

# **Upgrade to North Sydney Public School**

School Travel Plan

182 Pacific Highway, North Sydney 17/10/2023

Ref: P1903r01v08



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Appendix D. Signage and Linemarking Plan

**Appendix E. Transport Access Guide** 

Appendix F. School Drop Off and Pick Up Guidance

Appendix G. Drivers' Code of Conduct

Appendix H. North Sydney PS Travel Mode Survey

Appendix I. Response to TfNSW and Council Comments

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# **Glossary**

Acronym	Description
AGRD	Austroads Guide to Road Design
AGTM	Austroads Guide to Traffic Management
CC	Construction Certificate
Council	North Sydney Council
DCP	Development Control Plan
DoS	Degree of Saturation
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A	Environmental Planning and Assessment
EPPDM	Education Precinct Public Domain Masterplan
FSR	Floor space ratio
GFA	Gross Floor Area
HRV	Heavy Rigid Vehicle (as defined by AS2890.2:2018)
LEP	Local Environmental Plan
LGA	Local Government Area
LoS	Level of Service
MRV	Medium Rigid Vehicle (as defined by AS2890.2:2018)
NHVR	National Heavy Vehicle Regulator
NSDCP	North Sydney Development Contributions Plan
OC	Occupation Certificate
OSHC	Out of School Hours Care
OTAMP	Operational Transport and Access Management Plan
RMS Guide	Transport for NSW (formerly Roads and Traffic Authority), Guide to Traffic Generating Developments, 2002
SEAR	Secretary's Environmental Assessment Requirements
SINSW	School Infrastructure New South Wales
SRV	Small Rigid Vehicle (as defined by AS2890.2:2018)
SSDA	State Significant Development Application
STP	School Travel Plan
TDT 2013/04a	TfNSW Technical Direction, Guide to Traffic Generating Developments – Updated traffic surveys, August 2013
TfNSW	Transport for New South Wales
TA	Transport Assessment
veh/hr	Vehicle movements per hour (1 vehicle in & out = 2 movements)



### 1 Introduction

### 1.1 Background

Ason Group has been commissioned by School Infrastructure NSW (SINSW) on behalf of the Department of Education (DOE) to prepare a School Travel Plan (STP) for submission to Department of Planning and Environment (DPE) in response to the Conditions of Consent SSD - 11869481, granted 21 February 2022, for the upgrade of North Sydney Demonstration School.

Specifically, Condition D19 of SSD - 11869481 specified the following requirements, addressed in this report.

#### **School Transport Plan**

D19: Prior to the commencement of operation, a School Transport Plan (STP), must be submitted to the satisfaction of the Planning Secretary. The plan must:

- (a) be prepared by a suitably qualified consultant in consultation with Council and TfNSW;
- (b) include arrangements to promote the use of active and sustainable transport modes, including:
  - i. objectives and mode share targets (i.e. Site and land use specific, measurable and achievable and timeframes for implementation);
  - ii. specific tools and actions to help achieve the objectives and mode share targets;
  - iii. details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of users of the development.
- (c) include operational transport access management arrangements, including:
  - i. detailed pedestrian analysis including the identification of safe route options to finish times to ensure students and staff are able to access and leave the Site in a safe and efficient manner during school start and finish;
  - ii. the location of all car parking spaces on the school campus and their allocation (i.e. staff, visitor, accessible, emergency, etc.);
  - iii. the location and operational management procedures of the drop-off and pick-up parking, including staff management/traffic controller arrangements;
  - iv. the location and operational management procedures for the drop-off and pick-up of students by buses and coaches including staff management/traffic controller arrangements;
  - v. delivery and services vehicle and bus access and management arrangements;
  - vi. management of approved access arrangements;
  - vii. potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing drop-off and pick-up zones;
  - viii. car parking arrangements and management associated with the proposed use of school facilities by community members; and
- (d) measure to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibilities for relevant employees involved in the implementation of the plan; and
- (e) a monitoring and review program.



#### 1.1.1 Site Amenities, Existing Conditions & Catchment Analysis

**Section 2** of this Plan details the location and amenities of the site, i.e., bicycle parking, carparking, access locations, and drop-off / pick-up facilities.

Analysis is also provided on the anticipated mode share of the school for students and staff when the upgrade works are completed. Details regarding the public transport within the area and pedestrian accessibility are also provided.

#### 1.1.2 School Travel Plan

**Section 3** of this Plan, describes the School Travel Plan (STP) and is intended to develop a package of site-specific measures to promote and maximise the use of sustainable travel modes, including walking, cycling, public transport, and carpooling. These strategies will assist in less reliance on the use of private vehicles for travel to and from the school, supporting sustainability initiatives for growth into the future, providing sustainable travel modes that support independent travel of children attending the school and potential health benefits associated with walking, scooter riding and bicycle riding.

The STP sets out objectives and strategies to assist the School in achieving green travel goals to improve sustainability.

It also includes a review of the existing transport choices and sets targets so that the effective implementation of the Plan can be assessed. These targets are intended to be realistic but ambitious enough to initiate substantiative behavioural change to achieve the desired outcomes, given existing and future multi-modal transport networks. This is expected to be coordinated with the School or their representatives. It shall be reviewed regularly to ensure it remains relevant and reflective of current conditions.

#### 1.1.3 School Transport Operations and Access Management Plan

**Section 4** of this Plan, herein referred to as the School Transport Operations and Access Management Plan (OTAMP) is to provide guidance in relation to the traffic management arrangements for the site. The overall objective is to ensure safe and efficient movement of vehicles, students, visitors, and staff. In particular, this Plan details the following:

- A pedestrian access plan;
- Drop-off / Pick-up facilities management plan;
- Car parking plan;
- Servicing plan; and
- Details on the governance and administration of the plans.

# 1.2 Response to Conditions

In response to Condition D19 of the Development Consent SSD-11869481 issued by Department of Planning and Environment on 21 February 2022, the following table provides details of the requirement of



Condition D19 and respective response to the conditions reference demonstrating compliance with the condition.

