O'Connell Street at the O'Connell Street and Lefevre Terrace ends.



Figure 4.1 Recommended Initiatives at North Adelaide Primary School

4.2.1 Koala Crossing in Gover Street

Examples of koala pedestrian crossing at primary schools is shown in Figure 4.2. In order to apply for a koala crossing the DIT Pedestrian Guidelines require the following evidence to be provided to support the warrant for a koala crossing.



Koala crossing with yellow flashing lights and school crossing monitors at St Ignatius' College Junior School in Queen Street, Norwood



Koala crossing at St Joseph's Memorial School in William Street, Norwood

Figure 4.2 Examples of Koala Crossings at Primary Schools

The DIT warrant for a koala crossing requires pedestrian surveys for two separate one hour periods of a typical school day with:

- 50 or more children actually cross the road and could reasonably be expected to use the crossing; and
- 200 or more vehicles per hour pass the site where the children will cross during the same two hours.

These surveys are usually conducted for the continuous period from 8:00 am to 6:00 pm on a typical weekday, but may be extended if the time of peak pedestrian movement is outside that period. The section of road under consideration is divided into zones of approximately 30 m in length.

The numbers of pedestrians categorised according to type (such as Adult / Adult with bike / Child / Child with bike / Older person / Person with a disability etc) crossing the road in each zone are counted and the totals recorded for each 15-minute period.

When the category includes 'bike', only those who cross the road are counted; not those riding along the road or footpath. Young children, the elderly and people with a disability should be given greater recognition in the pedestrian surveys by weighing their numbers. The observed numbers of:

- children under 10 year old who are not accompanied by an adult,
- older people who may exhibit a degree of frailty or difficulty in crossing the road in a timely manner,
- people recognised as having a disability should be weighted by being multiplied by a factor of 1.5.



4.2.2 Options to Improve Pedestrian Crossing Safety in Tynte Street

In order to improve the pedestrian crossing safety to the school entrance in Tynte Street, several options are provided for further consideration. These options are provided with the advantages and disadvantages in Table 4.2. They require further site observations, data collection for pedestrian volumes crossings during the AM and PM school peak hours and a more detailed assessment.

Table 4.2 Options to Improve Pedestrian Crossing Safety in Tynte Street

Option ID	Description	Advantages	Disadvantages
A	Relocate the PAC 40 m west to align with student entrance and the pedestrian desire line.	Significantly improves safety for pedestrians crossing Tynte Street with one crossing located where most pedestrians want to cross. Provides multiple safe crossing points in Tynte Street for most students.	Costly up to \$500,000 to move and reinstate on street parking in front of main entrance to the school. The PAC would be located further west from the bakery and café on the corner of Tynte Street and Margaret Street.
B	Apply to install at koala crossing at the entrance and retain the PAC	Provides a safer pedestrian crossing location for most students.	Not accepted by DIT pedestrian crossing warrants Costly up to \$2000,000 to install a new koala crossing
C	Install physical measures to channel the pedestrians along the footpath on the north side of Tynte Street between existing PAC and student entrance.	Provides a safer pedestrian crossing location for most students.	Cost up to \$20,000 Affects access from the parked cars and Kiss and Drop activity to the school entrance. Pedestrians and school students would be forced to use the footpath with pedestrian congestion during the school drop-off and pick-up times.
D	Install a median with a fence in middle of Tynte Street.	A fence will discourage walking across Tynte Street at midblock locations,	Cost up to \$50,000 Not a good urban design outcome Impact on bus and large vehicles in Tynte Street
E	Clear trees and plantings inside the school fence for students and parents to walk between the school building and the fence in Tynte Street between the PAC and the student entrance.	Provides an alternate safe walk route on the school property between the PAC and main entrance to the student entrance.	Impact on heritage building façade with removal of greenery Cost up to \$10,000



4.2.3 Signage to Increase the Awareness of the School for Motorists

An issue for school student travel safety is many motorists in Tynte Street and Gover Street are not aware that North Adelaide Primary School is located here with the heritage buildings that are set-back from the streets. It is proposed to install larger and more prominent information signage (not regulatory signage) to increase the awareness of the school. The signs could be installed at either end of Tynte Street and Gover Street for motorists to see when entering from O'Connell Street and Lefevre Terrace.

Examples of signage at the entry points to a school precinct are shown in Figure 4.3. These information and advisory advance warning signs are not standard for the DIT guidelines. Council will need to discuss with DIT about these types of signs that are intended to increase awareness to traffic in Tynte Street and Gover Street that a primary school is in the



Large entry signage that is visible to traffic on the street



Advanced warning sign for a school zone

Figure 4.3 Alternative School Precinct Warning Signage

4.2.4 Information to Promote Safer Student Travel to the School

The school provides limited information to promote safer student travel to school. Examples of the types of information brochures, known as school Travel Access Guides in NSW, are provided for a primary school in Appendix B. The Travel Access Guide is prepared with a consistent template for all government schools in NSW in collaboration with the school principals and a school travel coordinator.



4.3 Assessment and Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.3. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- P for Parking control with new signage or to pavement markings for the on-street parking or a school zone.
- I for information to the school community with signage or online promotional brochure.

Table 4.3 Indicative Cost Estimates for the Travel Safety Options at North Adelaide Primary School

Option ID	Description	Indicative Cost Estimate	Comments
T1	Convert the emu crossing in Gover Street to a koala crossing with flashing warning lights during the AM arrival and PM departure periods.	Up to \$200,000	Council to prepare evidence to support the warrant for a koala crossing and liaise with DIT for the approval to install a koala crossing. Council responsible for the design and installation if approved.
T2	Reconfigure the footpath and kerb in front of the former fire station entrance that is immediately west of the student entrance in Tynte Street to allow for short term 15-minute parking during the AM and PM school peak hours. The 'No Stopping' yellow line would be removed to allow for angle parking spaces to be implemented. This would require minor changes to the footpath and kerbing in front of the former fire station entrance.	Less than \$20,000	The footpath and parking controls in front of the former fire station are under the control of Council to design and implement.
T3	Investigate options for safer pedestrian movements by parents and students in Tynte Street opposite the student entrance immediately east of the former fire station entrance.	Undetermined	Requires additional data collection, site observations and further analysis to determine a preferred option
P1	Change the 1P timed parking areas in Tynte Street in front of the school to 15-minute parking for the AM and PM school periods. This parking change will need to be enforced on a regular basis.	Less than \$1,000	parking controls in front of the former fire station are under the control of Council to design and implement.



Option ID	Description	Indicative Cost Estimate	Comments
I1	Install additional signage and promotion of the school area for traffic approaching the school zones at the O'Connell Street and Lefevre Terrace ends of Gover Street and Tynte Street.	Less than \$1,000	The selection of information signage and installation in Tynte Street and Gover Street is under the control of the Council.
I2	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	No cost to Council	This would be prepared and promoted by the school administration.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE 	
School Travel Survey for Students	
School: North Adelaide Primary School	
<i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i>	
Questions for the Teacher	
Date (day/month/year): Weather (Daytime temperature and sky conditions): Please enter the name or number of your class or year group. How many students are absent today in your class?	
Questions for the Students in Your Class / Year Group	
<i>Please ask the students with a 'hands-up' survey in the classroom.</i>	
AM Period Travel	
<i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>	
Main Mode of Travel in the AM Period	Number of Students
Car (as passenger with drop-off in Tynte Street)	
Car (as passenger with drop-off in Gover Street)	
Car (as passenger with drop-off in other streets)	
Walk for the entire trip	
Bus	
Train	
Tram	
Bicycle, e-bike or moped	
Scooter	
PM Period Travel	
<i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>	
Main Mode of Travel in the PM Period	Number of Students
Car (as passenger with pick-up in Tynte Street)	
Car (as passenger with pick-up in Gover Street)	
Car (as passenger with pick-up in other streets)	
Walk for the entire trip	
Bus	
Train	
Tram	
Bicycle, e-bike or moped	
Scooter	
If you travelled by car, would you prefer any of these modes? (multiple answers)	
Walking for the entire trip	
Bicycle, e-bike or scooter	
Public Transport (bus, tram or train)	



Appendix B –School Travel Access Guide in NSW

| NSW Department of Education – School Infrastructure



Meadowbank Public School Travel Access Guide

Effective: September 2023

Introduction

Our school community of parents/carers, staff and students live within a reasonable walk or cycle trip of the school. This Travel Access Guide provides suggested safe and accessible options for travelling to and from school.

Active ways to get to school



Walking to and from school

- Walking is a fun way to keep active and healthy.
- Stay alert and watch out for any potential hazards, including cars reversing out of driveways, bikes and other pedestrians.
- Remember to STOP, LOOK, LISTEN and THINK every time you cross the road.



Ride your bike

- 278 bike racks are available for everyone and 42 scooter racks for K-6 students.
- All bicycle riders are required by law to wear a correctly fitted Australian standards approved helmet and is highly recommended when riding a scooter.
- Children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.

Kiss and drop expectations

- For parents/carers who drive their child/ren to school, the kiss and drop zone is located along Rhodes Street starting from Hermitage Road.
- This space is a 'No Parking' zone, meaning that you may stop for up to a maximum of 2 minutes and move no more than 3 metres from the vehicle.

Message from our principal

- Meadowbank Public School supports sustainable and environmentally friendly transport practices.
- Students up to 8 years of age should hold the hand of an adult when walking or be accompanied by an adult when riding
- Students from 8 to 10 years of age should be actively supervised by an adult

School bell times

Start Times

8:45 am

End Times

2:45 pm

The outside school hour times for the primary school are: 7:00 am - 8:45 am and 2:45 pm - 6:00 pm.

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





NSW Department of Education – School Infrastructure

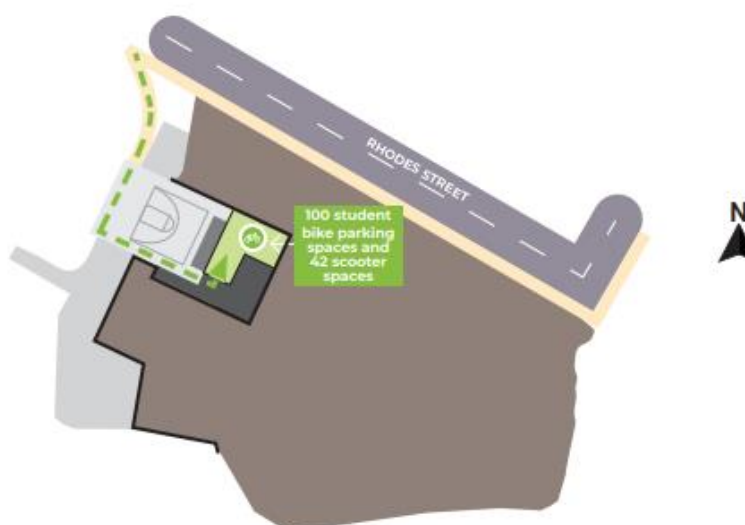


Please use the Trip Planner at transportnsw.info/ for additional information about cycling routes to the school.

End of trip facilities



Playground level:
For students attending
Meadowbank Public School





NSW Department of Education – School Infrastructure

Where do you ride?

Footpath/shared path/cycleway:

- Children under 16 can ride on a footpath.
- Adults supervising children under 16 can also ride on the footpath.
- Be careful of cars entering and exiting driveways.
- Watch out for pedestrians, other riders and animals.

Look out for pedestrians on shared paths.



Crossing the road:

- Be extra careful.
- Walk your bicycle when you cross at a pedestrian crossing.

Give a metre:

Give pedestrians 1 metre of space when riding past.



3 steps to follow when riding a bike:

Clip, check, chime.

Clip your helmet

1



You must always wear a helmet when riding your bike.

Check your brakes

2



Make sure your brakes are working.

Chime your bell

3



If you pass another rider or pedestrian, chime your bell.

Things to remember

- Always ask your parents permission to ride.
- Loose clothing and items can get caught in your wheels. Secure any loose items, like backpack straps.



- Shoes with a good tread on the soles will help you grip the pedals and protect your feet. Make sure your laces are tied.



Always remember to watch out for hazards



- 1 Wet leaves
- 2 Big puddles
- 3 Storm grates
- 4 Gravel or rocks
- 5 Little kids
- 6 Animals
- 7 Changes in the road/footpath/cycleway surfaces

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





Pulteney Grammar School

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
10 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	Kaitlin Neave	John Devney	John Devney	10 July 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Executive Summary

Overview

Pulteney Grammar School is a private school that accommodates students from Reception to Year 12. The school also has an Early Learning Centre (ELC) for children aged 3 to 5 years old that is part of the Junior School. In Term 2 2024, the school had 876 students enrolled with the number of students by year groups given are:

- Reception to Year 3 with 158 students (18 per cent)
- Years 4 to 6 with 186 students (21 per cent)
- Years 7 to 9 with 269 students (31 per cent)
- Years 10 to 12 with 263(30 per cent)

Key Findings

The Pulteney Grammar School does not have an enrolment zone and therefore students can live anywhere in metropolitan Adelaide and regional South Australia. Only 91 students or about 10 per cent live in the City of Adelaide. With 83 per cent of the students living in the inner metropolitan suburbs, most would have good access to public transport by train, tram or bus services. The frequent Go Zone bus corridors have bus stops in King William Street and Pulteney Street at both ends of Gilles Street within 300 m of the school.

In the AM period, 81 per cent of students travelled to school by car with 74 per cent in the PM period. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. Conversely, public transport was 12 per cent in the AM period and 20 per cent in in PM period.

The walk and cycling modes in the AM and PM periods was only for about six to seven per cent of students.

Traffic and parking issues near the school were observed on Gilles Street and South Terrace. The traffic safety issues that are for the City of Adelaide to address are:

- Delays for pedestrians to wait to cross at the PAC signalised crossing in Gilles Street.
- Traffic speeding in South Terrace in the school zone area during AM peak period.
- Parked vehicles extended the time limits in South Terrace that did not provide opportunities for parents for Kiss and Drop activity close to the school.

Key Recommendations

Options to improve the travel safety for students were developed and include the following recommendations:

- Install red light cameras along South Terrace around the school zone area.
- Review the signal timing at the signalised crossing Grote Street and improve the pedestrian green light waiting time during school peak hours.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.
- The following tasks were completed for this school travel safety review:
 - Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
 - With the support from the teachers, undertake a student travel mode survey.
 - Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.

1.3 School Location

Pulteney Grammar School is located on Gilles Street in Adelaide city centre on the block bounded by Gilles Street, Symonds Place, and South Terrace. It is in the immediate west to Gilles Primary School. The school site and the existing surrounding environs are shown in Figure 1.1.

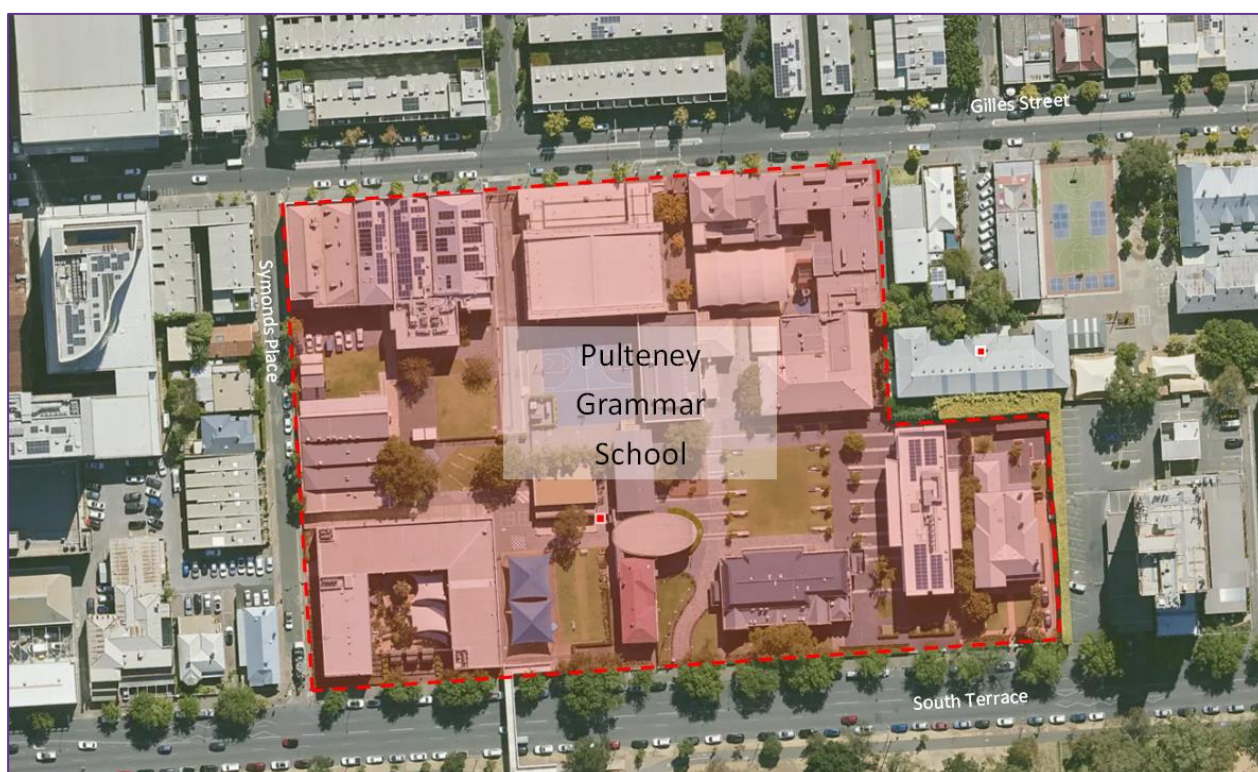


Figure 1.1 Pulteney Grammar School Location

The entrances to Pulteney Grammar School in Gilles Street and South Terrace are shown in Figure 1.2.



Entrance to Pulteney Grammar School in Gilles Street at Dumphries Place



Entrance to Pulteney Grammar School from the pedestrian bridge over South Terrace

Figure 1.2 Entrances to Pulteney Grammar School



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

Pulteney Grammar School is a private school that accommodates students from Reception to Year 12. The school also provides an Early Learning Centre (ELC) is part of the Junior School building for children aged 3 to 5 years old. The ELC closes for two weeks over the Christmas and New Year period. Individual closure days also occur throughout the year for Pulteney Grammar School professional development.

The school office hours are 8 am to 4:30 pm, Monday to Friday. The bell times are:

- Early Learning Centre (ELC) operates from 7:30 am to 6:00 pm
- Junior School operates from 8.20 am to 3.25 pm
- Middle School operates from 8.15 am to 3.30 pm
- Senior School operates from 8.15 am to 3.30 pm

2.2 Student Enrolment Analysis

The school enrolment in 2024 is for 876 students with a distribution by year as follows:

- 36 students in Reception
- 39 students in Year 1
- 45 students in Year 2
- 38 students in Year 3
- 53 students in Year 4
- 65 students in Year 5
- 68 students in Year 6
- 82 students in Year 7
- 98 students in Year 8
- 89 students in Year 9
- 78 students in Year 10
- 88 students in Year 11
- 97 students in Year 12

In summary, the number of students by year groups and percentage are:

- Reception to Year 3 with 158 students (18 per cent)
- Years 4 to 6 with 186 students (21 per cent)
- Years 7 to 9 with 269 students (31 per cent)
- Years 10 to 12 with 263 (30 per cent)

Reception to Year 3 is the smallest year group with 18 per cent of the student enrolments.



The Pulteney Grammar School does not have an enrolment zone and therefore students can live anywhere in metropolitan Adelaide and regional South Australia. The number of students by areas of suburb is shown in Figure 2.1. Only 91 students or about 10 per cent live in the City of Adelaide.

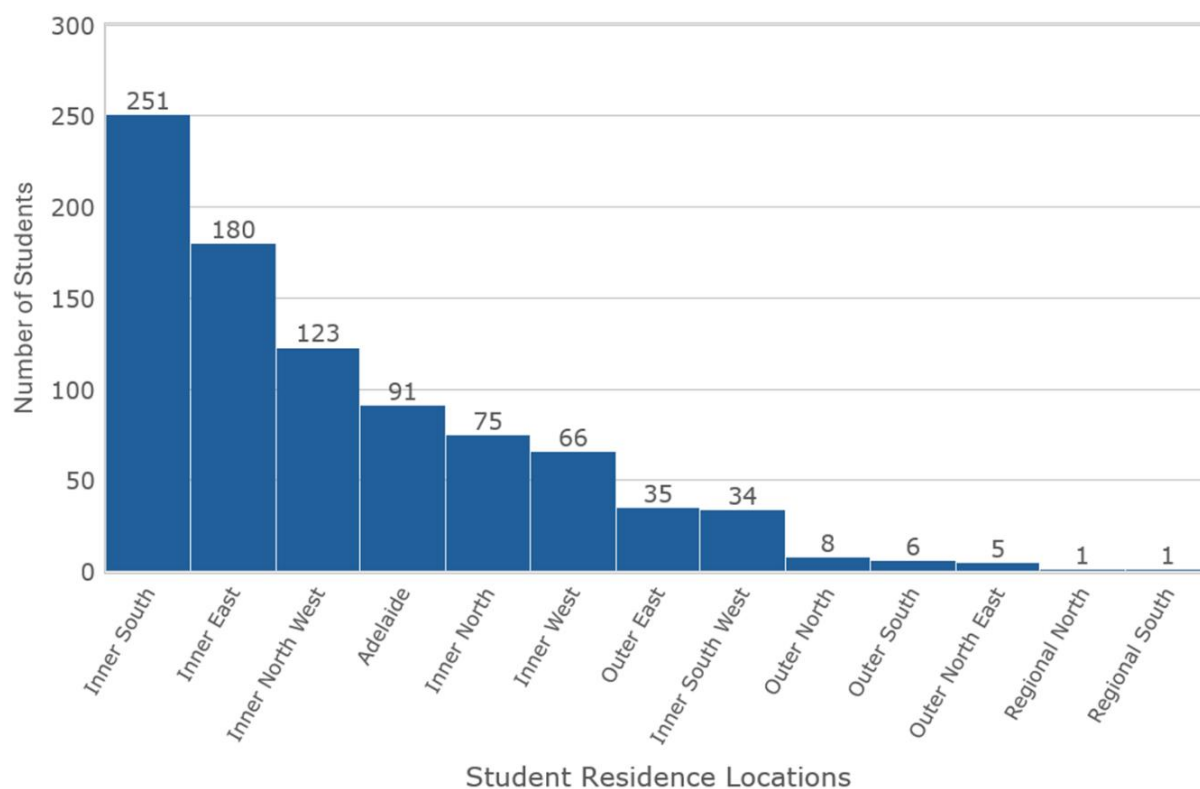


Figure 2.1 Pulteney Grammar School Student Residence Location Analysis

In Term 2 2024, 820 students or about 94 per cent live in the City of Adelaide or Inner suburbs. The remaining 56 students are from the outer suburbs or regional areas that are living in metropolitan Adelaide during the school terms. With over 10 per cent of the students living in the City of Adelaide, they have options to walk, cycle or use public transport to school. With 83 per cent of the students living in the inner metropolitan suburbs, most would have good access to public transport by train, tram or bus services. The frequent Go Zone bus corridors have bus stops in King William Street and Pulteney Street at both ends of Gilles Street within 300 m of the school.



2.3 Student Travel Demand

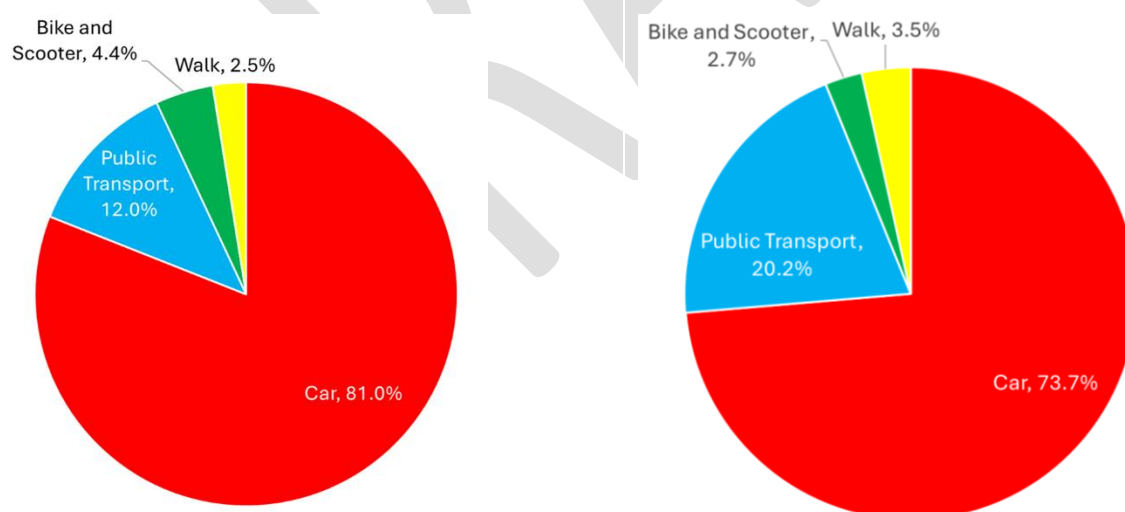
The existing school travel activity to and from the Pulteney Grammar School was reviewed through site observations, a Hands-up travel mode survey to determine the existing school transport modes and a staff travel survey to confirm their travel to work modes on typical workdays. A copy of the survey form is included in **Appendix A**.

The “Hands-up” student travel survey was conducted during the first morning class on Friday 24th, Monday 27th, and Tuesday 28th in May 2024. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus, Train or Tram
- Bicycle or e-bike
- Scooter

The student travel mode shares to school in the AM period and from school in the PM period for all years are shown in Figure 2.2. In the AM period, 81 per cent of students travelled to school by car with 74 per cent in the PM period. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. Conversely, public transport was 12 per cent in the AM period and 20 per cent in PM period.

The walk and cycling modes in the AM and PM periods was only for about six to seven per cent of students.



AM Period Arrival Transport Mode Share

PM Period Departure Transport Mode Share

Figure 2.2 Pulteney Grammar School Student Transport Mode Shares in May 2024



A breakdown of the student mode shares by year group for the AM arrivals from the survey conducted in May 2024 is provided in Table 2.1. Key insights from the AM survey results are:

- The students in Reception to Year 6 were mostly driven to school.
- Only seven per cent of the students in Reception to Year 3 used the public transport, walking and cycling.
- The highest usage of public transport was for students in Years 7 to 9 at 34 per cent. Students in Years 10 to 12 had 12 per cent less use of public transport, but five per cent more use of cycling at 6.7 per cent than students in Years 7 to 9.

Table 2.1 Student Transport Mode Shares for the AM Arrivals by Year Group in May 2024

AM Arrivals Transport Mode	REC to 3	4 to 6	7 to 9	10 to 12	Total
Car	93.3%	89.7%	70.3%	79.1%	81.0%
Public Transport	3.8%	5.2%	24.2%	12.0%	12.0%
Bike and Scooter	1.0%	2.1%	1.6%	6.7%	4.4%
Walk	1.9%	3.1%	3.9%	2.2%	2.5%

A breakdown of the student mode shares by year group for the PM departures from the survey conducted in May 2024 is provided in Table 2.2. Key insights from the PM survey results are:

- Three per cent of the students in Reception to Year 3 and 5.8 per cent in Years 7 to 9 walked home. 5.8 per cent of students in Years 7 to 9 walked home from school which is higher than the other year groups. Over 93 per cent of the students in Reception to Year 3 travelled home by car which is the same as the AM period.
- 84.5 per cent of the students in Years 4 to 6 were picked up by car which is five per cent less than the AM period. In the PM period, two per cent more students in Years 4 to 6 walked or cycled home from school.
- 69.2 per cent of students in Years 10 to 12 used the car mode to travel home.
- The highest usage of public transport was for students in Years 7 to 9 at 28.5 per cent. About 25 per cent of students in Years 10 to 12 used public transport to travel home which is 12 per cent more than the AM period.

Table 2.2 Student Transport Mode Shares for the PM Departures by Year Group in May 2024

PM Departures Transport Mode	REC to 3	4 to 6	7 to 9	10 to 12	Total
Car	93.3%	84.5%	64.2%	69.2%	73.7%
Public Transport	2.9%	8.2%	28.5%	24.7%	20.2%
Bike and Scooter	1.0%	3.1%	1.5%	3.4%	2.7%
Walk	2.9%	4.1%	5.8%	2.7%	3.5%



2.4 Transport Access

Transport access to the school via road, public transport, cycling, and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.4.1 Road Network

Access to the school is provided on Gilles Street and South Terrace. The school office is located on South Terrace.

Gilles Street

Gilles Street is a two-way two-lane Collector, aligned in an east-west direction. It is under the jurisdiction of the City of Adelaide. Each lane is around 3.6 m to 3.7 m, with concrete central median islands intermittently placed in the proximity of the school and Gilles Street Primary School.

Sealed footpaths are available on both sides of the street.

An extended 25 km/hr school zone and a PAC is located in Gilles Street for Pulteney Grammar School and Gilles Street Primary School as shown in Figure 2.3.



Gilles Street looking west to the 25 km/h school zone with rubbish bins on the street and footpath

PAC in Gilles Street for Pulteney Grammar School students to cross the street safely

Figure 2.3 Gilles Street at Pulteney Grammar School

South Terrace

South Terrace is classified as SubArterial, with daily volume estimated to be 16,900 vehicles per day. It is a two-way road with two lanes for each direction. On-road parking with time restriction is available on both sides of the road in proximity to the school.

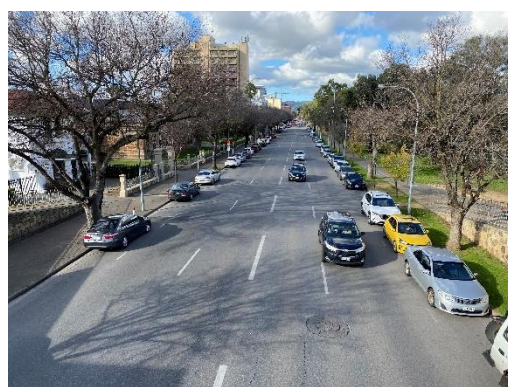
Sealed footpath is along the northern side of the road, while there is a shared user path along the southern side.

A pedestrian overpass connects the Park Lands sports grounds with the school so that pedestrians and cyclists can cross over South Terrace safely.

The road layout and the pedestrian overpass of South Terrace are shown in Figure 2.4 with the 25 km/hr school zone.



Looking west in South Terrace towards King William Street with the pedestrian overpass connecting the Park Lands to the school



Looking east in South Terrace to Pulteney Street and Glen Osmond Road

Figure 2.4 South Terrace at Pulteney Grammar School

2.4.2 Crash History

A review of the latest crash data from 2018 to 2022 was sourced from DataSA. Over this five-year period, the crashes by type are shown in Figure 2.5. The crashes in both Gilles Street and South Terrace near the school were for one minor injury and one property damage only.

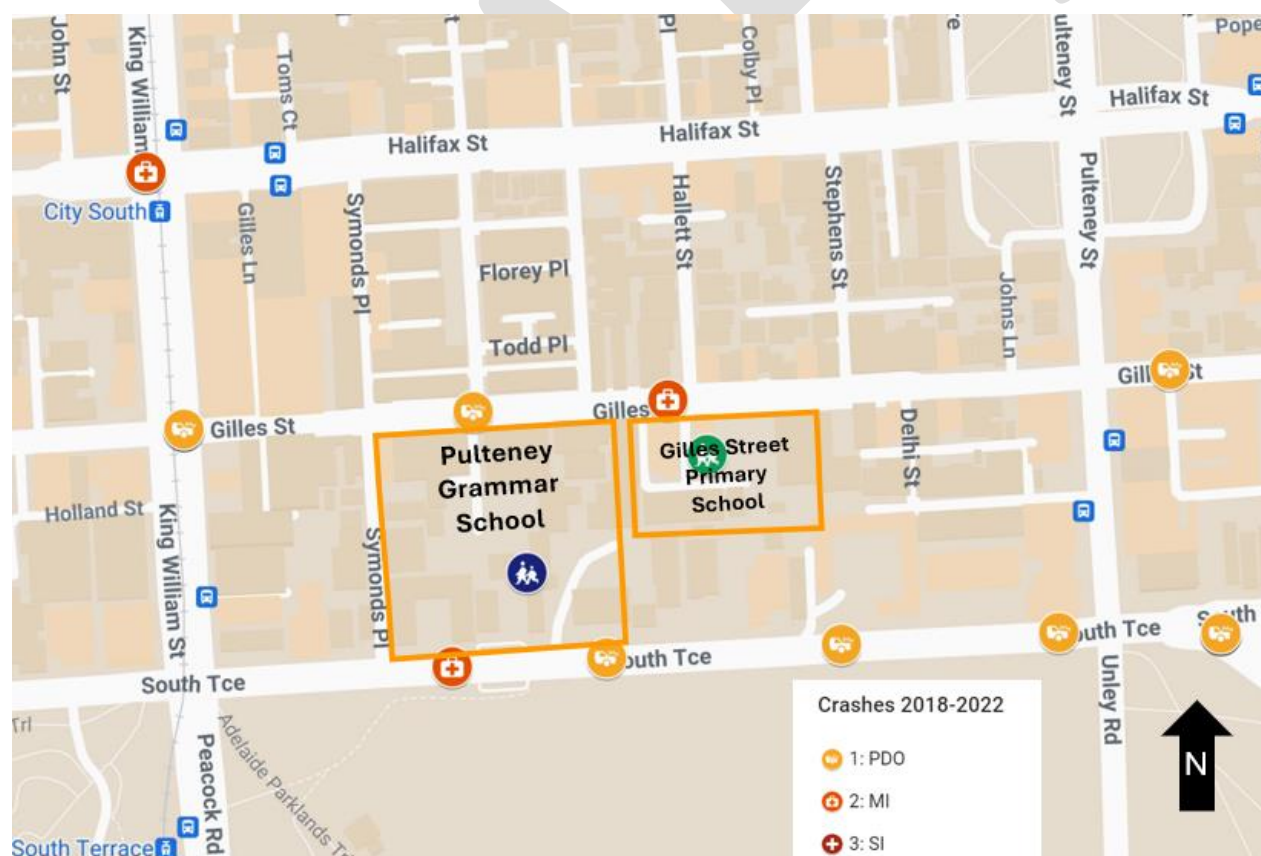


Figure 2.5 Crash History near Pulteney Grammar School



2.4.3 Parking and Kiss and Drop Areas

The on-street car parking controls along the streets in the vicinity of the school are shown in Figure 2.6. The kiss and drop areas are shown in red line. They are next to the school access points on Gilles Street and South Terrace. These areas have a 10-minute parking restriction from 8am to 9am, and 3pm to 4pm on Monday to Friday.

Parents who do not work in Adelaide CBD are unlikely to regularly drive into the CBD to drop off or pick up their child. Many students, who 13 years of age or older, are capable of travelling on their own and would use public transport.

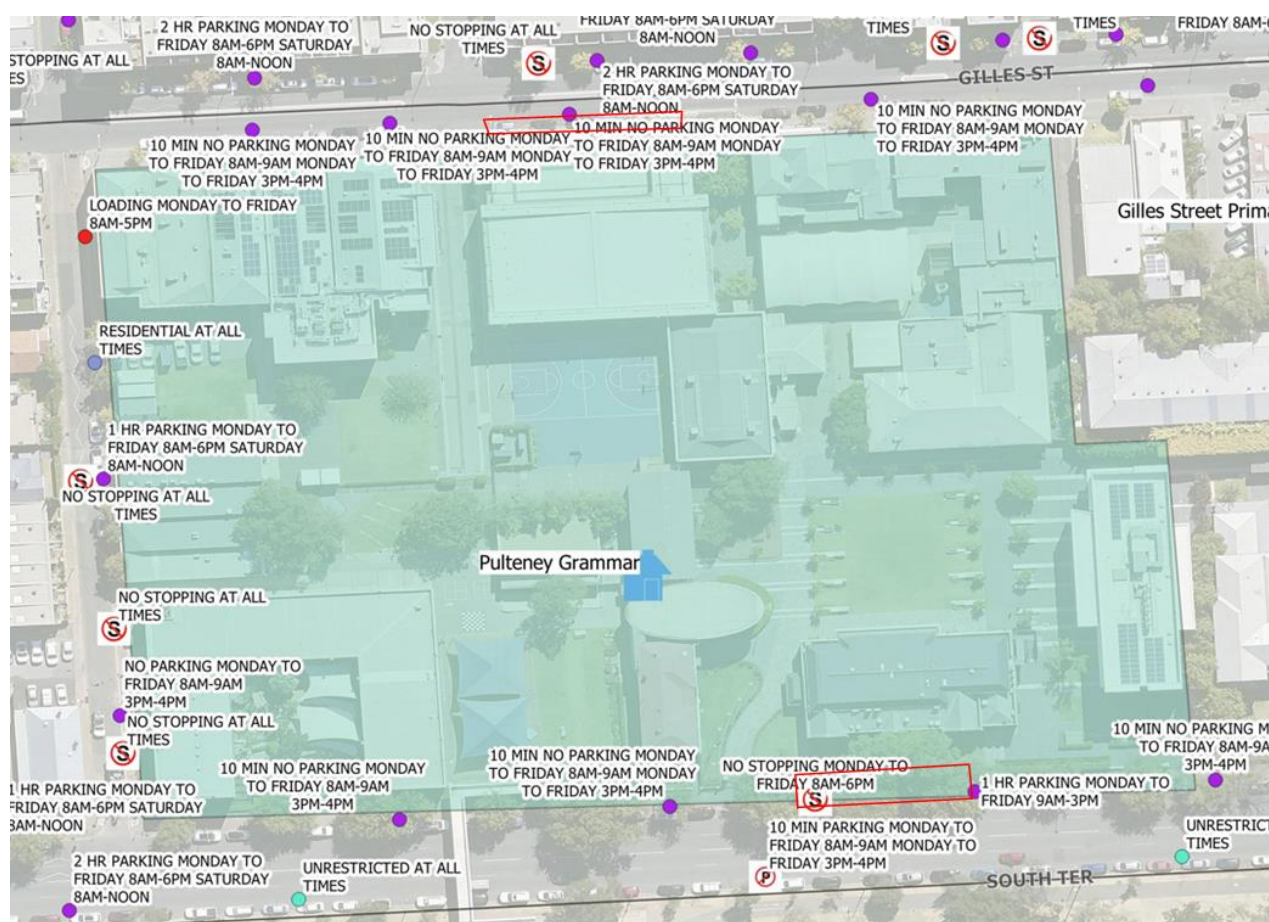


Figure 2.6 On-street Parking and Kiss and Drop Areas for Pulteney Grammar School

2.4.4 Public Transport

Adelaide CBD is the hub for the public transport in Adelaide with train, tram and bus services for students to travel to the school. The available public transport facilities within the walkable access from Pulteney Grammar School are bus stops on King Williams Street and Pulteney Street, and tramline on King William Street. The closest bus and tram stops that are within a 400 m walk distance to Pulteney Grammar School are shown in Figure 2.7.

Train services for all metropolitan train lines are at Adelaide Railway Station which is located 1.8 km north of the school and can be accessed by the free tram services from the City South tram stop in King William Street at Halifax Street that is 350 m from the south via Gilles Street and King William Street.

Pulteney Grammar School has a regular school bus service that operates from a bus zone in South Terrace.

