



Christian Brothers College – Senior Campus

School Travel Safety Review – Draft Report

City of Adelaide

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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 addition 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	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: • 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.

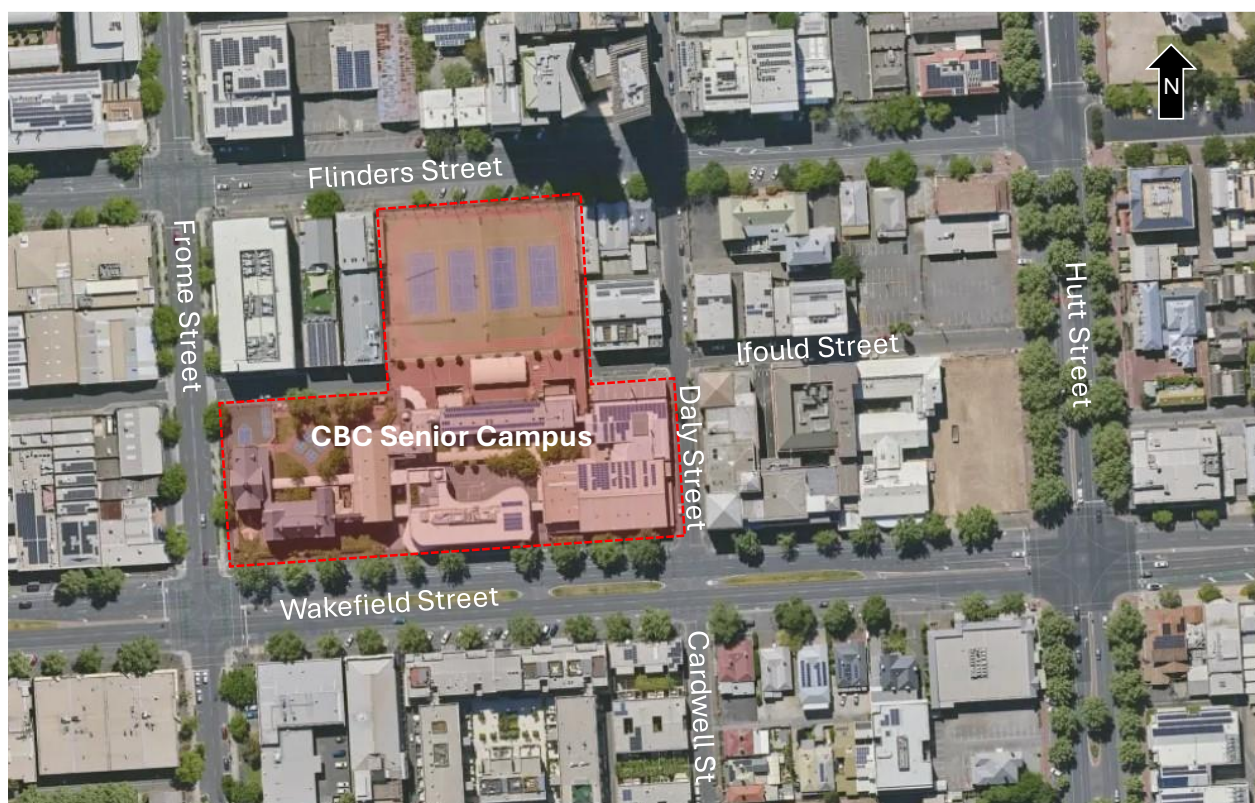


Figure 1.1 Christian Brothers College Senior Campus Location

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.