Table 1: Response to Conditions

CONDITION	CONDITION	ASON GROUP RESPONSE
NO.	33121131	AGGIT GROOF REGISTREE
D19 (a)	Prior to the commencement of operation, a School Transport Plan (STP), must be submitted to the satisfaction of the Planning Secretary. The plan must: be prepared by a suitably qualified consultant in consultation with Council and TfNSW;	Details of author's credentials are outlined in Appendix A.
D19 (b) (i)	include arrangements to promote the use of active and sustainable transport modes, including: objectives and mode share targets (i.e. Site and land use specific, measurable and achievable and timeframes for implementation);	Refer to section 3 of the report for details
D19 (b) (ii)	specific tools and actions to help achieve the objectives and mode share targets;	Refer to section 3.2 of the report for details
D19 (b) (iii)	details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of users of the development	Refer to section 5 and 6 of the report
D19 (c) (i)	include operational transport access management arrangements, including: detailed pedestrian analysis including the identification of safe route options to finish times to ensure students and staff are able to access and leave the Site in a safe and efficient manner during school start and finish;	Refer to section 4 of the report
D19 (c) (ii)	the location of all car parking spaces on the school campus and their allocation (i.e. staff, visitor, accessible, emergency, etc.);	Refer to section 2.2 of the report
D19 (c) (iii)	the location and operational management procedures of the drop-off and pick-up parking, including staff management/traffic controller arrangements;	Refer to section 4.1.9 of the report
D19 (c) (iv)	the location and operational management procedures for the drop-off and pick-up of students by buses and coaches including staff management/traffic controller arrangements;	Refer to section 4.1.12 of the report
D19 (c) (v)	delivery and services vehicle and bus access and management arrangements;	Refer to section 4 of the report
D19 (c) (vi)	management of approved access arrangements;	Refer to section 4 of the report, access arrangements will be communicated to all



		parties of the school via the Transport Access Guide included in Appendix E.
D19 (c) (vii)	potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing drop-off and pick-up zones;	Refer to section 4 of the report
D19 (c) (viii)	car parking arrangements and management associated with the proposed use of school facilities by community members; and	Refer to section 4.1.10 of the report
D19 (d)	measure to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibilities for relevant employees involved in the implementation of the plan; and	Refer to section 5 of the report
D19 (e)	a monitoring and review program.	Refer to section 6 of this report.

### 1.3 The School

This SSDA granted consent for alterations and additions to the existing North Sydney Public School which entails:

- Demolition of the existing hall (building B), haven building (building C) and 6 temporary buildings;
- Construction of a three-storey building comprising:
  - staff administration rooms;
  - 16 homebases
  - a new library;
  - hall;
  - out of school hours care facilities;
  - covered outdoor learning area;
  - 73 bicycle parking spaces;
  - End of trip facilities for staff; and
  - services, amenities and access.
- New entry gate and forecourt from Bay Road;
- Internal refurbishment of building G ground floor from the existing library to 3 homebases;
- Capacity for an increase in student numbers from 869 to 1,012;
- Increase of 7 staff members, for a total of 87 staff members; and
- Associated tree removal, landscaping and excavation.

#### The School maintains:

 The gates and fence of former Crows Nest House including the entrance from the Pacific Highway and Bay Road;



- Existing gate along McHatton Street;
- The outdoor play area to the east of Building A;
- Existing covered outdoor learning area adjacent to Building A;
- The basketball courts and staff carpark in the western portion of the site;
- The significant tree planting on all school boundaries;
- Buildings A, D and F noting minor internal refurbishments are being undertaken outside of the SSDA scope of work (exempt development) to improve student amenities and canteen; and
- Building G noting ground floor internal refurbishment is proposed in the SSDA.

Notably, the upgrades do not propose changes to following traffic and transport elements:

- On-site at-grade car parking providing 50 car parking spaces, including two accessible car spaces, accessed via McHatton Street
- Existing pedestrian access locations, as follows:
  - Three (3) pedestrian access points from McHatton Street (and associated school signage at two of the entrances);
  - One (1) pedestrian access point from the Pacific Highway; and
  - One (1) pedestrian access point from Bay Road.

Reference should be made to the reduced plans provided in the Figure 1.

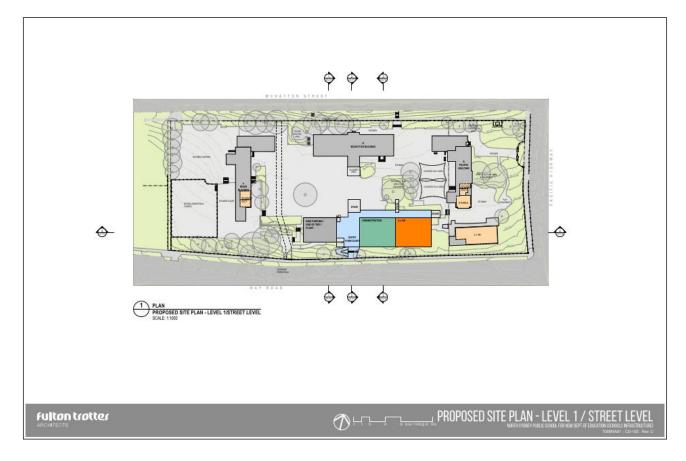


Figure 1: Site Plan (received 2 August 2021)

## 1.4 Ongoing Consultation

Over the course of the development of this Plan, Ason Group has consulted with key stakeholders including Transport for NSW (TfNSW), North Sydney Council, Sydney Buses, the School Principal and the SINSW. This report provides details of consultation undertaken by the Project Team in its preparation of this STP.

### 1.4.1 Transport Working Group

As part of the initiatives outlined in this document, a Transport Working Group has been established as the first point of consultation for any traffic and transport-related queries that the school may encounter.

At present, the current entities within the Transport Working Group are referred below.

IABLE 2	IKANSPUR	I WORKING	GROUP

Organisation	Personnel	Role/Position
Acon Croun	Dora Choi	Principal Lead
Ason Group	Wendy Zheng	Senior Design Traffic Engineer
North Sydney Council	Iman Mohammadi	Service Manager - Contracts and Projects
TfNSW	Zhaleh Najari Alamouti	Network and Safety Officer
Busways	Steve Grady	Network Infrastructure Supervisor  – Sydney
North Sydney Public School	Fiona Davis	Principal

### 1.4.2 Consultation Post SSD Approval

Details of the consultation with relevant stakeholders are presented in the table below and Appendices B - D.

TABLE 3: POST APPROVAL COUNCIL CONSULTATION RECORD			
Identified Party to Consult:	North Sydney Council		
Consultation type:	On-site meeting & E-mail correspondence		
When is consultation required?	Prior to project commencement		
Why	D19: Prior to the commencement of operation, a School Transport Plan (STP), must be submitted to the satisfaction of the Planning Secretary. The plan must:  (a) be prepared by a suitably qualified consultant in consultation with Council and TfNSW;		



When was consultation scheduled/held	<ul><li>04 July 2023</li><li>01 August 2023</li></ul>	
When was consultation held	<ul><li>04 July 2023</li><li>01 August 2023</li></ul>	
Identify persons and positions who were involved	Traffic Consultant – Sadeepth Bandaranayake (Traffic Engineer) Council – Max White (Sustainable Transport Project Coordinator)	
Provide the details of the consultation	The Draft School Travel Plan was discussed for Council's consultation. Comments were received.	
What specific matters were discussed?	Recommendations made by Council, see Appendix I for responses to Council's comments.	
What matters were resolved?		
What matters are unresolved?	Attempts were made to contact Council seeking endorsement via phone on 10 August 2023, 10 October 2023 and 17 October 2023, no responses were received.	
Any remaining points of disagreement?		
How will SINSW address matters not resolved?		