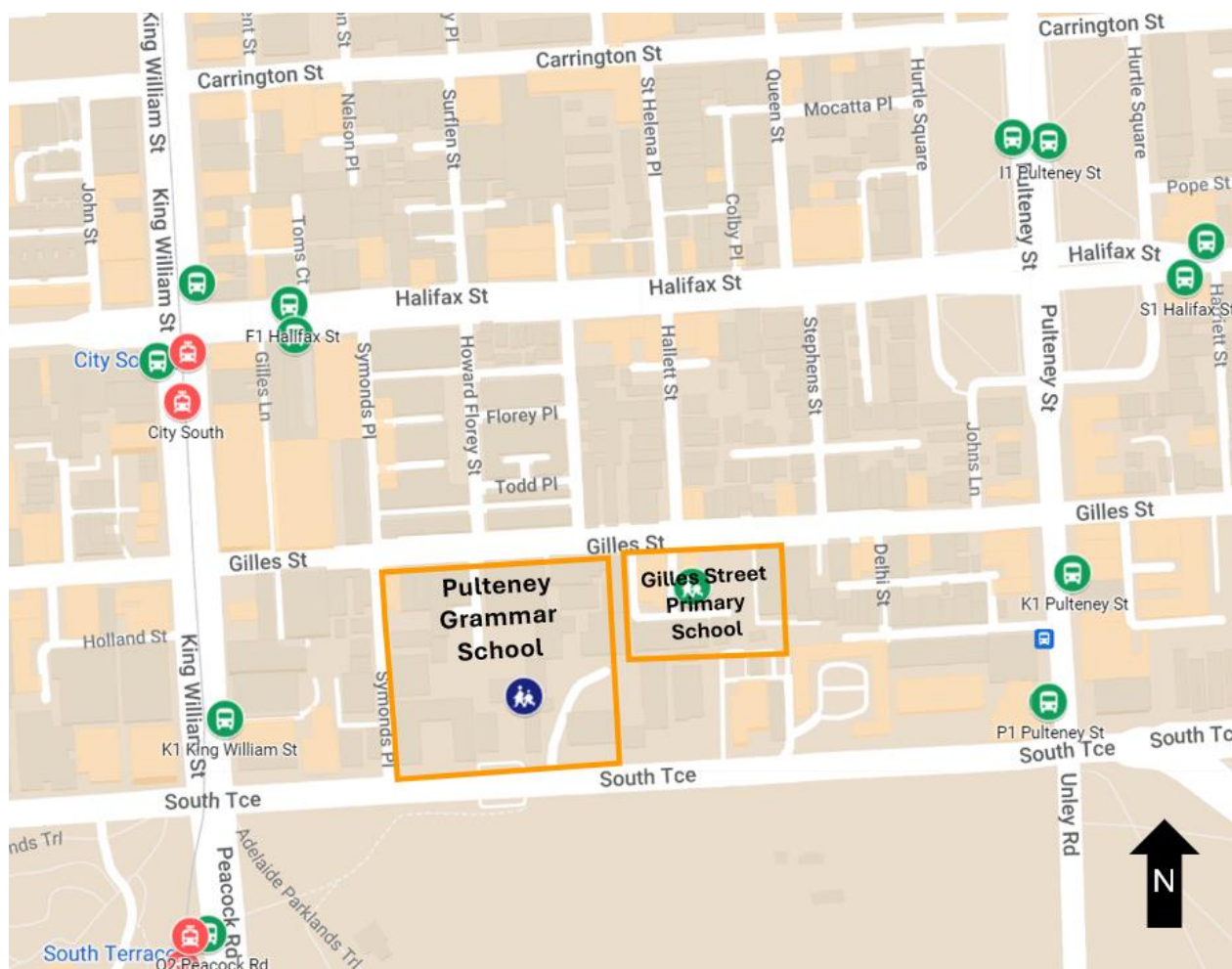


Figure 2.7 Public Transport Services to Pulteney Grammar School

2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to the adjacent south park lands and the inner metropolitan cycling network is shown in Figure 2.8.

Both Franklin Street and Grote Street have on-road bicycle lanes on both sides of the road. Sealed shared paths exist throughout Ellis Park.

No cycle lanes are provided in Gilles Street. A shared user path exists along the southern side of South Terrace in the Park Lands that connects from Glen Osmond Road to Goodwood Road.

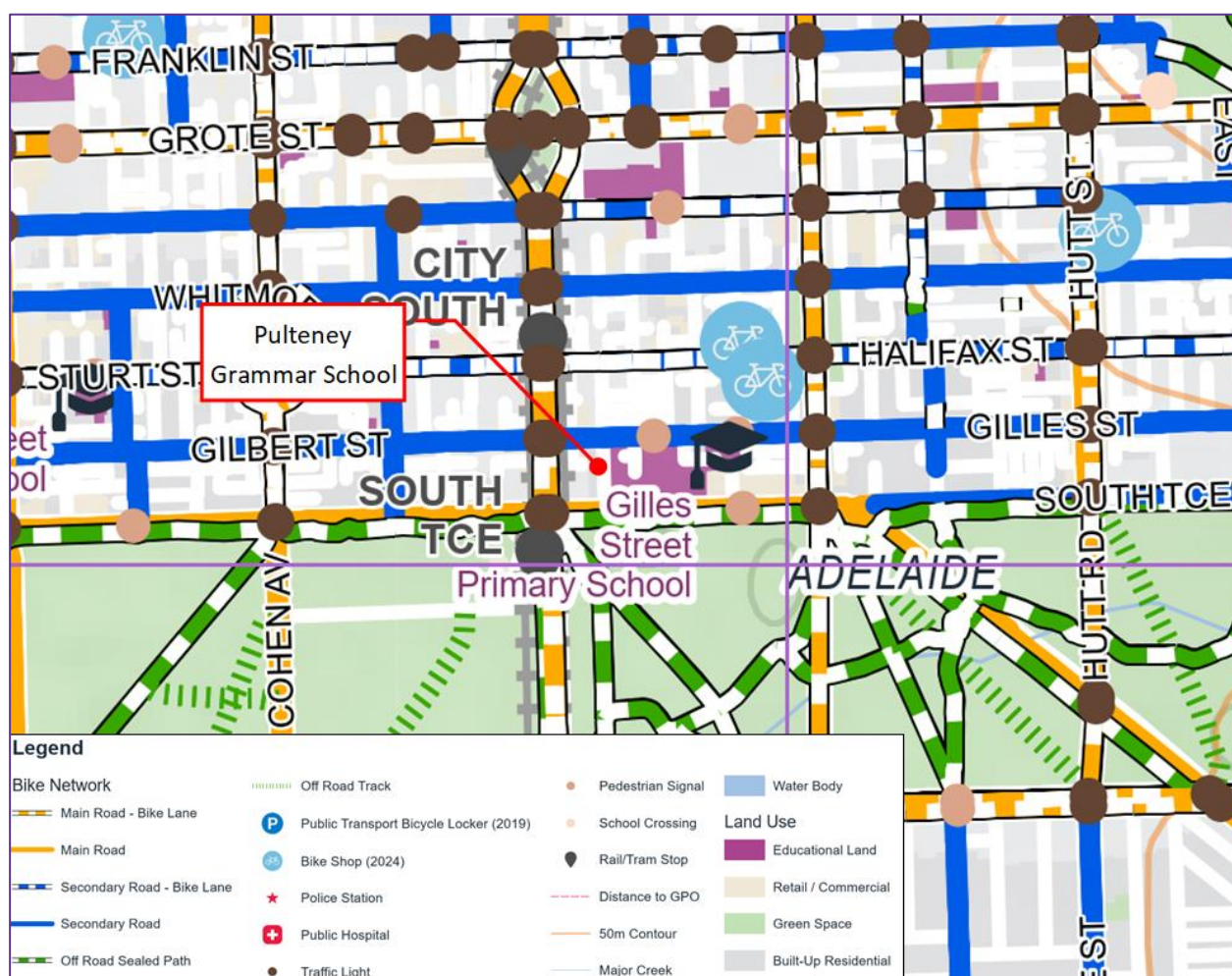


Figure 2.8 Cycling Network to Pulteney Grammar School

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff, and visitors who walk for their entire trip or as an access mode to the bus stops on King William Street, Pulteney Street, and South Terrace, and tram stops on King William Street.

The footpath network along Gilles Street and South Terrace needs to be well maintained and kept clear of fallen trees and debris by the City of Adelaide.

The school has good pedestrian access from all directions from Adelaide CBD, as shown in Figure 2.9, which has also shown a 5, 10, and 15-minute walkable catchment areas to Pulteney Grammar School. Students who walk their entire trip to school are likely walking from Adelaide city centre.

The signalised crossing on Gilles Street and the overpass bridge on South Terrace are the main facilities walking that connect the foot traffic from the school to the external wider network.

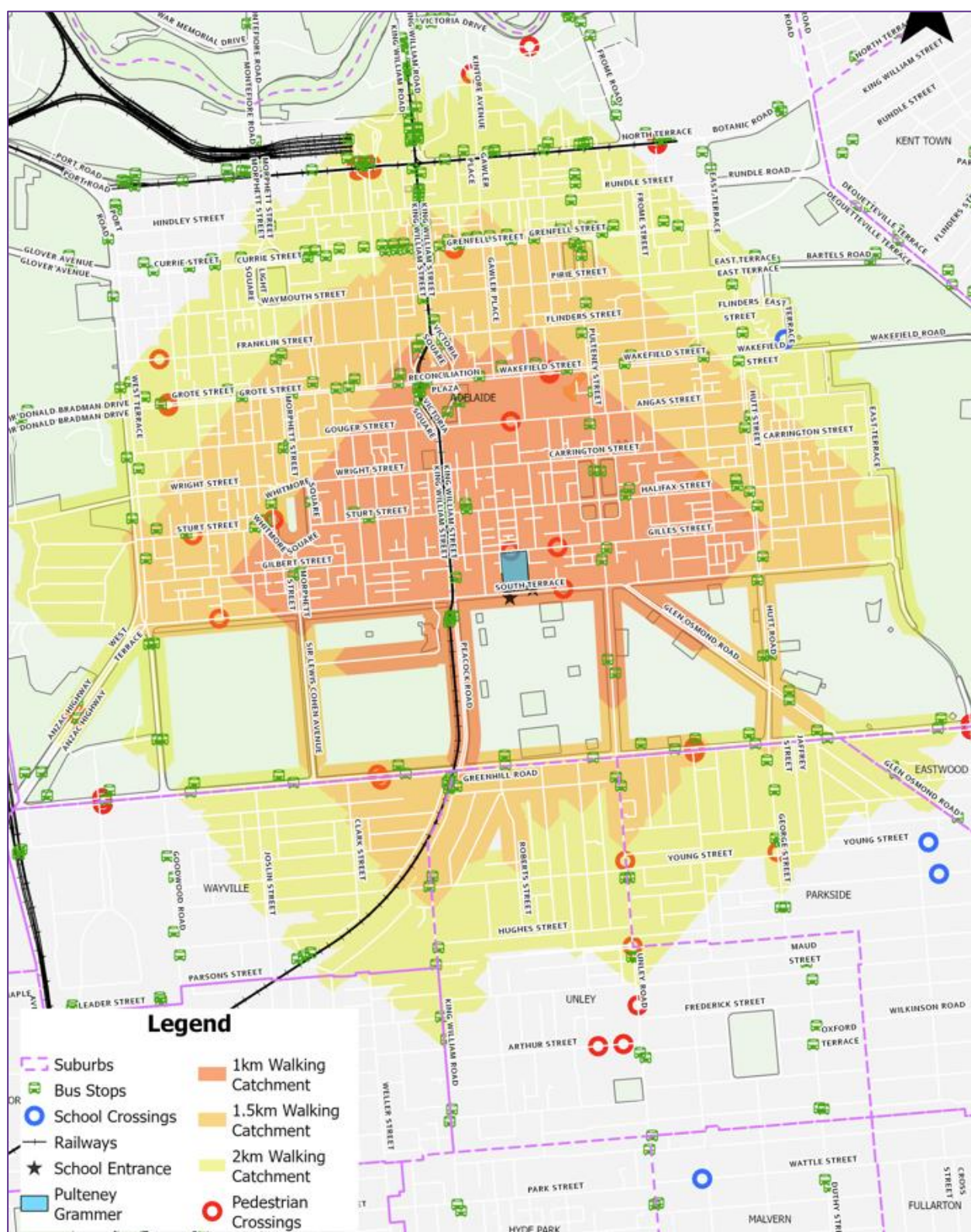


Figure 2.9 Walkable Access Catchment to Pulteney Grammar School



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with Pulteney Grammar School's principal on 22nd May 2024 to discuss existing issues. The school principal explained that the school does not have significant concerns with traffic safety or Kiss and Drop issues.

3.2 Site Observations

The existing staff and student transport mode activity to and from the Pulteney Grammar School were observed during the AM peak arrival period and the PM peak departure period on a typical school day, on 29th May 2024, 8 am to 9 am, and 3 pm to 4 pm.

3.2.1 AM Arrival Period

The key findings from the AM observations are summarised as follows:

Gilles Street

- The traffic on Gilles Street was in general in an orderly manner, as the central concrete median island prevented vehicles from speeding or overtaking.
- There is a 25 km/hr school zone in place, and most people were observed to be compliant.
- The pedestrian green light timing at the signalised crossing on Gilles Street near the school gate appears to be overly lengthy.
- Some drivers were impatient to run across the signalised crossing, resulting in both abrupt braking and stopping over the crossing and obstructed pedestrians.

South Terrace

- Around 3 to 4 cars were observed to use the entrance area of Sage Hotel Adelaide to drop off students.
- Several school buses were operating along South Terrace on the northern side with minibuses to coaches.
- One person was observed crossing South terrace without using the pedestrian overpass.
- Most drivers complied with the 25 km/hr school zone speed limit in South Terrace during the morning peak hour.

3.2.2 PM Departure Period

The key findings from the PM observations are summarised as below:

Gilles Street

- Much busier traffic than in the morning, therefore vehicles were in general moving at a slower pace.
- The concrete central islands prohibited vehicles from driving around those entering or exiting a roadside parking space.
- No staff were seen to be operating on Gilles Street to monitor students and traffic during the pick-up periods.



South Terrace

- Many students were observed to use the overpass.
- multiple school buses were seen operating along South Terrace on the northern side, of both small and large sizes.
- Many parents arrived at around 3pm to park and wait along the south side of South Terrace. Majority of them parked longer than the posted limit of 10 minutes, as the bell time is at 3:25 pm and 3:30 pm.
- no staff was seen to be operating on South Terrace.

Symonds Place

- Double parking in Symonds Place south of Gilles Street was observed for student pick-ups as shown in Figure 3.1.
- No staff were observed to monitor student and vehicle movements in Symonds Place.
- Vehicles stopping in the middle of the road to pick up students and this blocked traffic in the street.



Figure 3.1 Vehicles Double Parking in Symonds Place south of Gilles Street

3.3 Summary of the Issues and Opportunities

Traffic and parking issues near the school were observed on Gilles Street and South Terrace. The traffic safety issues that are for the City of Adelaide to address are:

- Delays for pedestrians to wait to cross at the PAC signalised crossing in Gilles Street.
- Traffic speeding in South Terrace in the school zone area during AM peak period.
- Parked vehicles extended the time limits in South Terrace that did not provide opportunities for parents for Kiss and Drop activity close to the school.



4 Travel Safety Options and Assessment

4.1 Options Development

Options to improve the travel safety for students were developed under two categories, namely:

- Operational efficiencies
- Increased awareness of the area

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 Travel Safety Options for Pulteney Grammar School

Type of Option	Description	Issue Addressed
Operational Efficiencies	Review the signal timing at the signalised crossing on Gilles Street and improve the pedestrian green light waiting time during school peak hours.	Improve the travel time for students and parents
Increased awareness of the area	Install red light cameras along South Terrace.	The speeding behaviour around the school zone on South Terrace.

4.2 Indicative Cost Estimates

- The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in S for Signal timing changes at an intersection.

Table 4.2. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- S for Signal timing changes at an intersection.

Table 4.2 Indicative Cost Estimates for the Travel Safety Options at Pulteney Grammar School

Option	Priority Assessment	Indicative Cost Estimate	Comments
T1	Install red light cameras along South Terrace around the school zone area.	\$200,000	Council to apply to DIT for installation of the cameras.
S1	Review the signal timing at the signalised crossing Grote Street and improve the pedestrian green light waiting time during school peak hours.	\$3,000	Requires consultation with DIT for approval





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114.
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105.
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones.
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024.
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34.
- School Transport Policy, Department for Education, South Australia, January 2024.



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE		
School Travel Survey for Students		
School:		Pulteney Grammar School
<p><i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i></p>		
Questions for the Teacher		
Date (day/month/year):		
Weather (Daytime temperature and sky conditions):		
Please enter the name or number of your class or year group.		
How many students are absent today in your class?		
Questions for the Students in Your Class / Year Group		
<p><i>Please ask the students with a 'hands-up' survey in the classroom.</i></p>		
AM Period Travel		
<p><i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i></p>		
Main Mode of Travel in the AM Period		Number of Students
Car (as driver)		
Car (as passenger with drop-off)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
PM Period Travel		
<p><i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i></p>		
Main Mode of Travel in the PM Period		Number of Students
Car (as driver)		
Car (as passenger with pick-up)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
If you travelled by car, would you prefer any of these modes? (multiple answers)		
Walking for the entire trip		
Bicycle, e-bike or scooter		
Public Transport (bus, tram or train)		



St Dominic's Priory College

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
8 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	John Devney	James Arnold	James Arnold	8 July 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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- Appendix A – Student Travel Survey Form
- Appendix B –Term 1 Road Safety and Transport News
- Appendix C – NSW School Travel Access Guide



Executive Summary

Overview

St Dominic's Priory College is a private school that comprises Reception to Year 12 with an enrolment of 1,226 students in Term 2 2024 with the distribution of students by year as follows:

- 107 students in Year R to 3
- 233 students in Year 4 to 6
- 228 students in Year 7 to 9
- 658 students in Year 10 to 12

Key Findings

The St Dominic's Priory College does not have an enrolment area so students can live and travel from anywhere. However, most students reside in inner Adelaide suburbs with clusters of students in Port Adelaide and Elizabeth that have special bus services to the school.

The student travel surveys that were conducted in May 2024 showed the following:

- The car mode share is 81 per cent in the AM period and 79 per cent in the PM period so that most students are travelling by car.
- Public transport is used by 15 per cent of the students in the AM period and over 20 per cent the PM period. The PM departure period has 6 per cent more students using public transport than in the AM period, and 2 per cent fewer students using private vehicles. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period.
- The bicycle mode share is less than three per cent and walk mode share is less than two per cent that indicates a very low interest in travelling by active transport modes.

From the discussions with the school and the site observations, the following student travel safety issues were identified:

- Double parking was continuous over a 20-minute period on Barnard Street. This exceeded 125m in length, reaching to the Mills Terrace intersection.
- Angled carparking in Molesworth Street was also difficult to navigate for school drop off / pick up.
- Large crossing distances across Molesworth Street at the Hill Street intersection resulted in issues with pedestrian / vehicle conflicts.
- Some issues with jaywalking across Molesworth Street and Barnard Street
- Many staff park on the nearby local streets (mostly Molesworth Street) with the time limit restrictions and limited spaces result in staff leaving classrooms to shift vehicles.

Key Recommendations

Infrastructure Treatments

- Ban the right turn movements from Molesworth Street into Hill Street during peak periods.
- Rearrange the car spaces in Molesworth Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the entrance to the student entrance (Years 7 to 11).
- Extend the existing Kiss and Drop area in Barnard Street for the junior school.
- Provide a central median within the Molesworth Street corridor between Hill Street and Barnard Street. This could also be explored along Barnard Street.
- Investigate the inclusion of further pedestrian crossings mid-block of Molesworth Street and Barnard Street. This could be integrated with a central median treatment.



Operational Efficiencies

- Staff parking improvements with the provision of permits for staff in the local streets, mostly focused on the 4P sections on Molesworth Street. This is not in the scope of this school travel safety review.

Safety Promotions

- Install additional signage to promote the school area for traffic approaching the school zones at the Hill Street and Mills Terrace ends of Molesworth Street and Barnard Street.
- Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in additional to the school newsletter.

DRAFT



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.

The following tasks were completed for this school travel safety review:

- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a student travel mode survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

St Dominic's Priory College is located on both sides of Hill Street between Molesworth Street and Barnard Street in North Adelaide. The school site and the existing surrounding environs are shown in Figure 1.1.



Figure 1.1 St Dominic's Priory College Location

The school provide a copy of the college floorplan as shown in Figure 1.2 that are located:

- Barnard Street for the junior school (Reception to Year 6)
- Molesworth Street for the college administration offices and Years 7 to 11.
- Hill Street on the eastern side for Year 12.

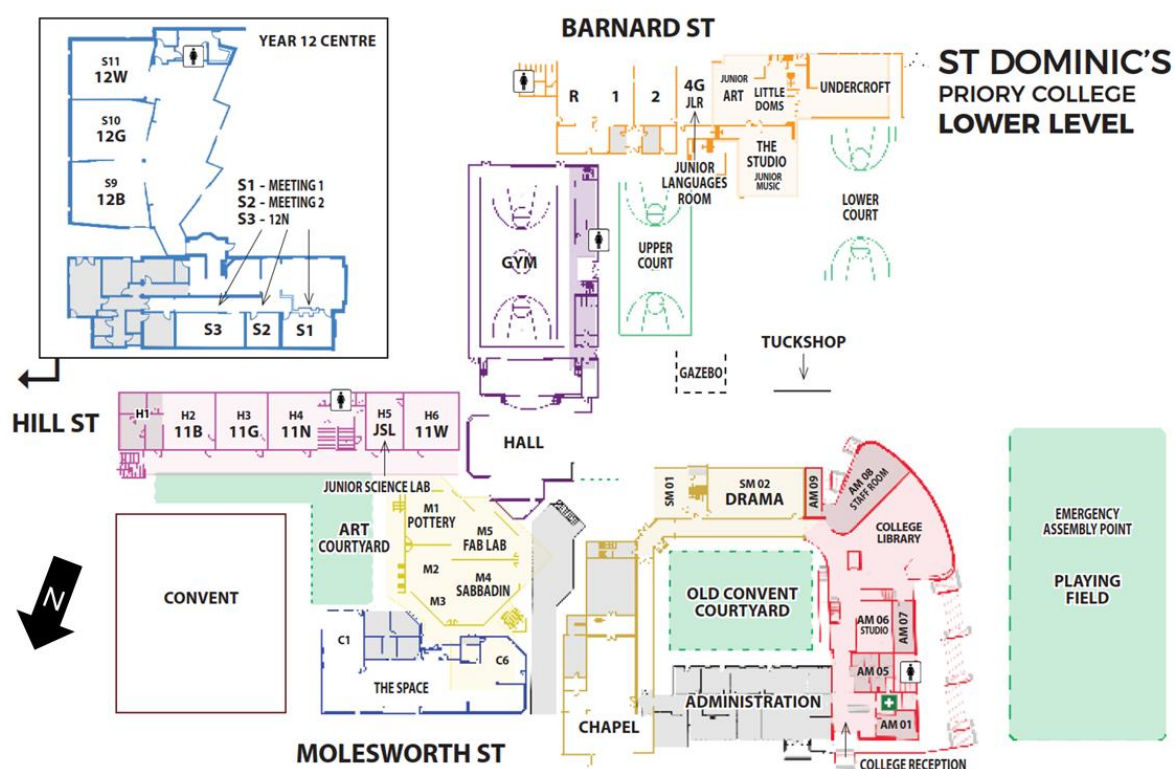


Figure 1.2 Entrances to St Dominic's Priory College

The student entrances in Barnard Street and Molesworth Street are shown in Figure 1.3.



Entrance to the Junior School on Barnard Street



Entrance for students to Years 7 to 11 in Molesworth Street

Figure 1.3 Entrances to St Dominic's Priory College in Barnard Street and Molesworth Street



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

St Dominic's Priory College comprises years Reception to 12. Students can enter the school building at 8:30 am. They are to be seated in their home class by 8:40 am. For the PM, the Junior School which is Years R to 6 finishes at 3:10 pm. The Middle (Years 7 to 9) and the Senior School (Years 10 to 12) finishes at 3:25 pm.

The school office hours are 8 am to 4 pm on school days.

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 was for 1,226 students with a distribution by year as follows:

- 107 students in Year R to 3
- 233 students in Year 4 to 6
- 228 students in Year 7 to 9
- 658 students in Year 10 to 12

The St Dominic's Priory College does not have an enrolment area so students can live and travel from anywhere. However, most students reside in inner Adelaide suburbs with clusters of students in Port Adelaide and Elizabeth that have special bus services to the school. The number of households by sub areas for groups of suburbs in the inner and outer metropolitan areas is shown in Figure 2.1.

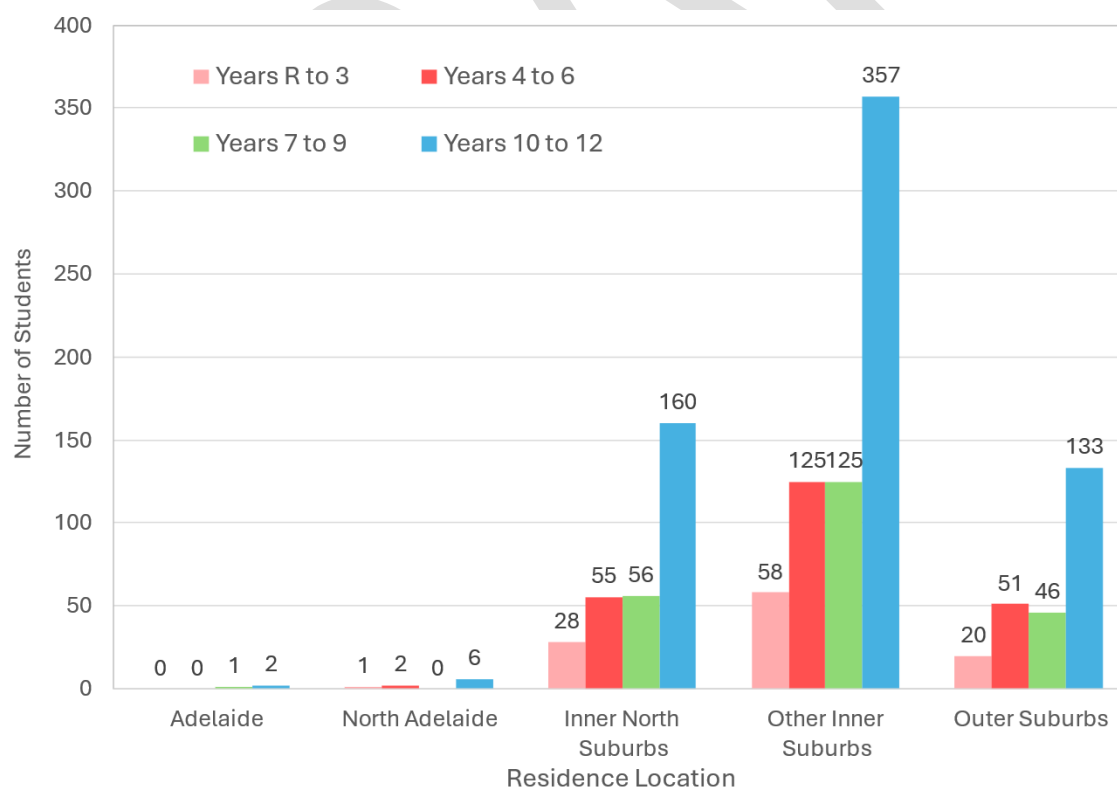


Figure 2.1 St Dominic's Priory College Student Residence Location Analysis



2.3 Student Travel Demand

The existing school travel activity to and from the St Dominic's Priory College was reviewed through site observations and a student travel mode survey on a typical school day. The student travel mode survey form is included in **Appendix A**.

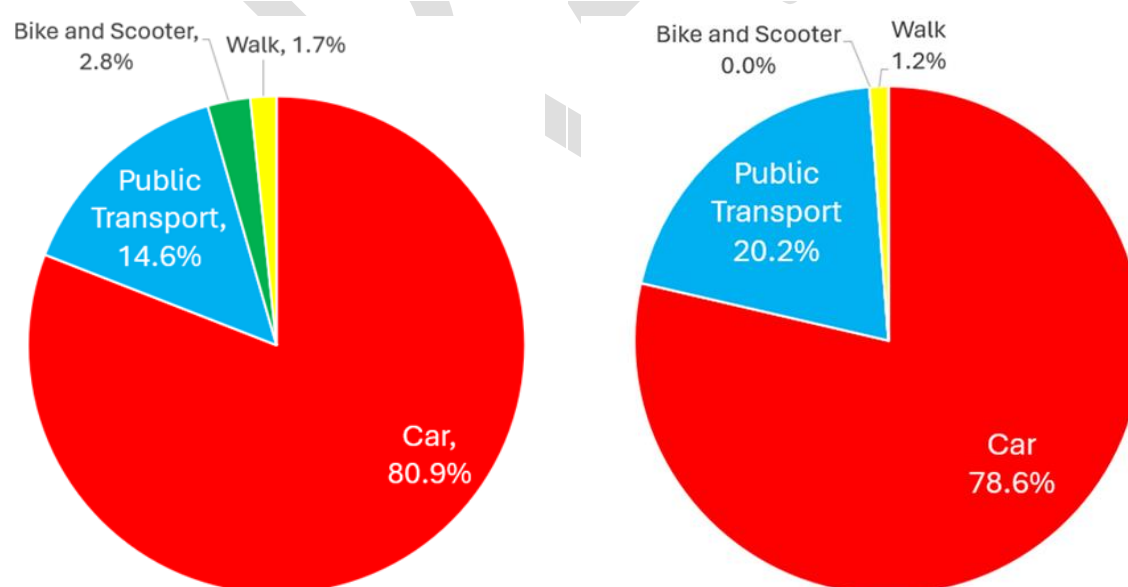
The "Hands-up" student travel survey was conducted during the first morning class on Thursday 30 May 2024. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus, Train or Tram
- Bicycle or e-bike
- Scooter

A total of 650 students were surveyed.

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.2. The car mode share is 81 per cent in the AM period and 79 per cent in the PM period so that most students are travelling by car.

Public transport is used by 15 per cent of the students in the AM period and over 20 per cent the PM period. The PM departure period has 6 per cent more students using public transport than in the AM period, and 2 per cent fewer students using private vehicles. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period. The bicycle mode share is less than three per cent and walk mode share is less than two per cent that indicates a very low interest in travelling by active transport modes.



AM Period Arrival Transport Mode Share

PM Period Departure Transport Mode Share

Figure 2.2 St Dominic's Priory College Student Transport Mode Shares in May 2024



2.4 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.4.1 Road Network

The streets in the local road network at St Dominic's Priory College are provided in Table 2.1. The front entrance and main office of the school is provided on Molesworth Street. The rear entrance, and location of the kiss and drop area, is located on Barnard Street.

Table 2.1 Local Streets at St Dominic's Priory College

Road	Classification	Relevance to the School
Molesworth Street	Local street	2-way traffic in on the northern side of the school and the location of the front entrance. Informal kiss and drop area
Hill Street	Local street	30 m opposite school on both sides of street; PAC located mid-block to facilitate smooth movements between east and western sides
Barnard Street	Local street	Rear entrance of the school with a Kiss and Drop area
Mills Terrace	Local street	100 m from school, unlimited parking used by P-platers

The attributes of the local road network at St Dominics are summarised in Table 2.2. In areas where no data was provided, the field was labelled as not applicable (n/a). Generally, the posted speed limit was obeyed by drivers in the area.

Table 2.2 Local Road Network Attributes at St Dominic's Priory College

Road	Number of Lanes	Daily Traffic Volumes	Posted Speed (km/h)	Average Speed (km/h)	85 th Percentile Speed (km/h)
Molesworth Street	2	486	50	43.1	52.0
Hill Street	2	2,212	50	40.0	48.5
Barnard Street	2	411	50	33.1	45.0
Mills Terrace	2	326	50	36.5	45.0

The road network north, south and east of the main campus are included within a 25km/h school zone during AM and PM peak times. As noted previously, a PAC is provided on Hill Street and is typically manned by students and teachers.

Table 2.3 Local Road Network Attributes at St Dominic's Priory College

Road	25 km/h School Zone in Street	Type of Crossing in Street
Molesworth Street	Yes	none
Hill Street	Yes	PAC
Barnard Street	Yes	none
Mills Terrace	No	none



2.4.2 Crash Analysis

A review of the latest crash data from 2018 to 2022 (five-year period) has been sourced from DataSA. During this time there has been the following crashes within direct vicinity of the school:

- Bernard Street: 2 property damage crashes
- Hill Street: 2 property damage crashes
 - Intersection with Bernard Street: 1 property damage crash
 - Intersection with Molesworth Street: 1 property damage crash

The crash statistics by location near the St Dominic's Priory College are shown in Figure 2.3.

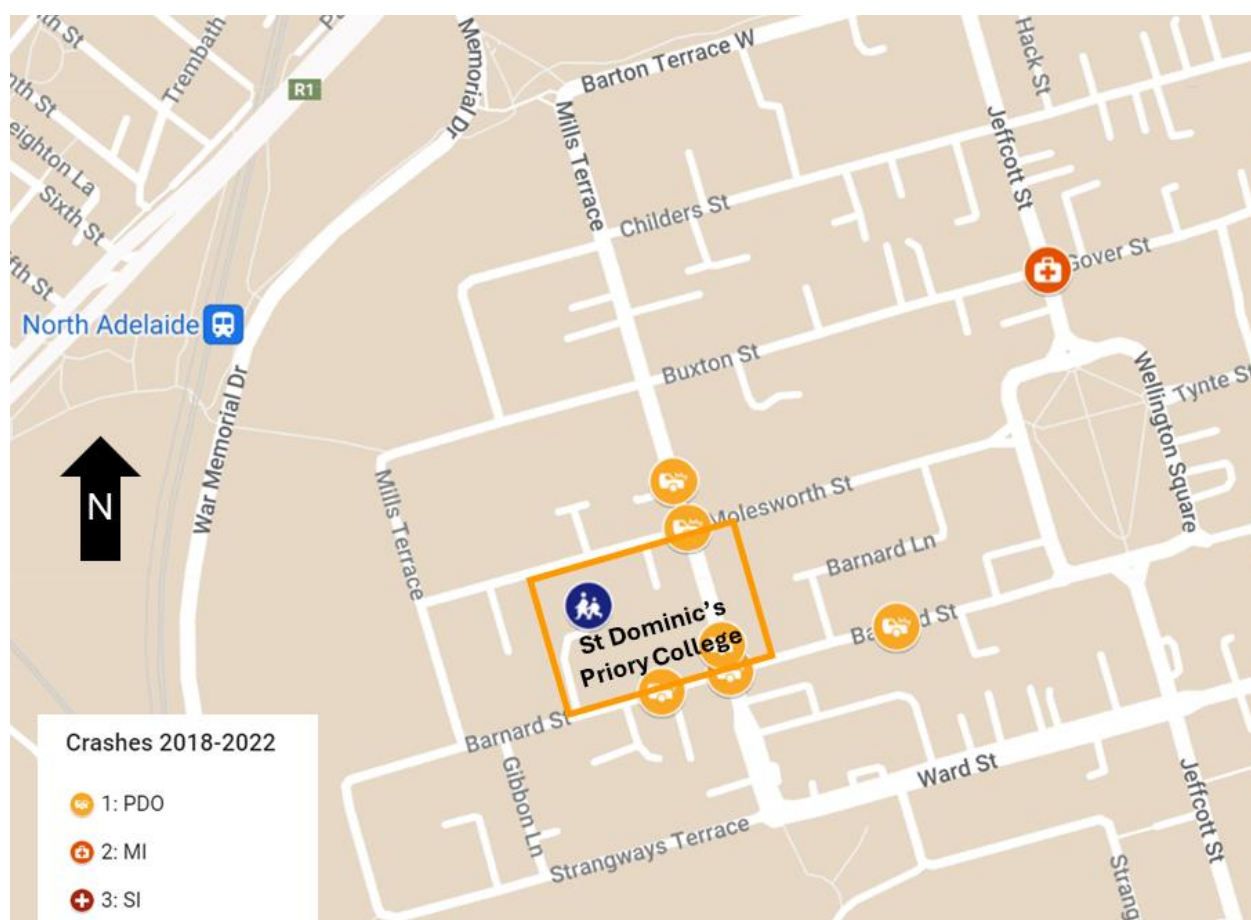


Figure 2.3 Crashes on School Days at St Dominic's Priory College



2.4.3 Parking and Kiss and Drop Areas

The types of carparking provided in the streets surrounding the school are provided in Table 2.4. These parking controls are also shown in Figure 2.4.

Table 2.4 Parking Types at St Dominic's Priory College

Road	Type of Parking	Time Restrictions
Molesworth Street	Angled Timed	4-hour parking Monday to Friday 8 am to 6 pm
Hill Street	Angled Timed	3-hour parking Monday to Friday 8 am to 6 pm
Barnard Street	Parallel Timed	3-hour parking Monday to Friday 8 am to 6 pm
Mills Terrace	Unlimited on the west side, Parallel Timed on the east side	3-hour parking Monday to Friday 8 am to 6 pm

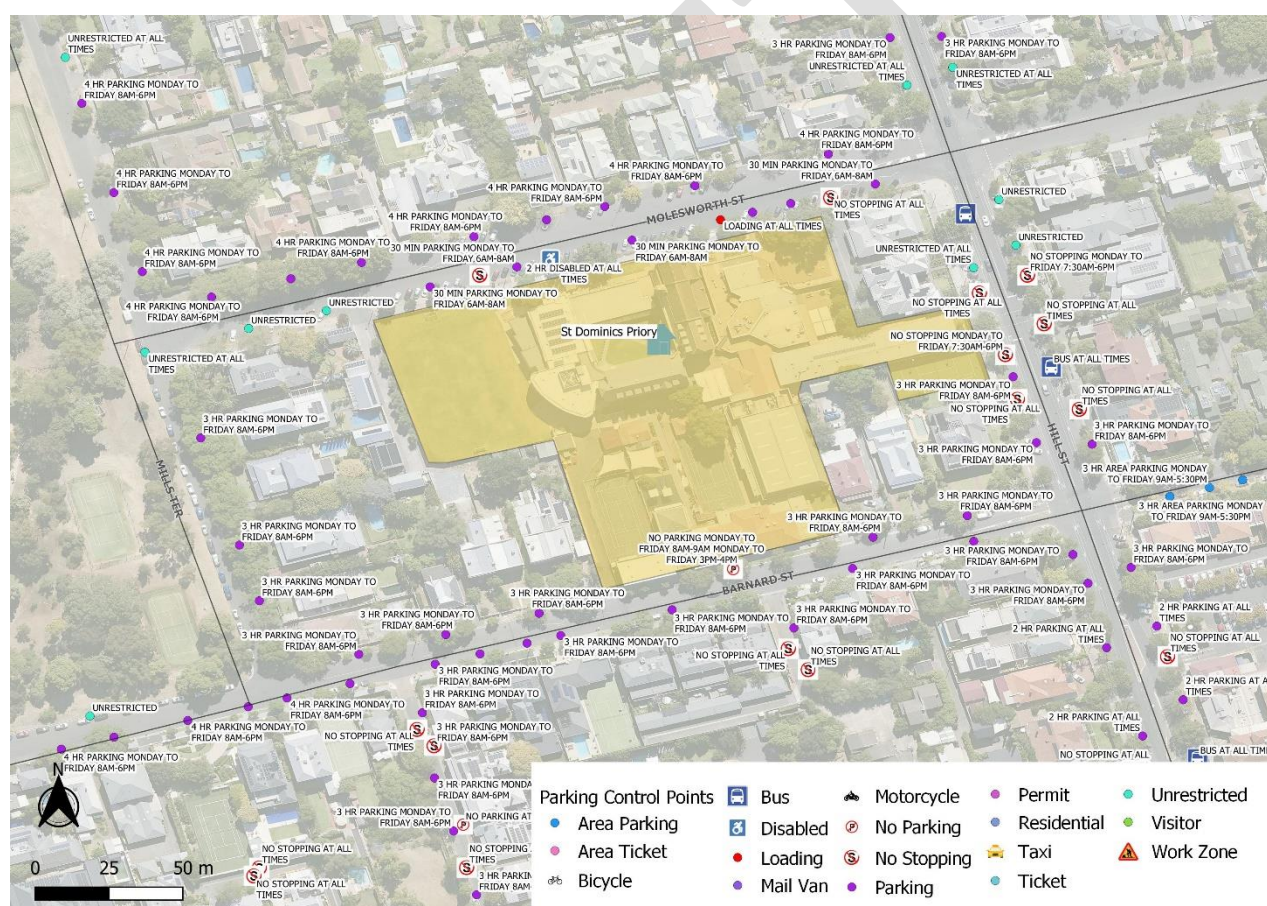


Figure 2.4 On-street Parking and Kiss and Drop Areas for St Dominic's Priory College

On-street parking on both sides of Barnard Street is used for Kiss and Drop activity on school days. Double parking was observed from the kiss and drop spot at the southern entrance to the Mills Terrace intersection.