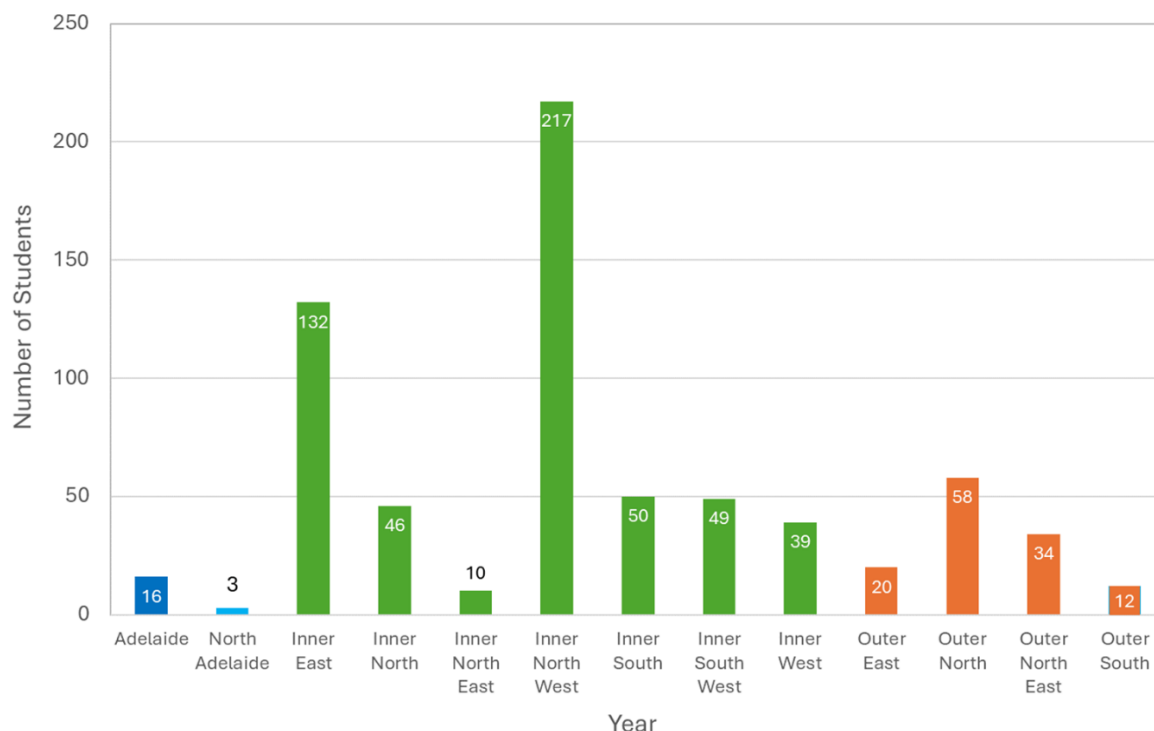


Figure 2.1 CBC Senior Campus Student Residence Location Analysis

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.

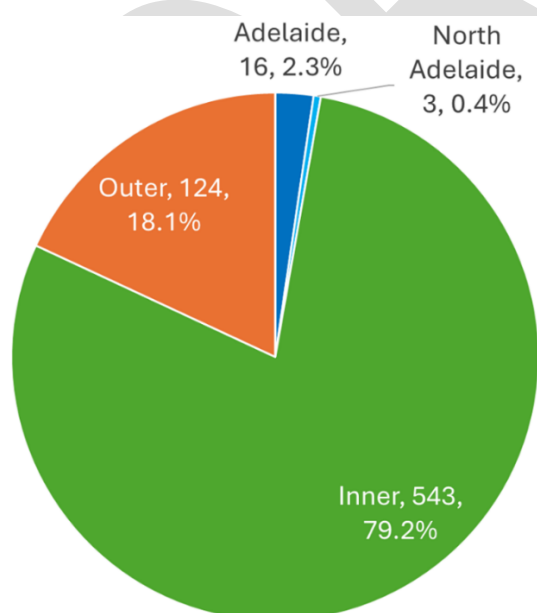


Figure 2.2 CBC Senior Campus Student Residence Area Analysis



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.

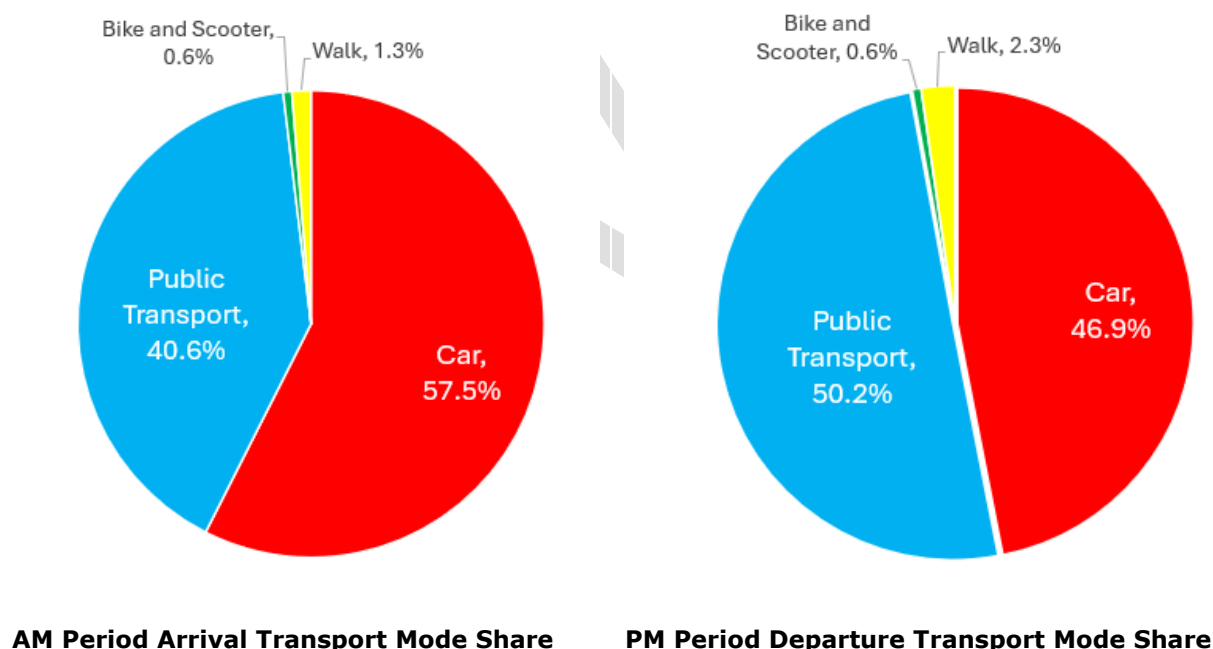


Figure 2.3 CBC Senior Campus Year 7-9 Students Transport Mode Shares in June 2024