TABLE 4: POST APPROVAL TFNSW CONSULTATION RECORD			
Identified Party to Consult:	Transport for NSW		
Consultation type:	Teleconference & E-mail correspondence		
When is consultation required?	Prior to project commencement		
Why	D19: Prior to the commencement of operation, a School Transport Plan (STP), must be submitted to the satisfaction of the Planning Secretary. The plan must:  (a) be prepared by a suitably qualified consultant in consultation with Council and TfNSW;		
When was consultation scheduled/held	<ul><li>08 June 2023</li><li>22 June 2023</li></ul>		



When was consultation held	<ul><li>08 June 2023</li><li>22 June 2023</li><li>30 June 2023</li></ul>		
Identify persons and positions who were involved	Traffic Consultant – Sadeepth Bandaranayake (Traffic Engineer), Dora Choi (Principal Lead – Traffic Management & Operations)  TfNSW – Sophia Greave (Travel Demand Project Manager)		
Provide the details of the consultation	The Draft School Travel Plan was discussed for TfNSW' consultation. Comments were received.		
What specific matters were discussed?	Recommendations made by TfNSW, see Appendix I for responses to TfNSW comments.		
What matters were resolved?	Confirmation of updating the report as per TfNSW comments were had between Dora Choi and Sophia Grieve. An updated Travel Access Guide was sent to Sophia Grieve with approval via phone.		
What matters are unresolved?			
Any remaining points of disagreement?			
How will SINSW address matters not resolved?			

TABLE 5: POST APPROVAL SCHOOL PRINCIPAL CONSULTATION RECORD			
Identified Party to Consult:	School Principal		
Consultation type:	Teleconference & E-mail correspondence		
When is consultation required?	Prior to school upgrade operations.		
Why	The Action Plan requires school principal and staff participation.		
When was consultation scheduled/held	22 November 2022		
When was consultation held	22 November 2022		



Identify persons and positions who were involved	Traffic Consultant - Wendy Zheng (Project Manager)  School Representative – Fiona Davis (Principal), Aisling Duke (Deputy Principal), Ashley Grimmond (Deputy Principal)  Taylor Construction – Daniel Wood (Senior Contract Administrator)  Turner & Townsend – Stephanie Leaper (Project Manager)		
Provide the details of the consultation	Traffic consultants presented the draft School Travel Plan to the School Principal and deputies for feedback.		
What specific matters were discussed?	<ul> <li>The header photos in the TAG needs to be updated as the area with the hands have been demolished during construction</li> <li>TAG is to be updated with the school bus details</li> <li>The TfNSW drop off initiatives need to be updated to the North Sydney Council drop off initiatives</li> <li>The school would like to be supplied with regular messaging regarding transports to the school community</li> <li>During the monitoring, the principal would like to be able to share the travel mode survey results with the school community</li> <li>The principal is adamant that her staff will not be taking on the School Travel Coordinator role</li> </ul>		
What matters were resolved?	<ul> <li>The TAG has been updated with the school bus details and the header has been changed</li> <li>School drop off initiatives has been updated with the North Sydney School drop off / pick up procedures</li> </ul>		
What matters are unresolved?	Transport messaging, travel mode monitoring and school coordinator duties / role is currently being determined by SINSW.		
Any remaining points of disagreement?	n/a		
How will SINSW address matters not resolved?	n/a		

In addition to the above meetings, Ason Group has undertaken further liaison with North Sydney Council and North Sydney Public School in the development and finalisation of this plan.

# 1.5 Key References

In preparing this Plan, Ason Group has made reference to the following key planning documents:

- North Sydney Development Contributions Plan 2013, Amended 17 November 2020;
- Education Precinct Public Domain Masterplan, prepared by Oculus for North Sydney Council;



- North Sydney Council Cycling Guide and Map;
- North Sydney Integrated Cycling Strategy, Final (Post Exhibition) 18 June 2014;
- North Sydney Council Walking Map; 2009
- NSW Department of Education, Master planning guidelines for schools, October 2020
- NSW Department of Education, SINSW Community of Practice Architects + Transport Planners, 29th October 2020
- NSW Department of Education, Educational Facilities Standards and Guidelines (EFSG Guide)
- NSW Government, Planning Guidelines for Walking and Cycling, November 2019;
- Supplement to Australian Standard AS 1742.10-2009, Manual of Uniform Traffic Control Devices Part 10: Pedestrian control and protection Version 3.1 (21.039 – 16 March 2021)



# **2 Transport Conditions**

### 2.1 Site Location

The site, Lot 1 in DP 183591 and Lot 1 in DP 184559, is located at 182 Pacific Highway, North Sydney NSW 2060. The site is bounded by the Pacific Highway to the east, McHatton Street to the north, low density residential land to the west and Bay Road to the south, is essentially rectangular in shape and has an approximate area of 1.93 hectares.

The site is currently occupied by North Sydney Public School, located adjacent to the North Sydney CBD and within proximity to a number of educational establishments including the North Sydney campus of the Australian Catholic University, Shore's preparatory and senior schools, Monte Sant'Angelo Mercy College and Cammeraygal High School.

The North Sydney Public School is currently a primary school and includes the following building and facilities:

- Five (5) existing buildings;
- Six (6) demountable single-storey buildings;
- A number of outdoor spaces;
- At-grade car parking accommodating 50 car parking spaces, inclusive of 2 accessible car spaces, accessed via McHatton Street:
- Five (5) pedestrian accesses, including three (3) along the McHatton Street frontage and one (1) along each of the frontages to Bay Road and the Pacific Highway; and
- 20 on-site bicycle/ scooter parking spaces.

The Site and surrounding context is demonstrated in Figure 2 and Figure 3, below.