A small area located near the front entrance on Molesworth Street is provided for informal Kiss and Drop activity. However, most pick up and drop off activity occurs in the angled parking along both sides of Molesworth Street.



2.4.4 Public Transport

Public transport services to St Dominic's Priory College are provided very conveniently at bus stop 5A in Hill Street as shown in Figure 2.5. Routes 251, 252, 253 and 254 that are in a Go Zone to Hawker Street and the Route 98 Connector bus operate from these stops. The school has two special services operated by Torrens Transit under contract to Adelaide Metro from Elizabeth in the AM period and to Adelaide CBD in the PM period.

Other bus routes that operate in a Go Zone corridor to Adelaide CBD are within a 400 m walk along Molesworth Street to Stop 5 in Jeffcott Street (Routes 230, 232, 235, 238 and 239) and within 1 km to O'Connell Street for the Routes G10 and 222.

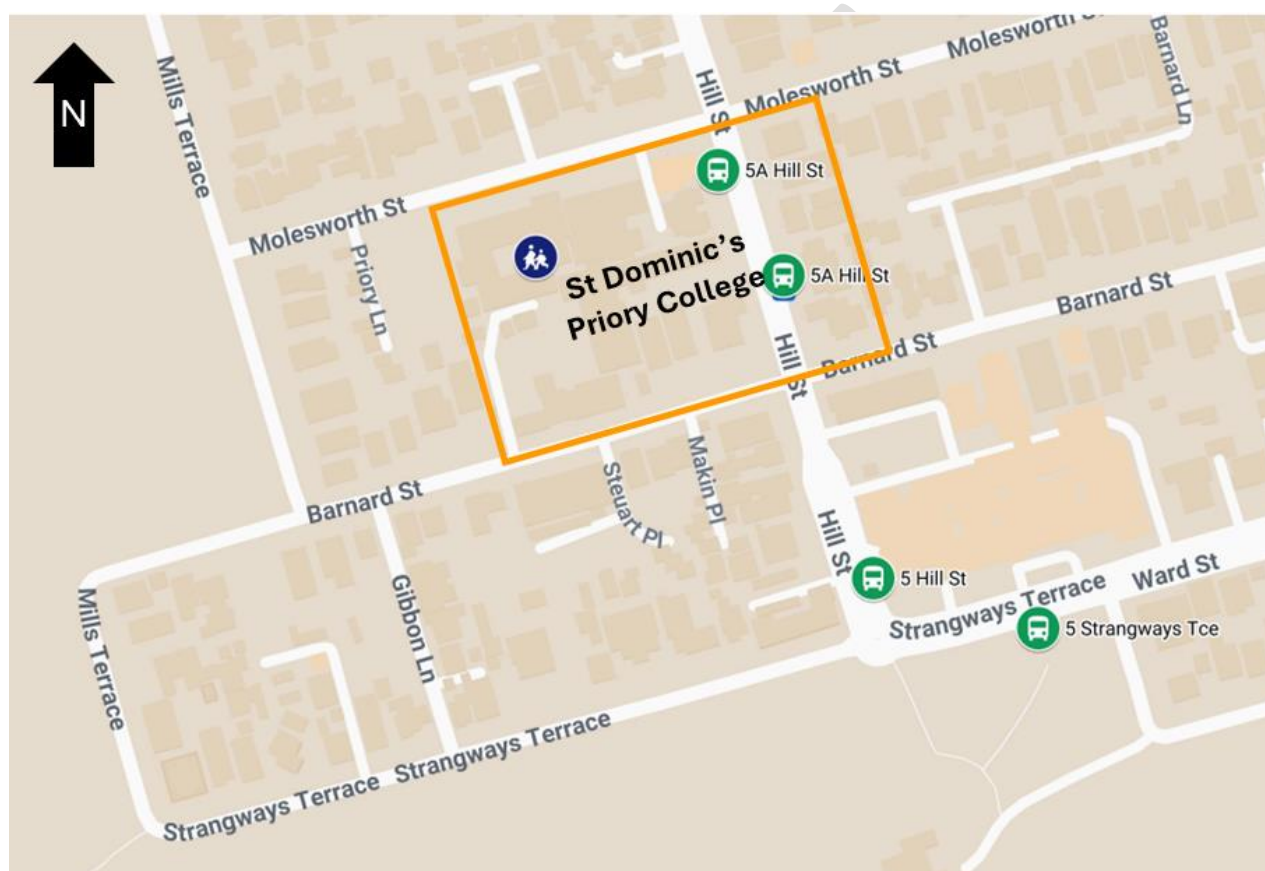


Figure 2.5 Public Transport Services to St Dominic's Priory College

The arrival or departure times of the bus services at Stop 5A in Hill Street are listed by route number within one hour of the school AM and PM bell times in Table 2.5. The school promotes these bus services in the newsletter at the start of each school year and are included with the road safety information in **Appendix B**.



Table 2.5 Public Transport Services at Stop 5A in Hill Street at St Dominic's Priory College

Stop 5A Direction	Route	Timetable Schedule
Northbound West side	98C to North Adelaide	8:14 am, 8:44 am, 3:14 pm, 3:44 pm
	251 to Port Adelaide from Adelaide CBD	8:41 am, 8:56 am, 3:13 pm, 3:29 pm, 3:36 pm, 3:45 pm
	477 from Elizabeth	8:14 am
Southbound East side	98A to Adelaide CBD	7:29 am, 8:29 am, 8:59 am, 3:29 pm, 3:59 pm
	251 and 252 from Port Adelaide to Adelaide CBD	8:04 am, 8:11 am, 8:19 am, 8:34 am, 8:49 am, 8:57 am, 3:30 pm, 3:15 pm, 3:31 pm, 3:47 pm, 4:02 pm
	958 to Adelaide CBD	3:35 pm

St Dominic's Priory College has organised and chartered school bus services contracted to Grant's Coachlines with the buses shown in Figure 2.6. In May 2024, a special bus route was implemented with Adelaide Metro fares and tickets from the school. The service operated with one trip in the AM period from Port Adelaide and in the PM period to Port Adelaide with stops all the route. The route travels north of the school and stops at Port Adelaide. The route and timetable with key stop times are provided in Figure 2.7.



Grant's Coachlines bus in Hill Street with the timetable to Port Adelaide



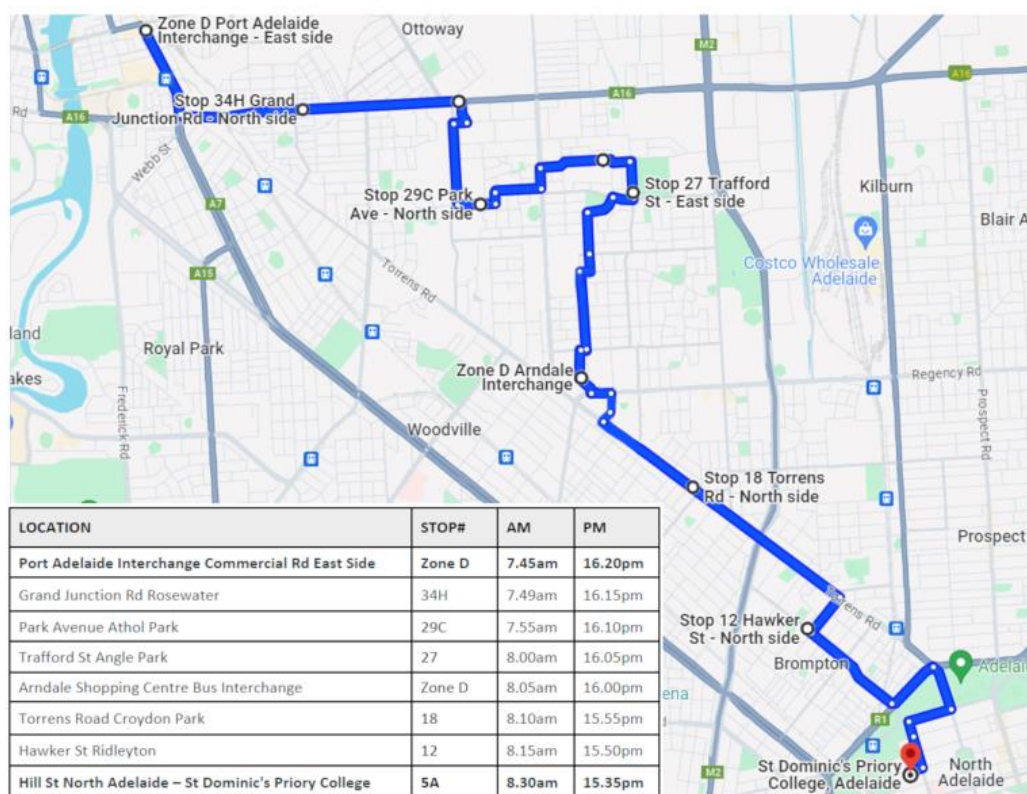
Shuttle bus in Barnard Street for the junior school students

Figure 2.6: Grant's Coachlines Bus at St Dominic's Priory College



**ST DOMINIC'S
PRIORY COLLEGE**
EDUCATING GIRLS. INSPIRING CONFIDENCE

School Bus North Service



Catching the bus

The dedicated bus will be branded with St Dominic's Priory College logos, making it easy for the girls to identify.

St Dominic's/Grant's Coachlines school bus will stop at all Adelaide Metro yellow bus stops along the route.

Please ensure students clearly hail the bus as it approaches.

Fares

Tickets are available for purchase from the College Reception starting Monday 20 May, Week 4.

The prices of tickets are as follows:

- \$2.40 for a Single Trip
- \$20 for Ten Trips
- \$180 for a Term Pass (available for purchase from Term 3).

ST.DOMINIC'S PRIORY COLLEGE
139 Molesworth Street.
North Adelaide SA 5006
(08) 8331 5100



inspiring confidence

Figure 2.7: St Dominic's School Bus Service operated by Grant's Coachlines



2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.8. Hill Street has an on-road bicycle lane on both sides of the road. Storage space for 12 bicycles is provided on the eastern side of the campus, nearby to the Hill Street PAC.

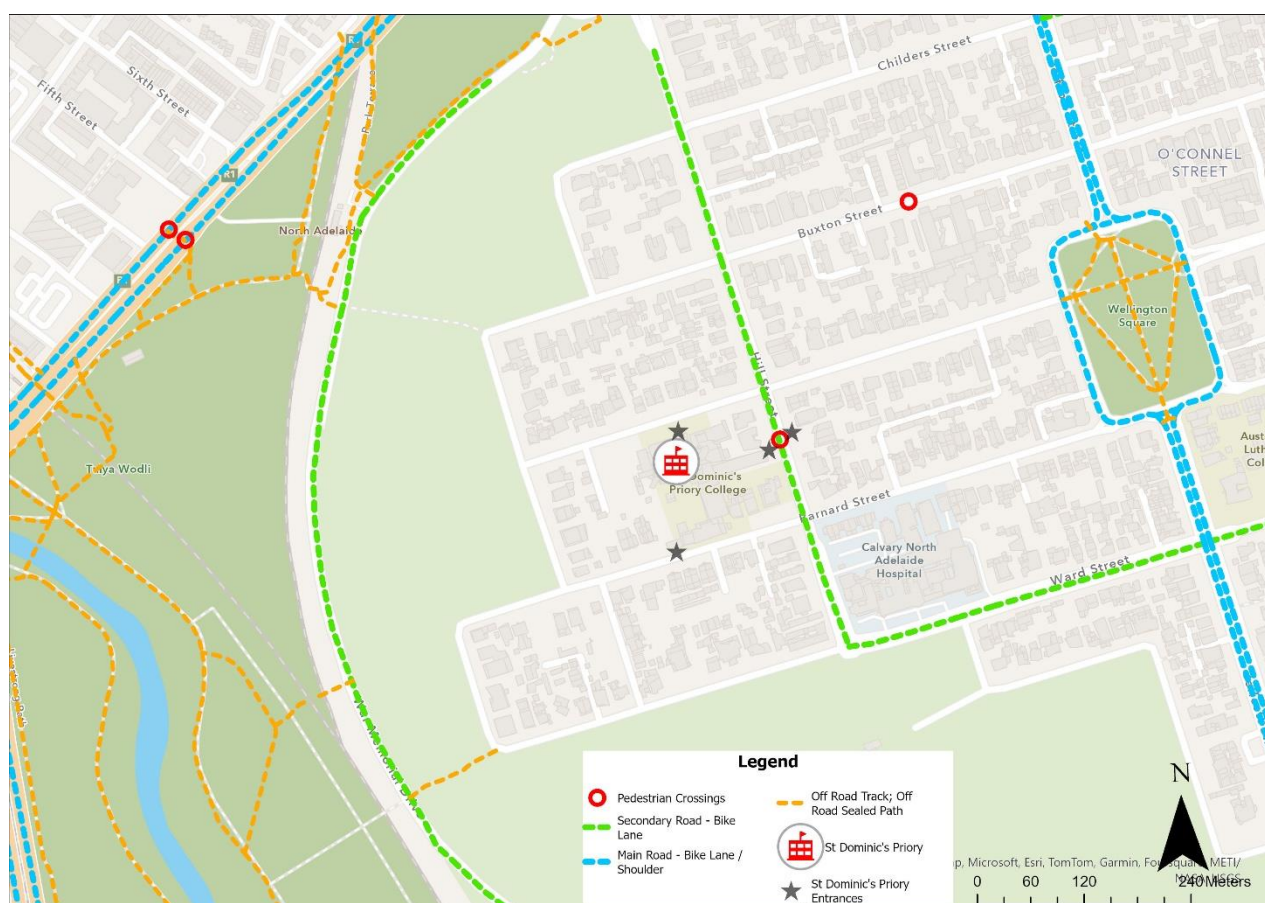


Figure 2.8 Cycling Network to St Dominic's Priory College

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff and visitors who walk for their entire trip or as an access mode to the bus stops in Hills Street.

Pedestrian access routes to the high school are via:

- Sealed footpaths exist along all road corridors to the school.
- Footpaths through the path network in the nearby parklands.

The walkable catchment areas for 1km, 1.5km and 2km to St Dominic's Priory College are shown in Figure 2.9. Students who walk their entire trip to school are likely walking from North Adelaide, the Mile End Train Station, and suburbs such as Bowden and Ovingham.

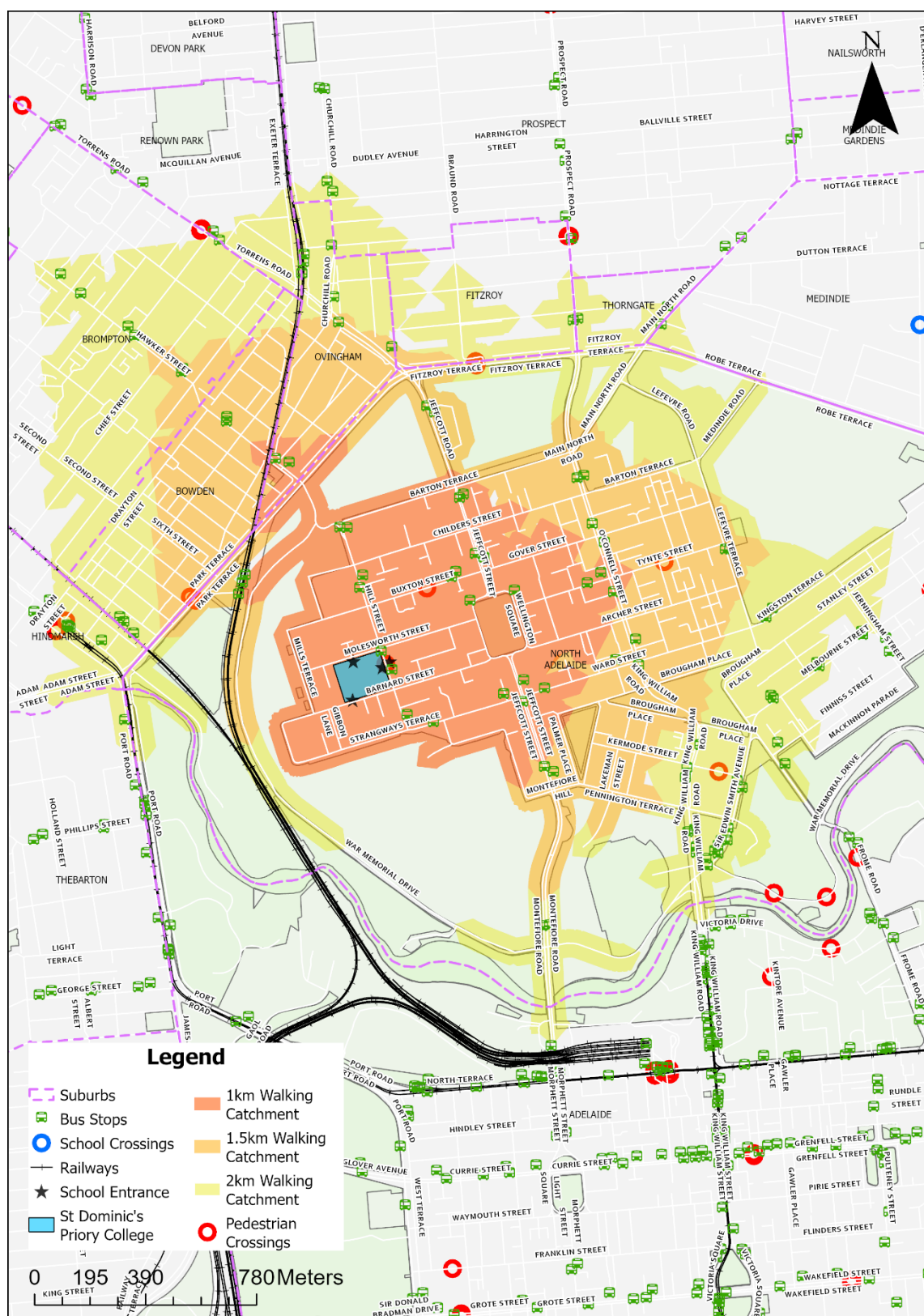


Figure 2.9 Walkable Access Catchment to St Dominic's Priory College



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with St Dominic's Priory College leadership on Wednesday 5 of June to discuss existing issues and any suggestions for new infrastructure. These were as follows:

- The informal Kiss and Drop area on Molesworth Street was difficult to use due to the angled parking
- The 13 m long loading zone on Molesworth Street was utilised for kiss and drop activity, resulting in double parking and reduced movement for vehicles travelling west.
- Kiss and drop area on Barnard Street resulting in significant double parking back to the west
- Drivers were observed regularly performing U-turns in the middle of the both Barnard Street and Molesworth Street
- 3 significant crashes and near miss incidents were reported by the school in Hill Street between students and other vehicles
- Staff carparking is limited at the school. Many staff park on the nearby local streets with the time limit restrictions and limited spaces result in staff leaving classrooms to shift vehicles.

No school expansion is currently planned.

3.2 Site Observations

The existing student arrival and departure movements at the St Dominic's Priory College were observed on Thursday 30 May 2024 from 8 am to 9 am and on Wednesday 5 June from 2:30 pm to 3:30 pm.

3.2.1 AM Arrival Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during the AM arrival period from 8:00 am to 9:00 am. The AM period arrival profile was relatively distributed over the 30 minutes before the school start time, with the peak activity of arrivals between 8:15 am and 8:30 am. This weather for this AM period was stormy, with rain continuing through the entire morning period. This likely resulted in a higher number of private vehicle travel for school drop off than typical days.



Parking in Molesworth Street



Parking in Barnard Street

Figure 3.1 AM Peak Conditions at St Dominic's Priory College



Other findings from the AM observations are:

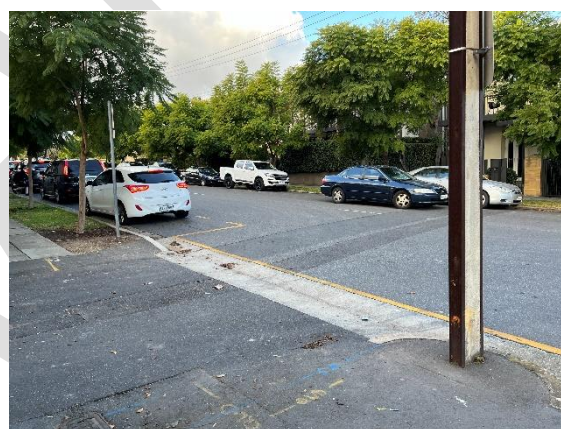
- Carparking was generally available across the peak hour in both Molesworth Street and Barnard Street. Kiss and drop activity also occurred on Hill Street, either side of the PAC. Vehicles typically stayed for less than 2 minutes.
- Some vehicles stayed longer as parents escorted their children within the school gates at the junior campus entrance on Barnard Street.
- Some instances of speeds over 25 km/h on Molesworth Street.
- Several students utilised the bus on Hill Street.
- U-turn movements within the street on Molesworth Street to turn back towards the east.
- Pedestrians were likely to use the PAC provided on Hill Street.
- Pedestrians on Barnard Street, where the traffic volume is low and the road width is shorter than Molesworth Street, were more inclined to jaywalk to travel to the school entrance.
- Minimal drop off activity occurred on the northern side of Molesworth Street, however in situations where it did occur, students jaywalked to the school entrance on the southern side.

3.2.2 PM Departure Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during PM departure period from 2:30 pm to 3:30 pm. The PM period departure profile included a significant movement of vehicles within a 20-minute timeslot after the school bell. Vehicles occupied most of the carparking spaces in front of the school in the 30-minute lead up to the school bell, with these vehicles typically moving on quickly.



Parking near the Molesworth Street school entrance



Parking in Barnard Street near the junior school entrance

Figure 3.2 PM Peak Conditions at St Dominic's Priory College

Other findings from the PM observations are:

- Carparking was quickly utilised on both sides of Barnard Street and the southern side of Molesworth Street in the 30-minute lead up to the school bell.
- Kiss and drop activity on Barnard Street was conducted by releasing the junior students individually to the waiting cars lined up
 - This line up of cars resulted in double parking exceeding 125 m in length to the Mills Terrace intersection. The delay of these vehicles picking up students ranged from 5-15 minutes.
- Vehicle parking limits on Barnard Street generally allows for 3-hour parking, with parents utilising these car spots if they wanted to park for more than five minutes and pick up their children inside the school.
- Some instances of speeds over 25km/h on Molesworth Street.



- Over 20 students utilised the bus on Hill Street.
- U-turn movements within the street on Molesworth Street to turn back towards the east. Instances of u-turning was not prevalent on Barnard Street due to the shorter road width.
- Pedestrians were likely to use the PAC provided on Hill Street if travelling in that direction.
- Parents on Barnard Street did jaywalk across the road to meet with students at the junior school entrance.
- Students walked at midblock locations across Molesworth Street to meet vehicles parked on the northern side of the road.



Car making an unsafe U-turn in Hill Street



Cars observed double parking in Barnard Street

Figure 3.3 PM Peak Safety Issues in Gover Street at St Dominic's Priory College

3.3 Summary of the Issues and Opportunities

The key issues for students and parents access the school are:

- Double parking was continuous over a 20 minute period on Barnard Street. This exceeded 125m in length, reaching to the Mills Terrace intersection.
- Angled carparking in Molesworth Street was also difficult to navigate for school drop off / pick up.
- Large crossing distances across Molesworth Street at the Hill Street intersection resulted in issues with pedestrian / vehicle conflicts.
- Some issues with jaywalking across Molesworth Street and Barnard Street
- Many staff park on the nearby local streets (mostly Molesworth Street) with the time limit restrictions and limited spaces result in staff leaving classrooms to shift vehicles.



4 Travel Safety Options and Assessment

4.1 Options Development

Options to improve the travel safety for students at the school were developed under three categories, namely:

- Infrastructure treatments requiring civil works with changes to signals or pedestrian crossings.
- Operational efficiencies, with changes to parking controls, Kiss and Drop areas or school zones.
- Safety promotions to increase awareness of the school with warning signage or information.

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

-
-

Table 4.1 School Travel Safety Options for St Dominic's Priory College

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Ban the right turn movements from Molesworth Street into Hill Street during peak periods	This reduces delays and safety issues for pedestrians and vehicles in the area.
	Rearrange the car spaces in Molesworth Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the entrance to the student entrance (Years 7 to 11).	Unsafe conditions for parents to reverse out of carparking during busy periods. This will also help improve double parking currently positioned at the loading bay area.
	Extend the existing Kiss and Drop area in Barnard Street for the junior school.	This aims to reduce double parking currently positioned in peak times.
	Provide a central median within the Molesworth Street corridor between Hill Street and Barnard Street. This could also be explored along Barnard Street.	Remove U-turn movements mid-block and prevent unsafe vehicle manoeuvres around school entrances.
	Investigate the inclusion of further pedestrian crossings mid-block of Molesworth Street and Barnard Street. This could be integrated with a central median treatment.	Reduction of jaywalking by students and parents crossing the road to drop off or meet each other at parked vehicles.
Operational Efficiencies	Staff parking improvements with the provision of permits for staff in the local streets, mostly focused on the 4P sections on Molesworth Street. This is not in the scope of this school travel safety review.	With the limited on-site parking for staff and the timed parking controls in the local streets close to the school, many teachers leave their cars to move their cars during the school day leaving students unattended for short periods. This is a safety issue for



Type of Option	Description	Issue Addressed
		students because they are left unaccompanied in the classroom. This would potentially allow for staff to park on the north side of Molesworth Street and free up space in the unrestricted carparking areas on Molesworth Street in the PM period pick up.
Safety Promotions	Install additional signage to promote the school area for traffic approaching the school zones at the Hill Street and Mills Terrace ends of Molesworth Street and Barnard Street.	Reinforce the awareness for drivers entering a "school precinct area"
	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	Students and parents may not be aware of their travel choices for different modes. The private school bus service is promoted but other modes could be consolidated.

4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives are shown on Figure 4.1. They include:

- Investigate the inclusion of a central median treatment. This could be integrated with pedestrian crossings mid-block of Molesworth Street and Barnard Street.
- Rearrange the car spaces in Molesworth Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the entrance to the student entrance (Years 7 to 11).
- Extend the existing Kiss and Drop area in Barnard Street for the junior school.
- Investigate a ban of the right turn movements from Molesworth Street into Hill Street during peak periods.
- Staff parking improvements with the provision of permits for staff in the local streets, mostly focused on the 4P sections on Molesworth Street.
- Inclusion of additional signage to promote the school area for traffic approaching the school zones at the Hill Street and Mills Terrace ends of Molesworth Street and Barnard Street.



Legend






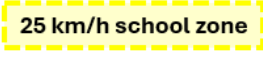

-  Central Median with New Pedestrian refuges
-  Rearrangement of parking alignment
-  Add and Modify Timed Parking Permits
-  Right turn movement bans
-  Existing Traffic Signal and PAC
-  25 km/h school zone
-  Install new School Zone warning sign at street entry point

Figure 4.1 Recommended Initiatives at St Dominic's Priory College

4.2.1 Options to Improve Pedestrian Crossing Safety in Tynte Street

In order to improve the pedestrian crossing safety to the school entrance and prevent jaywalking in peak times, an option could be to include a central median and pedestrian refuges through Molesworth Street and Barnard Street. A continuous solid median on both streets would prevent dangerous u-turn movements by vehicles during peak pedestrian periods. This option requires further site observations, data collection for pedestrian volumes crossings during the AM and PM school peak hours and a more detailed assessment. Examples of pedestrian refuges at the Hill Street intersections of both Molesworth Street and Barnard Street could be transferred further along the road corridor.



Figure 4.2 Pedestrian Refuge Example – Hill Street / Molesworth Street

4.2.2 Signage to Increase the Awareness of the School for Motorists

An issue for school student travel safety is many motorists in streets approaching the schools are not aware that St Dominic's Priory College is located here until they enter the 25km/h zones near the school entrances. It is proposed to install larger and more prominent information signage (not regulatory signage) to increase the awareness of the school. The signs could be installed at either end of Molesworth Street and Barnard Street for motorists to see when entering the school area.

Examples of signage at the entry points to a school precinct are shown in Figure 4.3. These information and advisory advance warning signs are not standard for the DIT guidelines. Council will need to discuss with DIT about these types of signs that are intended to increase awareness to traffic in Hill Street.



Large entry signage that is visible to traffic on the street



Advanced warning sign for a school zone

Figure 4.3 Alternative School Precinct Warning Signage

4.2.3 Information to Promote Safer Student Travel to the School

The school provides some information to promote different travel modes such as the Adelaide Metro and private school buses. However, a specific brochure/pamphlet could be provided to school students, separate to newsletter articles. An example of the types of the school information brochures, known as school Travel Access Guides in NSW, are provided for a primary school in **Appendix C**. The Travel Access Guide is prepared with a consistent template for all government schools in NSW in collaboration with the school principals and a school travel coordinator.

4.3 Assessment and Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.2. The options were given labels under the following categories:

- P for Parking control with new signage or to pavement markings for the on-street parking or a school zone.
- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- I for information to the school community with signage or online promotional brochure.



Table 4.2 Indicative Cost Estimates for the Travel Safety Options at St Dominic's Priory College

Option ID	Description	Indicative Cost Estimate	Comments
P1	Ban the right turn movements from Molesworth Street into Hill Street during peak periods	Less than \$1,000 for signage	Council to liaise with DIT on this change since it may affect traffic volumes in Hill Street.
P2	Rearrange the car spaces in Molesworth Street with a parallel parking to provide a formal 2-minute Kiss and Drop zone near the entrance to the student entrance (Years 7 to 11).	Less than \$20,000	This would require consultation with the residents in Molesworth Street.
P3	Extend the existing Kiss and Drop area in Barnard Street for the junior school.	Less than \$1,000 for signage	Council would need to consult with residents in Barnard Street if the on-street parking was affected.
P4	Staff parking improvements with the provision of permits for staff in the local streets, mostly focused on the 4P sections on Molesworth Street. This is not in the scope of this school travel safety review.	To be determined	This is not a priority action within the scope of this school travel safety review. Parking in Molesworth Street was previously changed with community input.
T1	Provide a linemarked central median within the Molesworth Street corridor between Hill Street and Barnard Street. This could also be explored along Barnard Street.	Less than \$1,000 for line marking.	Council would need to consult with the school and residents in Molesworth Street.
T2	Investigate the inclusion of further pedestrian crossings mid-block of Molesworth Street and Barnard Street. This could be integrated with a central median treatment.	Up to \$10,000	Council would need to consult with the school and residents in Molesworth Street.
I1	Install additional signage to promote the school area for traffic approaching the school zones at the Hill Street and Mills Terrace ends of Molesworth Street and Barnard Street.	Less than \$1,000	The selection of information signage and installation is under the control of the Council.
I2	Prepare a consolidated travel access guide for students and parents that would be promoted on the school website in location that is easy to find, in addition to the school newsletter.	No cost to Council	This would be prepared and promoted by the school administration.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE 	
School Travel Survey for Students	
School: St Dominic's Priory College	
<i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i>	
Questions for the Teacher	
Date (day/month/year): Weather (Daytime temperature and sky conditions): Please enter the name or number of your class or year group. How many students are absent today in your class?	
Questions for the Students in Your Class / Year Group	
<i>Please ask the students with a 'hands-up' survey in the classroom.</i>	
AM Period Travel	
<i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>	
Main Mode of Travel in the AM Period	Number of Students
Car (as driver if applicable)	
Car (as passenger with drop-off in Barnard Street)	
Car (as passenger with drop-off in Molesworth Street)	
Car (as passenger with drop-off in Hill Street)	
Car (as passenger with drop-off in other streets)	
Walk for the entire trip	
Bus	
Train	
Tram	
Bicycle, e-bike or moped	
Scooter	
PM Period Travel	
<i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>	
Main Mode of Travel in the PM Period	Number of Students
Car (as driver if applicable)	
Car (as passenger with pick-up in Barnard Street)	
Car (as passenger with pick-up in Molesworth Street)	
Car (as passenger with pick-up in Hill Street)	
Car (as passenger with pick-up in other streets)	
Walk for the entire trip	
Bus	
Train	
Tram	
Bicycle, e-bike or moped	
Scooter	
If you travelled by car, would you prefer any of these modes? (multiple answers)	
Walking for the entire trip	
Bicycle, e-bike or scooter	
Public Transport (bus, tram or train)	



Appendix B –Term 1 Road Safety and Transport News

ROAD SAFETY INFORMATION

KEEPING KIDS SAFE AROUND SCHOOLS - A MESSAGE FROM THE CITY OF ADELAIDE

With of the resumption of learning for all students, we wish to remind families of the road safety measures that help keep all members of our Community safe.

Parking Zones around the school are put in place to ensure pedestrian safety. Children are in particular danger near schools because:

- Their small size makes it hard for drivers to see them between traffic, parked cars, stobie poles and other obstacles.
- They are easily distracted and may not be aware of traffic.
- They may suddenly run onto the road - e.g. to meet a parent.

Some road rules you particularly need to be aware of are:

- You must not stop in a No Stopping Zone, even for a few seconds to pick up your child.
- You may stop in a No Parking Zone / Kiss & Drop Zone for **a few seconds only** to pick up a child who is already waiting nearby. You must not linger in this zone in wait, park, or leave the vehicle.
- You must not Double Park, or stop in the line of traffic, to pick up or drop off a child.
- You must not stop in a Bicycle Lane.
- You must not stop within 20 metres before a crossing or 10 metres after a crossing.
- You must not stop within 10 metres of an intersection or junction without traffic lights.
- If you have an enquiries regarding this information, please contact City of Adelaide on 8203 7203.

City of Adelaide Parking and Information Officers and SAPOL are aware of these issues and will monitor the situation and deal with breaches accordingly, to ensure children's safety. Expiations will be issued to vehicles contravening these rules.

In addition to the information above, as provided by City of Adelaide, the College would further wish to request that drivers please be mindful of our neighbours in:

- Not pulling into, or parking across driveways or no standing zones.
- Not making U Turns at busy pick up/drop off times. This obstructs the flow of traffic and may endanger children crossing the road. Please drive around the block.

Please be mindful of your own behaviour around schools, whether in relation to where you park or the respect shown to those trying to ensure pedestrian safety - you are our children's greatest role model.

ADELAIDE METRO BUS SERVICES



PLAN YOUR TRIP TO SCHOOL WITH ADELAIDE METRO

The nearest bus stop to St Dominic's is **HILL STREET STOP 5A**. It is serviced by two student-only School Bus services:

477 Elizabeth Station to St Dominic's

985 St Dominic's to City (afternoons only)

For current timetables for these routes, as well as other (general public) services that are within the vicinity of the College, visit:

www.adelaidemetro.com.au



Appendix C – NSW School Travel Access Guide

| NSW Department of Education – School Infrastructure



Meadowbank Public School Travel Access Guide

Effective: September 2023

Introduction

Our school community of parents/carers, staff and students live within a reasonable walk or cycle trip of the school. This Travel Access Guide provides suggested safe and accessible options for travelling to and from school.

Active ways to get to school



Walking to and from school

- Walking is a fun way to keep active and healthy.
- Stay alert and watch out for any potential hazards, including cars reversing out of driveways, bikes and other pedestrians.
- Remember to STOP, LOOK, LISTEN and THINK every time you cross the road.



Ride your bike

- 278 bike racks are available for everyone and 42 scooter racks for K-6 students.
- All bicycle riders are required by law to wear a correctly fitted Australian standards approved helmet and is highly recommended when riding a scooter.
- Children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.

Kiss and drop expectations

- For parents/carers who drive their child/ren to school, the kiss and drop zone is located along Rhodes Street starting from Hermitage Road.
- This space is a 'No Parking' zone, meaning that you may stop for up to a maximum of 2 minutes and move no more than 3 metres from the vehicle.

Message from our principal

- Meadowbank Public School supports sustainable and environmentally friendly transport practices.
- Students up to 8 years of age should hold the hand of an adult when walking or be accompanied by an adult when riding
- Students from 8 to 10 years of age should be actively supervised by an adult

School bell times

Start Times

8:45 am

End Times

2:45 pm

The outside school hour times for the primary school are: 7:00 am - 8:45 am and 2:45 pm - 6:00 pm.

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





NSW Department of Education – School Infrastructure

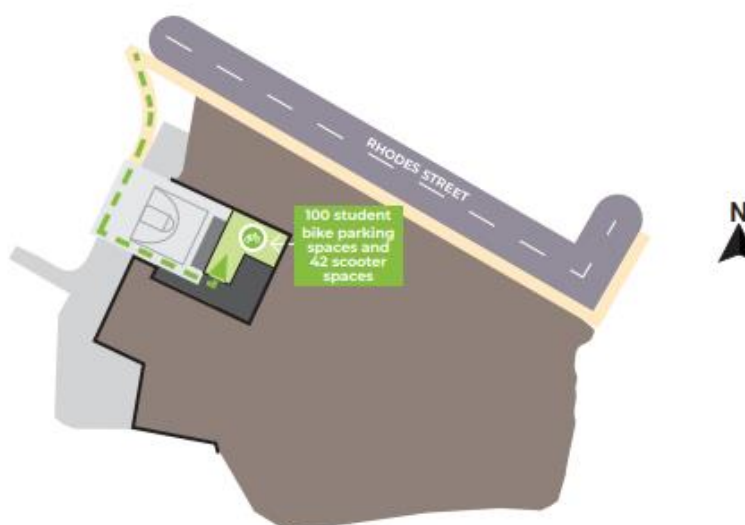


Please use the Trip Planner at transportnsw.info/ for additional information about cycling routes to the school.

End of trip facilities



Playground level:
For students attending
Meadowbank Public School





NSW Department of Education – School Infrastructure

Where do you ride?

Footpath/shared path/cycleway:

- Children under 16 can ride on a footpath.
- Adults supervising children under 16 can also ride on the footpath.
- Be careful of cars entering and exiting driveways.
- Watch out for pedestrians, other riders and animals.

Look out for pedestrians on shared paths.