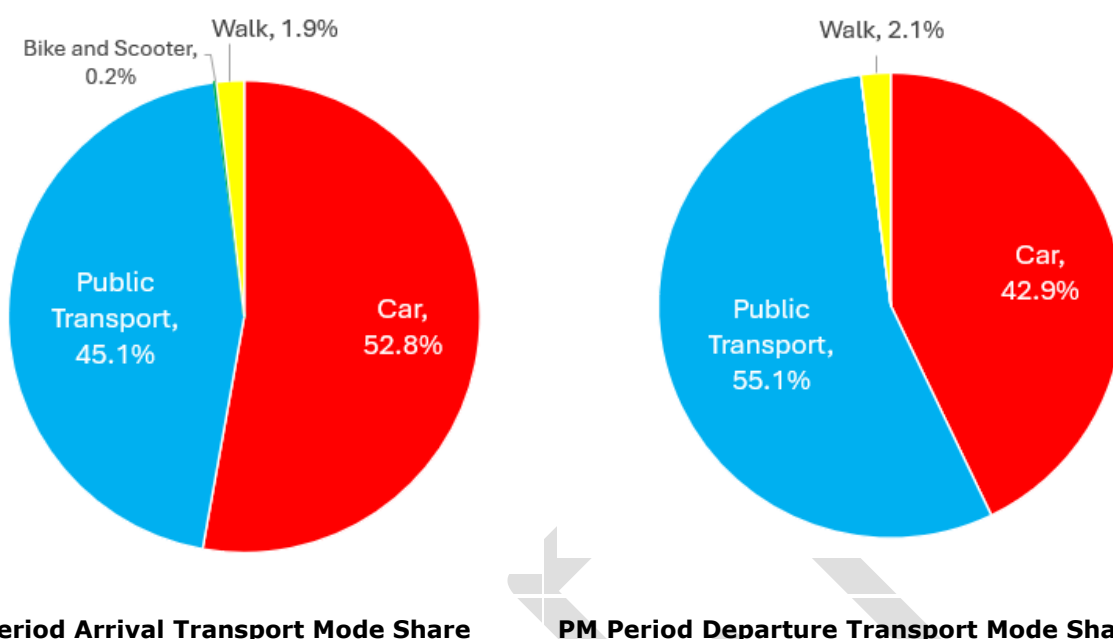


Figure 2.4 CBC Senior Campus Year 10-12 Students Transport Mode Shares in June 2024

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.

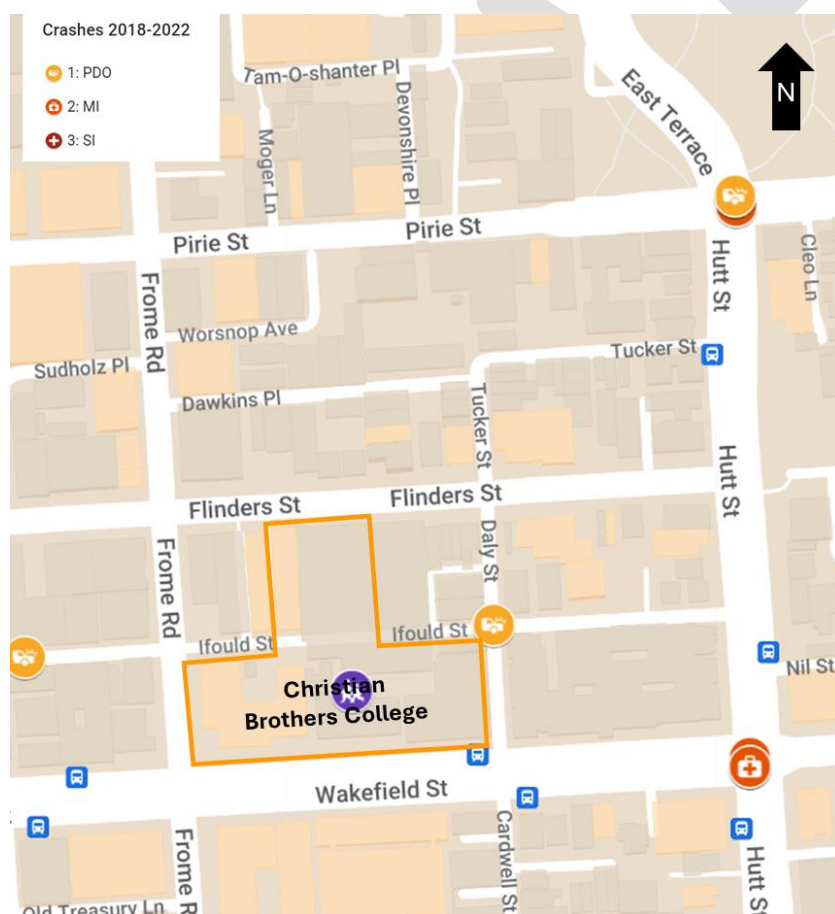


Figure 2.5 Crashes from 2018 to 2022 near CBC - Senior Campus



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.