Figure 2: Site Location



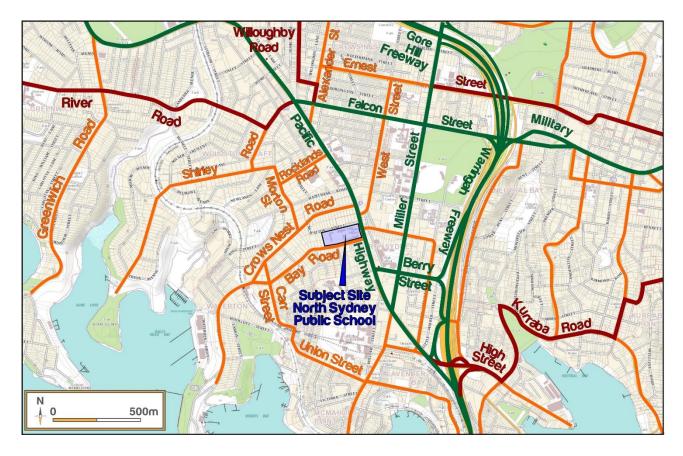


Figure 3: Site Context and Road Hierarchy

# 2.2 Post Project Completion Site Transport Facilities

As it relates to travel planning, once construction works are complete, the School and immediate surroundings of the School Site will provide the following transport facilities:

- 73 new on-site bicycle parking spaces;
- Retain the existing 50 on-site car parking spaces for staff;
- Retention of the time restricted on-street Kiss and Ride area along McHatton Street which can accommodate approximately 10 vehicles.
- Proposed conversion of existing 1/4P parking along the western end of the Bay Road frontage of the school to a Kiss and Ride (No Parking restriction).
- A single bus bay on Bay Road along the School frontage (northern side) between the school crossing and the Pacific Highway.
- Constructed concrete footpaths surrounding the school along McHatton Street, Princess Highway and Bay Road;
- Constructed shared path along the western boundary of the site, linking McHatton Street and Bay Road;
- Existing school crossing on Bay Road.

The existing arrangements are presented in Figure 4, Figure 5 and Figure 6.





Figure 4: Existing Transport Facilities1



Figure 5: Existing Parking Restrictions

<sup>&</sup>lt;sup>1</sup> Source: Fulton Trotter Architects

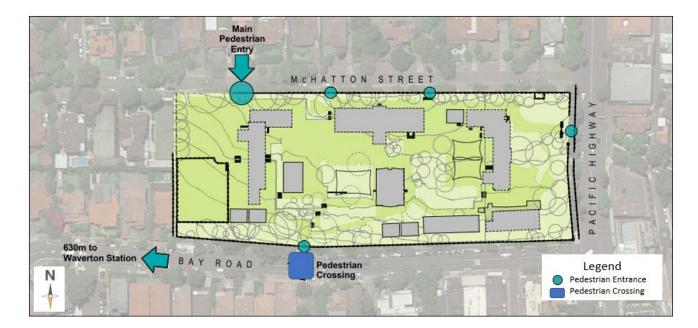


Figure 6: Existing Pedestrian Facilities<sup>2</sup>

With consideration for these facilities, Ason Group has prepared a Parking Restrictions Plan to detail the proposed parking restriction surrounding the Site. This is detailed in Figure 7 and has also been attached in **Appendix E** for further information.

This Parking Restrictions Plan details the proposed parking restrictions for the school, which seeks to provide a kiss and ride facility along Bay Road, whilst reducing the capacity of the kiss and ride facility along McHatton Street.



<sup>&</sup>lt;sup>2</sup> Source: Fulton Trotter Architects

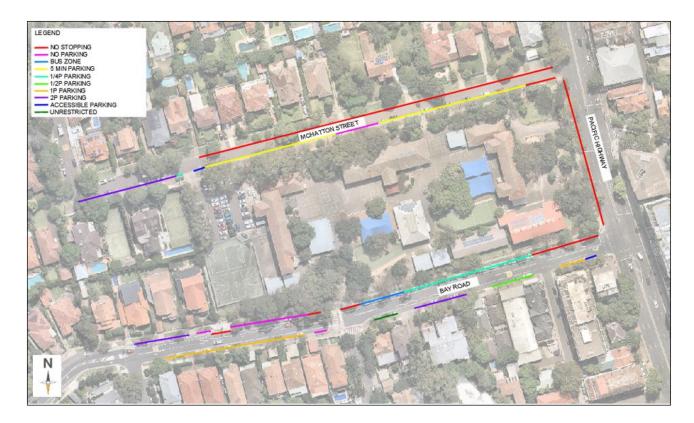


Figure 7: Proposed Parking Restrictions

## 2.3 Existing Travel Mode Share

An assessment of the ABS 2016 Census Data for the region was undertaken to determine the mode share in North Sydney. The results are provided in table below

TABLE 6 TRAVEL MODE SHARE				
Travel Mode <sup>1</sup>	%			
Car (as driver)	30.1%			
Car (as passenger)	2.4%			
Train	21.8%			
Bus	16.5%			
Walking	10.9%			
Cycling	1.1%			

Note: 1. Excludes people who worked from home or do not work

The above table demonstrates typical modal share characteristic of inner-city areas, featuring a low dependency on private vehicles (~33%) and increased dependency on public transport resultant from full public transport coverage and congestion on road.

It is considered that this data is also representative of the general travel mode choice such as for shopping and recreational trips. At the time of preparation of this report, package 1 of the ABS 2021 Census Data was released. However, travel-related data from the ABS 2021 Census Data is not available until October 2022.



# 2.4 Public Transport

### 2.4.1 Existing Train Connectivity

The Public School is situated in proximity of several existing train stations, being Waverton Station (approximately 650m) and North Sydney Station (~950m), with Waverton Station being the preferred option relating to walking distance.

Key serviceability details are provided in **Table 7**, with reference to **Figure 8** below.

**TABLE 7: EXISTING TRAIN SERVICES** 

LINE	NAME	FREQUENCY	
T1	North Shore & Western Line	Moderate Frequency (5-10 services per hour)	
Т9	Northern Line	Low Frequency (2-4 services per hour)	
CCN	Central Coast & Newcastle Line	Low Frequency (1-2 services per hour)	



Figure 8: Train Stations

### 2.4.2 Existing Public Bus Connectivity

With reference to existing public bus service connectivity for the area, immediate to the Site is a bus stop along Bay Road servicing the school and provides access for a single route during the AM Peak. Route details for the 265 are provided below in **Table 8** and **Figure 9**.



It is considered that broadly, the route largely operates as a public route, with only a single AM service modified for the AM School Peak (arriving at the school 8:24am).