Crossing the road:

- Be extra careful.
- Walk your bicycle when you cross at a pedestrian crossing.

Give a metre:

Give pedestrians 1 metre of space when riding past.



3 steps to follow when riding a bike:

Clip, check, chime.

Clip your helmet

1



You must always wear a helmet when riding your bike.

Check your brakes

2



Make sure your brakes are working.

Chime your bell

3



If you pass another rider or pedestrian, chime your bell.

Things to remember

- Always ask your parents permission to ride.
- Loose clothing and items can get caught in your wheels. Secure any loose items, like backpack straps.



- Shoes with a good tread on the soles will help you grip the pedals and protect your feet. Make sure your laces are tied.



Always remember to watch out for hazards



- 1 Wet leaves
- 2 Big puddles
- 3 Storm grates
- 4 Gravel or rocks
- 5 Little kids
- 6 Animals
- 7 Changes in the road/footpath/cycleway surfaces

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au





St Mary's College

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
28 June 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	Kaitlin Neave	John Devney	John Devney	28 June 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Appendix A – Student Travel Survey Form



Executive Summary

Overview

St Mary's College is a Reception to Year 12 Catholic girls' school located on the block between Franklin Street, West Terrace, Grote Street and Gray Street in Adelaide CBD. The College had 686 students enrolled in Term 2 2024 with 145 students in Reception to Year 3, 225 students in Years 7 to 9 and 313 students in Years 10 to 12.

Key Findings

Issues for accessing the school that were observed in Franklin Street and Grote Street. These traffic safety issues that are for the City of Adelaide to address are:

- Extensive queues of cars were formed in Franklin Street creating local traffic congestion.
- Parents and children not watching the traffic as they enter the roadway in Franklin Street.
- Parents were observed parking or stopping where they should not be, or parking for longer than the posted time limits.
- Signal timing at the crossings in Franklin Street and Grote Street need to be modified to provide priority for pedestrians, especially during school peak hours.

Key Recommendations

Infrastructure

- Install overhead mast arm at the signalised Crossing in Grote Street. This is an issue because drivers are not seeing/aware of the signalised crossing in Grote Street.
- Install solid white line in Franklin Street to ban U-turn movements in Franklin Street.
- Install built-out islands or extension at the signalised crossing in Grote Street. This will prevent vehicles from travelling on cycle lane and road shoulder as a jump lane to West Terrace.

Operational Efficiencies

- Convert the no stopping to a kiss and drop area at the indented bay west of the signalised crossing in Grote Street.
- Review the signal timing at the signalised crossing in Grote Street and improve the pedestrian green light waiting time.

Increased Awareness of the Area

- Implement school zones and corresponding the 25km/hr speed limit conditions in Franklin Street.
- Install red light cameras at the signalised crossings in Franklin Street and Grote Street.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.
- The following tasks were completed for this school travel safety review:
 - Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
 - With the support from the teachers, undertake a student travel mode survey.
 - Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

St Mary's College is located in Franklin Street in Adelaide city centre on the block bounded by West Terrace, Franklin Street, Gray Street, and Grote Street. The school site and the existing surrounding environs are shown in Figure 1.1.



Figure 1.1 St Mary's College Location



Figure 1.2 St Mary's College in Franklin Street



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

St Mary's College is a Reception to Year 12 Catholic girls' school, established in 1869. It is the oldest continuously running school for girls in South Australia.

The school office opens at 8am and closes at 4pm. The bell times are:

- Start of classes at 8:40 am Monday to Friday.
- End of classes at 2:30pm on Monday.
- End of classes at 3:15pm on Tuesday to Friday.

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 is for 686 students with a distribution by year as follows:

- 13 students in Reception
- 16 students in Year 1
- 19 students in Year 2
- 12 students in Year 3
- 24 students in Year 4
- 21 students in Year 5
- 41 students in Year 6
- 65 students in Year 7
- 81 students in Year 8
- 80 students in Year 9
- 108 students in Year 10
- 105 students in Year 11
- 101 students in Year 12

The number of students by year group is:

- 59 students in Reception to Year 3
- 86 students in Years 4 to 6
- 225 students in Years 7 to 9
- 313 students in Years 10 to 12



2.2.1 Existing School Travel Activity

The St Mary's College catchment boundary area includes all suburbs in metropolitan Adelaide. The number of households by sub areas of each suburb is shown in Figure 2.1.

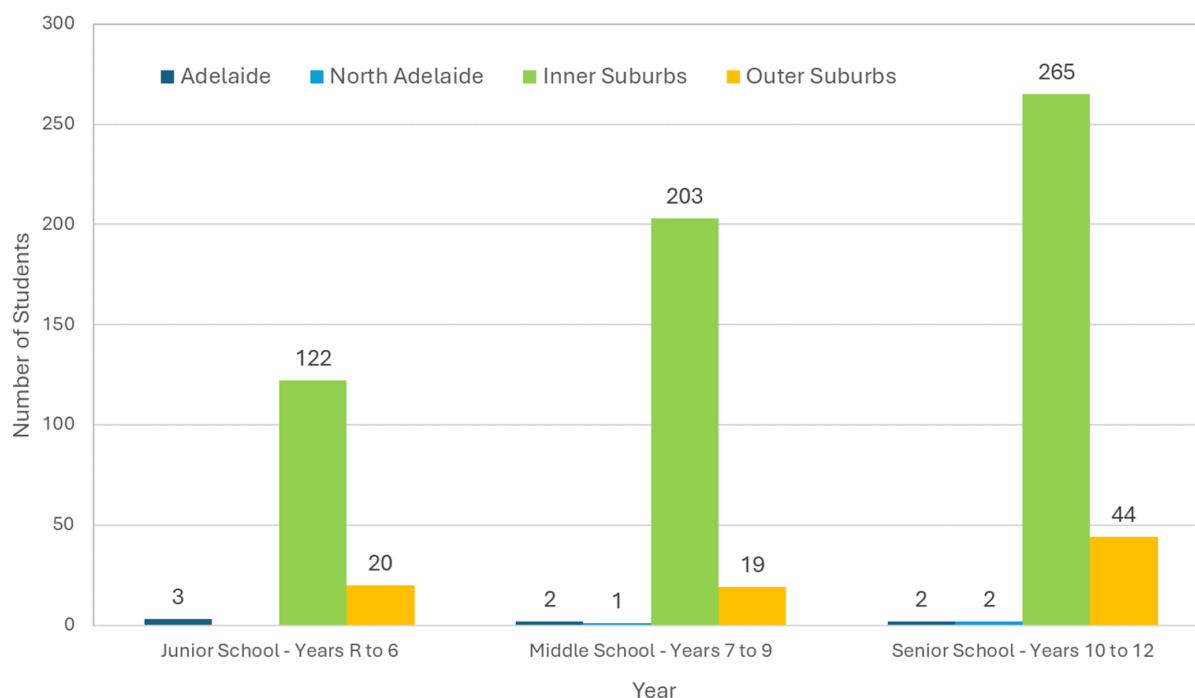


Figure 2.1 St Mary's College Student Residence Location Analysis

A breakdown of the number of students by year groups with the percentages by location are provided in Table 2.1. Over 86 per cent of the students live in the inner suburbs of Adelaide that is beyond an easy walk or bicycle trip to the school. Only 1.4 per cent of the students live in the City of Adelaide.

Table 2.1 Student Residence per Location for St Mary's College

Location	Junior School - Years R to 6	Middle School - Years 7 to 9	Senior School - Years 10 to 12	Total	Percentage
Adelaide	3	2	2	7	1.0%
North Adelaide	0	1	2	3	0.4%
Inner Suburbs	122	203	265	590	86.4%
Outer Suburbs	20	19	44	83	12.2%
Total	145	225	313	683	100.0%



2.2.2 Student Travel Demand

The existing school travel activity to and from the St Mary's College was reviewed through site observations and a student travel mode survey to determine the existing school transport modes on a typical school day. A copy of the student travel mode survey form is included in Appendix A.

The student travel mode survey was conducted on the week of 21st to 28th May 2024. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus
- Train
- Tram
- Bicycle or e-bike
- Scooter

A total of 628 students were at school for the "morning Connect" class meeting when the survey was conducted. 128 students were absent from school and 46 students were at an offsite activity.

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.2 and with a breakdown by year group in Table 2.2. The PM departure period has 20 per cent more students using public transport than in the AM period, and 45 students fewer using private vehicles. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period.

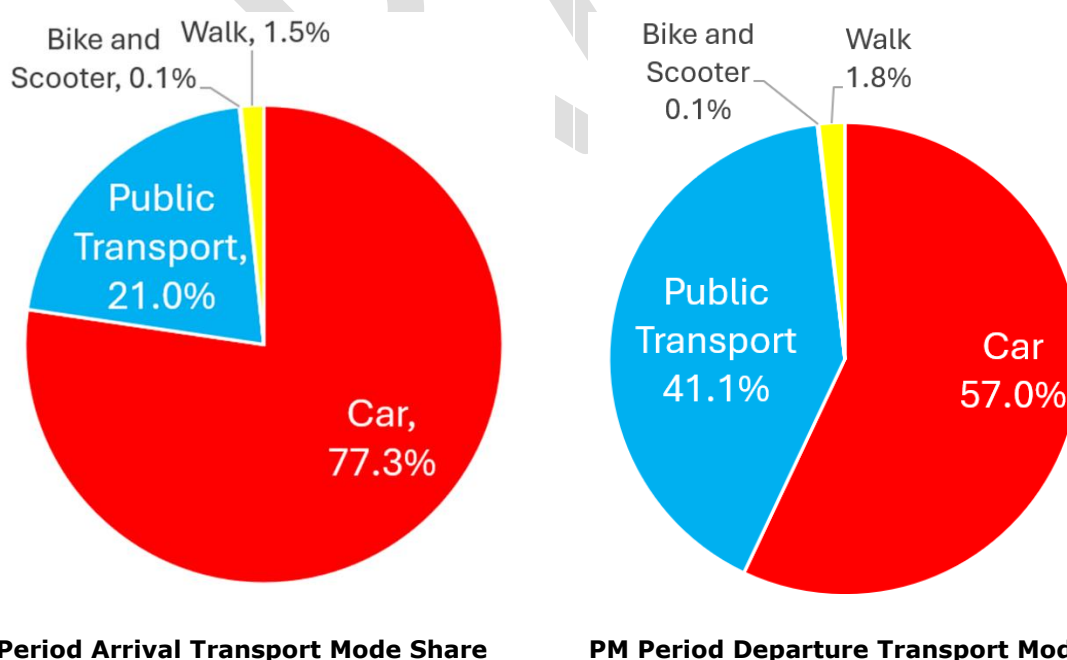


Figure 2.2 St Mary's College Student Transport Mode Shares in May 2024



A breakdown of the student mode shares by year group for the AM arrivals from the survey conducted in May 2024 is provided in Table 2.2. Key insights from the AM survey results are:

- The students in Reception to Year 3 were mostly driven to school.
- Over 82 per cent of students in Years 4 to 6 were drive to school.
- The highest usage of public transport was for students in Years 7 to 9 at 36 per cent.
- Cycling to the school for the girls was very low for all year groups.

Table 2.2 Student Transport Mode Shares for the AM Arrivals by Year Group in May 2024

AM Arrivals Transport Mode	REC to 3	4 to 6	7 to 9	10 to 12	Total
Car	97.8%	82.1%	62.5%	77.3%	94.1%
Public Transport	2.2%	16.2%	35.6%	21.0%	3.2%
Bike and Scooter	0.0%	0.2%	0.1%	0.1%	0.1%
Walk	0.0%	1.6%	1.8%	1.5%	2.7%

A breakdown of the student mode shares by year group for the PM departures from the survey conducted in May 2024 is provided in Table 2.3. Key insights from the PM survey results are:

- Five per cent of the students in Reception to Year 3 walked home.
- Over 91 per cent of students in Years 4 to 6 were picked up by car.
- About 40 per cent of students in Years 10 to 12 used the car mode to travel home.
- The highest usage of public transport was for students in Years 10 to 12 at 58 per cent.
- Cycling to the school for the girls was very low for all year groups.

Table 2.3 Student Transport Mode Shares for the PM Departures by Year Group in May 2024

PM Departures Transport Mode	REC to 3	4 to 6	7 to 9	10 to 12	Total
Car	84.2%	91.3%	60.9%	40.5%	57.0%
Public Transport	10.9%	8.3%	37.5%	57.4%	41.1%
Bike and Scooter	0.0%	0.4%	0.0%	0.1%	0.1%
Walk	5.0%	0.0%	1.6%	2.1%	1.8%



2.3 Transport Access

Transport access to the school via road, public transport, cycling, and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.3.1 Road Network

Access to the school is provided in Franklin Street and Grote Street. The front entrance, kiss and drop area, and main office of the school is located in Franklin Street. The rear entrance with a kiss and drop area is provided in Grote Street.

Franklin Street

Franklin Street is a two-way two lane Collector, and is under the care and control of the City of Adelaide. At the frontage of the school, each lane is around 3.5m wide, with on-road cycle lane and 45-degree angle parking provided on both sides of the road. In front of the school there is a signalised crossing.

Sealed bitumen footpaths are on both sides of Franklin Street. The traffic volume in Franklin Street is about 11,000 vehicles per day. It has a posted speed limit of 50 km/h. The kerbside parking, bicycle lanes, and traffic lanes in Franklin Street is shown in Figure 2.3.



Figure 2.3 Franklin Street, Looking West

Grote Street

Grote Street is classified as a SubArterial road, with two lanes in each direction. It is under the jurisdiction of the City of Adelaide council. In the proximity to the school there is a signalised crossing. Each lane is approximately 3.6m wide, with on-road cycle lane on each side. There is no provision for on-street parking.

Sealed bitumen footpaths are on both sides of Grote Street. The traffic volume in Grote Street is about 22,800 vehicles per day. It has a posted speed limit of 50 km/h. The kerbside parking, bicycle lanes, and traffic lanes in Grote Street is shown in Figure 2.4.



Figure 2.4 Grote Street, Looking West

2.3.2 Crash History

A review of the latest crash data from 2018 to 2022 (five-year period) has been sourced from DataSA. During this time there has been 2 crashes in Franklin Street with 1 minor injury and 1 serious injury. There was one serious injury at the intersection of Franklin Street and Gray Street. There were two property damage only collisions in Grote Street.

The number and type of crashes is not considered high for this type of road treatment and intersection design. An overview of the latest crash data is presented in Figure 2.5.

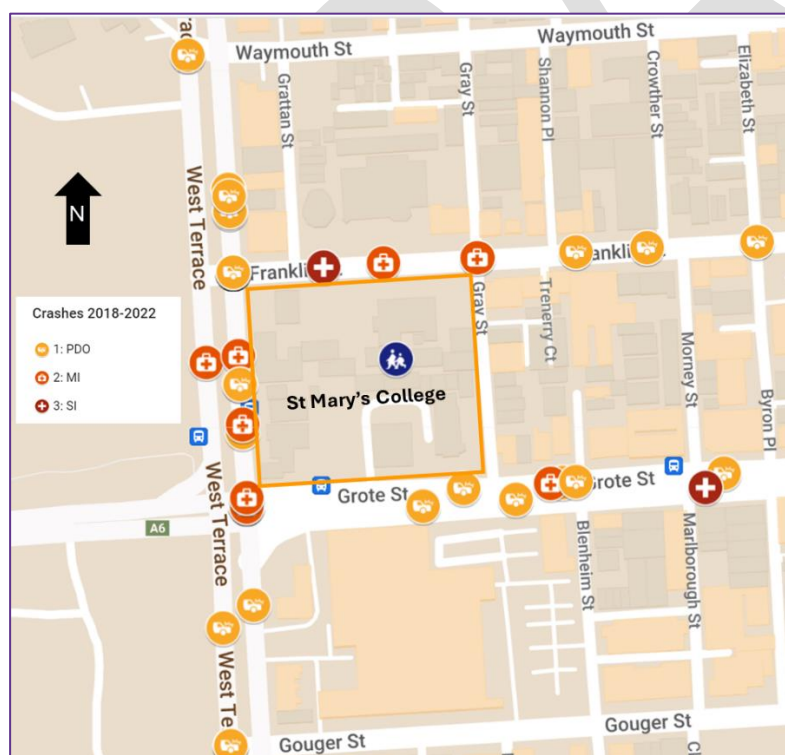


Figure 2.5 Crash History in the Streets near St Mary's College



2.3.3 Parking and Kiss and Drop Areas

The on-street car parking controls along the streets in the vicinity of the school, and the kiss and drop areas are shown in Figure 2.6.

The kiss and drop area in Franklin street is operative between 8am to 9am, and 2:30pm to 4pm, Monday to Friday, when no parking is allowed. From 9am to 2:30pm up to 2 hours of parking is permitted.

The kiss and drop area in Grote Street has spaces for two hours of parking any day from 8 am to 6 pm.

The students who may use a Kiss and Drop area are:

- Students with a disability
- Students whose parents work close to the school, such as in Adelaide CBD or North Adelaide.
- Students who are carrying heavy bulky equipment.

Parents who do not work in Adelaide CBD are unlikely to regularly drive into the CBD to drop off or pick up their child. Many students, who 13 years of age or older, are capable of travelling on their own and would use public transport.

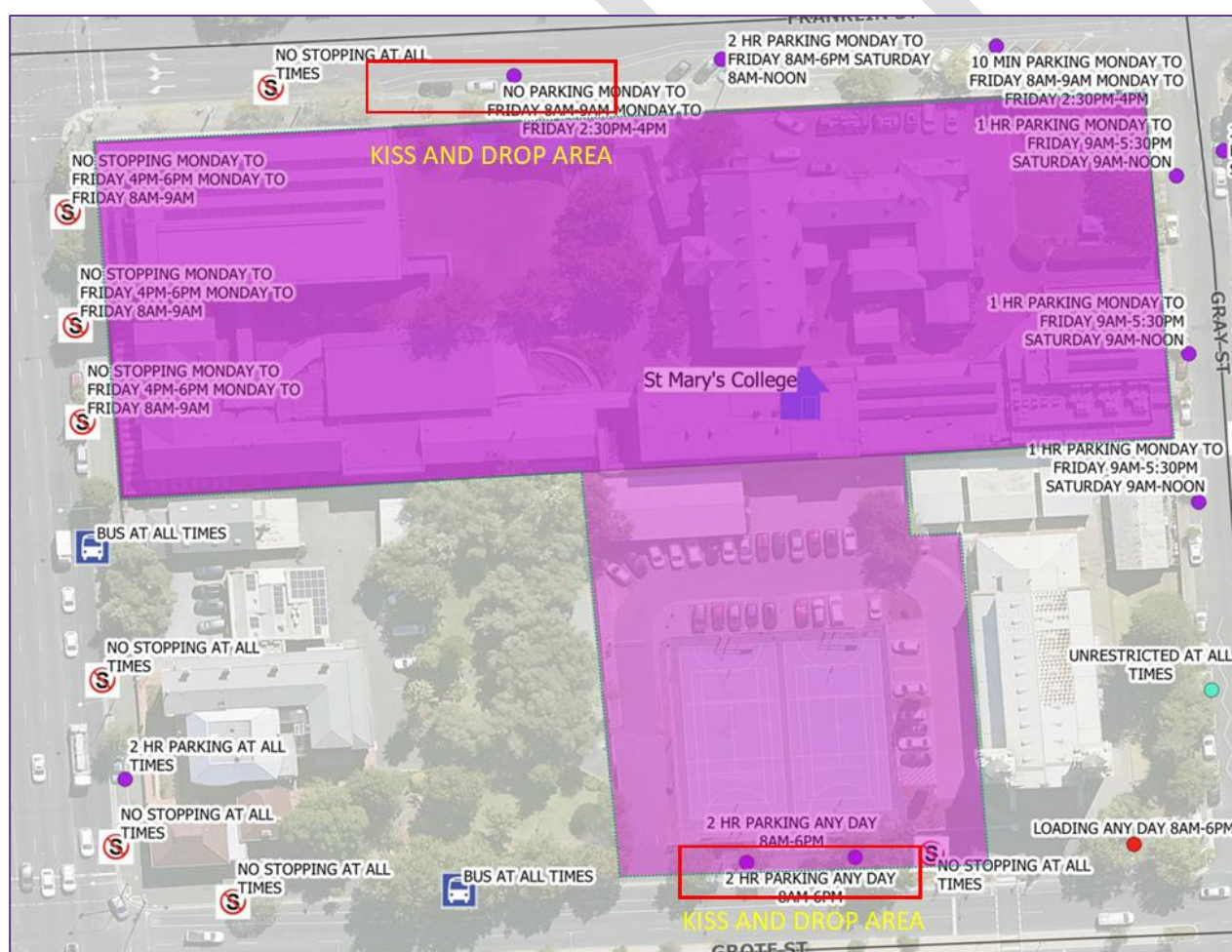


Figure 2.6 On-street Parking and Kiss and Drop Areas for St Mary's College



2.3.4 Public Transport

Adelaide CBD is the focus of the bus, tram, and train network with the walkable access from St Mary's College, as there are bus stops on West Terrace and Grote Street.

The walkable access from these public transport services to the school is shown in Figure 3.14.

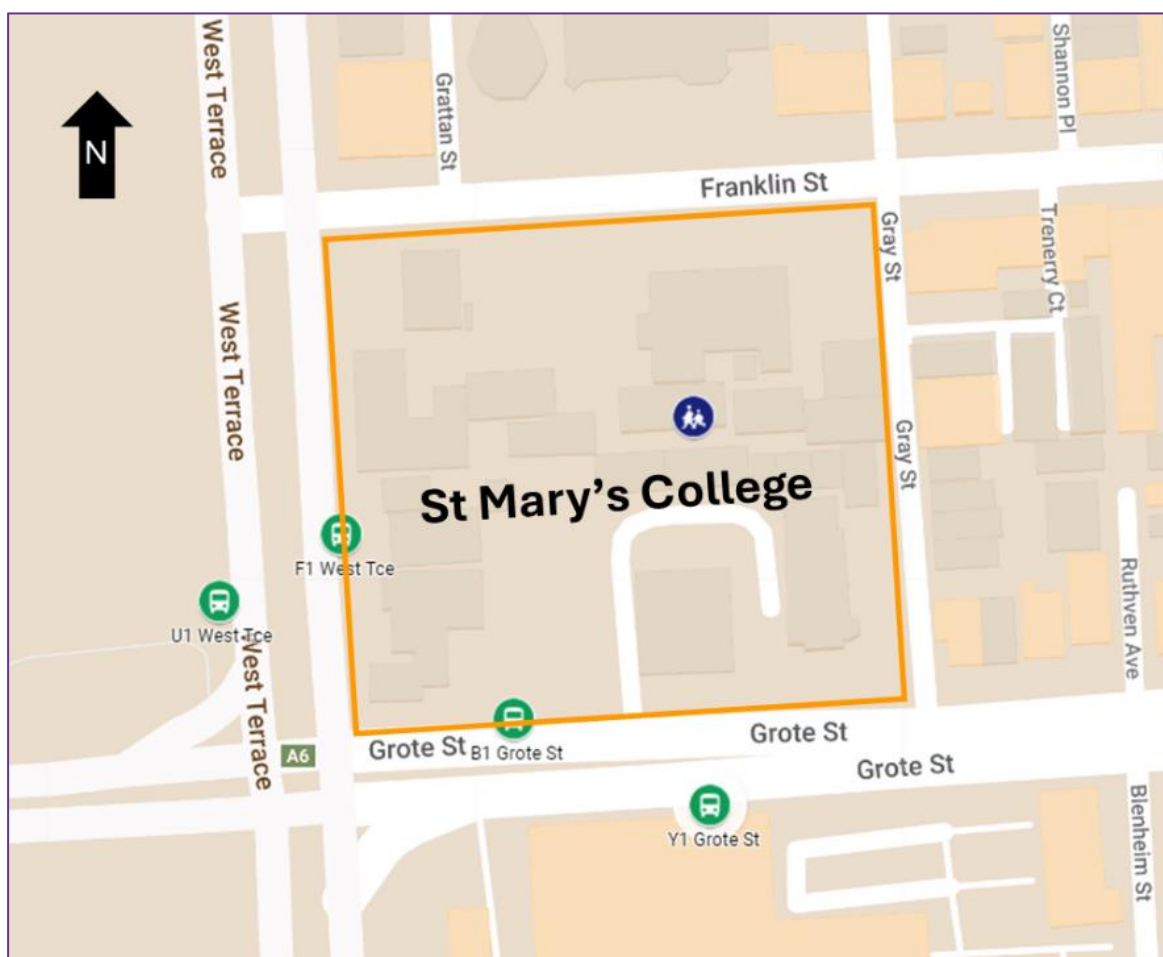


Figure 2.7 Public Transport Stops at St Mary's College

The Adelaide Metro bus services to the bus stops in Grote Street and West Terrace are considered sufficient for the demand based on the site observations. Many students are likely using public transport services from the CBD.

St Mary's College does have any special school bus services, provided by Adelaide Metro or privately operated.

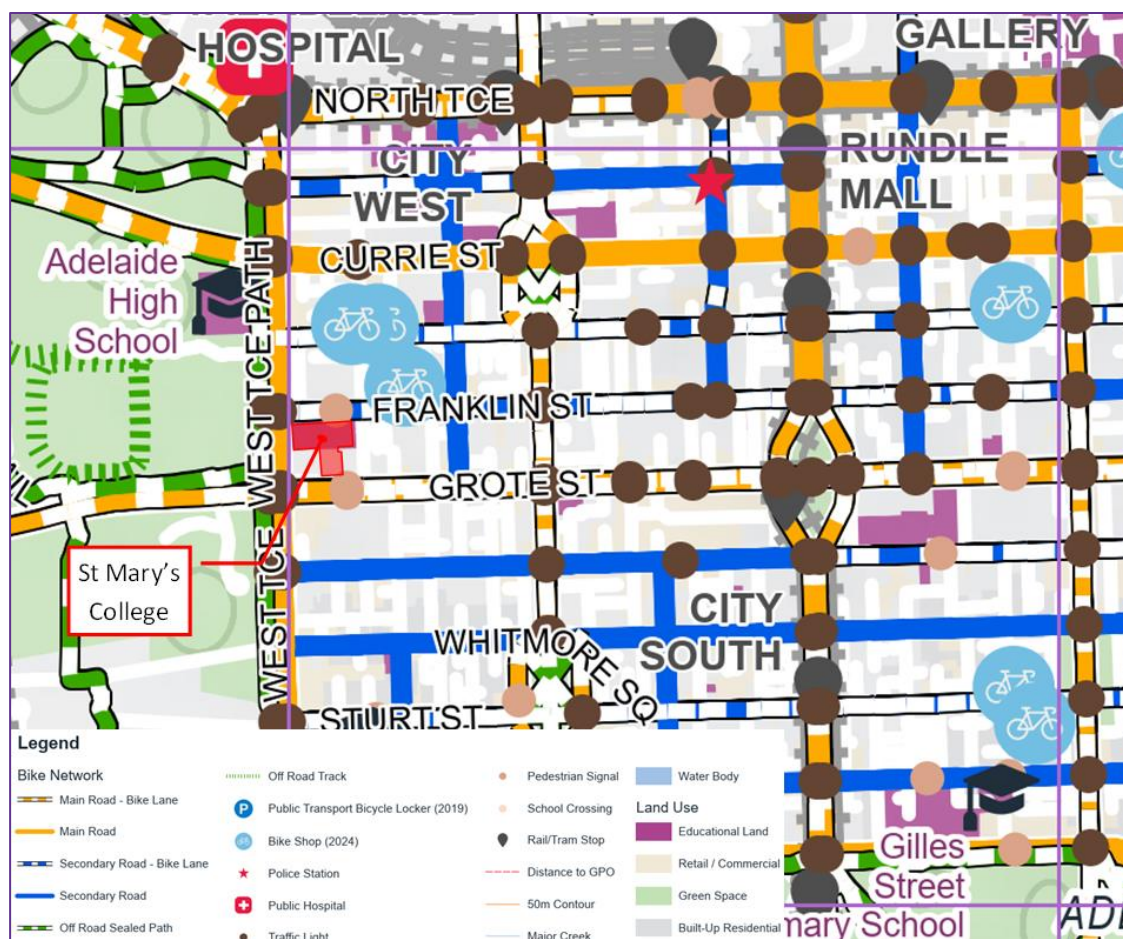
Train services for all metropolitan train lines are at Adelaide Railway Station which is located 1.6 km northeast of the school.



2.3.5 Cycling

The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.8.

Both Franklin Street and Grote Street have on-road bicycle lanes on both sides of the road. Sealed shared paths exist throughout the Adelaide Park Lands.



Source: BikeDirect map, January 2024

Figure 2.8 Cycling Network to St Mary's College

2.3.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff, and visitors who walk for their entire trip or as an access mode to the bus stops, tram stops in North Terrace, and train services at Adelaide Railway Station. The footpath network along Franklin Street, Gray Street, West Terrace, and Grote Street needs to be well maintained and kept clear of fallen trees and debris by the City of Adelaide.

The school has good pedestrian access from all directions from Adelaide CBD, as shown in Figure 2.9. There are one signalised pedestrian crossing adjacent to the school in Franklin Street and Grote Street.

A 5, 10 and 15-minute walkable catchment areas to St Mary's College are also shown in Figure 2.9. Students who walk their entire trip to school are likely walking from Adelaide city centre.

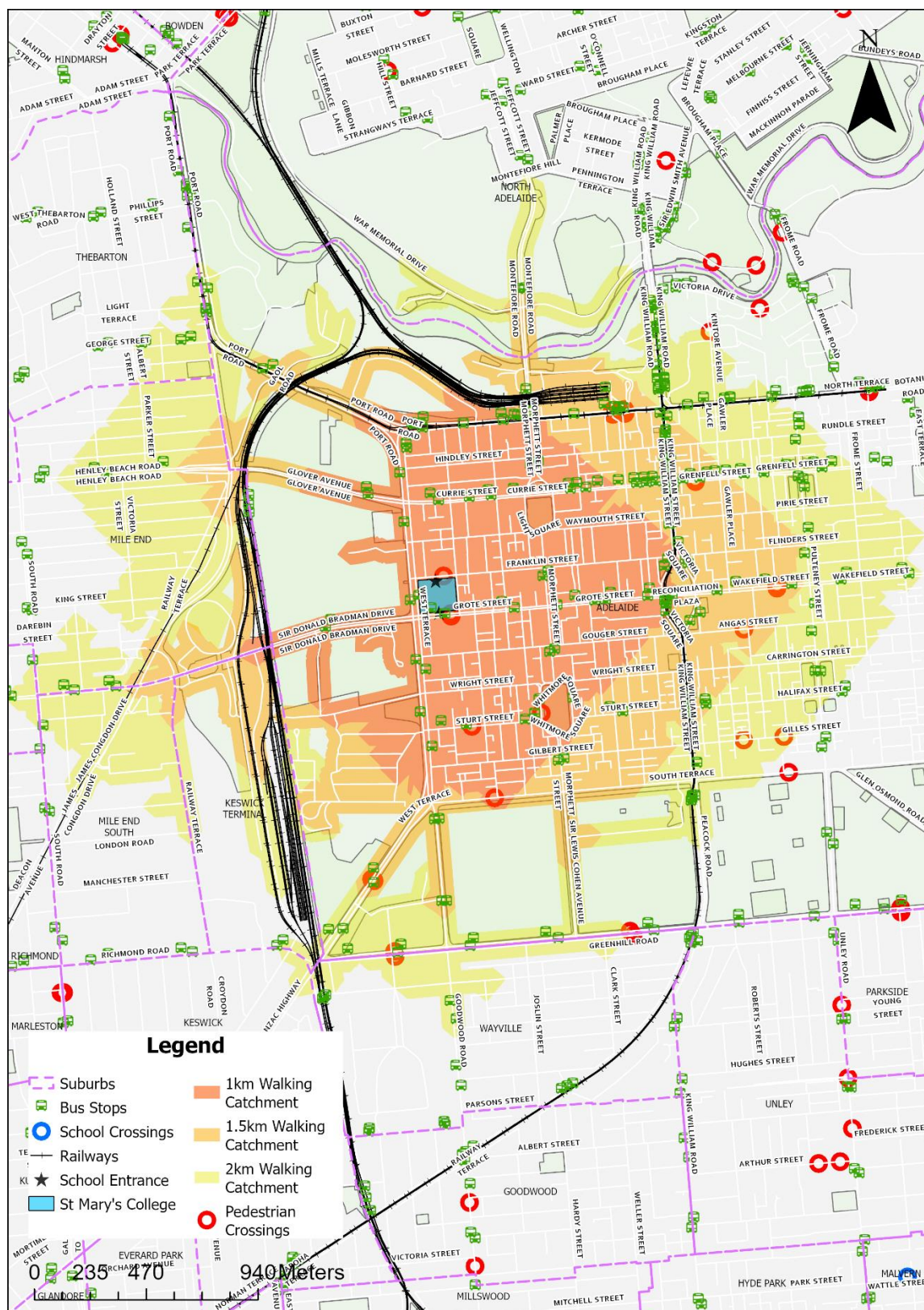


Figure 2.9 Walkable Access Catchment to St Mary's College



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

A meeting was held with St Mary's College Principal on 20th May 2024 to discuss existing issues. The following concerns were raised by the school:

Franklin Street

- The queues formed during the PM peak period could form extensively in Franklin Street, and the queue could also extend to Gray Street. The queuing cars would also block on-road cycle lane, the signalised crossing, and the school gate. This is illustrated in Figure 3.1.

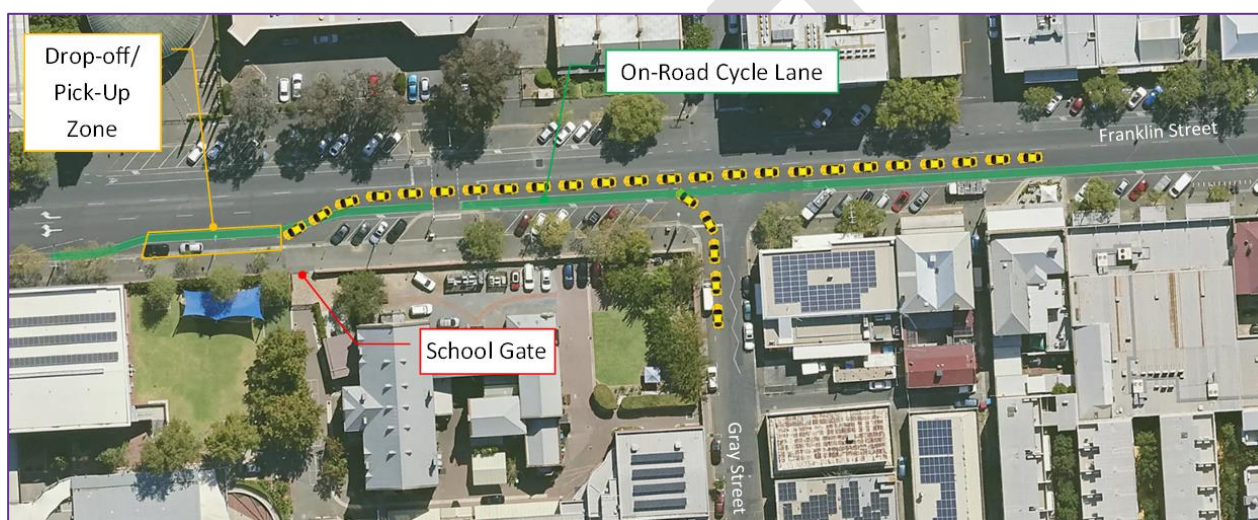


Figure 3.1 Queuing in Franklin Street and Gray Street during PM Peak

- Red light running behaviour is reported at the signalised crossing in Franklin Street.
- The school reports that if green paint is applied to the on-road cycle lane, parking inspectors will be able to enforce vehicles from stopping or parking over the on-road cycle lane. The parking inspector has claimed that it's currently not enforceable to do so.

Grote Street

- Red light running at the crossing in Grote Street, likely due to the inconspicuous positioning of the traffic lights. Sun glare – as the street sits in an east-west orientation – has also contributed.



Figure 3.2 Signalised Crossing in Grote Street

- Vehicles are observed to drive on on-road cycle lane and road shoulders to skip the queuing vehicles in the through lanes, in order to get to the left turning lane at the intersection with West Terrace, as illustrated in Figure 3.3.

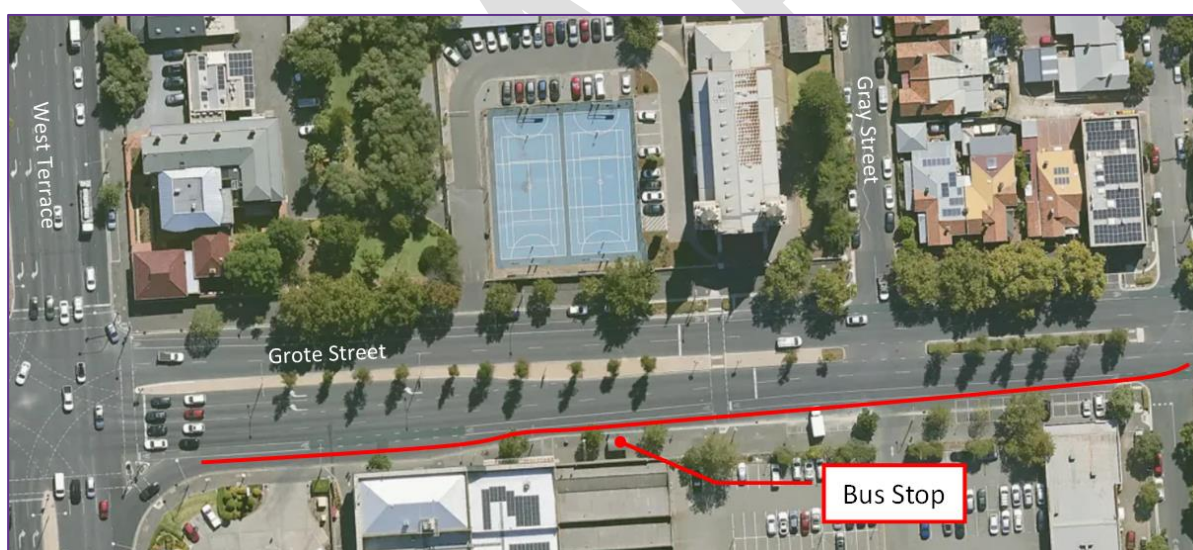


Figure 3.3 Vehicles Travelling on On-Road Cycle Lane and Road Shoulders

This is mainly due to the wide width in the road shoulder, which was intended for the bus stop. It was to allow buses to pull over without blocking the traffic flow.

Combining the on-road cycle lane, the available width is around 4m, as shown in Figure 3.4. This width is wider than the typical lane width of 3.5m.



Figure 3.4 Width of Shoulder and On-Road Cycle Lane

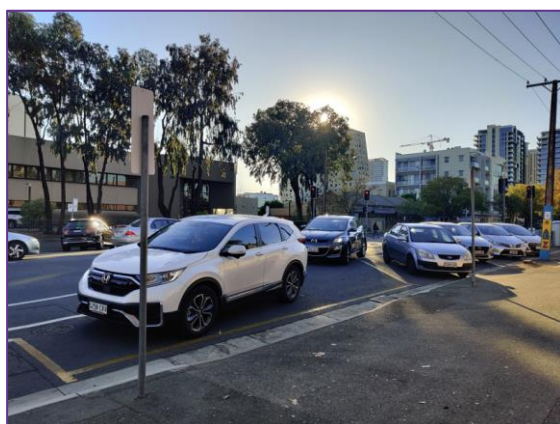
- Pedestrians tend to wait for longer than usual after pressing the button to cross at the signalised crossing in Grote Street.