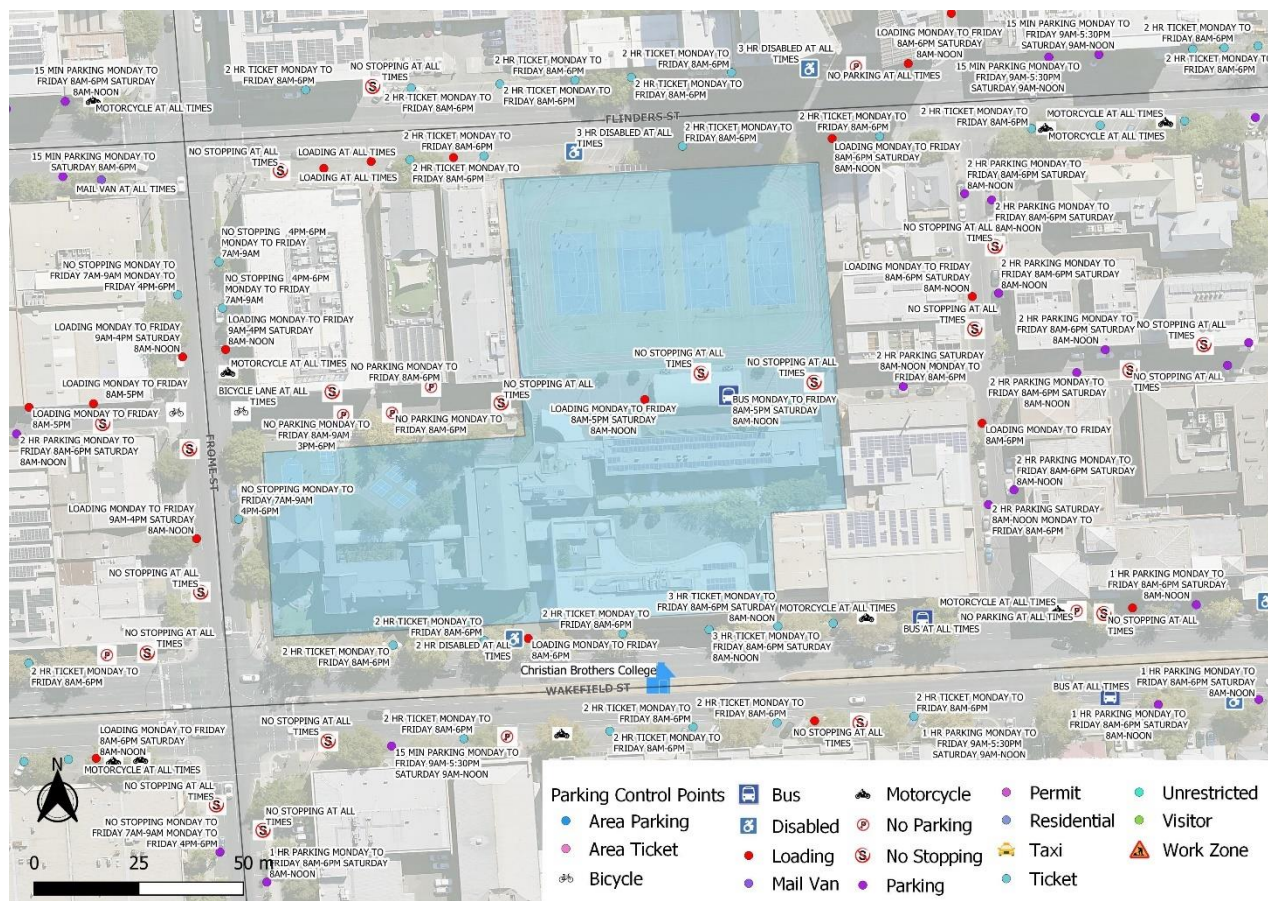
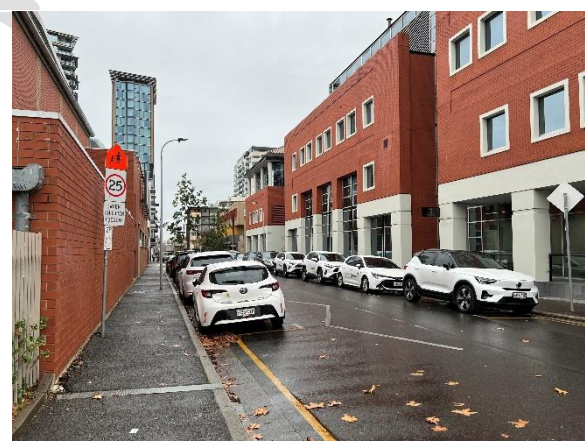