**TABLE 8: EXISTING MODIFIED PUBLIC BUS ROUTE** 

ROUTE DESCRIPTION		SERVICE	
265	Lane Cove to North Sydney via Greenwich	1 modified bus route for school service during AM Peak	

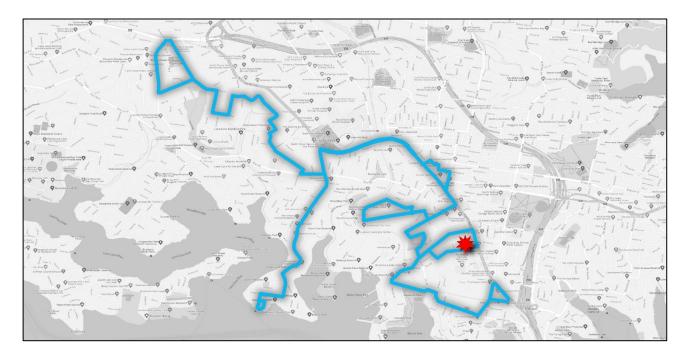


Figure 9: Route 265 (School Service)

In addition to the above, a bus stop location situated 100m north of the school along the Pacific Highway provides for a number of key routes throughout greater North Sydney and the Sydney CBD area. A summary of these routes are captured in Table 9, with mapping extents of the routes and general connectivity broadly demonstrated in Figure 10.

**TABLE 9: EXISTING PUBLIC BUS ROUTES** 

ROUTE	DESCRIPTION	ROUTE	DESCRIPTION	
115	Chatswood to City Bridge St via North Sydney	287	Ryde to Milsons Point via St Leonards & North Sydney	
200	Gore Hill to Bondi Junction	Epping to City Erskine St via Macquarie University & North Sydney		
252	Gladesville to City King Street Wharf via North Sydney	291	Epping to McMahons Pt	
254	Riverview to McMahons Point	320	Gore Hill to Mascot	
261	Lane Cove to City King Street Wharf via Longueville	N90	Hornsby to City Town Hall via Chatswood (Night Service)	
286	Denistone East to Milsons Point via St Leonards & North Sydney	N91	Macquarie Park to Bondi Junction via City Town Hall (Night Service)	

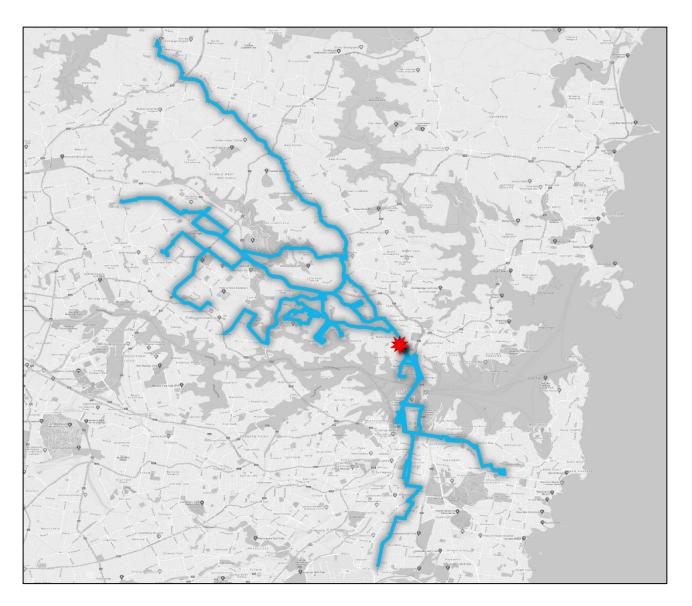


Figure 10: Public Bus Service Extents

### 2.4.3 Existing School Bus Connectivity

In addition to the modified 265 route during the AM Peak, the school is additionally serviced by a further 4 dedicated school routes, as captured in Figure 11 and Table 10.

**TABLE 10: EXISTING SCHOOL BUS CONNECTIVITY** 

ROUTE	DESCRIPTION	SERVICE	
265	Lane Cove to North Sydney via Greenwich	1 modified bus route for school service during AM Peak	
568W	North Sydney Demonstration School to Wollstonecraft Station	1 School PM service	
664W	North Sydney Demonstration School to Milsons Point	1 School PM service	
665W	Milsons Point to Crows Nest	1 School AM service	
667W	North Sydney Demonstration School to McMahons Point	1 School PM service	

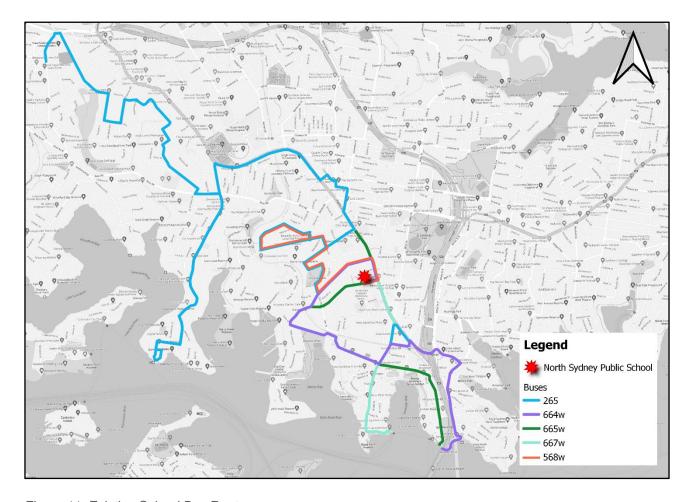


Figure 11: Existing School Bus Routes

The 664W, 665W and 667W routes demonstrate predominant serviceability towards the School south and south-east and operates within the school's catchment zone. Routes 265 and 568W demonstrate predominant serviceability towards the School north and north-west.

#### 2.4.4 Future Opportunities for Services

As demonstrated above, the Site demonstrates adequate and broad serviceability by public transport and accordingly, is not anticipated to require the identification of additional bus services.

It is noted that TfNSW has advised that the entire bus network will be reviewed within the next 12 to 24 months, with any changes to the existing bus routes and timetabling communicated to the public via appropriate channels.

# 2.5 Active Transport

### 2.5.1 Pedestrian Network & Connectivity

The Site is situated within an established suburb adjacent to a developed business centre in the North Sydney CBD. With reference to the pedestrian network, desktop studies as well and on-site observations confirm that the broader road network is accompanied by pedestrian footpaths, either on one or both sides of all streets.



Immediate to the Schools' frontage on Bay Road, a raised zebra crossing provides a safe location for students to access the school. To the frontage along the Pacific Highway, full movements for pedestrian crossings at the traffic signals are provided. A throughfare also exists to the west between Bay Road and McHatton Street. These locations provide broader catchment to the wider pedestrian network.

Figure 12 below shows Council's Walking Map within the context of the Public School, having regard for defined "walking routes" separate to the provision of pedestrian pathways / footpaths.