3.2 Site Observations

The existing staff and student transport mode activity to and from the St Mary's College were observed during the AM peak arrival period and the PM peak departure period on typical school days in May 2024. The site visits were conducted on Tuesday 28 May 2024 for both the AM and PM peaks.

3.2.1 AM Arrival Period

The Kiss and Drop activity was observed during AM arrival period from 8 am to 9 am. The AM period arrival profile was relatively distributed over the hour before the school start time, with the peak activity of arrivals between 8:30 am and 8:45 am. Some behaviours were observed to be of concerns, as shown in Figure 3.5.



Car queuing at the kiss and drop zone



cars blocking access school bus

Figure 3.5 AM Peak Safety Issues at St Mary's College

Other findings from the AM observations are:

- Most of the drop off activity for students occurred on the south side of Franklin Street with the busiest period between 8:30 am and 9:45 am with no safety issues or traffic delays.
- The kiss and drop area in Franklin Street was generally available across the peak hour, with vehicles not staying for more than 5 minutes. However, the school bus was observed to be waiting for a few minutes before the bay was clear (Figure 3.5).
- Excessive U-turns are observed in Franklin Street by eastbound vehicles to get to the drop-off / pick-up zone, as shown in Figure 3.6. Regardless, many parents did park on the north side of Franklin Street and walked their children across at the signalised crossing.



Figure 3.6 U-Turning Movements in Franklin Street

- Some vehicles were observed to drive at an inappropriate speed approaching the signalised crossing in Franklin Street.
- parents and students mostly arrived by private cars and public buses.
- A low level of drop off activity was observed in Grote Street with less than 20 vehicles.
- The signal timing at the signalised crossing in Grote Street was observed to take up to 2 minutes to turn green for pedestrians.
- Many students were observed to get off buses in Grote Street.



3.2.2 PM Departure Period

The pedestrian, cyclist, bus passenger and Kiss and Drop activity was observed during PM departure period from 3:15 pm to 3:30 pm. The key findings from the observations are as follows:

- The peak period for departure activity was between 3:10pm to 3:30 pm.
- The pick-up activities occurred on both sides of Franklin Street.
- Extensive queues were formed from the pick-up area towards east, as indicatively shown in Figure 3.1. The queuing vehicles obstruct through movement near the intersection with West Terrace in shown in Figure 3.7.

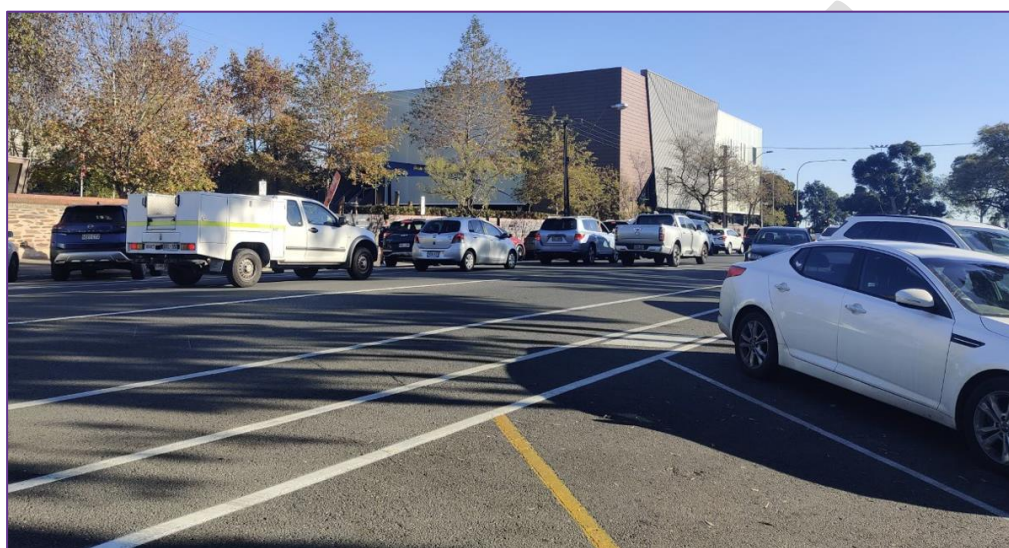


Figure 3.7 PM Peak – Queues from Pick Up Activities

- Some children were observed to walk unsafely between stopped or parked vehicles without giving heed to moving traffic.
- No students or parents were observed to be riding bicycles or scooters.
- Many older students were observed to be travelling northbound and westbound in Franklin Street, likely to be catching public transport on Currie Street and West Terrace.
- Many students were observed to use the public buses on the northern side of Grote Street.
- Many parents were observed to use the on-street parking spaces on the southern side of Grote Street to wait for their children, sometimes over the 30-minute limit, as shown in Figure 3.8.

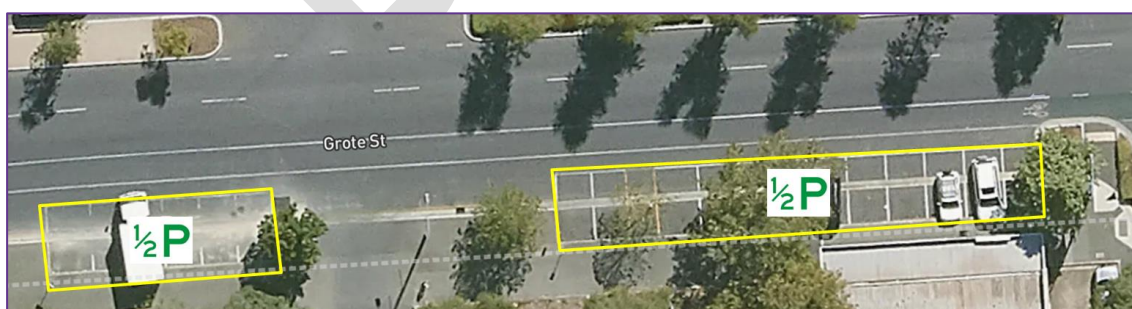


Figure 3.8 Cars Parked along Southern Side in Grote Street

- Many parents are observed to use the bay area east of the signalised crossing in Grote Street as a pickup zone, although there is a no stopping yellow line, as shown in Figure 3.9.

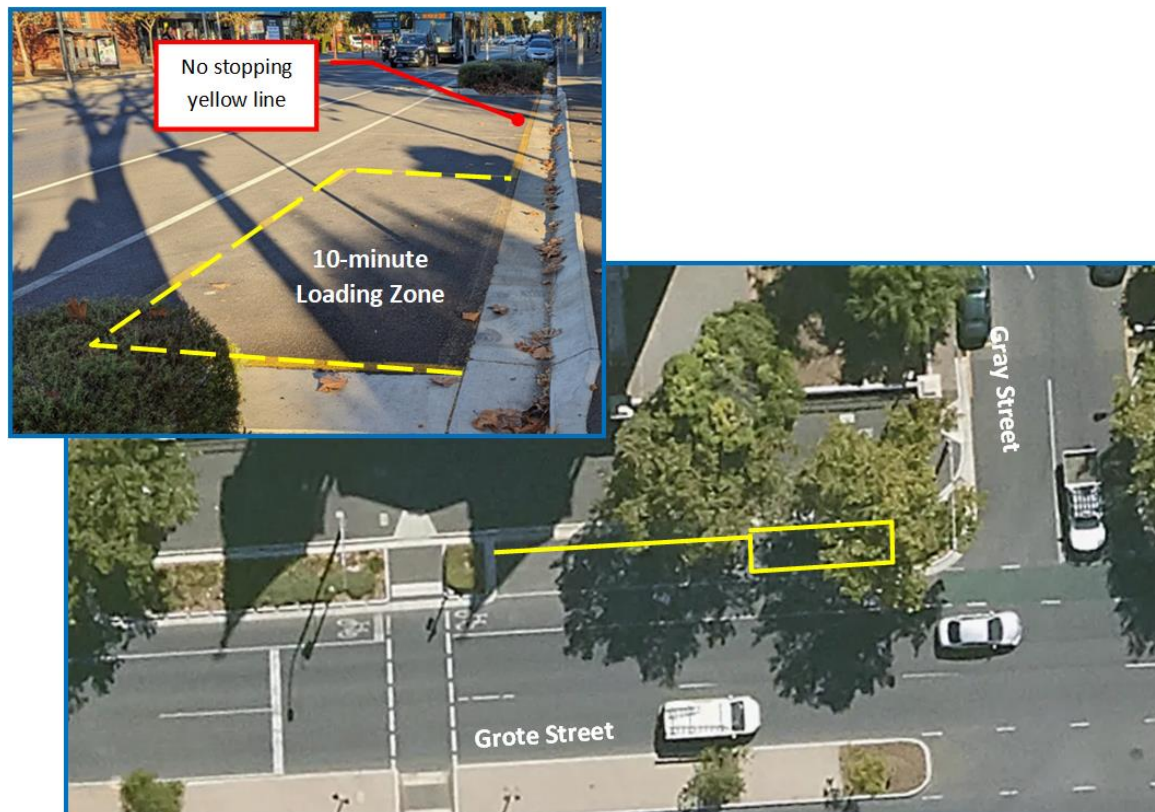


Figure 3.9 Parking Control East of Signalised Crossing in Grote Street

- Cars were observed to be parking at both no parking zone and 15-minute parking zone for over 30 minutes in Grote Street outside of the school, as shown in Figure 3.10.



Figure 3.10 Cars in Parking Spaces Over the Time Limit in Grote Street

- The signal timing at the signalised crossing in Grote Street was observed to take up to 2 minutes to turn green for pedestrians.
- Vehicles were observed to stop in front of the driveway to the private car park in Grote Street to pick up students, as shown in Figure 3.11.

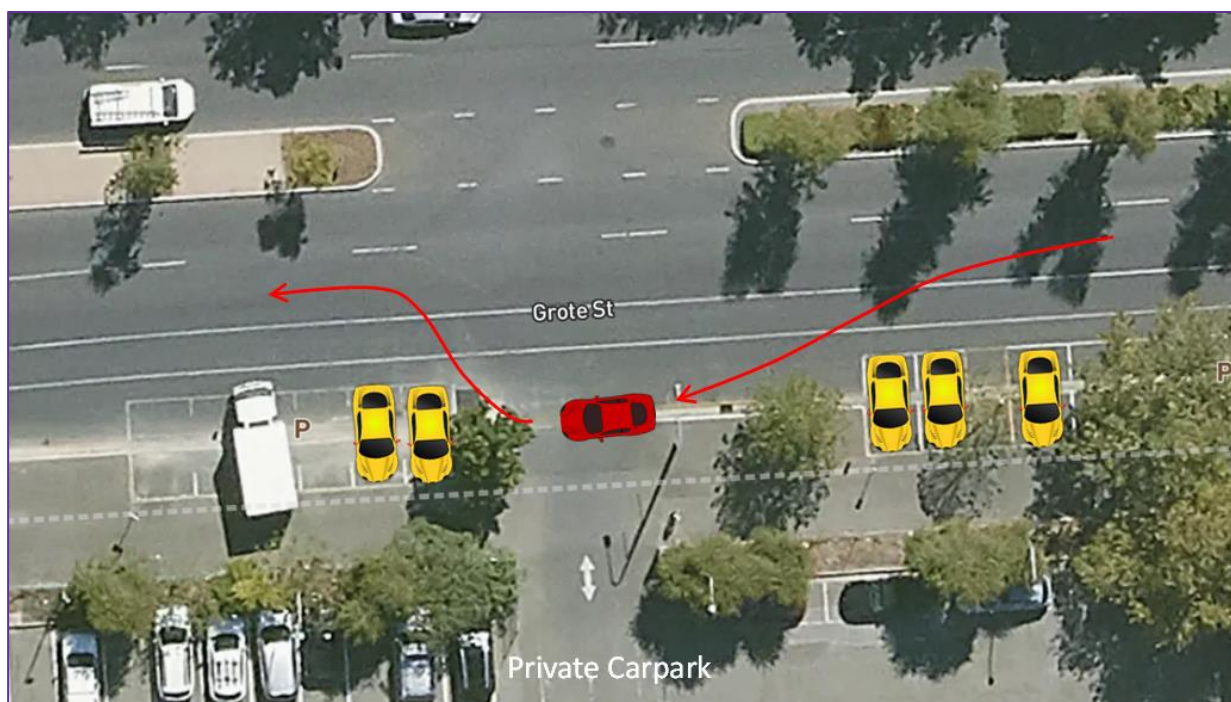


Figure 3.11 Cars Blocking a Driveway to a Private Carpark in Grote Street

3.3 Summary of the Issues and Opportunities

Issues for accessing the school that were observed in Franklin Street and Grote Street. These traffic safety issues that are for the City of Adelaide to address are:

- Extensive queues of cars were formed in Franklin Street creating local traffic congestion.
- Parents and children not watching the traffic as they enter the roadway in Franklin Street.
- Parents were observed parking or stopping where they should not be, or parking for longer than the posted time limits.
- Signal timing at the crossings in Franklin Street and Grote Street need to be modified to provide priority for pedestrians, especially during school peak hours.



4 Travel Safety Options and Assessment

Recommendations to improve the travel safety for students at the school were developed under three categories, namely:

- Infrastructure
- Operational efficiencies
- Increased awareness of the area

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options

Type of Option	Description	Issue Addressed
Infrastructure	Install overhead mast arm at the signalised Crossing in Grote Street	Drives are not seeing/aware of the signalised crossing in Grote Street.
	Install solid white line in Franklin Street	Traffic and pedestrian safety in Franklin Street to prohibit U-turn movements.
	Install built-out islands or extension at the signalised crossing in Grote Street	Prevent vehicles from travelling on cycle lane and road shoulder as a jump lane to West Terrace
Operational Efficiencies	Convert the no stopping yellow line to a kiss and drop area at the indented bay west of the signalised crossing in Grote Street, as shown in Figure 3.9.	Allow parents more space to pick up and drop off students in Grote Street
	Review the signal timing at the signalised crossing Grote Street and improve the pedestrian green light waiting time during school peak hours.	Improve the travel time for students and parents
Increased awareness of the area	Implement 25 km/hr school zone in Franklin Street.	Speeding issue
	Install red light cameras at the signalised crossings in Franklin Street and Grote Street	To enforce red light running behaviour

The recommended actions are explained with more detail as follows:

Infrastructure

- Install overhead mast arm at the signalised crossings in Franklin Street and Grote Street, as indicatively shown in Figure 4.1.



Figure 4.1 Install Overhead Mast Arm at the Signalised Crossing

- Install solid white line in Franklin Street, to prohibit U-turn movements, as shown in Figure 4.2.



Figure 4.2 Width of Shoulder and On-Road Cycle Lane

- Install kerb built-outs or extension at the signalised crossing in Grote Street, as shown in Figure 4.3.

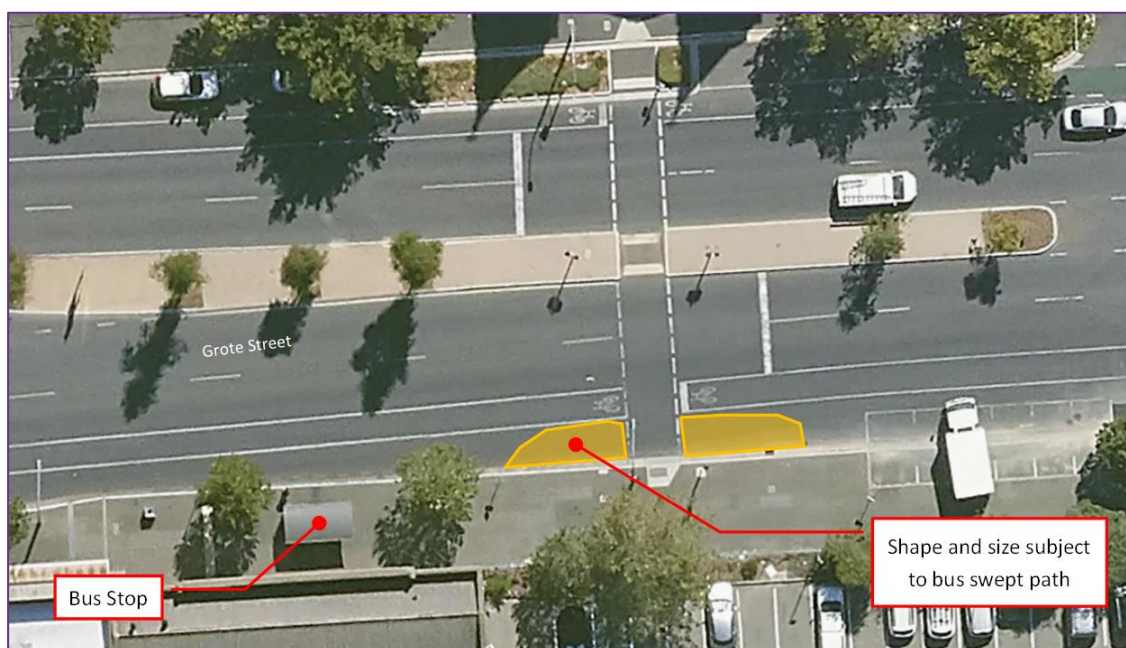


Figure 4.3 Kerb Built-Out or Extension at the Signalised Crossing

Operational Efficiencies

- Convert the no stopping to a kiss and drop area at the indented bay west of the signalised crossing, as shown in Figure 3.9.
- Review the signal timing at the signalised crossing in Grote Street and improve the pedestrian green light waiting time.

Increased Awareness of the Area

- Implement school zones and corresponding the 25km/hr speed limit conditions in Franklin Street.
- Install red light cameras at the signalised crossings in Franklin Street and Grote Street.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October, 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE			
School Travel Survey for Students			
School:		St Mary's College	
<i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i>			
Questions for the Teacher			
Date (day/month/year):			
Weather (Daytime temperature and sky conditions):			
Please enter the name or number of your class or year group.			
How many students are absent today in your class?			
Questions for the Students in Your Class / Year Group			
<i>Please ask the students with a 'hands-up' survey in the classroom.</i>			
AM Period Travel			
<i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>			
Main Mode of Travel in the AM Period		Number of Students	
Car (as driver)			
Car (as passenger with drop-off)			
Walk for the entire trip			
Bus			
Train			
Tram			
Bicycle or e-bike			
Scooter			
PM Period Travel			
<i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i>			
Main Mode of Travel in the PM Period		Number of Students	
Car (as driver)			
Car (as passenger with pick-up)			
Walk for the entire trip			
Bus			
Train			
Tram			
Bicycle or e-bike			
Scooter			
If you travelled by car, would you prefer any of these modes? (multiple answers)			
Walking for the entire trip			
Bicycle, e-bike or scooter			
Public Transport (bus, tram or train)			



Sturt Street Community School

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
2 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	Kaitlin Neave	John Devney	John Devney	2 July 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Executive Summary

Overview

Sturt Street Community School is located on Franklin Street in Adelaide city centre. The total number of students enrolled in Term 2 2024 is 191 students. The Sturt Street Community School does not have an enrolment zone and includes all suburbs in metropolitan Adelaide. Over 55 per cent of the students live in the City of Adelaide and they have an easy walk or bicycle trip to the school is possible.

Key Findings

The walk mode share is 22 and 26 per cent in the AM and PM periods respectively with 68 and 61 per cent using the car mode in the AM and PM periods responds. Travel to school by bicycle and scooters is six per cent. Four per cent of students travel to school by public transport in the AM period and seven per cent from school in the PM departure period.

The PM period has 2 per cent more students using public transport and 4 per cent more walking than in the AM period. This result is likely because parents drop of their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport or walking when the parent is still working in the PM school departure period.

Issues observed from the site visits and raised by the principal are summarised as follows.

- Implement 25 km/hr school zone on Sturt Street.
- Increase police patrolling around the school.
- Review the waiting area at the intersection of West Terrace and Sturt Street.
- Implement a formal Kiss and Drop zone in Sturt Street near the school entrance.

Key Recommendations

Infrastructure Treatments

- Install red light cameras at the signalised crossing on Sturt Street to enforce the red light running of traffic at the PAC.
- Implement a formal Kiss and Drop area near the school entrance in Sturt Street.
- Implement a 25 km/hr school zone in Sturt Street with Council discussions and approval from DIT.

Operational Efficiencies

- Increase police enforcement for speeding in Sturt Street to prevent and address the anti-social and homeless activity in the area.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.
- The following tasks were completed for this school travel safety review:
 - Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
 - With the support from the teachers, undertake a student travel mode survey.
 - Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.

1.3 School Location

Sturt Street Community School is located on Franklin Street in Adelaide city centre on the block bounded by Sturt Street, O'Brien Street, Little Sturt Street, and Maxwell Street. The school site and the existing surrounding environs are shown in Figure 1.1.



Figure 1.1 Sturt Street Community School Location

The entrance to the school in Sturt Street at the PAC is shown in Figure 1.2.



Figure 1.2 Sturt Street Entrance to the Sturt Street Community School



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

Sturt Street Community School is a public school that comprises years Reception to Year 6. It is located in a heritage building that was established in 1883 and was refurbished in 2004.

The bell times are 8:45 am and 3:10 pm, Monday to Friday. The school office hours are 7:45 am to 6 pm, Monday to Friday.

2.2 Student Enrolment Analysis

The total students enrolled at the school in Term 2 2024 is 191 with a breakdown shown by year is Figure 2.1.

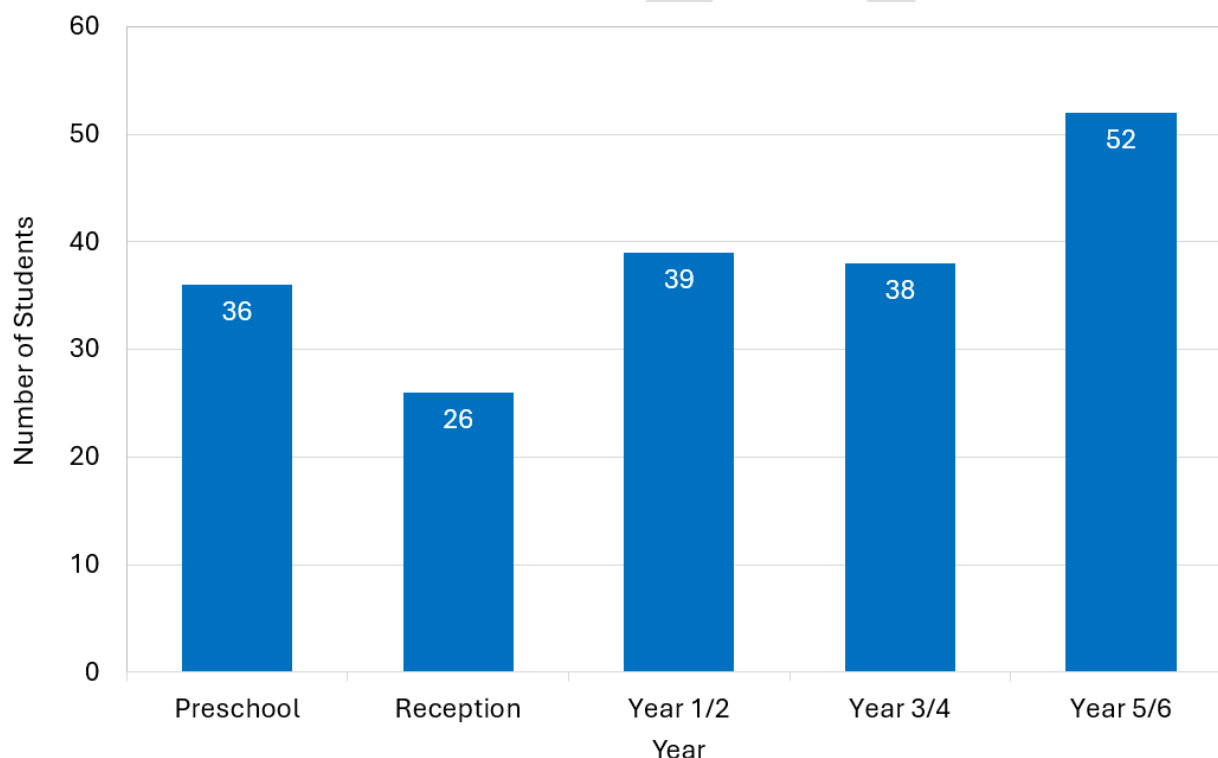


Figure 2.1 Sturt Street Community School Student Enrollment in May 2024 by Year



2.2.1 Existing School Travel Activity

The existing school travel activity to and from the Sturt Street Community School was reviewed through site observations and a student travel mode survey on typical school days. The student travel mode survey form is included in Appendix A.

The Sturt Street Community School does not have an enrolment zone and includes all suburbs in metropolitan Adelaide. The number of students by residential sub areas is shown in Figure 2.2.

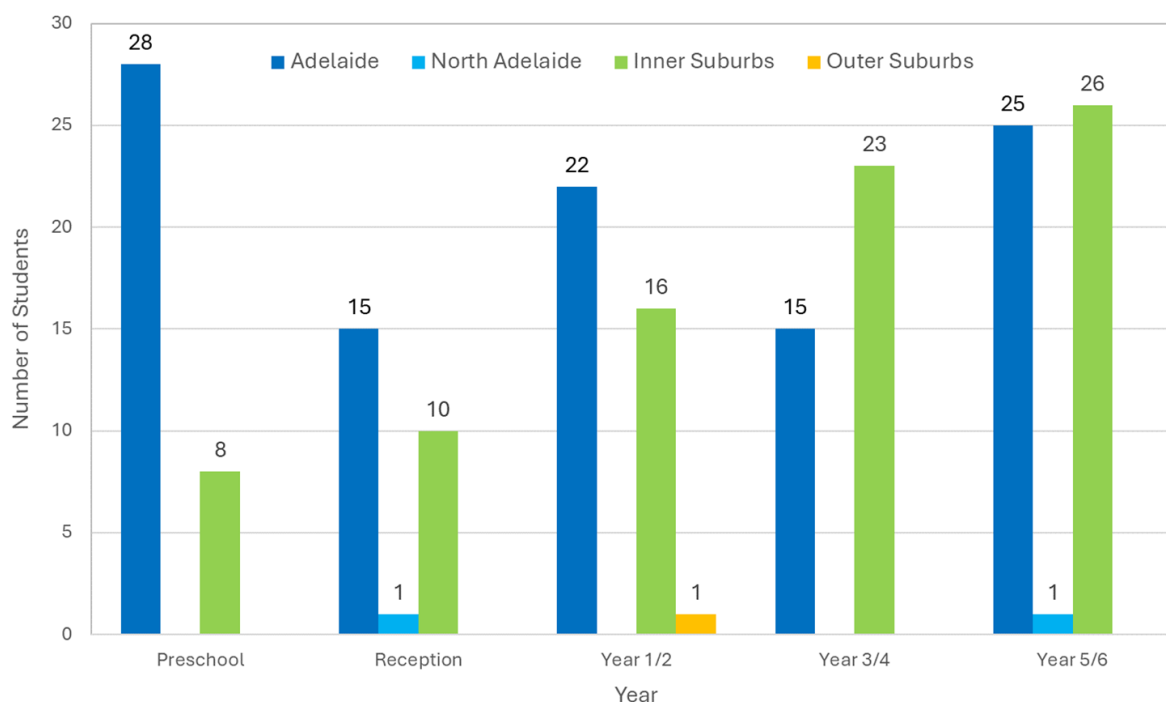


Figure 2.2 Sturt Street Community School Student Residence Location Analysis

A breakdown of the number of students by year groups with the percentages by location are provided in Table 2.1. Over 55 per cent of students live in the City of Adelaide where they have an easy walk or bicycle trip to the school is possible.

Table 2.1 Student Residence per Location for St Mary's College

Location	Junior School - Years R to 6	Middle School - Years 7 to 9	Senior School - Years 10 to 12	Total	Percentage
Adelaide	28	15	22	105	55%
North Adelaide	0	1	0	2	1%
Inner Suburbs	8	10	16	83	44%
Outer Suburbs	0	0	1	1	0.5%
Total	36	26	39	191	100%



2.2.2 Student travel demand

The student travel mode survey was conducted during the first morning class from Wednesday 29 May to Tuesday 4 June 2024. The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus
- Train
- Tram
- Bicycle or e-bike
- Scooter

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.3. The walk mode share is 22 and 26 per cent in the AM and PM periods respectively with 68 and 61 per cent using the car mode in the AM and PM periods responds. Travel to school by bicycle and scooters is six per cent. Four per cent of students travel to school by public transport in the AM period and seven per cent from school in the PM departure period.

The PM period has 2 per cent more students using public transport and 4 per cent more walking than in the AM period. This result is likely because parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport or walking when the parent is still working in the PM school departure period.

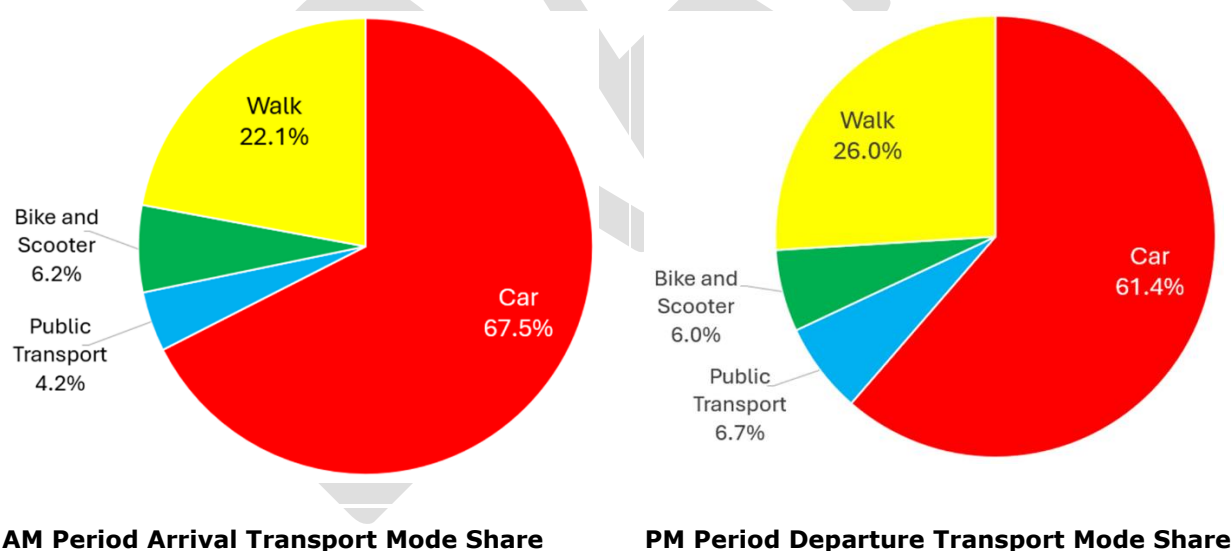


Figure 2.3 Sturt Street Community School Student Transport Mode Shares in May 2024



2.3 Transport Access

Transport access to the school via road, public transport, cycling, and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.3.1 Road Network

Vehicular access to the to the underground level of the school is by majority by the main access on Sturt Street. The school office, staff parking areas, the kiss and drop area, and the school gate are all located on Sturt Street.

Sturt Street

Sturt Road is a two-way two-lane Collector aligned in an east to west direction and is under the care and control of the City of Adelaide. At the frontage of the school, each lane is around 3m wide, with 30-degree angle parking on the northern side, and 90 degree angle parking on the southern side, along the road.

Sealed bitumen footpaths are on both sides of Sturt Street. On-road cycle lane has also been provided on both directions. It has a posted speed limit of 50 km/h. The kerbside usage, bicycle lanes and traffic lanes in Frome Road north of Victoria Drive next to Botanic Park is shown in Figure 2.4.



Figure 2.4 Sturt Street at the Signalised Crossing, Looking East



2.3.2 Crash History

A review of the latest crash data from 2018 to 2022 (five-year period) has been sourced from DataSA. During this time there has not been any crashes in the direct proximity of the school, as presented in Figure 2.5.

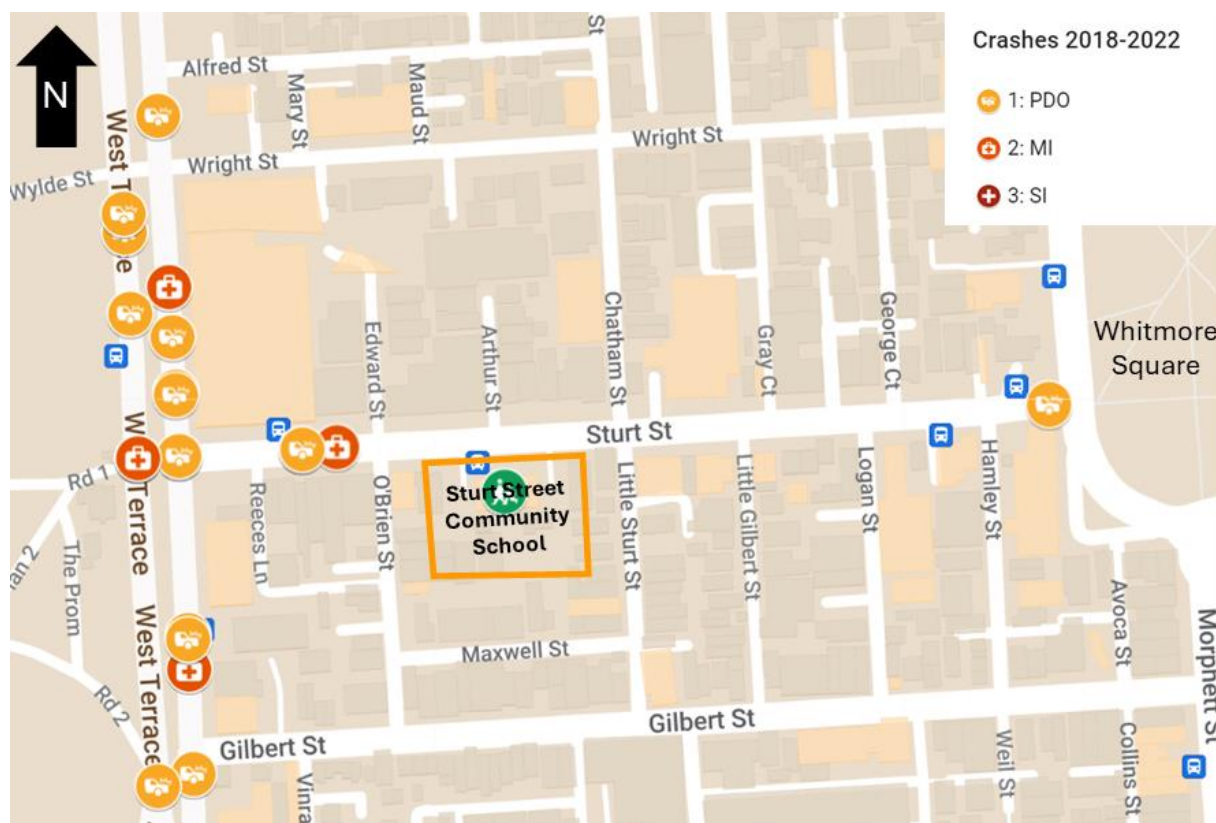


Figure 2.5 Crashes from 2018-2022 near the Sturt Street Community School

2.3.3 Parking Areas

The on-street car parking controls along Sturt Street in the vicinity of the school are shown in Figure 2.6.

The area that some parents use as kiss and drop off – shown in red rectangle – is operative 8:30am to 9:30am and 3pm to 4pm, Monday to Friday, when 15 minutes of parking duration is allowed.

Parents who do not work in the CBD are unlikely to regularly drive into the CBD to drop off or pick up their child. Many students, who 13 years of age or older, are capable of travelling on their own and would use public transport.

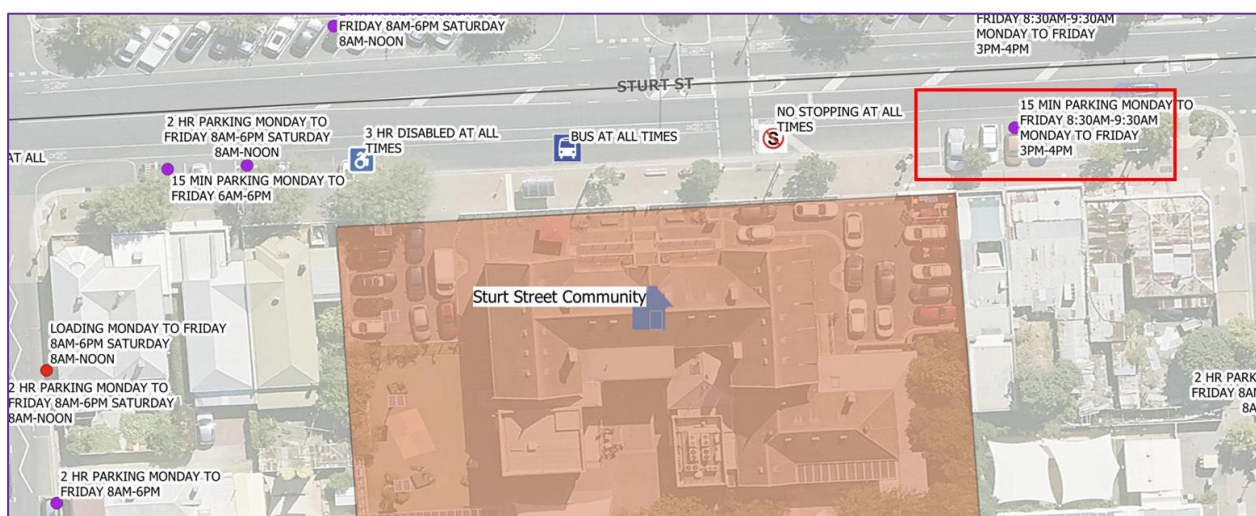


Figure 2.6 On-street Parking and Kiss and Drop Areas for Sturt Street Community School

2.3.4 Public Transport

Adelaide CBD is the focus of the bus, tram and train network. Sturt Street Community School has a bus stop that is immediately outside of the school gate, and more along Sturt Street and West Terrace, as shown in Figure 3.14. The Go Zone route G10 stops in Sturt Street.

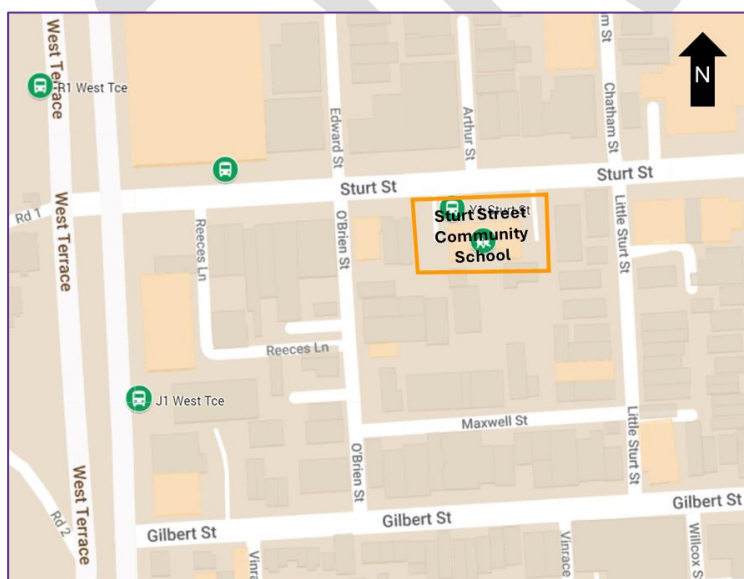


Figure 2.7 Public Transport Stops at Sturt Street Community School



2.3.5 Cycling

The bicycle network in vicinity of the school with the connecting link to the adjacent G S Kingston Park and the West Terrace cemetery, and the inner metropolitan cycling network is shown in Figure 2.8.