Figure 2.7 On-street Parking and Kiss and Drop Areas at the CBC Senior Campus

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

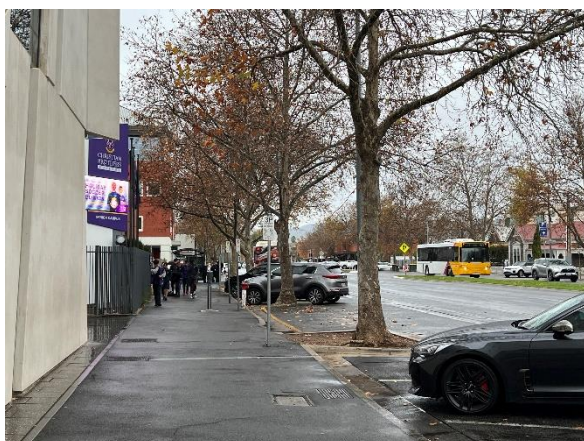


Parallel Timed parking in Daly Street in the 25 km/h school zone

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 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 .

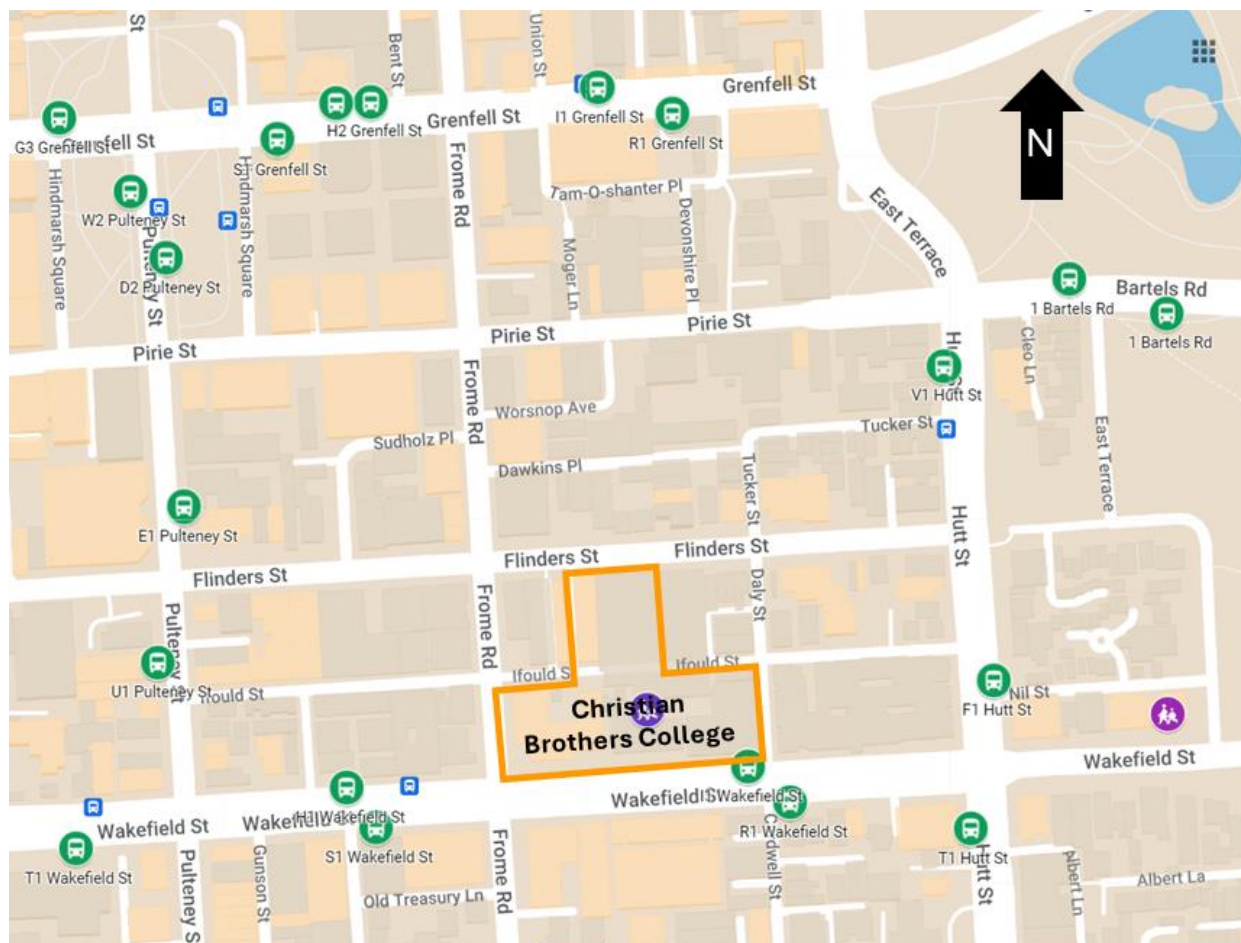


Figure 2.12 Public Transport Bus Stops close to the CBC Senior Campus



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.