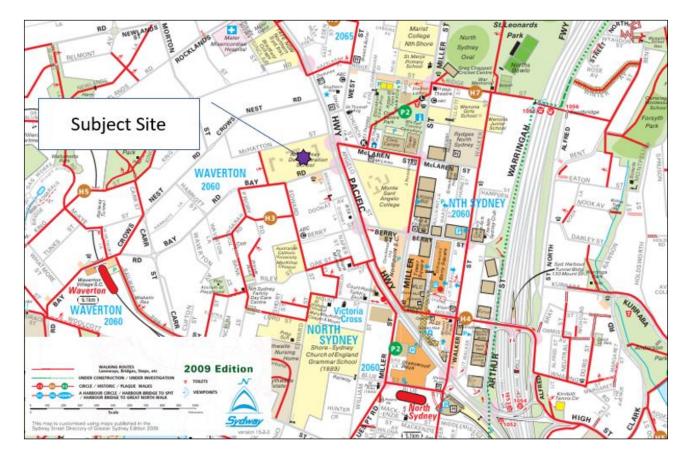


Figure 12: North Sydney Walking Map<sup>3</sup>

In addition, the Education Precinct Public Domain Masterplan (EPPDM) has identified the following pedestrian access improvements surrounding the Site, as shown in Figure 13.

These pedestrian access improvements are predominately focussed to the south of the Site, along Berry Street, Oak Street and Mount Street.

<sup>&</sup>lt;sup>3</sup> North Sydney Council. North Sydney Walking Map 2009

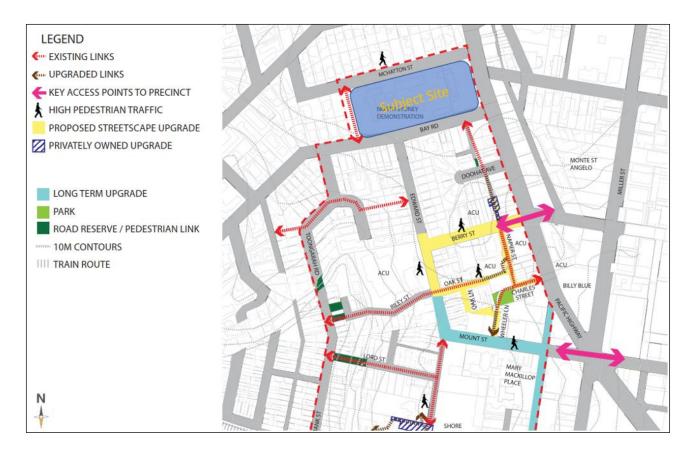


Figure 13: Pedestrian Access Improvements4

### 2.5.2 Cycling Network

With reference to existing cycling infrastructure within the Council area, Figure 14 below captures the extents of the North Sydney Bike Map in proximity of the School. Surrounding the school includes a mix of shared user paths, and on-road bicycle routes.

Specifically, the Council map identifies the Pacific Highway as a "High Current Bicycle Use" corridor. It is considered that this is defined by usage of both on and off-road cyclists accessing the corridor.

<sup>&</sup>lt;sup>4</sup> Education Precinct Public Domain Masterplan - Location Precinct Public Domain Masterplan

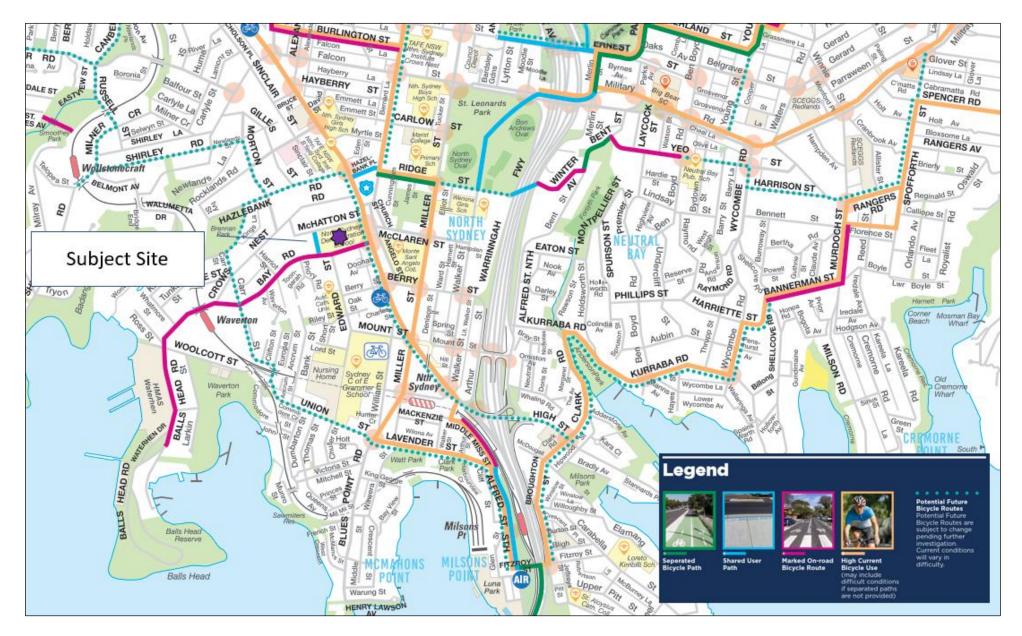


Figure 14: North Sydney Bicycle Path Network<sup>5</sup>

In addition to Council's cycling map, Service NSW provides a Cycleway Finder map for the locality and characterises specific bicycle routes and infrastructure by the degree of difficulty to which the route can be traversed. Based on the figure below, the school is generally surrounded by 'moderate difficulty' routes, which effectively captures on-road cycling provisions.

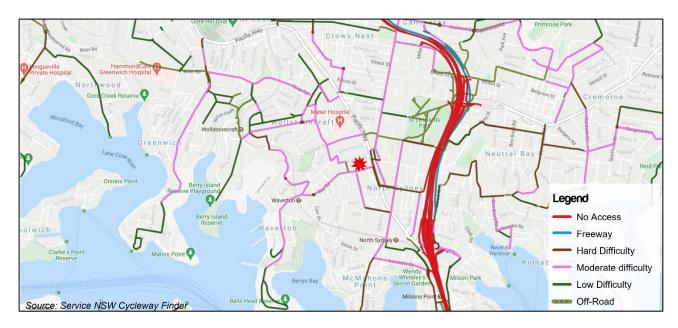


Figure 15: North Sydney Cycleway Finder Map

# 2.6 Catchment Analysis

The school itself is situated within a metropolitan area in close proximity to the North Sydney and Sydney CBD's. In this regard, the high population density of this area is underpinned by several primary schools in proximity servicing the wider locality. Figure 16 below demonstrates the existing North Sydney Public School Catchment, and defines its catchment borders with Greenwich Public School, Anzac Park Public School, and Neutral Bay Public School, amongst more distant catchment zones.