Based on Figure 2.8, Sturt Street is a secondary road with on-road bike lane provided on both sides of the road. Sealed shared paths exist throughout the Adelaide Park Lands.



Figure 2.8 Cycling Network to Sturt Street Community School

2.3.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff, and visitors who walk for their entire trip or as an access mode to the school, as many students live within the Adelaide CBD area. The footpath network along Sturt Street needs to be well maintained and kept clear of fallen trees and debris by the City of Adelaide.

The high school has good pedestrian access from all directions from Adelaide CBD, as shown in Figure 2.9. There is a signalised pedestrian crossing adjacent to the school on Sturt Street.

A 5, 10 and 15-minute walkable catchment areas to Sturt Street Community School are shown in Figure 2.9. Students who walk their entire trip to school are likely walking from Adelaide city centre or G S Kingston Park.

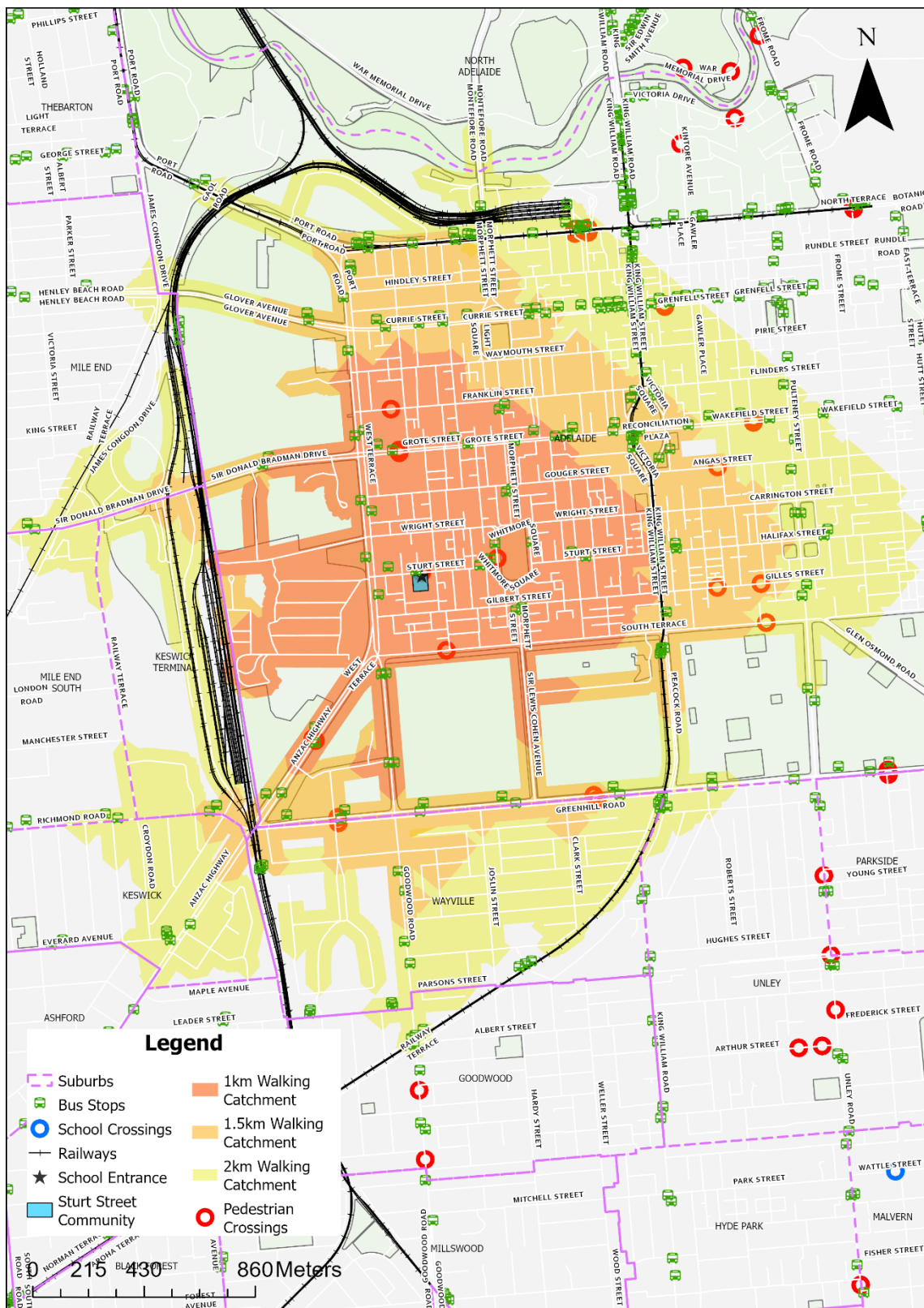


Figure 2.9 Walkable Access Catchment to Sturt Street Community School



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff and site observations conducted during the AM drop-off period and the PM pick-up period.

3.1 Stakeholder Discussions

The following issues were discussed with the school at a meeting held in May 2024:

- The general public are not aware of the school zone in Sturt Street.
- Speeding traffic in Sturt Street is significant concern, in particular at school drop-off and pick-up times.
- Vehicles are observed to run red lights at the signalised crossing.
- There is no designated kiss and drop off area for the school. Consequently, some parents would use the bus stop area in front of the school to drop off or pick up students.
- Due homeless camping out in Edwards Park, some homeless people have been spotted on using school facilities.
- Anti-social behaviour and criminal activity occurring on Sturt Street in close proximity to the school.
- The school conducts a daily bicycle ride with around 20 students to ride from the school along the bicycle trails in Edwards Park. When crossing at West Terrace and Sturt Street intersection, as shown in Figure 3.1, the space at the signalised crossing is very limited, where the shared user path is in direct conflict. This is problematic when a cyclist rides along the shared user path and is blocked by the crowd of students on bicycles waiting for the light.



Figure 3.1 Limited Space at Signalised Crossing in West Terrace at Sturt Street



3.2 Site Observations

The existing staff and student transport mode activity to and from the Sturt Street Community School were observed during the AM peak arrival period and the PM peak departure period on typical school days in May 2024. The site visits were conducted on Thursday 30 May for the AM and PM peak periods.

3.2.1 AM Arrival Period

The pedestrian, cyclist, bus passenger, and drop-off activity were observed during AM arrival period from 8:30 am to 9:00 am. The AM period arrival profile was relatively distributed over the 15-minute block before 8:30 am, then the activity peaked from 8:30 am to 8:45 am.

The findings from the AM observations are:

- Many parents and students were observed to have walked or cycled for the drop off, despite of the raining weather.
- No private passenger cars were observed to occupy the bus stop area.
- Drivers were overall respectful to the pedestrians walking on the signalised crossing.

3.2.2 PM Departure Period

The pick-up activities were observed during PM departure period from 3:00 pm to 3:30 pm. The key findings from the PM observations are:

- Many parents were observed to arrive on foot, some on bicycles.
- Some students were observed to take buses on Sturt Street and West Terrace.
- No private passenger cars were observed to occupy the bus stop area.
- Drivers were overall respectful to the pedestrians walking on the signalised crossing.

3.3 Summary of the issues and opportunities

Issues observed from the site visits and raised or suggested by the principal are summarised as follows.

- Implement a 25 km/hr school zone on Sturt Street.
- Increase police patrolling around the school.
- Review the waiting area at the intersection of West Terrace and Sturt Street.
- Implement a formal Kiss and Drop zone in Sturt Street near the school entrance.



4 Travel Safety Options and Assessment

4.1 Student Travel Safety Options

Options to improve the travel safety for students at the school were developed under two categories, namely:

- Infrastructure treatments requiring civil works with changes to signals or pedestrian crossings.
- Operational efficiencies, with changes to parking controls, Kiss and Drop areas or school zones.

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Implement a formal Kiss and Drop area near the school entrance in Sturt Street.	Parents occupying bus stop areas for drop off / pick up activity.
	Implement a 25 km/hr school zone in Sturt Street.	Traffic speeding issues in Sturt Street would be help with a 25 km/h speed limit during the school drop-off and pick-up times.
	Install red light cameras at the signalised crossing on Sturt Street	To enforce red light running behaviour.
Operational Efficiencies	Increase police enforcement	To prevent and address the anti-social and homeless activity in the area.

4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives are explained with more detail as follows:

- Implement a Kiss and Drop area near the gate of the school in Sturt Street as shown in Figure 4.1.



Figure 4.1 Parking Time Limit at Drop Off Area in Sturt Street



4.3 Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.2. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- P for Parking control changes with new signage and pavement markings for a Kiss and Drop or school zone.

Table 4.2 Indicative Cost Estimates for the Travel Safety Options at Sturt Community School

Option	Priority Assessment	Indicative Cost Estimate	Comments
T1	Install red light cameras at the PAC signalised crossing on Sturt Street.	\$200,000	Council to apply to DIT for installation of the cameras.
T2	Implement 25 km/hr school zone in Franklin Street.	Less than \$5,000	Council to design and install this treatment. Consult with DIT for approval.
P1	Implement Kiss and Drop area in Sturt Street in front of the school.	Less than \$2,000	Council to install line marking and changes to the signage.





5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114.
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105.
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones.
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024.
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34.
- School Transport Policy, Department for Education, South Australia, January 2024.



Appendix A – Student Travel Survey Form

 CITY OF ADELAIDE		
School Travel Survey for Students		
School:		Sturt Street Community School
<p><i>Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by undertaking a short student survey during the first period class.</i></p>		
Questions for the Teacher		
Date (day/month/year):		
Weather (Daytime temperature and sky conditions):		
Please enter the name or number of your class or year group.		
How many students are absent today in your class?		
Questions for the Students in Your Class / Year Group		
<p><i>Please ask the students with a 'hands-up' survey in the classroom.</i></p>		
AM Period Travel		
<p><i>How did you travel to school this morning? (If you travelled by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i></p>		
Main Mode of Travel in the AM Period		Number of Students
Car (as passenger with drop-off)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
PM Period Travel		
<p><i>How will you travel from school this afternoon? (If you will travel by more than one mode, please answer with the longest part of your journey - e.g. "car" for "car and scooter".)</i></p>		
Main Mode of Travel in the PM Period		Number of Students
Car (as passenger with pick-up)		
Walk for the entire trip		
Bus		
Train		
Tram		
Bicycle or e-bike		
Scooter		
If you travelled by car, would you prefer any of these modes? (multiple answers)		
Walking for the entire trip		
Bicycle, e-bike or scooter		
Public Transport (bus, tram or train)		



University Senior College

School Travel Safety Review – Draft Report

City of Adelaide

CLC003491
9 July 2024
Ref: 240706



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
A	Draft Report	John Devney	James Arnold	James Arnold	9 July 2024

DRAFT



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Client: City of Adelaide
Ref: 240706

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Appendix A – Student Travel Survey Form

Appendix B – Travel Access Guide for TAFE NSW



Executive Summary

Overview

University Senior College (USC) comprises years 10 to 12. The school does not have an enrolment area and students are accepted from anywhere. The school operates like a university with no set bell times. Students arrive and depart at irregular times each day to suit the courses that they are enrolled in. Students also do not have uniforms as with other high schools.

Key Findings

The students University Senior College can have a home location anywhere in the metropolitan Adelaide area and in regional South Australia. Students beyond a commuting distance typically live with short-term accommodation elsewhere. Very few students live in the City of Adelaide and therefore walking to school is not a convenient travel option.

From the student travel survey conducted in May 2024, most students are using public transport to and from the school with 75 per cent in the AM arrival period and 90 per cent in the PM departure period. This excellent result is because the students are older and confident to use the train, bus and tram network services that converge in Adelaide CBD.

The PM departure period has 15 per cent more students using public transport than in the AM period, and a similar percentage fewer using private vehicles. This result is likely because some parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period.

Transport safety issues that affect the USC students that were identified through a discussion with the school administrator are:

- Safety for walking along footpaths in the city streets with trip hazards, in particular along Kintore Avenue.
- Risks for incidents between pedestrians and vehicles entering and exiting the U-Park in Gawler Place that at the entrance of the Gawler Place campus.
- Traffic entering the University of Adelaide at Gates 11, 12 and 13 often do not give way to pedestrians and are travelling too fast.
- The U-Park parking facility in Gawler Place attracts anti-social behaviour in the stairwells and on the street. This is a security issue for students entering and exiting the building.

Key Recommendations

The recommended school travel safety initiatives include:

- Maintain footpaths along Kintore Avenue.
- Install warning signs at the entrance and exit of the U-Park in Gawler Place.
- Council to follow up on security issues with the monitoring of the video surveillance cameras at the Gawler Place U-Park entrance and stairwells.
- Prepare a promotional brochure about public transport and safe cycling routes to Adelaide CBD.



Abbreviations

Abbreviation	Description
DfE	Department for Education, South Australia
DIT	Department for Infrastructure and Transport, South Australia
PAC	Pedestrian Actuated Crossing with traffic signals

Glossary of Terms

Term	Description
Bicycle lane	On-road kerbside lane allocated for bicycles with pavement markings
Emu crossing	A pedestrian crossing with white road markings, red and white posts and operate only when the children's crossing flags are displayed. They are placed within school zones and a speed limit of 25 km/h applies to drivers when children are present. Drivers must stop for pedestrians using or about to use the crossing.
Kiss and Drop zone	A location designated on the street or on the school grounds for parents and carers in vehicles to drop-off or pick-up students typically with a 2-minute waiting limit. Parents are to stay in the vehicle.
Koala crossing	A pedestrian crossing with white road markings, red and white posts and two yellow alternating flashing lights. They are only operational when the yellow lights are flashing and a speed limit of 25 km/h applies to drivers between signs on the approach to the crossing. Drivers must stop for pedestrians using or about to use the crossing.
Shared path	Off-road pathway for pedestrians and cyclists
Go Zone	<p>A high frequency bus corridor with one or more bus routes with a service headway of every 15 minutes on weekdays and every 30 minutes at other times. Stops and stations within a 'Go Zone' provide a bus, train or tram operating:</p> <ul style="list-style-type: none">• every 15 minutes between 7.30 am and 6.30 pm, Monday–Friday• every 30 minutes between 6.30 pm and 10 pm, Monday–Friday• every 30 minutes on Saturday, Sunday and South Australian public holidays.



1 Introduction

This section provides the background for the school travel safety reviews and the study purpose and scope with an overview of the school location.

1.1 Background

The City of Adelaide is conducting School Travel Safety Reviews with the key objectives to:

- Investigate the current speed limits to assess the requirement of reducing the speed to 40km/h or less to help support more vibrant businesses and for a safer urban environment with the provision of higher quality amenity in the residential streets in the City of Adelaide.
- Consider always extending the time periods for the 25 km/h speed limit at and near all schools in the City of Adelaide when children are present and to work with DIT to further understand what responsible safety measures may be added to assist with drop off/pick up of children.

In January 2023, the Council requested the administration to investigate and report by the end of the 2023 school year on the need for and the nature of any additional measures to enhance the safety of primary and secondary, public and private school students entering and leaving schools at the beginning and end of the school day, including the introduction of supervised or unsupervised so called “kiss and drop zones” at all schools in the City of Adelaide.

A School Safety Report was completed for St Aloysius College and presented to the Infrastructure and Public Works Committee held on 19 March 2024. At the Council Meeting on 26 March 2024, Council decided to complete school travel safety reviews for 11 other schools in the City of Adelaide.

1.2 Study Purpose and Scope

The purpose of the work is to develop and document an evidence-based approach using the Safe System approach to address road safety concerns for children, parents and carers, with recommended changes such as safer crossing outcomes and measures to reduce the danger from motorised vehicle movements. The key objectives of the school transport safety reviews are to:

- Review the extents of the existing school speed zones to achieve Safe System speed outcomes, and
- Identify and prioritise opportunities to improve safety outcomes around schools.

The following tasks were completed for this school travel safety review:

- Engage with each school Principal or relevant representative to discuss issues with student travel to and from the school and opportunities to improve school travel safety.
- With the support from the teachers, undertake a student travel mode survey.
- Conduct AM and PM site investigations to observe any unsafe movements, in particular at the Kiss and Drop areas.
- Identify and map the location of the:
 - Existing pick up and drop off areas.
 - Existing school zones and other speed limits, including signs.
 - Existing crossings by type and informal crossing points and pedestrian desire lines.
 - Proposed locations of any measures, such as indicative locations of new crossings, new/changed school zones and of pick-up and drop off areas.
- Document the research and site investigation findings with options and prioritised recommendations for infrastructure projects to improve school travel safety.



1.3 School Location

University Senior College (USC) is a Government-supported high school that has two buildings in Adelaide CBD in Kintore Avenue at Victoria Drive and in Gawler Place as shown in Figure 1.1.

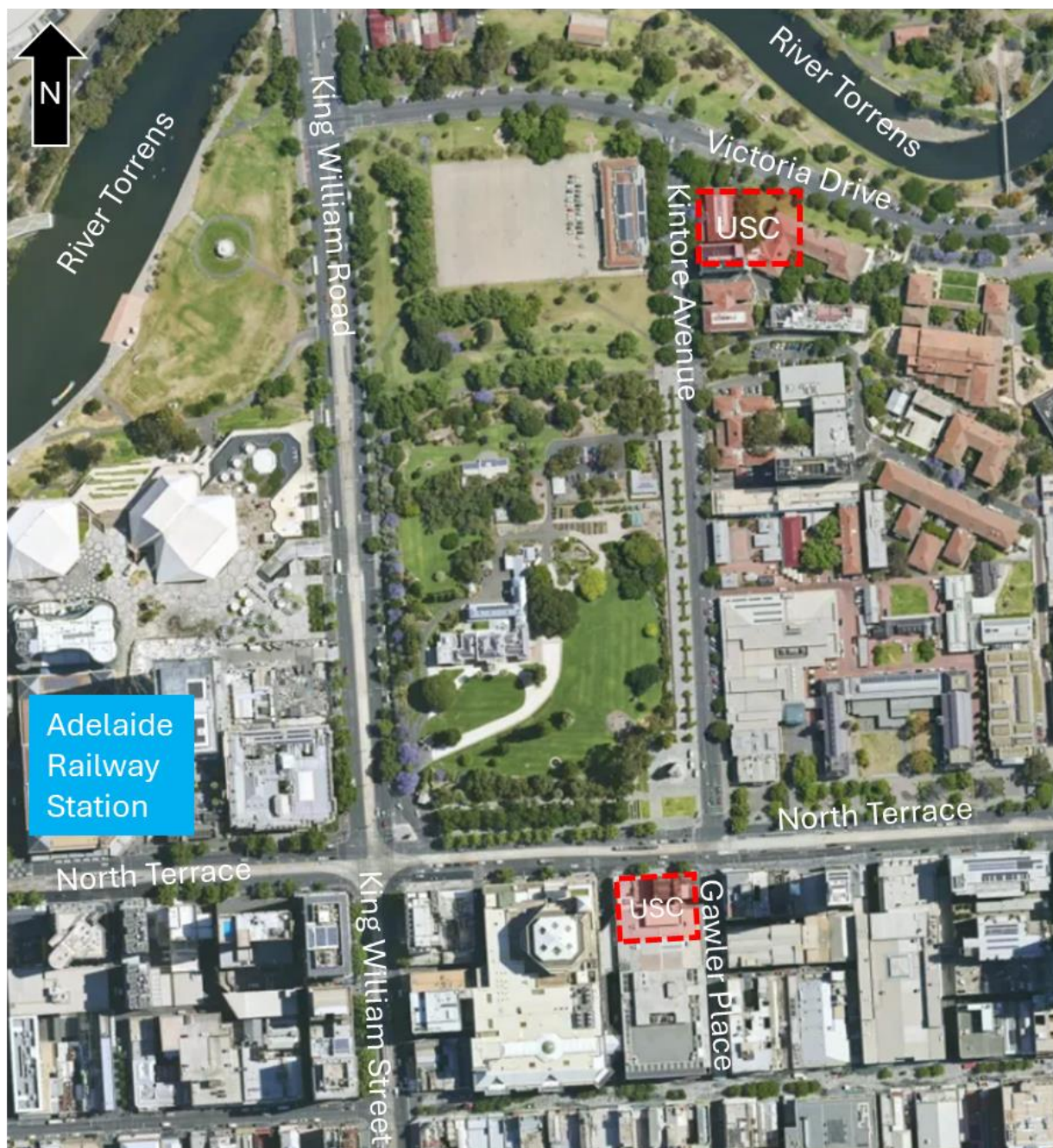


Figure 1.1 University Senior College Locality Plan



The USC campus site plan provided in Figure 1.2 shows the location of the Kintore Avenue and Gawler Place campuses.

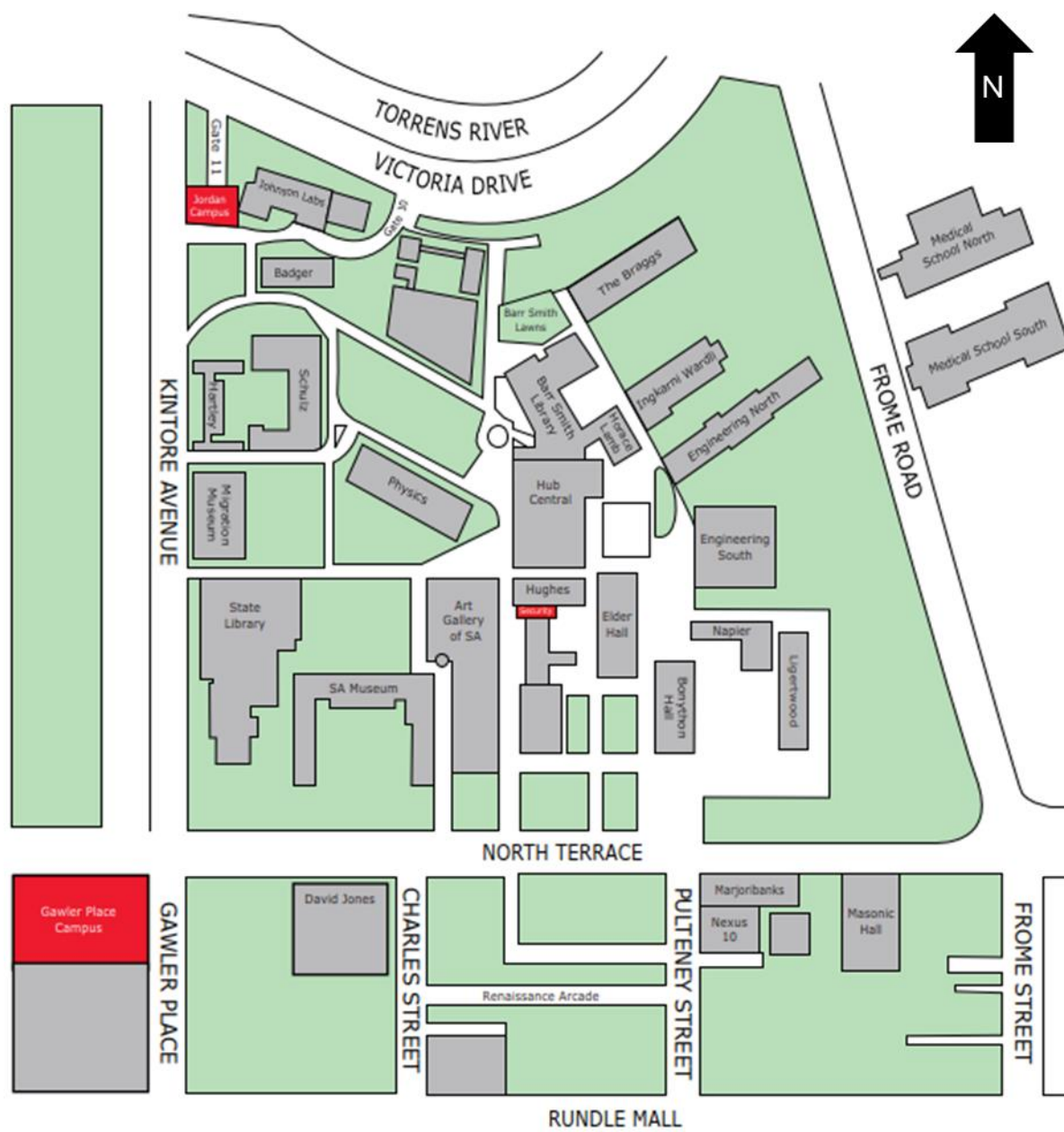


Figure 1.2 University Senior College Campus Site Plan

The two campuses at University Senior College are located:

- on Kintore Avenue at Victoria Drive as shown in Figure 1.3.
- in Gawler Place in the Parc Arcade building as shown in Figure 1.5.

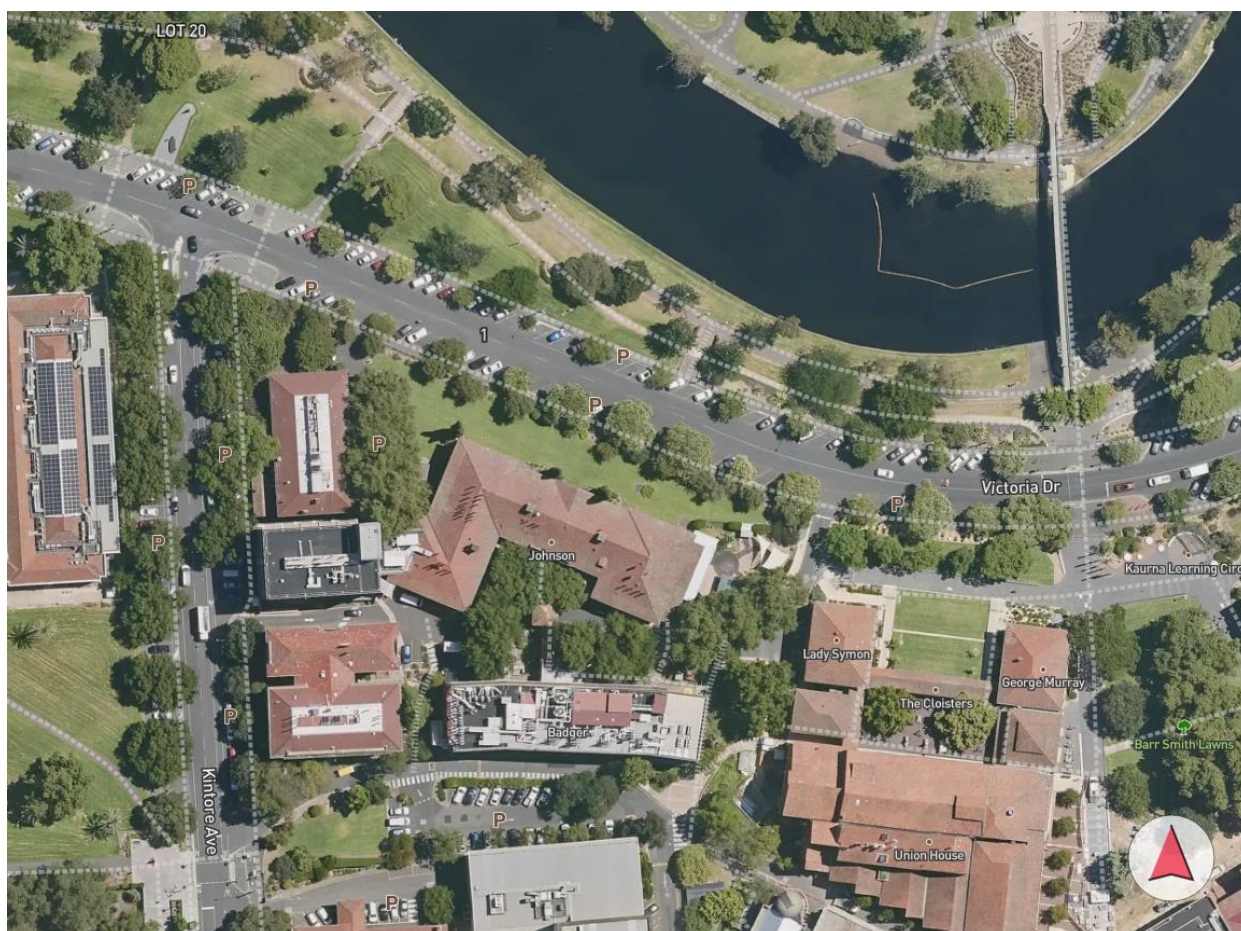
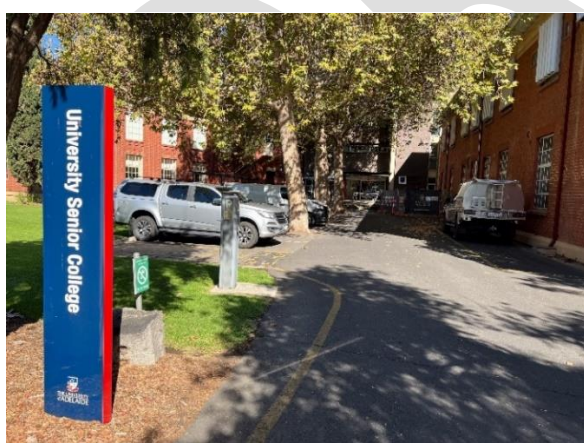


Figure 1.3 University Senior College – Kintore Avenue Location

The entrances to the USC Kintore Avenue campus are shown in Figure 1.4.



USC Campus in Kintore Avenue with the car park with access from Victoria Drive



USC Campus in Kintore Avenue the short-term parking in Kintore Avenue

Figure 1.4 Entrances to the University Senior College Kintore Avenue Campus

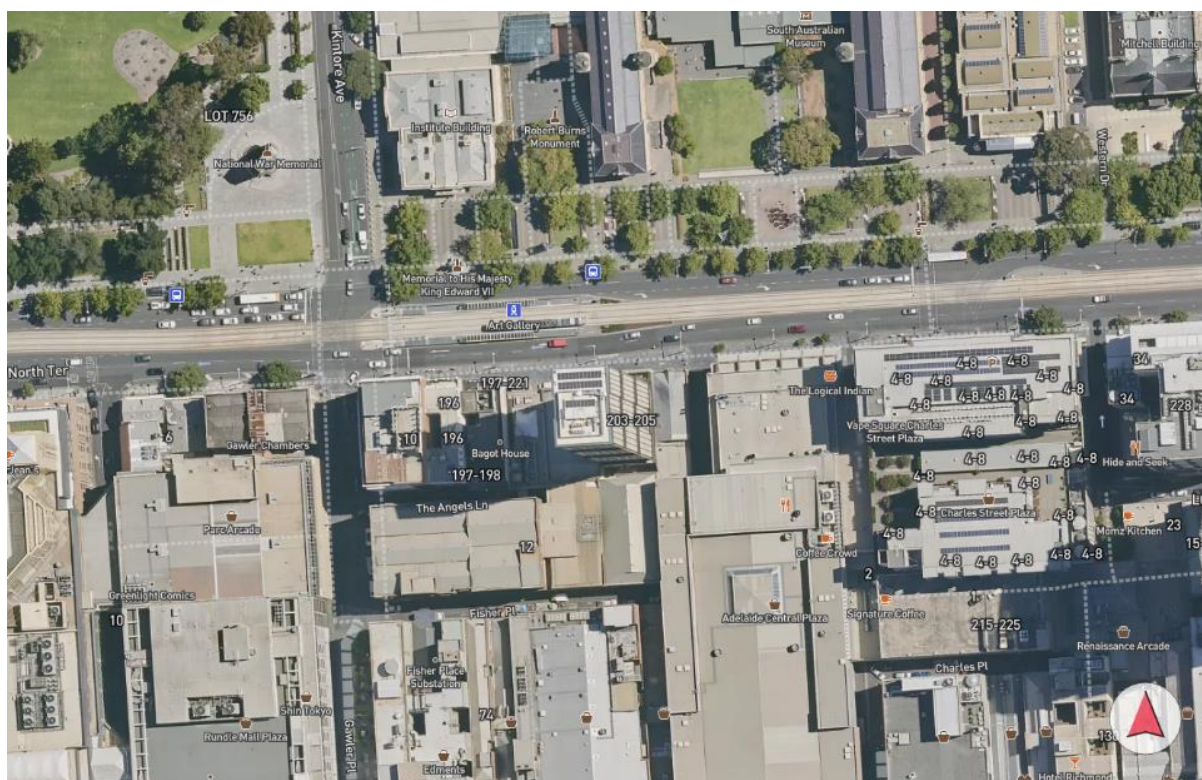


Figure 1.5 University Senior College – Gawler Place Location

The entrance to the USC campus in Gawler Place is shown in Figure 1.6



The USC Gawler Place campus entrance with a car exiting from the Parc Arcade in Gawler Place.



Footpath on the west side of Gawler Place to the USC Gawler Place campus entrance.

Figure 1.6 Entrance to the USC Gawler Place Campus



2 Existing Conditions

The section provides the analysis of the existing school operations, the student population and travel patterns and an overview of transport access to the school by all transport modes.

2.1 School Operations

University Senior College (USC) comprises years 10 to 12. The hours of operations by year are:

- Year 10 classes typically start at 9 am and finish at 4 pm whilst on Fridays finish at 3 pm. Year 10 students will engage in 1- and 2-hour classes which provide them with time to go deeply into their learning, and while experiencing a range of subjects.
- For Year 11 and 12 students, the USC school day begins at 8.10 am and on most days ends at 5.00pm. This extended day has the benefit of a flexible timetable structure, based upon two-hour blocks. At Year 11, students have two 2-hour lessons in each subject, providing greater opportunity to engage with the subject in considerable depth. At Year 12, many subjects have two one-hour lectures delivered in the USC and University of Adelaide lecture theatres and one 2-hour tutorial.

The school office hours generally follow the timetables of students within both campuses.

2.2 Student Enrolment Analysis

The school enrolment in Term 2 2024 is for 471 students with a distribution by year as follows:

- 100 students in Year 10
- 189 students in Year 11
- 182 students in Year 12

Students attending USC can have a home location anywhere in the metropolitan Adelaide area and in regional South Australia. Students beyond a commuting distance typically live with short-term accommodation elsewhere. The number of students by sub area are shown in Figure 2.1. Very few students live in the City of Adelaide and therefore walking to school is not a convenient travel option.

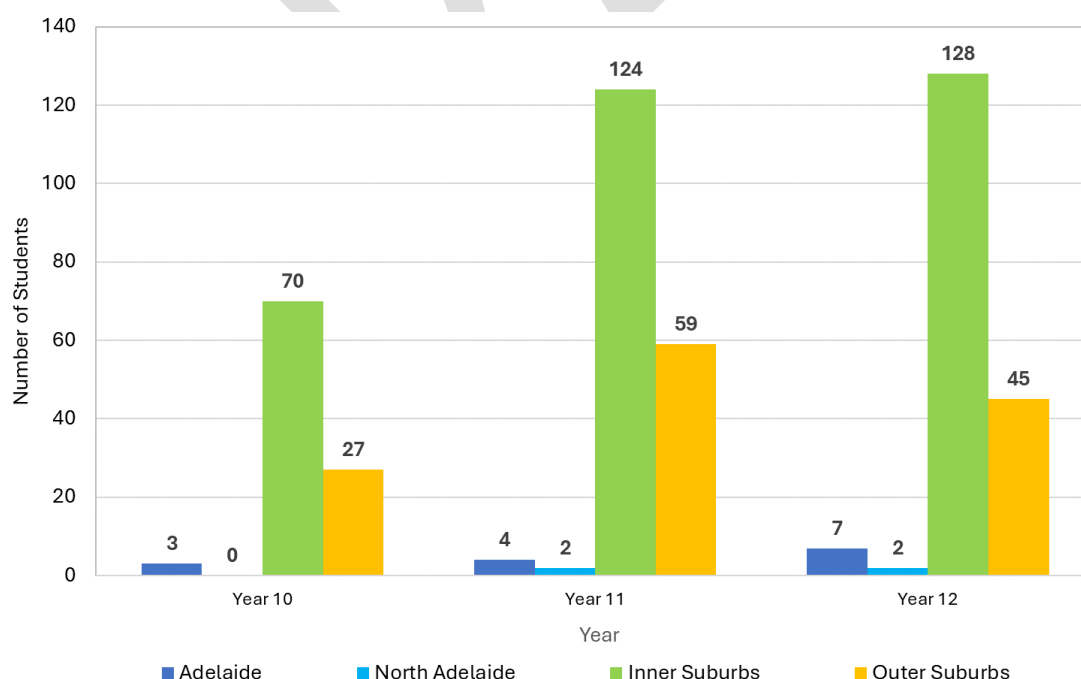


Figure 2.1 University Senior College Residence Locations by Sub-Area



2.3 Student Travel Demand

The existing school travel activity to and from the University Senior College was reviewed through site observations and a student travel mode survey on typical school days. The student travel mode survey questions using the Survey Monkey online tool is included in **Appendix A**.

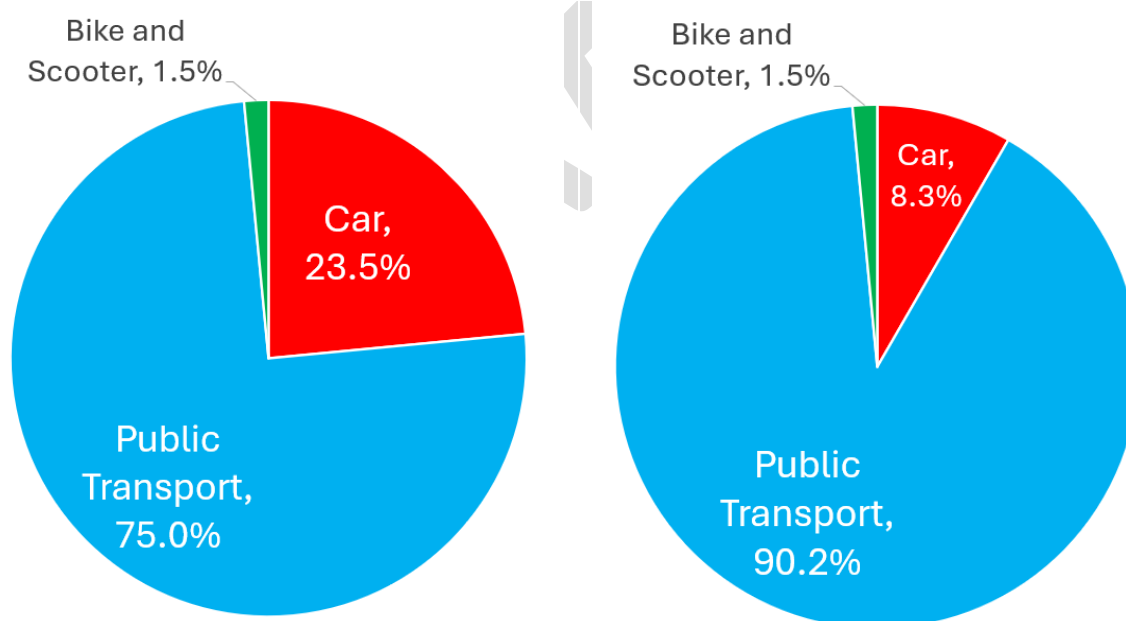
The student travel survey was conducted across 5 days between Friday May 24 and Thursday May 30 2024. With 132 surveys completed, the response rate 28 per cent with an enrolment of 471 students. This is considered a valid sample of the student population for statistical purposes.