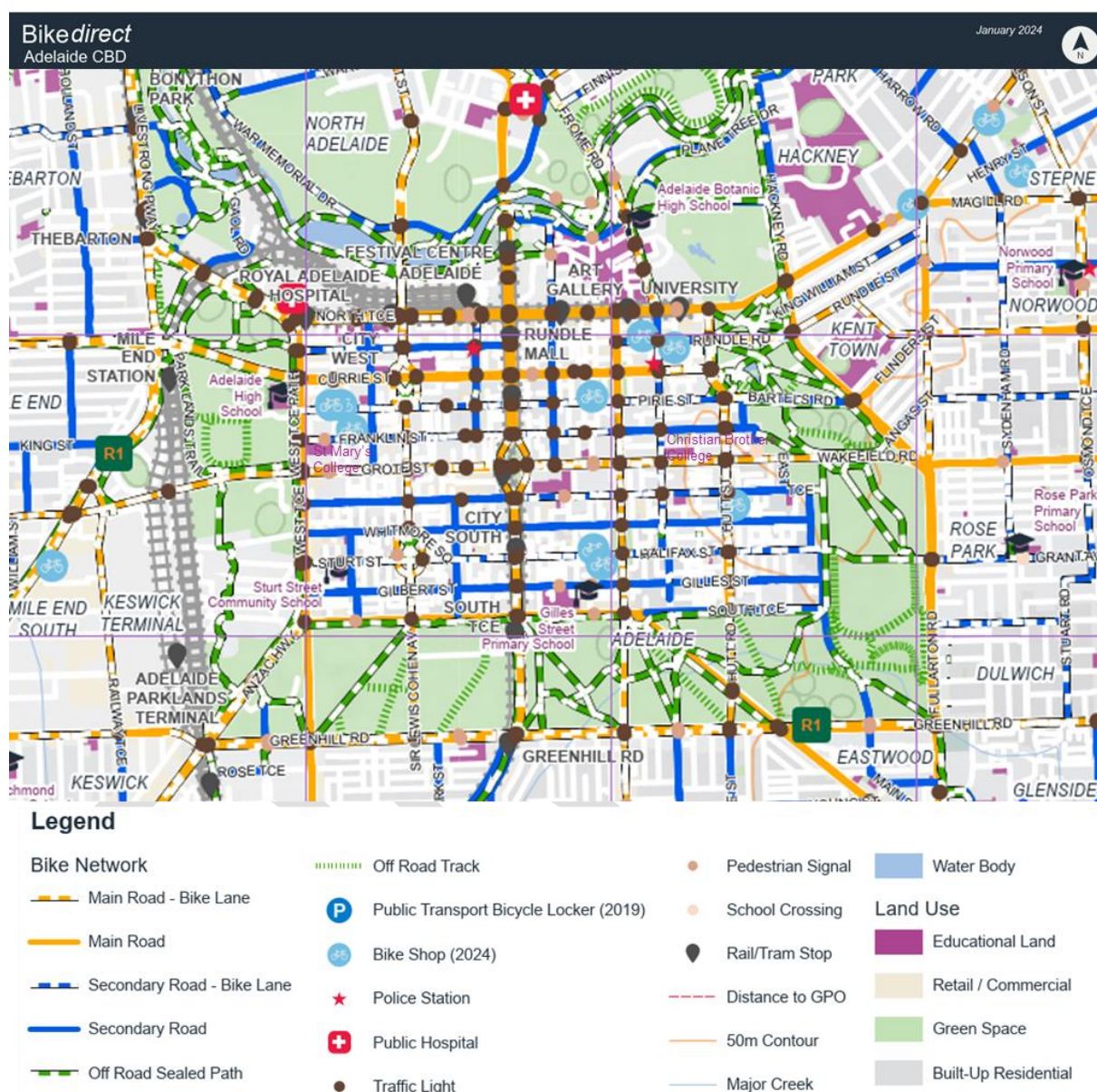
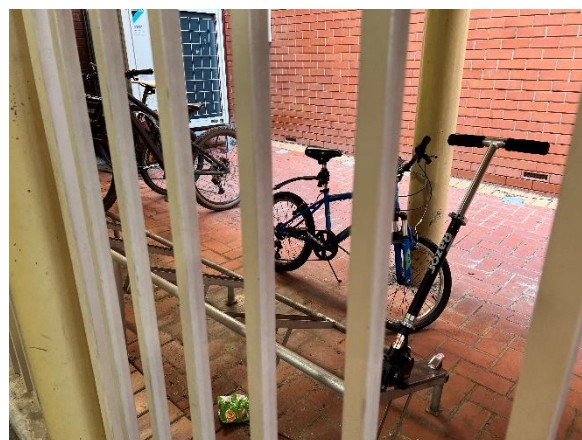


Figure 2.13 Cycling Network to the CBC Senior Campus

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.