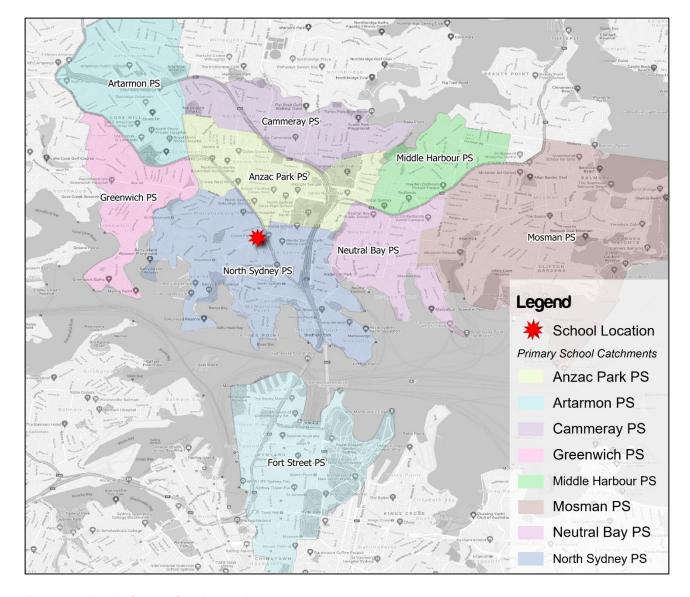


Figure 16: Public School Catchment Areas

With consideration for the school as an existing development, it is anticipated that the increased student capacity for North Sydney Public School will likely come from a combination of factors, including increasing density to the region in future years, as well as from adjacent catchment zones.

Accordingly, SINSW have provided student location data based on the above catchment areas, which in turn provides spatial indication for where additional growth to the public school may be originating from.

Figure 17 below demonstrates an anonymized distribution for the existing student population of the School in its current form. While additional students are anticipated to come from adjacent catchments, it is anticipated that the school will consolidate the locality of its existing population, predominantly within the areas south-west of the school, as demonstrated below.

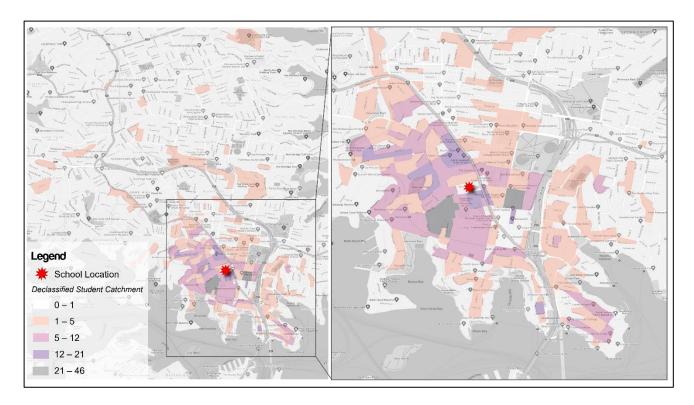


Figure 17: North Sydney Public School (Grade K – 6)

The abovementioned figure demonstrates that there is a lower degree of student density residing north-east of the Pacific Highway and east of the M1. This broadly indicates a degree of geographic separation resultant from main roads, as well as isolation from adjacent public school catchment zones.

Further northwards, there are fewer students in attendance residing in the Castle Cove, Willoughby and Lane Cove areas, with an even smaller degree of students residing south of the Harbour Bridge.

When considered in conjunction with the catchment map in **Figure 16** above, it can be deduced that potential growth centres for the North Sydney Public School are more like to originate in proximity of the location, maintaining local connectivity and geographical separation. Specifically, these areas are more likely to be from the Gore Hill, Greenwich and Northwood areas, with Cammeray and Neutral Bay to a lesser degree.

#### 2.6.1 Public Transport Catchment

In line with guidelines outlines by the NSW Government and TfNSW, the School Student Transport Scheme (SSTS) provides catchment guidelines to provide eligibility for school public transport.

For grades K-2, the following eligibility criteria applies:

- They are a resident of NSW, or an overseas student eligible for free government education.
- Aged 4 years 6 months, or older.
- No minimum walking distance criteria applies to these students.

For grades 3-6, the following eligibility criteria applies:

- They are a resident of NSW, or an overseas student eligible for free government education.
- The straight line distance from their home address to school is more than 1.6 km.



The walking distance from home to school is 2.3 km or further.

As defined above, Figure 18 below demonstrates the catchment exclusion zones for Grades 3-6 with reference to the Public Schools' location.

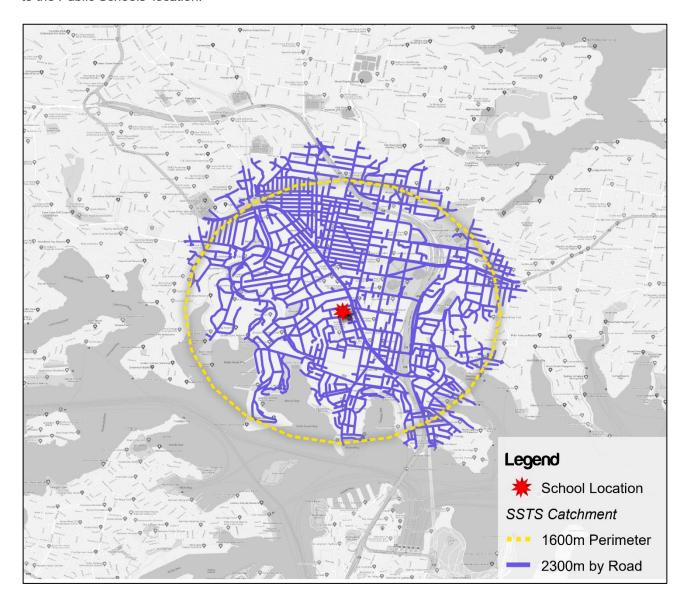


Figure 18: SSTS Exclusion Zones

The exclusion zones above demonstrate that both the 1.6km radius and 2.3km distance capture the wider proportion of the local area to which the majority of the student population are currently residing.

### 2.6.2 Active Transport Catchment

#### Pedestrian Catchment

SINSW have characterised the walking catchment of a school within 5, 10 and 15-minute walking distance increments (approximately 400m increments) of the school, representing desirability for the catchment area. Figure 19 demonstrates the walking distances relative to the Site.