The findings from the surveys were used to confirm the existing transport mode shares for:

- Car (as driver)
- Car (as passenger with drop-off)
- Walk for the entire trip
- Bus, Train or Tram
- Bicycle or e-bike
- Scooter

The student travel mode shares to school in the AM period and from school in the PM period are shown in Figure 2.2. Most students are using public transport to and from the school with 75 per cent in the AM arrival period and 90 per cent in the PM departure period. This excellent result is because the students are older and confident to use the train, bus and tram network services that converge in Adelaide CBD.

The PM departure period has 15 per cent more students using public transport than in the AM period, and a similar percentage fewer using private vehicles. This result is likely because some parents drop off their children on the way to work in the CBD for the morning commute trip, but the students travel home by public transport when the parent is still working in the PM school departure period.



AM Period Arrival Transport Mode Share

PM Period Departure Transport Mode Share

Figure 2.2 University Senior College Student Transport Mode Shares in May 2024



A more detailed breakdown of the transport mode survey for the AM travel to University Senior College is provided in Table 2.1. The bus services at the stops in Grenfell Street/Currie Street were used by 17 per cent of the students and 25 per cent of the students arrived by train.

Table 2.1 AM Travel Mode Survey Results for University Senior College by Year

Transport Mode	Year 10	Year 11	Year 12	Total
Car	6 (19.4%)	11 (21.2%)	14 (28.6%)	31 (23.5%)
Bus in Grenfell Street/ Currie Street	3	10	10	23 (17.4%)
Bus in King William Street	3	8	6	17 (12.9%)
Bus in North Terrace	1	6	1	8 (6.1%)
Train	6	14	13	33 (25.0%)
Tram	3	1	2	6 (4.5%)
Public Transport	24 (77.4%)	40 (76.9%)	35 (71.4%)	99 (75.0%)
Bike and Scooter	1 (3.2%)	1 (1.9%)	0 (0.0%)	2 (1.5%)
Total	31	52	49	132

A more detailed breakdown of the transport mode survey for the PM travel from University Senior College is provided in Table 2.2. The bus services at the stops in Grenfell Street/Currie Street were used by 24 per cent of the students and 29 per cent of the students travelled home by train.

Table 2.2 PM Travel Mode Survey Results for University Senior College by Year

Transport Mode	Year 10	Year 11	Year 12	Total
Car	1 (3.2%)	4 (7.7%)	6 (12.2%)	11 (8.3%)
Bus in Grenfell Street/ Currie Street	9	11	12	32 (24.2%)
Bus in King William Street	3	9	8	20 (15.2%)
Bus in North Terrace	3	9	3	15 (11.4%)
Train	8	17	13	38 (28.8%)
Tram	2	0	2	4 (3.0%)
Public Transport	29 (93.5%)	47 (90.4%)	43 (87.8%)	119 (90.2%)
Bike and Scooter	1 (3.2%)	1 (1.9%)	0 (0.0%)	2 (1.5%)
Total	31	52	49	132



2.4 Transport Access

Transport access to the school via road, public transport, cycling and walking and the availability of on-street, on-site and off-site parking is provided in this section.

2.4.1 Road Network

The streets in the local road network at University Senior College are provided in Table 2.3. The front entrance and schools are from Kintore Avenue and Gawler Place for the Kintore and Gawler campuses respectively.

Table 2.3 Local Streets at University Senior College

Road	Campus	Classification	Relevance to School
Kintore Avenue	Kintore	Local street	Front entrance – Kintore Campus
Victoria Drive	Kintore	Local street	20 m from Kintore Avenue school entrance
North Terrace	Gawler	Sub-Arterial	Northern boundary of Gawler Place campus, location of nearby bus stops and trams
Gawler Place	Gawler	Local street	Front Entrance of Gawler Place campus

The attributes of the local road network at University Senior College are provided in Table 2.4. In areas where no data was provided, the field was labelled as not applicable (n/a). North Terrace has a high traffic volume and is a busy east-west that students walking between the two campuses must cross.

Table 2.4 Local Road Network Attributes at University Senior College

Road	Number of Lanes	Daily Traffic Volumes (veh/day)	Posted Speed (km/h)
Kintore Avenue	2	-	50
Victoria Drive	2	-	50
North Terrace	4	22,700	50
Gawler Place	2	-	50

The road network does not include any 25 km/h school zone during AM and PM peak times. Signalised pedestrian crossing is provided at the North Terrace / Gawler Place / Kintore Avenue intersection.

Table 2.5 Local Road Network Attributes at University Senior College

Road	25 km/h School Zone in Street	Type of Crossing in Street
Kintore Avenue	No	Signalised Crossing
Victoria Drive	No	N/A
North Terrace	No	Signalised Crossing
Gawler Place	No	Signalised Crossing



2.4.2 Crash Analysis

A review of the latest crash data from 2018 to 2022 (five-year period) has been sourced from DataSA. During this time there has been the following crashes within direct vicinity of the school:

- Kintore Avenue: 3 property damage crashes
- Victoria Drive: 3 property crashes
 - Intersection with Kintore Avenue: 1 property damage crash
- Gawler Place: 1 property damage crash
 - Intersection with North Terrace: 2 property damage crashes

The crash statistics in the vicinity of Kintore Avenue and Victoria Drive and near Gawler Place are presented in Figure 2.3.



Figure 2.3 Crashes on School Days at University Senior College

2.4.3 Parking and Kiss and Drop Areas

The types of carparking provided in the streets surrounding the both school locations are separated in Table 2.6 and Table 2.7. The on-street car parking controls along the streets in the vicinity of the school are also shown in Figure 2.4 and Figure 2.5 for the Kintore Avenue and Gawler Place campuses respectively.

On-street parking on both sides of Kintore Avenue and Victoria Drive is available. This is provided for motorcycles and vehicles. Kiss and Drop activity can occur on these streets, however it does not present an issue with the distributed times for the start and finish of classes and the high public transport usage for students.

Table 2.6 Parking Types at University Senior College – Kintore Avenue

Road	Type of Parking
Kintore Avenue	Motorcycle all times, Angled timed (3-hour ticket parking 9 am to 3 pm any day}
Victoria Drive	Motorcycle all times, Angled timed (3-hour ticket parking 9 am to 3 pm any day}

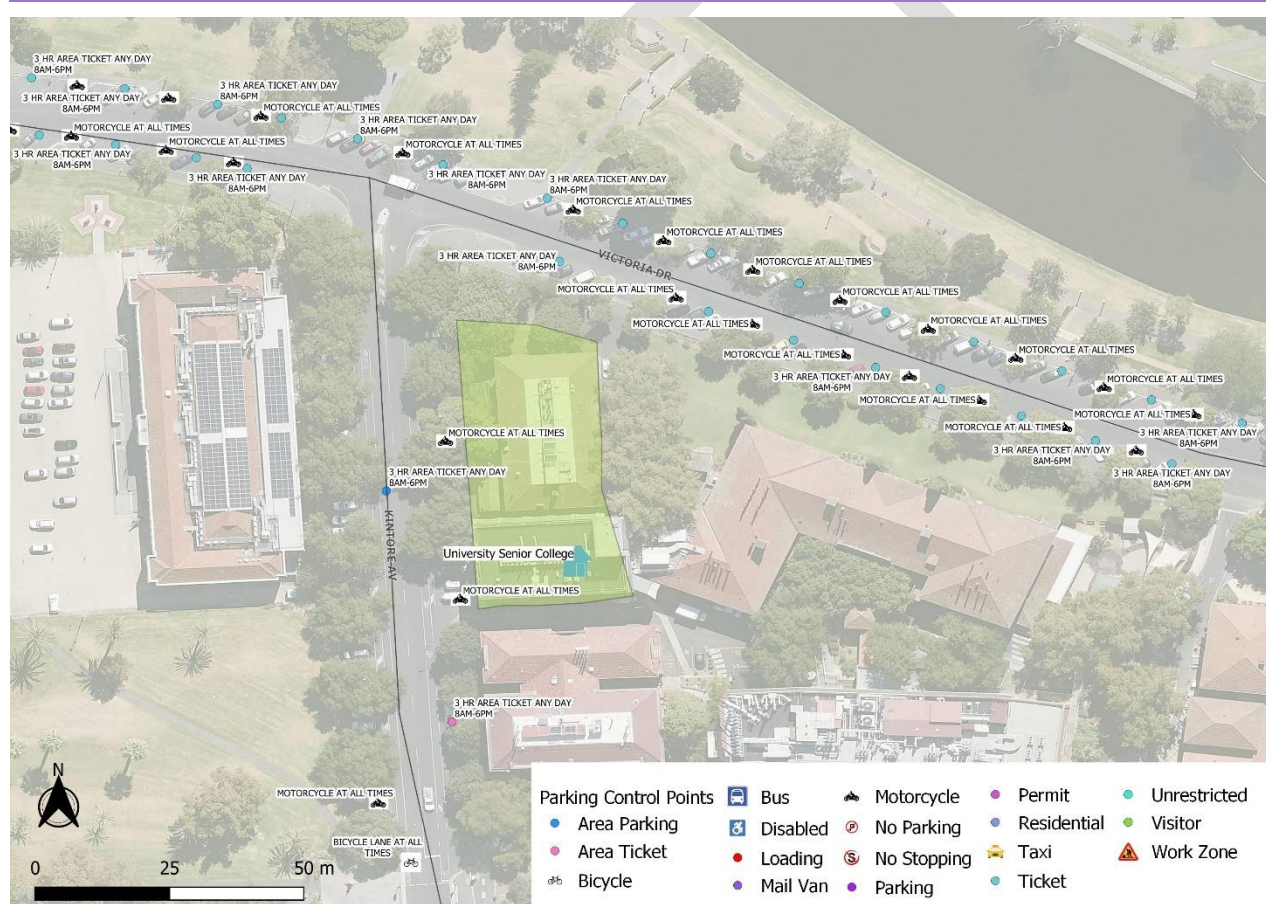


Figure 2.4 On-street Parking and Kiss and Drop Areas for University Senior College - Kintore Avenue

On-street parking on North Terrace and Gawler Place is limited to taxi parking, with no designated drop-off or pick-up zone for the school. Kiss and Drop activity occurs informally in the Gawler Place in the turnaround area before the entrance to the Council car park or in other CBD streets where the students walk through Rundle Mall and Gawler Place.



Table 2.7 **Parking Types at University Senior College – Gawler Place**

Road	Type of Parking
North Terrace	No Stopping at all times with the tram line
Gawler Place	Taxi access at all times, no stopping at all times with access to the City of Adelaide U-Park facility

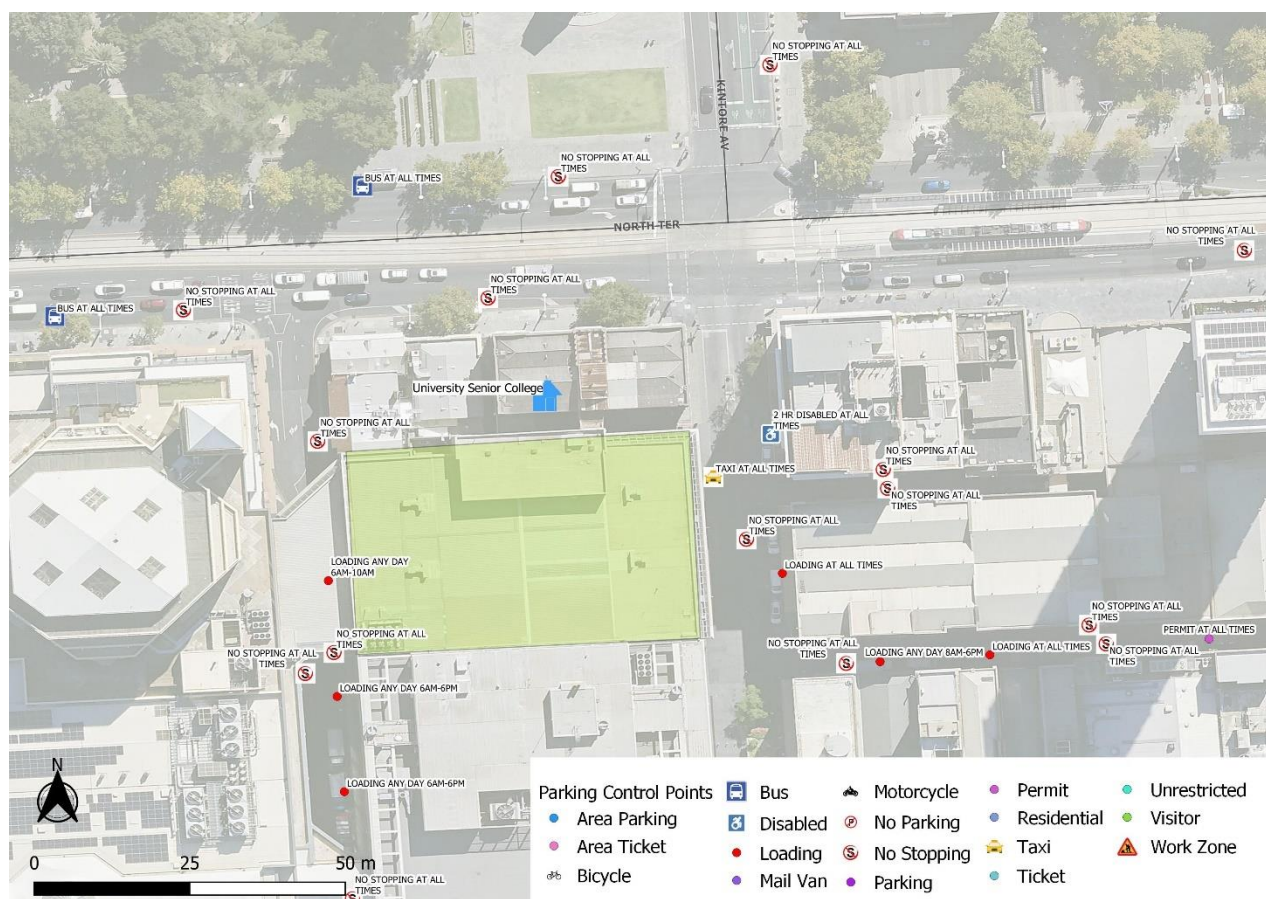


Figure 2.5 **On-street Parking and Kiss and Drop Areas for University Senior College – Gawler Place**



2.4.4 Public Transport

Students have convenient walk access to all train lines at Adelaide railway station, to the tram network with stops in King William Street at Rundle Mall and North Terrace at the Art Gallery and to all CBD bus routes in Grenfell Street/Currie Street, King William Street, King William Road and North Terrace as shown in Figure 2.6.



Figure 2.6 Public Transport Services to University Senior College

Public transport services for students to travel to University Senior College are provided by train, tram and bus with the locations, routes and walk distances to the Kintore Avenue and Gawler Place campuses provided in Table 2.8.



Table 2.8 Public Transport Services for Students at University Senior College

Public Transport Location	Public Transport Routes	Walk Distance to USC in Kintore Avenue (m)	Walk Distance to USC in Gawler Place (m)
Adelaide Railway Station	All train lines (Gawler, Seaford, Flinders, Outer Harbor, Grange and Belair)	750 m via Victoria Drive to King William Road	450 m via North Terrace
Art Galley tram stop in North Terrace	Botanic Gardens to Entertainment Centre tram line	350 m along Kintore Avenue to North Terrace	20 m via North Terrace
Rundle Mall tram stop in King William Street	Glenelg tram line	750 m via Kintore Avenue, Gawler Place and Rundle Mall to King William Street	300 m via Gawler Place and Rundle Mall to King William Street
Buses in Grenfell Street/Currie Street	Multiple Go Zone bus corridors for the East-West, Hills and O-Bahn routes	750 m via Kintore Avenue and Gawler Place to Grenfell Street 950 m via Kintore Avenue, Gawler Place and Grenfell Street to Currie Street	300 m via Gawler Place to Grenfell Street 500 m via Gawler Place and Grenfell Street to Currie Street
Buses in King William Street	Multiple Go Zone bus corridors for the North-South and East-West bus routes	600 m via Kintore Avenue and North Terrace to King William Street	400 m via Gawler Place and Rundle Mall to King William Street
Buses in North Terrace	Go Zone for the East-West bus routes	500 m via Kintore Avenue to North Terrace	130 m via North Terrace

The public transport network in Adelaide CBD is the hub of the train, tram and bus services where all train lines terminate at Adelaide railway station, the two tram lines operating in King William Street or North Terrace and all Go Zone high frequency bus corridors and Free Connector bus (98/99) route meet as shown in Figure 2.7.

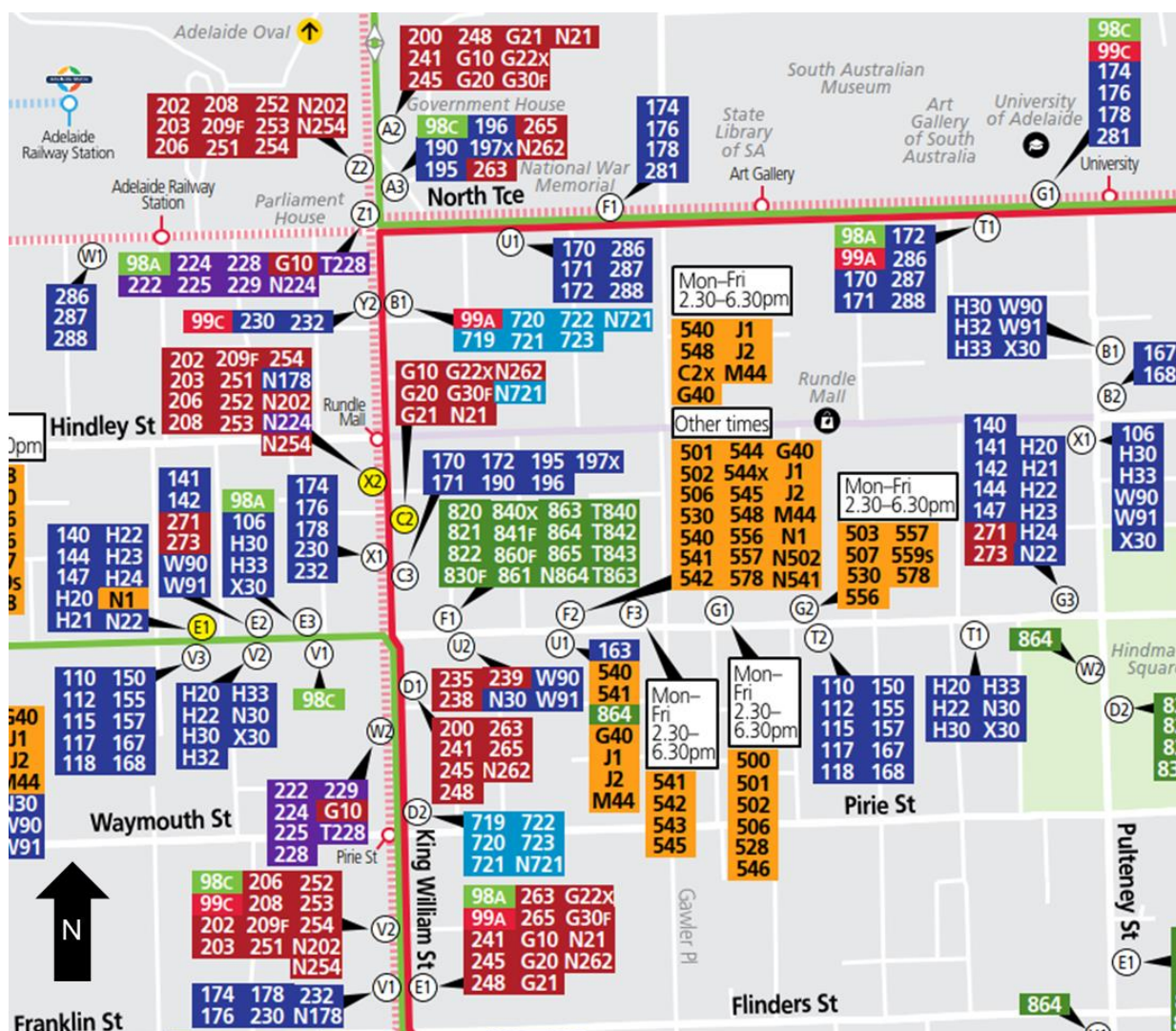


Figure 2.7 **Public Transport Network to University Senior College**



2.4.5 Cycling

The bicycle network in vicinity of the school with the connecting link to surrounding Park Land trails and the inner metropolitan cycling network is shown in Figure 2.8. The schools are located within walking distance to several on and off-road cycling paths within the CBD and surround parklands. Students using bikes are provided several options to travel to and from school grounds.

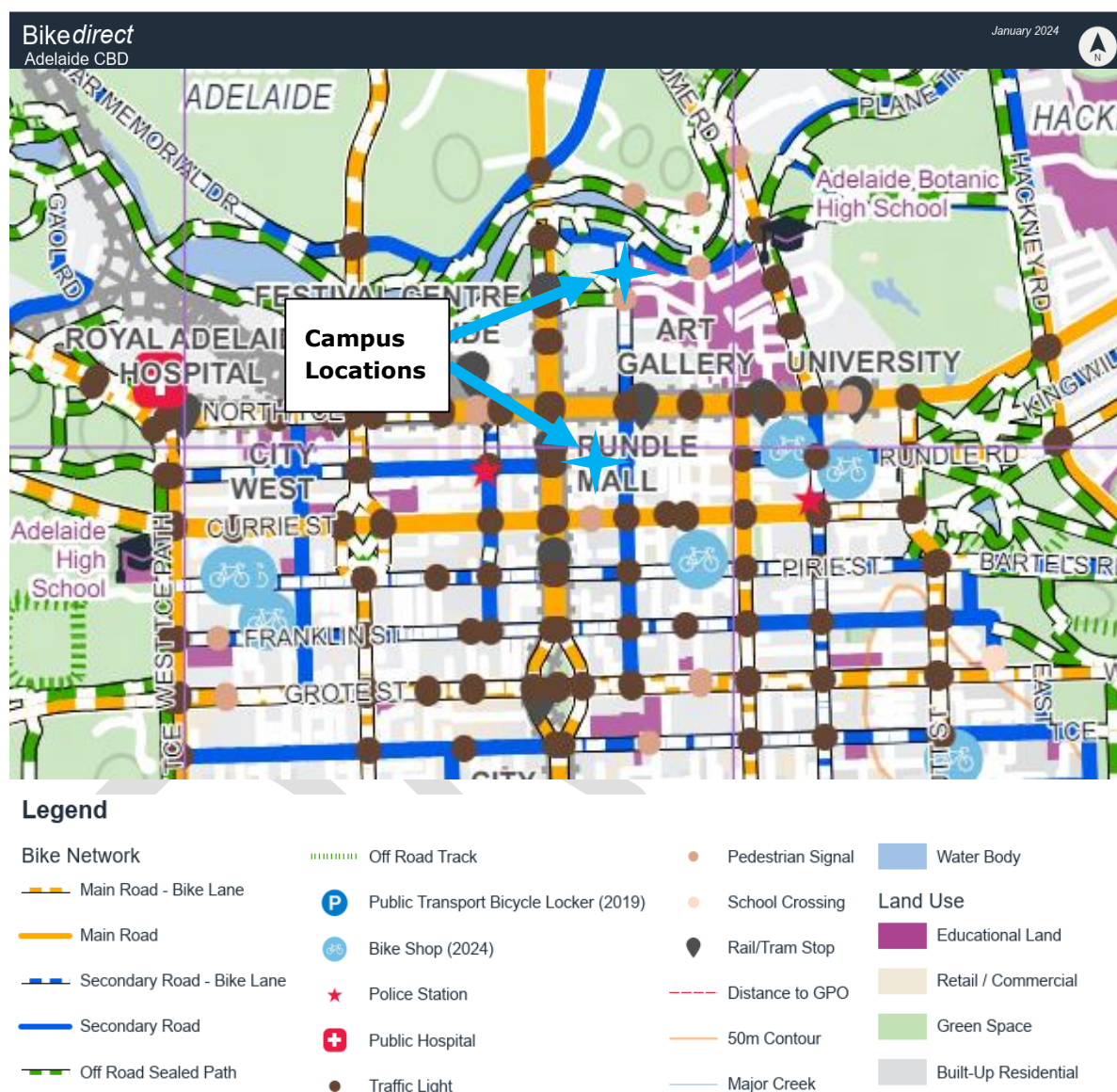


Figure 2.8 Cycling Network to University Senior College

Bicycle end-of-trip facilities, such as secure off-road bicycle storage or racks are not provided for students.

2.4.6 Pedestrian Access

Walking to and from the school is an important transport mode for students, staff and visitors who walk for their entire trip or as an access mode to nearby public transport stops.

Pedestrian access routes to the high school are via:

- Sealed footpaths exist along all road corridors to the school.
- Footpaths through the path network in the nearby parklands.

The 1 km, 1.5 km and 2 km walkable access catchment areas to University Senior College that were calculated using the footpath network are shown in Figure 2.9. Students who walk their entire trip to school are likely walking from Adelaide city centre and North Adelaide.

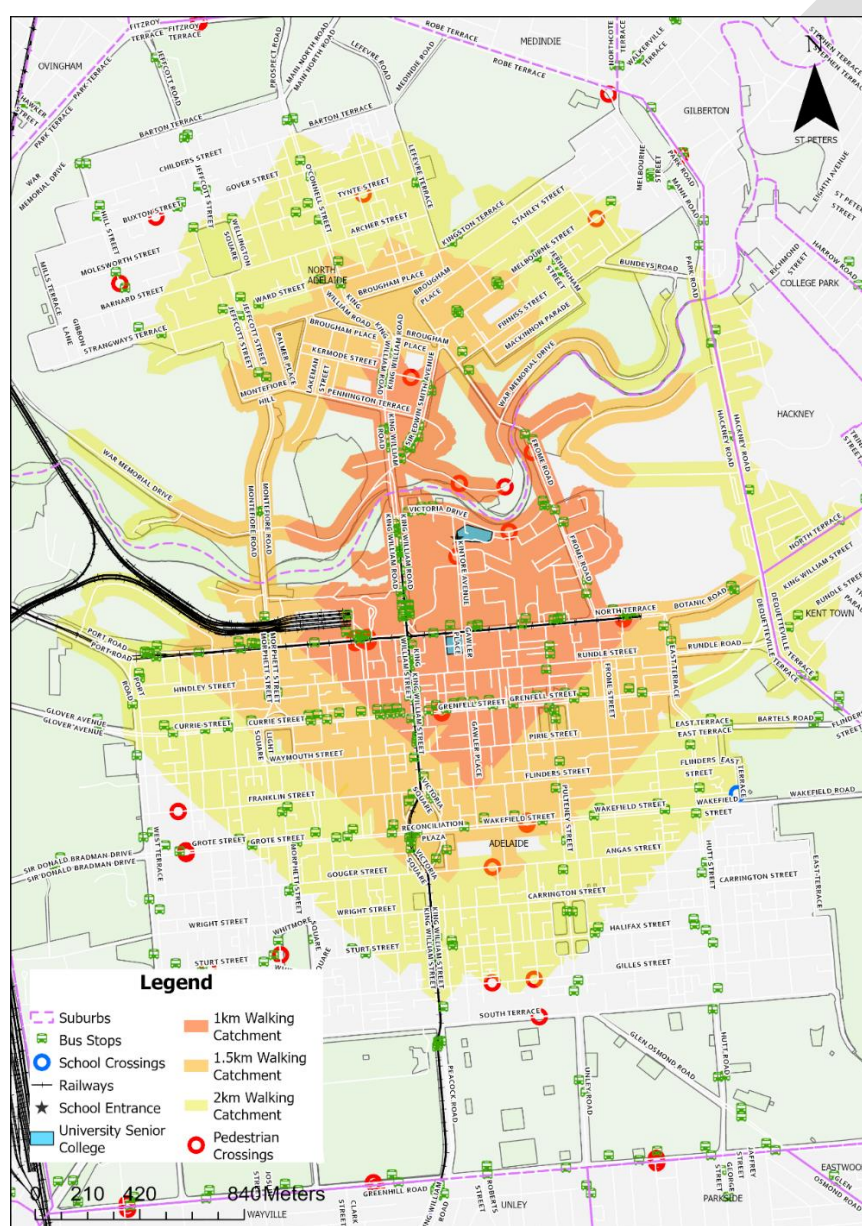


Figure 2.9 Walkable Access Catchment to University Senior College



3 Issues and Opportunities

The issues and opportunities were identified with discussions with the school administration staff. Site observations were not conducted because the high school does have set times for the start and end of the school day.

3.1 Stakeholder Discussions

A telephone meeting was held with Mr Matthew Noble on 4 June 2024 to discuss the survey results and issues for student safety when travelling to and from school.

- All students live in metropolitan Adelaide. They do not have remote learning, however teachers record all lectures. Students must attend on campus.
- Students with a parent living in regional areas typically board with relatives or privately with families in Adelaide.
- Students do not wear school uniforms as required by other high schools. Therefore, they are not identifiable on the street and mix in with the other university students, young workers and visitors.

Safety issues that affect the USC students and staff:

- Uneven footpaths creating hazards. They have had several students and staff trip the footpaths along Kintore Avenue.
- The traffic in Gawler Place from North Terrace. Despite signage many cars use Gawler Place for making a U-turn at the entrance to the car parkade. Cars accelerate quickly to beat the traffic lights. That part of Gawler Place could be restricted to only vehicles entering the U-park carpark.
- Traffic entering the University of Adelaide at Gates 11, 12 and 13 often do not give way to pedestrians and are travelling too fast.
- The U-Park parking facility in Gawler Place attracts anti-social behaviour in the stairwells and on the street. This is a security issue for students entering and exiting the building.

3.2 Site Observations

A site visit was conducted during April 2024 on a non-school day to confirm the parking and access to the two campuses in Kintore Avenue and Gawler Place.

Formal site observations at the two campuses of University Senior College were not conducted because:

- The students do not start and finish classes at the same times and it varies by day of the week.
- University Senior College operates like a university with variable lesson times.
- Students do not wear uniforms and therefore students arriving and departing are not easy to distinguish from the general public or university students.

3.3 Summary of the Issues and Opportunities

Issues for safety for students accessing the high school are:

- Safety for walking along footpaths in the city streets with trip hazards, in particular along Kintore Avenue.
- Risks of incidents between pedestrians and vehicles entering and exiting the U-Park in Gawler Place that at the entrance of the Gawler Place campus.
- Traffic entering the University of Adelaide at Gates 11, 12 and 13 often do not give way to pedestrians and are travelling too fast.
- The U-Park parking facility in Gawler Place attracts anti-social behaviour in the stairwells and on the street. This is a security issue for students entering and exiting the building.



4 Travel Safety Options and Assessment

4.1 Student Travel Safety Options

Options to improve the travel safety for students were developed under three categories, namely:

- Infrastructure treatments requiring civil works with changes to signals or pedestrian crossings.
- Operational efficiencies, with changes to parking controls, Kiss and Drop areas or school zones.
- Safety promotions to increase awareness of the school with warning signage or information.

The options for the assessment are provided in Table 4.1 with a description of the initiative and the issue to be addressed.

Table 4.1 School Travel Safety Options for University Senior College

Type of Option	Description	Issue Addressed
Infrastructure Treatments	Maintain footpaths along Kintore Avenue	Reduce the risk of pedestrian trip hazards
Operational Efficiencies	Install warning signs at the entrance and exit of the U-Park in Gawler Place	Improve the safety for students and pedestrians in Gawler Place
	Council to follow up on security issues with the monitoring of the video surveillance cameras at the Gawler Place U-Park entrance and stairwells	Reduce the risk of harassment of students at the U-Park facility in Gawler Place
Safety Promotions	Prepare a promotional brochure about public transport and safe cycling routes to Adelaide CBD	Encourage more students to use walking, cycling or public transport than using private vehicles

4.2 Recommended School Travel Safety Initiatives

The recommended school travel safety initiatives include:

- Maintain footpaths along Kintore Avenue.
- Install warning signs at the entrance and exit of the U-Park in Gawler Place.
- Council to follow up on security issues with the monitoring of the video surveillance cameras at the Gawler Place U-Park entrance and stairwells.
- Prepare a promotional brochure about public transport and safe cycling routes to Adelaide CBD. Since USC is not a typical high school with set start and finish times on school days, a travel access guide that is designed for class times that are variable by day and student is proposed. An example of a Travel Access Guide that was prepared for a TAFE campus in NSW is provide in **Appendix B**.



4.3 Assessment and Indicative Cost Estimates

The school travel safety options were assessed under the safe systems approach and indicative cost estimates are provided for each travel safety option in Table 4.2. The options were given labels under the following categories:

- T for Traffic control device or treatment that requires civil works and construction with cost estimates.
- I for information to the school community with signage or online promotional brochure.

Table 4.2 Indicative Cost Estimates for the Travel Safety Options at University Senior College

Option ID	Description	Indicative Cost Estimate	Comments
T1	Maintain footpaths along Kintore Avenue	Less than \$5,000	Council has a responsibility for regular maintenance of footpaths in the CBD.
T2	Install warning signs at the entrance and exit of the U-Park in Gawler Place	Less than \$500	A larger more conspicuous warning sign would help alert motorists and pedestrians that Gawler Place is a shared zone.
T3	Council to follow up on security issues with the monitoring video surveillance cameras at the Gawler Place U-Park entrance and stairwells	Operational cost for the City of Adelaide	The video cameras need to be monitored by Council staff to observe for any security issues at the car park.
P1	Prepare a promotional brochure about public transport and safe cycling routes to Adelaide CBD	Not a cost for the City of Adelaide	USC administration has a role to promote non-car transport to the school. This information could have the format of a webpage or brochure that is similar to the example provided in Appendix B .



5 References

The following references were used in the preparation of the school travel safety review.

- Guide to Traffic Management Part 8, Local Area Traffic Management, Austroads, Sydney, 2016, Section 7.5.7 School Zones, page 114
- Guide to Traffic Management Part 10, Traffic Control and Communication Devices, Austroads, Sydney, 2019, Section 6.5.8 Zig Zag Markings, page 105,
- Speed Limit Guideline for South Australia, Department for Infrastructure and Transport, October 2023, Appendix C School Zones
- Supplement to AS 1742.10, Manual of uniform traffic control devices, Part 10, Pedestrian control and protection, Department for Infrastructure and Transport, April 2024
- Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices Part 2: Code of Technical Requirements, Department for Infrastructure and Transport, March 2024, Section 9.3 Drop off and pick up zones, page 34
- School Transport Policy, Department for Education, South Australia, January 2024



Appendix A – Student Travel Survey Form



**UNIVERSITY
SENIOR
COLLEGE
ADELAIDE**

University Senior College

Student Transport Survey

Tonkin on behalf of the City of Adelaide is conducting a survey to determine the main modes of travel for students to understand the travel behaviour to the school. Please assist us by completing the following questions. Thank you for your participation to support safer and more sustainable transport to University Senior College.

* 1. Please enter your Year of study.

- ☐ Year 10 ☐ Year 11 ☐ Year 12

* 2. Please enter your gender.

- ☐ Male ☐ Female ☐ Prefer not to answer

* 3. Please enter your suburb of residence.

* 4. On a typical school day, how do you travel to school?

- | | |
|--|--|
| <input type="radio"/> Car (as driver) | <input type="radio"/> Bus (from bus stop in Grenfell Street/Currie Street) |
| <input type="radio"/> Car (as passenger with drop-off in North Terrace) | <input type="radio"/> Bus (from bus stop in King William Street/King William Road) |
| <input type="radio"/> Car (as passenger with drop-off in Gawler Place) | <input type="radio"/> Tram |
| <input type="radio"/> Car (as passenger with drop-off in Kintore Avenue) | <input type="radio"/> Train |
| <input type="radio"/> Car (as passenger with drop-off in Victoria Drive) | <input type="radio"/> Walk for the entire trip |
| <input type="radio"/> Car (as passenger with drop-off elsewhere in Adelaide CBD) | <input type="radio"/> Bicycle for the entire trip |
| <input type="radio"/> Bus (from bus stop in North Terrace) | <input type="radio"/> Scooter for the entire trip |
| <input type="radio"/> Other (please specify) | |



* 5. On a typical school day, how do you travel from school?

- | | |
|---|--|
| <input type="radio"/> Car (as driver) | <input type="radio"/> Bus (from bus stop in Grenfell Street/Currie Street) |
| <input type="radio"/> Car (as passenger with pick-up in North Terrace) | <input type="radio"/> Bus (from bus stop in King William Street/King William Road) |
| <input type="radio"/> Car (as passenger with pick-up in Gawler Place) | <input type="radio"/> Tram |
| <input type="radio"/> Car (as passenger with pick-up in Kintore Avenue) | <input type="radio"/> Train |
| <input type="radio"/> Car (as passenger with pick-up in Victoria Drive) | <input type="radio"/> Walk for the entire trip |
| <input type="radio"/> Car (as passenger with pick-up elsewhere in Adelaide CBD) | <input type="radio"/> Bicycle for the entire trip |
| <input type="radio"/> Bus (from bus stop in North Terrace) | <input type="radio"/> Scooter for the entire trip |
| <input type="radio"/> Other (please specify) | |

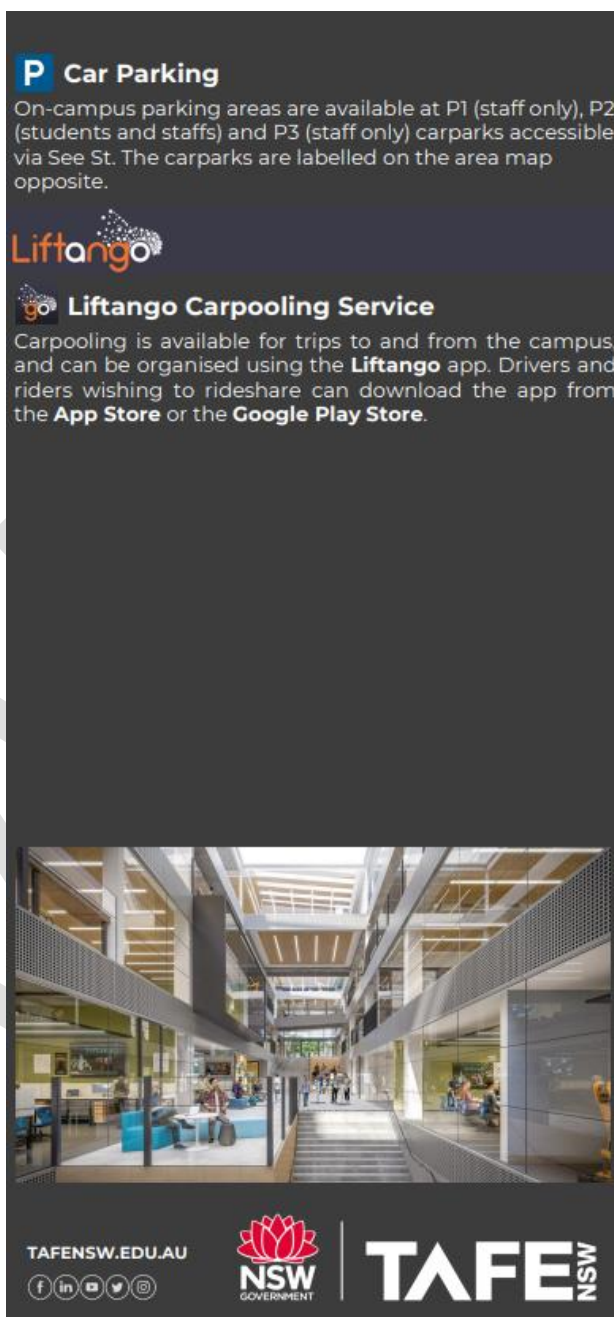
6. If you travelled to or from school by car, would you consider any the following modes? (answer all that are applicable).