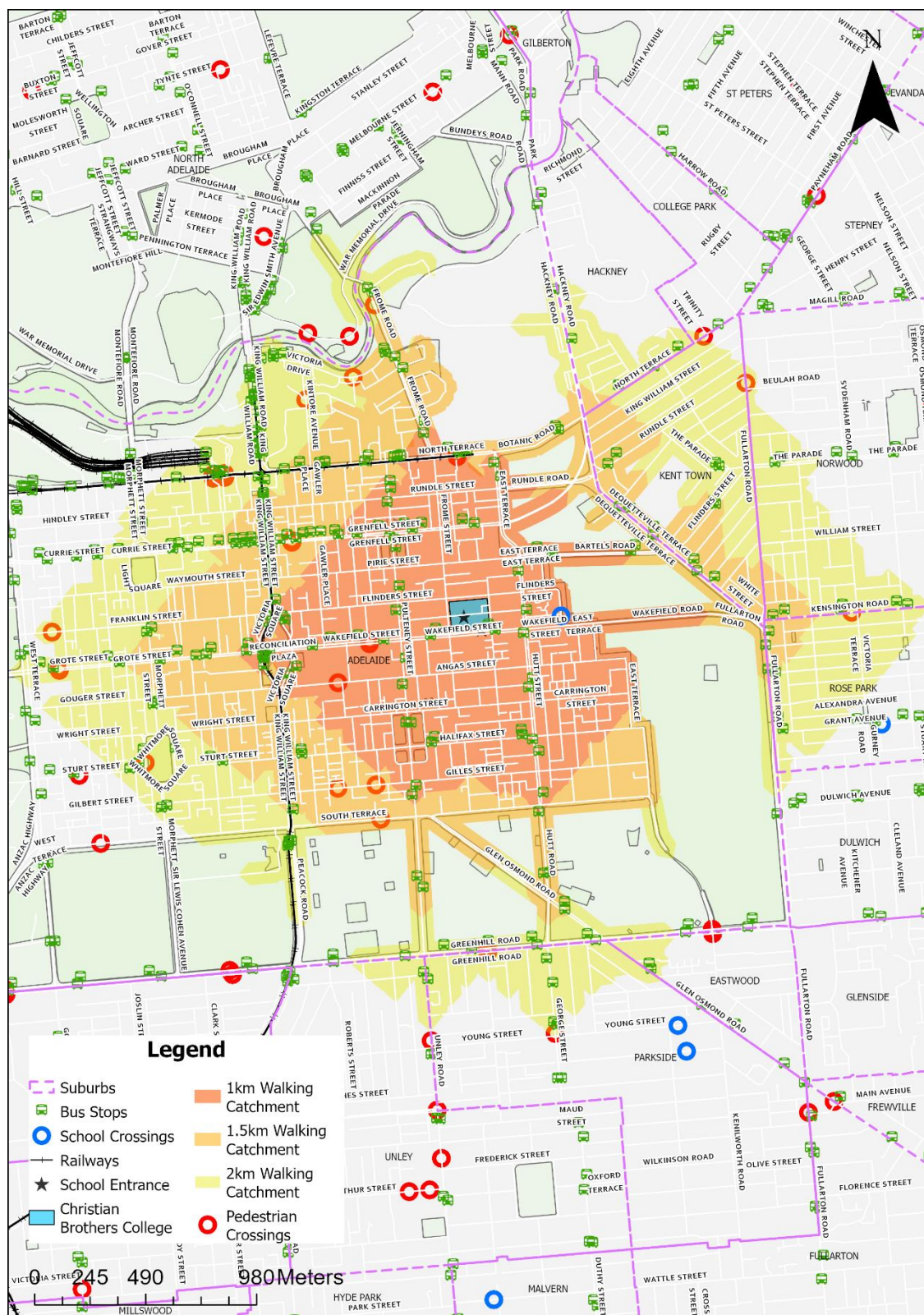


Figure 2.15 Walkable Access Catchment to the CBC Senior Campus



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:

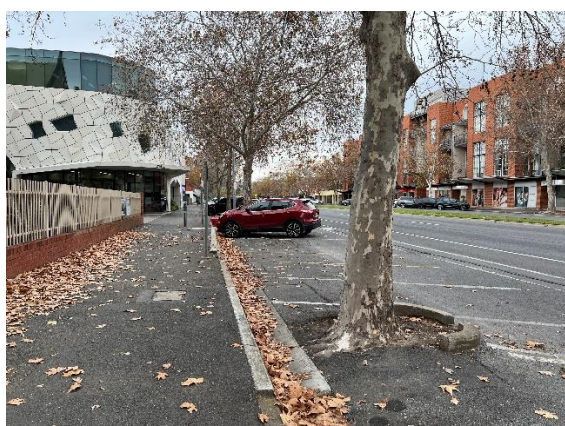
- The bus stop R1 on the south side of Wakefield Street is very popular with students in the PM period for the buses heading to Victoria Square to the tram stop, the more frequent bus routes and to Adelaide railway station. It is a high risk for students who walk midblock across Wakefield Street with 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



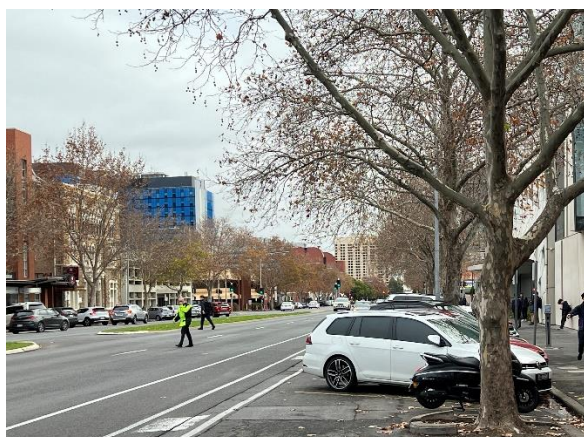
Vehicle making a U-turn in median of Wakefield Street to park in front of the school entrance

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

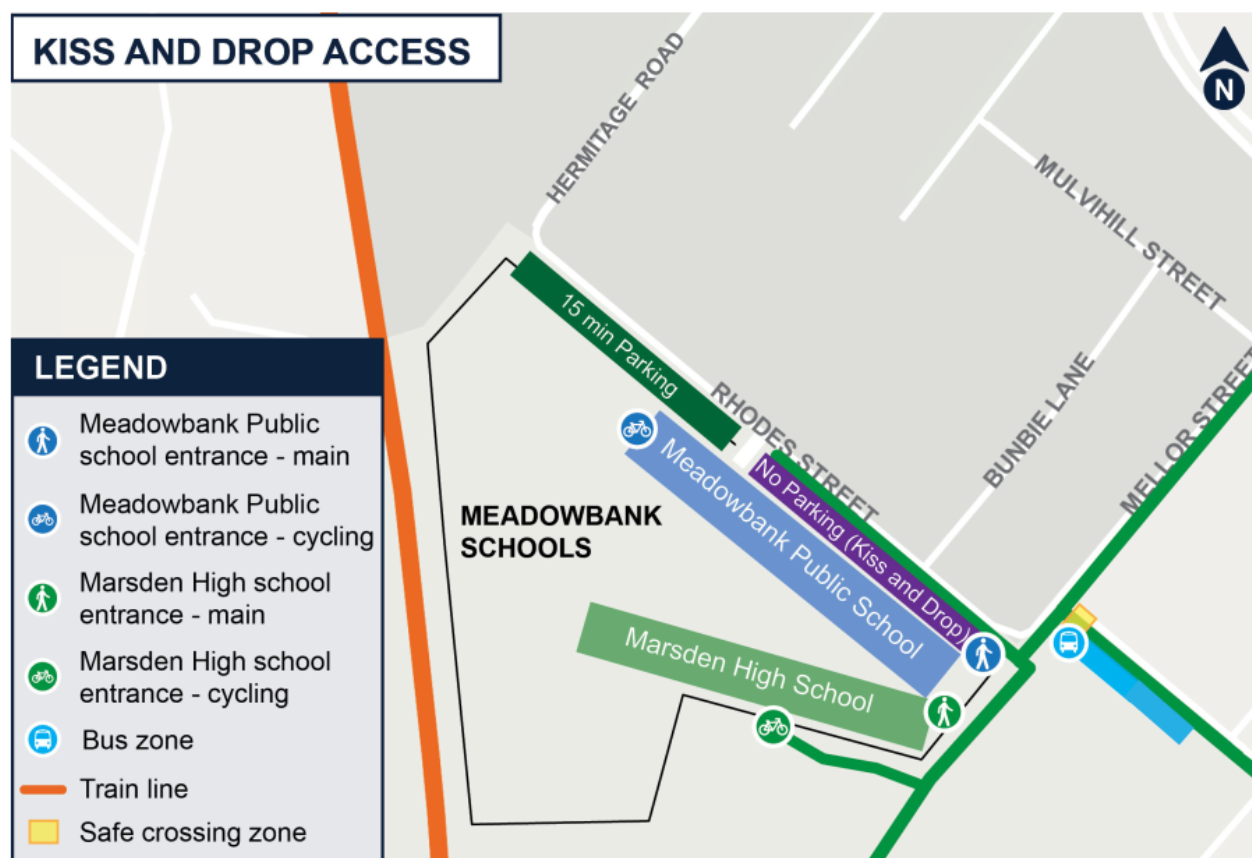
For more information contact:

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





NSW Department of Education – School Infrastructure

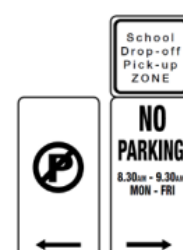


Safety tips for drivers using the Kiss and Drop zone

- 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