- ☐ Walking for the entire trip
- ☐ Bicycle, e-bike or scooter
- ☐ Bus, tram and/or train
- ☐ Other (please specify)





Appendix B – Travel Access Guide for TAFE NSW





This Travel Access Guide (TAG) provides information on the different travel choices available for you to travel to and from the TAFE Meadowbank Campus.

TAFE Meadowbank Campus is well serviced by many public transport services nearby as well as accessible walking and cycling routes.

Pedestrian Access



Cycling Access and Bicycle End-of-Trip Facilities

Bicycle end-of-trip facilities are available at level 2 of the Multi-Trades and Digital Technology Hub building accessible via carpark entry from See St Laneway.



Getting to TAFE Meadowbank Campus

Walking

The Meadowbank Campus is a 2-minute walk from Meadowbank Station and up to a 10-minute walk from Meadowbank Ferry Wharf and nearby bus stops.

When walking, watch out for any potential hazards, including cars reversing out of driveways, bikes and other pedestrians. Remember to STOP, LOOK, LISTEN and THINK before you cross.

Cycling

Suggested cycling routes which connect to Meadowbank Station, Meadowbank Ferry Wharf and surrounding residential suburbs are labelled on the area map opposite. For all on-road and off-road cycle paths, visit the City of Ryde Bike Map www.ryde.nsw.gov.au. Always wear a helmet when you ride.

Train

Meadowbank Station is a 2-minute walk to the campus via pedestrian entries on Constitution St. The station is on T9 Northern Line (Hornsby-North Shore via City).

Ferry

Meadowbank Ferry Wharf is a 10-minute walk to the campus via Bay Dr or Angas St, and a 3-minute ride to the campus via Bus Route 507. The wharf is on F3 Parramatta River Ferry Route (Circular Quay-Sydney Olympic Park).

Bus

Via Meadowbank Station

Route 507 – Gladesville & City Hyde Park to Meadowbank

Route 518 – Macquarie University to Meadowbank Wharf

Along Bowden St opp TAFE Meadowbank

Route 518 – Macquarie University to Meadowbank Wharf

Along Victoria Rd opp TAFE Meadowbank

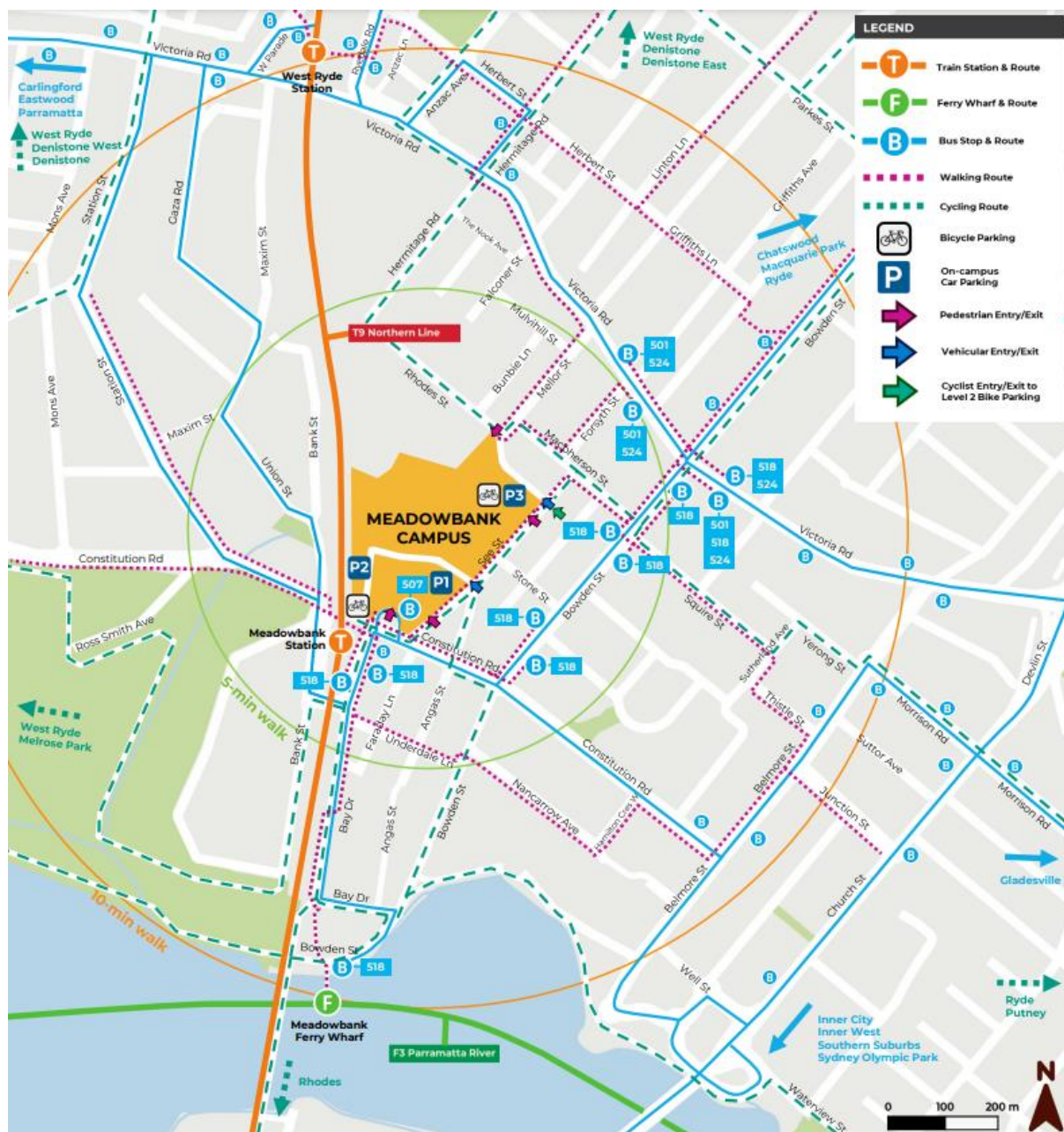
Route 501 – Parramatta to Central Pitt St

Route 518 – Macquarie University to Meadowbank Wharf

Route 524 – Parramatta to Ryde via West Ryde

Planning your Trip

To plan your trip from start to finish with train, bus and ferry service information, plus stop locations and platform numbers, visit Transport for NSW Trip Planner <https://transportnsw.info/trip#/>.



Capital Works Monthly Project Update - May 2025

Strategic Alignment - Our Corporation

Public

Tuesday, 17 June 2025

Infrastructure and Public Works Committee

Program Contact:

Mark Goudge, Associate Director
Infrastructure

Approving Officer:

Mike Philippou, Acting Director
City Infrastructure

EXECUTIVE SUMMARY

This report provides a summary view of the Capital Works Program delivery and financial performance as of 31 May 2025 including a snapshot of headline projects either complete or in progress, future procurement activities and upcoming community consultation and engagement activities.

The Infrastructure Program will present a monthly report to the Infrastructure and Public Works Committee reflecting the previous monthly performance.

RECOMMENDATION

THAT THE INFRASTRUCTURE AND PUBLIC WORKS COMMITTEE RECOMMENDS TO COUNCIL

THAT COUNCIL:

1. Notes the Capital Works Program Update for May 2025 as contained within this report and Attachment A to Item 7.2 on the Agenda for the meeting of the Infrastructure and Public Works Committee held on 17 June 2025.
-

IMPLICATIONS AND FINANCIALS

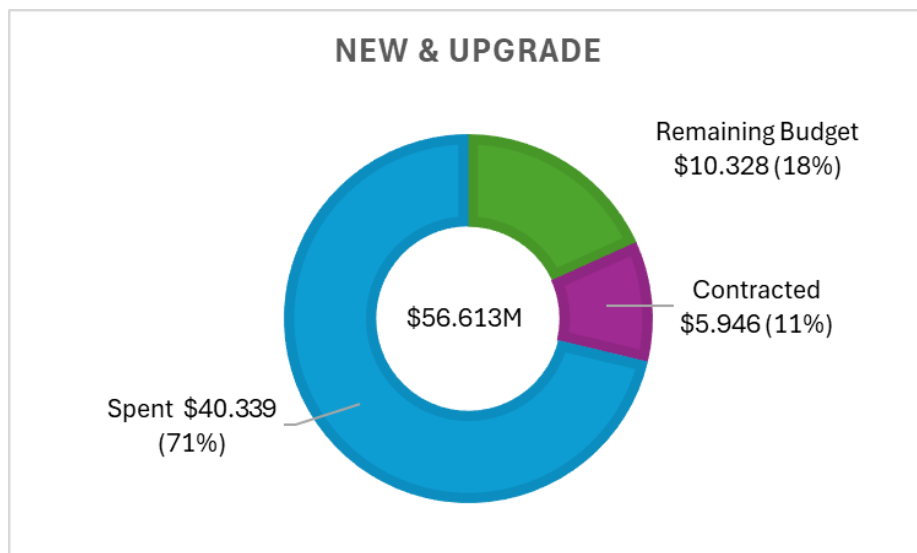
City of Adelaide 2024-2028 Strategic Plan	Strategic Alignment – Our Corporation Strategy, Value and Efficiency - Strategic and Capital Projects are delivered on time and on budget (target 75%)
Policy	Not as a result of this report
Consultation	Consultation and / or engagement to various levels as required for the delivery of each project has or will be undertaken.
Resource	Projects delivered through a combination of Council resources, contract staff and external contractors and suppliers.
Risk / Legal / Legislative	Not as a result of this report
Opportunities	Not as a result of this report
24/25 Budget Allocation	This report tracks capital works performance against the revised 2024/25 Capital Works budget of \$112.909m.
Proposed 25/26 Budget Allocation	Not as a result of this report
Life of Project, Service, Initiative or (Expectancy of) Asset	Life expectancy of assets varies by asset class.
24/25 Budget Reconsideration (if applicable)	Not as a result of this report
Ongoing Costs (eg maintenance cost)	Ongoing costs for the maintenance of new and/or renewed assets are factored into future Asset Management and Maintenance Plans, Business Plans and Budgets.
Other Funding Sources	Projects reported on are primarily funded from Council's Capital Budget, however various State and Federal grant funding opportunities have been leveraged against a number of projects.

DISCUSSION

1. The total revised Capital Expenditure Budget for 2024/25 approved by Council is \$112.909m.
2. The Capital Works Program is itemised as follows:
 - 2.1. New and Upgrade Projects are identified through Council's Strategies and Plans and defined as complex in nature, installation of new infrastructure and upgrades to existing infrastructure. The funding allocated within 2024/25 financial period totals \$56.613m.
 - 2.2. Renewal Projects are grouped against multiple asset categories and are directly aligned to maintenance service levels contained within Council's Asset Management Plans. The funding allocated within 2024/25 financial period totals \$56.296m.
3. The monthly Capital Works Update provides the status of these two capital programs as at the end of each calendar month.

New and Upgrade

4. New and Upgrade Projects as of 31 May 2025 reflects \$40.339m in spend and a further \$5.946m in contracted works.



5. New and Upgrade Summary:
 - 5.1. In financial year 2024/25 we are delivering approximately 202 new and upgrade projects across the city. The Main Streets program continues to occupy much of the resource effort in our New and Upgrade program with other significant city initiatives also underway including planning for the new Visitor Centre. Solid progress with Central Market Arcade Development is also reported this month.
 - 5.2. Two New and Upgrade projects have reached practical completion in May being:
 - 5.2.1. Mistletoe Park/ Tainmuntilla (Park 11) Shared Use Path Renewal and Public Lighting Upgrade
 - 5.2.2. Old Police Station Horticulture Shed - New Air Conditioning Installation.
6. Examples of New and Upgrade Projects within this category are:
 - 6.1. Main Streets progress:
 - 6.1.1. Hindley Street – next steps are largely dependent on higher level decisions within state government which are critical to moving forward with a preferred design. Meanwhile, the project team have commenced discussions with third party utilities and are seeking to undertake early contractor engagement. Associated risks relate to stakeholder engagement, budget and expectations around delivery timeframes.
 - 6.1.2. Hutt Street – A paper and workshop will be referred to the Infrastructure and Public Works Committee in July with line of sight to a market approach in early October for detailed design.

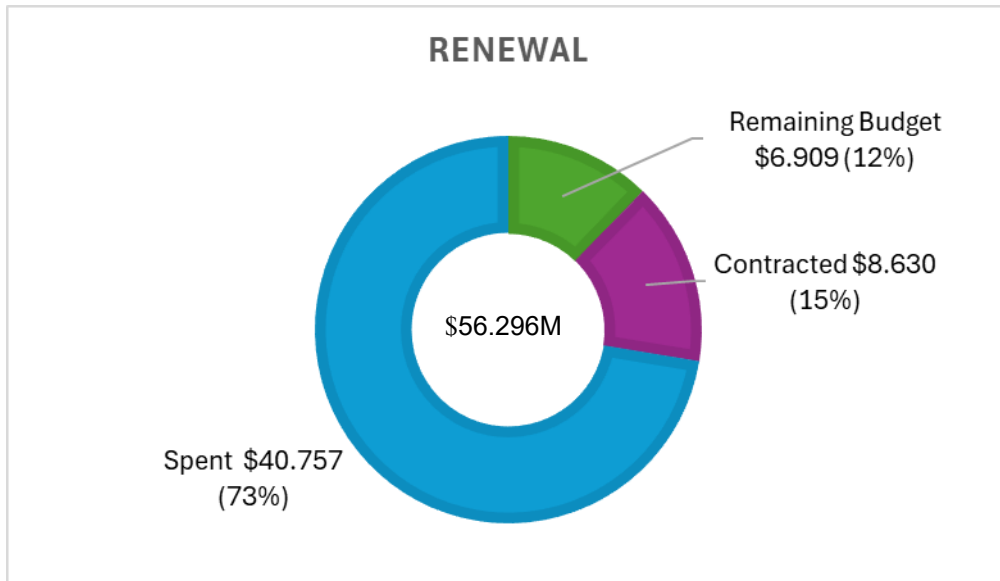
Recent progress has included the commissioning of an economic impact assessment report and draft engagement report through external providers. Works in progress include finalisation of a stormwater assessment that will support the broader street design.

- 6.1.3. Gouger Street – Key stakeholder design workshops were undertaken in March / April. Public consultation has been completed on the concept layout, while a detailed design consultancy has now been engaged. Decisions on materiality and service levels are being addressed by the project team with current risks on this project including designing within the budget constraints and managing community expectations.
- 6.1.4. O'Connell Street – Upgrades to the eastern footpath outside 88 O'Connell Street between Archer and Tynte Street will start in June 2025. Stakeholder engagement on concept design has been undertaken and the project team will return to the community at 70% design. Design and Construction of the western footpath between Archer and Tynte Streets has been bought forward to the 2025/26 financial year. Safety outcomes at the O'Connell Street / Archer Street intersection will be included in this package of works utilising Blackspot funding.
- 6.1.5. Melbourne Street – Work continues on the broader design plan following several minor upgrade elements in the street being delivered, including new furniture, planters and banners. Future scope will include installation of information signage for the Dunn Street car park which has now received planning approval; and hanging baskets. Wombat crossings will also be installed east and west of Jerningham Street, grant funded by the Department for Infrastructure and Transport (DIT).
- 6.2. Experience Adelaide Visitor Centre – Delivery of the smart Experience Adelaide Visitor Centre has commenced with this essential information resource to be located within the State Library on North Terrace, funded by the Commonwealth as part of the Adelaide City Deal.

Scope of the project includes:
 - 6.2.1. Design and fit-out of the centre including interactive / immersive spaces, service areas, retail, and ways to provide visitor information that excites and engages.
 - 6.2.2. Experiential technologies including hardware and software.
 - 6.2.3. Mobile / digital experience platform to connect with visitors pre and post visit and connect visitors with the city.
 - 6.2.4. Procurement - Tender for design and construct services underway. Discussions held between AEDA and State Library regarding the licence agreement and delivery model. State Library discussion regarding shared foyer space works is being undertaken.
- 6.3. Central Market Arcade Development - Since March the site has progressed from having 220 workers on-site to 270. The site workers are all now housed within the site using the builder's temporary amenity areas.
 - 6.3.1. Structural construction of the podium floor levels across the site is complete including basement to the level 4 podium deck. This has included the suspended slab construction, precast wall panel installations and progressive construction of the tower core jump form (both North and South towers) to level 14. The residential / hotel northern tower has reach level 8 while the commercial office southern tower is at level 6. Stripping of formwork has reached level 2 and fit out works include services trunk installation to ground and level 1, while blockwork walls are being put in across the basements to level 1 areas.
 - 6.3.2. Other important activities occurring concurrently are a wayfinding masterplan across the whole Market Square site including existing Central Market and UPark areas. The Adelaide Central Market Authority continues to manage the retail leasing component for the Market Expansion on ground floor
 - 6.3.3. Total budget expenditure is currently 98% of the \$31.9m approved budget. The financial year 2024/25 budget of \$21.841m is on track to be reached by year end having spent 96% year to date with the final claim currently under assessment.

Renewal Projects

7. Renewal Projects as of 31 May 2025 reflects \$40.757m in spend and a further \$8.630m in contracted works.



8. Renewal Project Summary:

- 8.1. In the 2024/25 financial year we are delivering 286 Renewal projects across the city. Our renewals program is on target to achieve its Asset Sustainability Ratio (>90%). This years' program has seen a heavy focus on our stormwater assets both with investigation and building an up-to-date stormwater management plan (SMP) for the city. This program has also delivered replacement stormwater assets (culverts, pipes and pits) in high-risk locations.
- 8.2. Five projects have reached practical completion in May 2025, including:
- 8.2.1. Bud Lighting Renewal - North Terrace - between King William Street and East Terrace
 - 8.2.2. Colonel Light Centre - Lift System Renewal
 - 8.2.3. Electrical switchboards above ground - Switchboard - Albert Bridge
 - 8.2.4. Mistletoe Park/ Tainmuntilla (Park 11) Shared Use Path Renewal and Public Lighting Upgrade
 - 8.2.5. Rundle Mall Fountain - Light Renewal

9. Examples of Renewal Projects within this category:

- 9.1. Roads Renewals - The purpose of this delivery program is to deliver road resurfacing works in line with the objectives of the Transport Asset Management Plan.
- 9.2. On site works have progressed, with resurfacing undertaken on multiple streets during April and May.
- 9.2.1. Grenfell Street (works ongoing)
 - 9.2.2. Playhouse Lane
 - 9.2.3. Gilles Arcade
 - 9.2.4. Sultram Place
 - 9.2.5. Blyth Street
 - 9.2.6. Patching works on Wakefield Street was also commenced.
- 9.3. During June, we expect to complete Wakefield Street, as well as undertake patching works in Morphett Street and Gouger Street, as well as complete the Grenfell Street works.
- 9.4. The Roads program is well on schedule and will deliver all expected outcomes for 2024/25.

- 9.5. Royal Avene project - Streetscape improvements on Royal Avenue are progressing well. The scope of this work includes renewal of road, kerb and water table and footpath assets. The project commenced on 22 April 2025 with an expected completion end of June 2025. The street community has been provided with regular updates of work progress and level of disruption has been kept minimal. Works have included renewal of a heritage spoon drain.
- 9.6. Vincent Street and Vincent Place Improvements - Streetscape Improvements on Vincent Street and Vincent Place (Gilles Street to South Terrace) are moving ahead with construction well commenced. The scope being delivered by contractor Gridlock Civil includes road rehabilitation, kerb and water table renewal, footpath and stormwater renewal and pedestrian and cycling improvements. Works commenced in April and are expected to take approximately 5 months to complete.
- 9.7. Fire Door Renewal program -The fire door renewal program is an extensive compliance project to address identified defects and ensure compliance with applicable fire safety regulations and standards across multiple City of Adelaide buildings. The program is well underway with most doors ordered and installation commencing. The project team are working closely with the Facilities team and stakeholders at designated renewal locations including the Bus Station, U-Park, Archives and Adelaide Town Hall.

Greening Adelaide Streets

10. Construction drawings have been issued for 28 streets, one less than April as one street has been deferred. Street designs are ongoing to ensure that tree planting will continue into the 2025/26 financial year as part of the 2025 planting season, which ends in Spring. Designs that have not been implemented in 2025 will form part of the 2026 planting season.
11. Tree planting is now increasing as pits are being completed in addition to trees planted in Halifax Street, adjoining Hurtle Square.
12. During May tree pits have been completed in Devonshire Place, Gawler Place, Eliza Street and James Street with trees being installed in Barton Terrace, King William Street, Strangways Terrace, Halifax Street and James Place.
13. Tree pit works are ongoing at Gawler Place, King William Street, Ifould Street, Eliza Street, Myers Street, Queen Street and Royal Place.
14. The table below shows the expected number of plantings to occur. Some trees are already in stock and ordering is not required.

Program Delivery Reporting Tool

	Stream 1	Stream 2	Stream 3	Stream 4	Totals
No. Trees @ IFT	35	16	53	190	294
No. Trees Ordered	33	16	53	235	337
Trees Planted Pre-April '25	0	16	0	1	248
Trees Planted April '25	0	0	0	16	
Trees Planted May '25	10	0	0	48	
Proposed Planting June '25	14	0	26	117	
No. Trees Planted	10	16	0	51	77

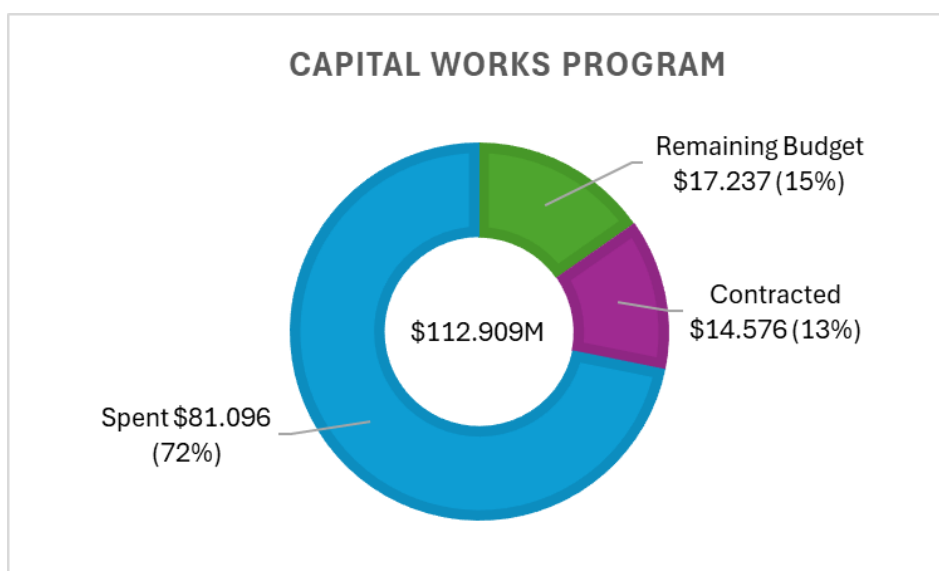
- 14.1. **Stream 1** – 2023/24 and 2024/25 Road and Footpath Renewals
- 14.2. **Stream 2** – Streetscape Projects
- 14.3. **Stream 3** – Heat Map Greening for small streets and laneways
- 14.4. **Stream 4** – Priority Boulevards and Squares

Forward Tree Planting Schedule

15. As designs are complete and Issue for Tender (IFT) is achieved, tree orders have increased from 255 in April to 337 in May.
16. The planting schedule outlined above shows current anticipated tree numbers for the end of the 2025 planting season with around 200 trees still expected to be planted by June 2025, with any trees not planted in June to follow as part of overall 2025 planting season.

Capital Works Program

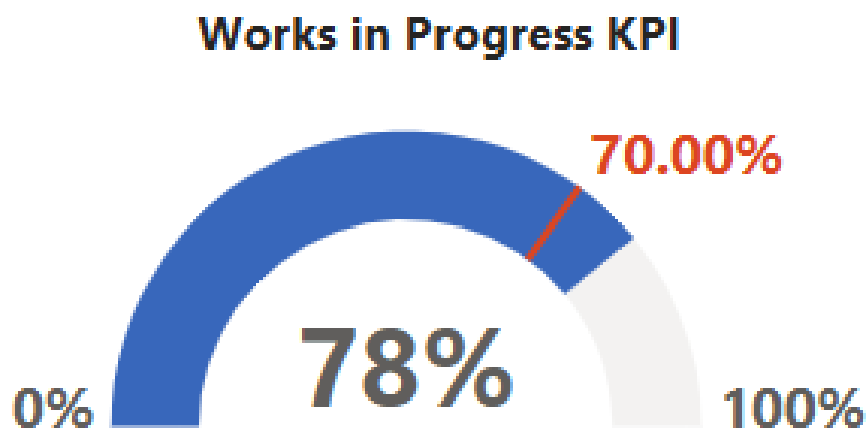
17. There are 479 projects within the approved program in the 2024/25 financial year.
18. Within the 2024/25 Capital Works Program there are currently 187 projects within the Initiate, Concept and Design phase.
19. The total value of projects within the Initiate, Concept and Design Phase is \$10.402m.
20. There are 292 projects in the Delivery Phase with a total value of \$102.506m. Of these projects, Practical Completion has been achieved on 24 New and Upgrade, 74 Renewals and nine combined New and Upgrade and Renewals projects – 107 projects in total.
21. The total expenditure against the Capital Works Program to the end of May 2025 is \$81.096m spent with a further \$14.576m contracted, totalling \$95.672m in the first 11 months.



22. Summary of commitments and expenditure by asset class for Month of May:

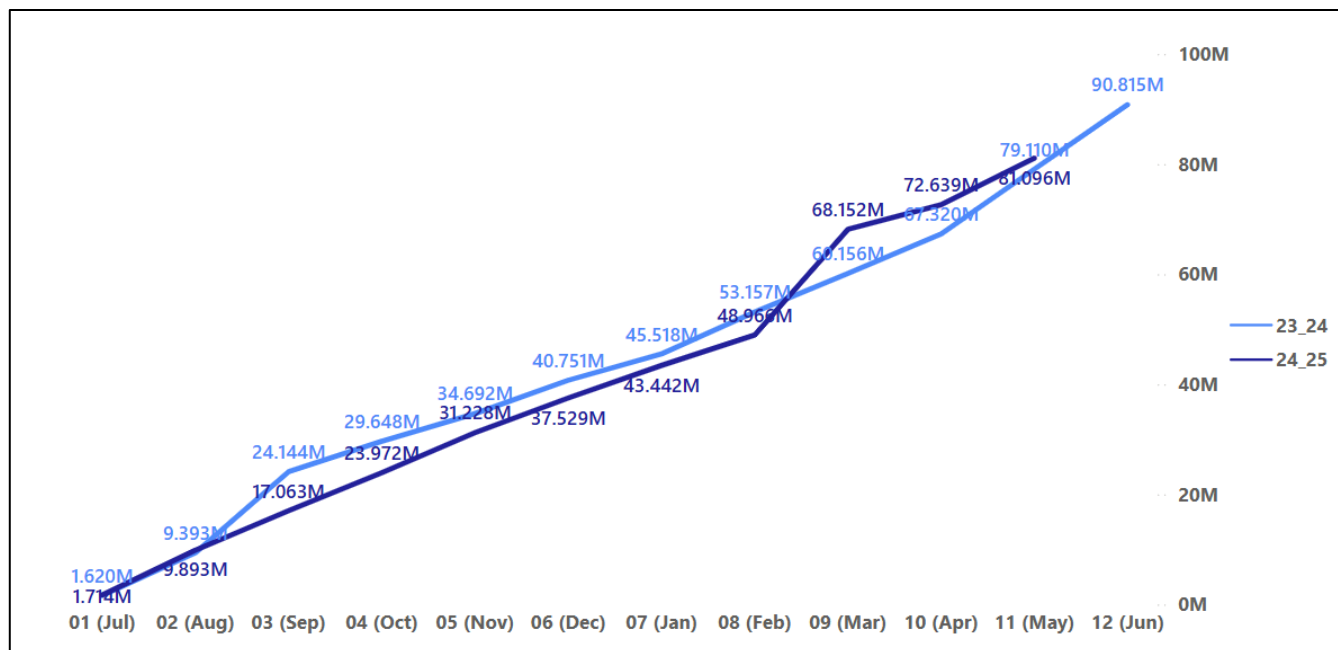
Capital Works	No. of Projects*	Approved Budget	Commitments	Expenditure	Remaining Budget
Asset Renewals	303	\$56.296	\$8.630	\$40.757	\$6.909
Corporate Overhead		\$5.665	\$0.000	\$5.068	\$0.598
Bridges	3	\$0.266	\$0.057	\$0.204	\$0.005
Buildings	50	\$11.751	\$1.718	\$8.388	\$1.645
ICT Renewals	18	\$3.102	\$0.613	\$2.061	\$0.428
Light'g & Electrical	31	\$3.462	\$0.403	\$2.530	\$0.530
Park Lands Assets	19	\$1.984	\$0.247	\$1.051	\$0.686
Plant and Fleet	11	\$2.235	\$0.233	\$1.713	\$0.289
Streets	1				
Traffic Signal	11	\$3.663	-\$0.021	\$3.433	\$0.251
Transport	96	\$14.644	\$2.997	\$11.464	\$0.183
Urban Elements	53	\$2.488	\$0.625	\$1.425	\$0.438
Water Infrastructure	10	\$7.036	\$1.758	\$3.421	\$1.856
New/Upgrade Projects	205	\$56.613	\$5.946	\$40.339	\$10.328
Total	479	\$112.909	\$14.576	\$81.096	\$17.237

23. Examples of those works completed or in progress are reflected in **Attachment A - Capital Works**.
24. Works in Progress (WIP) is the capitalisation of projects within ten weeks following Practical Completion. WIP currently sits at 78%. WIP KPI - 70%.



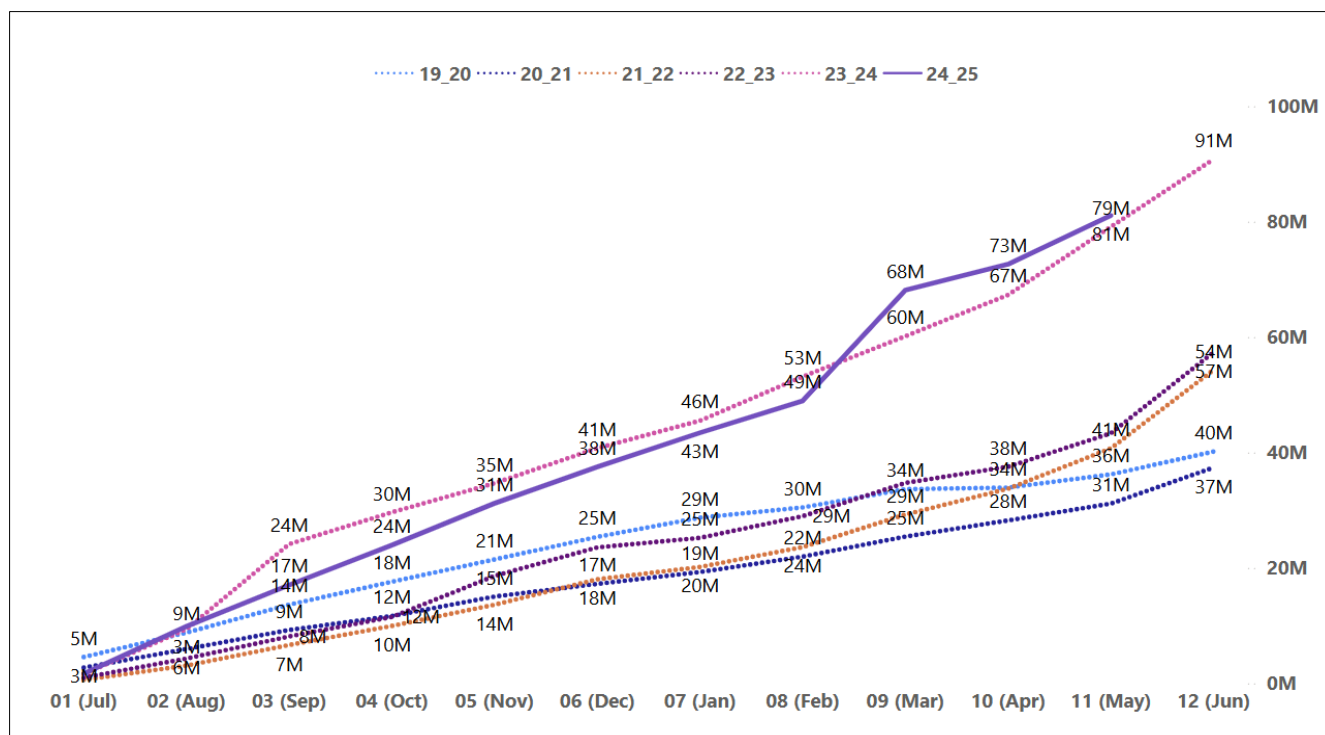
Capital Works Year on Year Spend Profile

25. The spend profile for May 2025 reflects a capital spend of \$81.096m year to date, compared to \$79.110m in May 2024. This represents a 3% increase on the same period last year.



Capital Works Five Year Spend Profile

26. The table below reflects the past five year spend performance.



Future Procurement Activities

27. The following procurement table represents early 2025/26 financial year procurement opportunities being progressed to the value of \$19m.

Project name	Project no.	Value (000's)	Procurement status
ACMA Market Floor Compliance – Western Wall	Z0593	200	Seeking RFQ to complete works
ACMA Installation of Automatic Exhaust Fan	Z7006	800	Ready to issue to market
ACMA Basement structural Rehabilitation	Z7014	500	Out to tender (4/June close)
CLC Level 9 fit out	Z0645	820	Sole select award - pending
Road & footpath asphalt renewal program	various	5850	Standing agreement extension: June +2 years
Glen Osmond / Park 17 improvements	X550	5504	Design progressing – aiming June to market
Strangway Terrace Street Lighting Renewal	Z0417	605	Procurement commenced – awaiting long lead time materials
Traffic Signal Cables and Conduit Renewal program	various	2421	PM evaluating requirements – expects early commencement of works,
Rymill Park Irrigation	Z2513	400	Procurement completed: BTM engaged
Integrated Climate Strategy	Z0121	2000	Multiple contractors engaged

28. Early engagement will provide a head-start to the 2025/26 Capital program and see design and construction commencing early. This opportunity is made possible through detailed procurement review of the capital plan and early preparation of tender packages ready for market.

Future Community Consultation and Engagement Activities

29. The following are some community consultation activities and engagements that are ongoing or planned:
 - 29.1. Stage 2 Frome Road Bikeways – information sharing with local stakeholders
 - 29.2. Greening program – ongoing consultation across the CBD
 - 29.3. Council infrastructure website – 19 projects showcased.
30. The information provided reflects 11 months of the 2024/25 financial year. For further details on the 2024/25 Capital Program, the Council Member Corporate Dashboard has a dedicated Capital Works section.

ATTACHMENTS

Attachment A – Capital Works Projects in Focus – May 2025

- END OF REPORT -

Capital Works May Update

Infrastructure & Public Works Committee

This report provides an overview of Capital Projects either complete or progressing for the month of May 2025.



Central Market Arcade Redevelopment

New/Upgrade



Further progress has been made on the two towers, where the Northern 'residential/hotel' tower is up to level 8 and the southern 'commercial' tower is commencing level 6.

Externally on the façade steel arch lintels are being installed. Fit-out works have reached the ground floor and level 1 with services trunk runs installation.

South Terrace & Hutt Street

New/Upgrade



Construction on the stormwater improvements and traffic signal upgrades is progressing steadily, with kerbing, drainage, garden beds, and signal upgrades well underway.

In June, major work will take place at the intersection, including road lowering and extensive asphalt resurfacing.

These improvements are designed to enhance drainage by directing stormwater away from the intersection.

Once the roadworks are complete, new signal masts will be installed to improve right-turn movements.

Greening Wakefield Street

New/Upgrade



Greening of the Wakefield Street median strip with 46 proposed new trees.

Trees will be planted once the median strip is ready with majority to be planted by end of June 2025.

Mills Terrace

Renewal and New/Upgrade

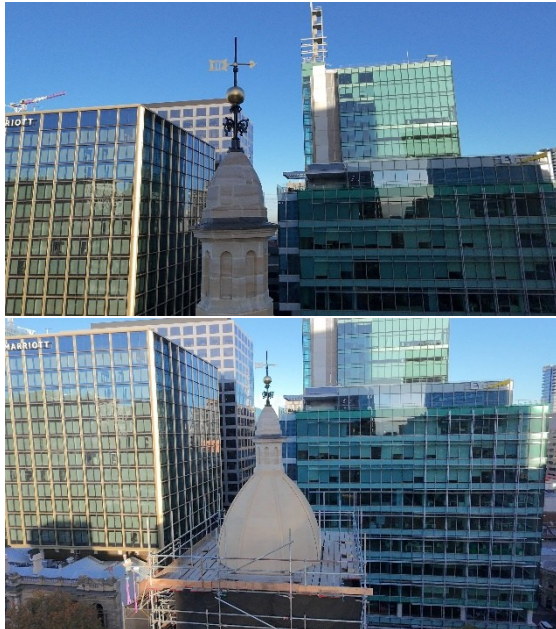


Road resurfacing of Mills Terrace from Childers Street to Barton Terrace West including tree surround renewals and new street trees.

Bike lane marking to be completed along with the planting of 5 new street trees.

Adelaide Town Hall Façade Conservation Works

Renewal



The Albert Tower scaffolding is starting to be removed unveiling the beautiful restoration.

The finial has been restored, and the gold gilding has been redone.

The lantern stone has been replaced. The stone was sourced locally and was hand carved to match the original stonework.

Lead flashing has been replaced around the tower and patching and grouting of the tower was also undertaken.

The original stonework has also been cleaned.

Works to be completed late August.

Royal Avenue

Renewal



Works have involved:

- New paving
- New kerb
- Works to the heritage spoon drain
- New road pavement
- WSUD kerbing to allow passive irrigation to tree pits
- New stormwater pits
- Landscaping

Works are progressing well, with Practical Completion expected end of June 2025

Botanic Creek Rehabilitation

Renewal



Renewal works in Rymill Park / Murlawirrapurka (Park 14) have achieved Practical completion.

Works involved:

- Removal of silt
- Bank stabilisation
- Channel reshaping
- Landscaping
- Community planting

Pennington Gardens Footpath

Renewal



Timber edging and resurfacing of the footpath has been completed in Pennington Gardens East, Red Gum Park / Karrawirra (Park 12).

Public Lighting LED Program

Renewal



The final public lighting project for 2024/25 is underway on Rundle Street with over 50% per cent of the street complete.

The warm colour complements many of the old heritage structures on the street.

Completion is expected in mid-June.

Brookman Fountain

Renewal



Works involved the replacement of the control system and pump.

The previous control system was 20 years old, resulting in a failure or two.

Funds were brought forward into 2024/25 to ensure that the renewal took place prior to the winter rain period, this work has been completed.

The replacement of the pump has recently been funded, and this will be completed by the end of June 2025.