In its existing form, the pedestrian network for the North Sydney area exhibits a high degree of pedestrian connectivity, with adequate provision of footpaths on either one or both sides of all roads. The span of the Pacific Highway additionally provides adequate and safe crossing opportunities for pedestrians, approximately every hundred metres.

It is noted that there are substantially less crossing opportunities between the east and west sides of the M1 Highway, indicating a lower degree of pedestrian permeability from the Neutral Bay side.

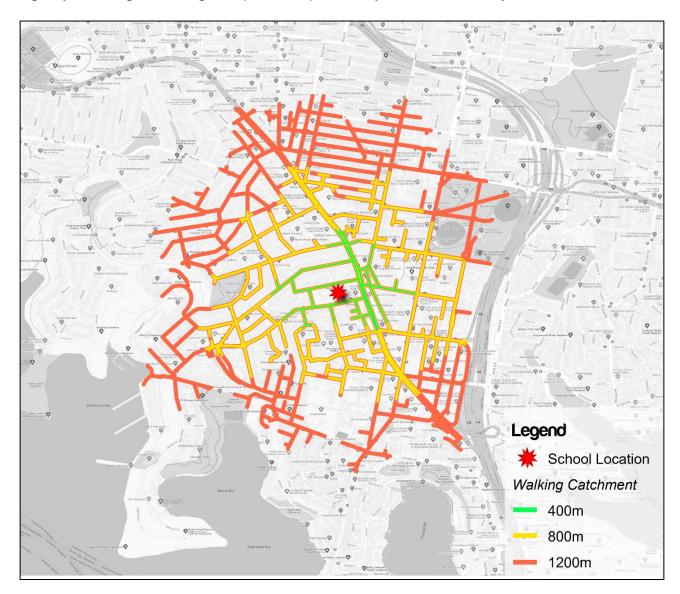


Figure 19: Pedestrian Catchment Zone

#### Cycling Catchment

In addition to the pedestrian catchment guidelines described by SINSW, the catchment areas for cycling are defined in a similar format based from 5-minute increments (approximately 1.2km increments). Figure 20 illustrates the maximum extents of the cycling catchment zone.

With reference to the figure, the M1 forms a geographic barrier and is particularly prevalent in the cycling map with limited crossing opportunities across the road.



While the catchment map exhibits farther reaching extents particularly towards the north and east, it should be broadly noted that certain elements of cycling infrastructure - specifically relating to on-road cycling lanes may not be applicable particularly for younger students as safe provisioning.

Accordingly, the extents of the catchment captures cycling movements as applicable to usage of pedestrian and shared pathways.

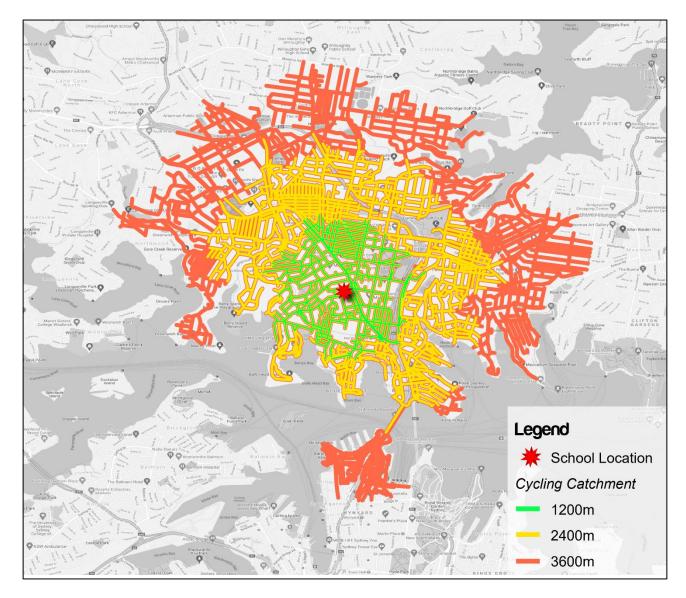


Figure 20: Cycling Catchment Zones

### 2.6.3 Catchment Summary (Completed in 2021)

In the context of public and active transport catchment areas relating to the school, the table below captures the extents of students within the respective zones and summarised as follows:

Approximately 91% of students reside within the SSTS exclusion zones, with only 9% of students living outside of the zones and hence eligible for free public transport. While the majority of students are located within the exclusion zone, they may be eligible for School Term Bus Passes, which provides discounted travel during the school term.

 Approximately 96% of students reside within the 15-minute cycling distance to the school, and 62% live within the 15-minutes walking distance.

A more detailed breakdown for the catchment analysis is presented in **Table 11**.

#### **TABLE 11 CATCHMENT ANALYSIS**

Catchment Analysis	Notional (as the crow flies)		Actual (on path/using road network as proxy)	
1-400m (5-min walk)	68	8%	63	7.6%
401-800m (10-min walk)	246	30%	282	34%
801-1200m (15-min walk)	271	33%	164	20%
5-min cycling	585/831	70%	509/831	61%
10-min cycling	151	18%	252	30%
15-min cycling	736/831	89%	761/831	92%
1-1600m crow flies / 2300m on path (excl from SSTS Primary)	831	100%	831	100%
Within 400m of public transport stop / station / wharf that brings them closer to school	831	100%	831	100%
Within 800m of public transport that brings them closer to school	0	0%	0	0%
# outside SSTS zone, with PT access	585/831	70%	509/831	61%
OSHC placements				
Total Students Within Enrolment Boundary (2021 data)	831		831	

Note that during the construction period students enrolled dropped to 767 in 2022 but is forecasted to rise to 1012 following the completion of construction.

### 2.7 Travel Mode

Ason Group has undertaken a travel mode survey in August 2021 and August 2022 of staff and students of the School. The purpose of the survey is to determine key traffic and parking characteristics of existing school population, including:

- Travel mode for both the arrival and departure trips;
- Vehicle occupancy;
- Out of Hours School Care;



- Car Pooling, and
- Interest in different green travel strategies and initiatives.

The results of the travel mode surveys are discussed in further detail below.

## 2.8 Student Travel Mode Share (August 2021)

#### 2.8.1 Student Travel Mode

At the time of preparation of the report, a total 106 responses have been received for the issued student surveys, representing approximately 12% of the 869 enrolled students. As the STP is intended to be a live document, this student survey information will be appropriately updated as responses to the surveys increase.

Notwithstanding, the results of the surveys are discussed below.

As part of the undertaken student surveys, an appreciation for modal travel has been obtained to provide indicators for travel behaviour and interactions with the School. Accordingly, **Figure 21** below demonstrates the modal breakdown of student trips to the Primary School.

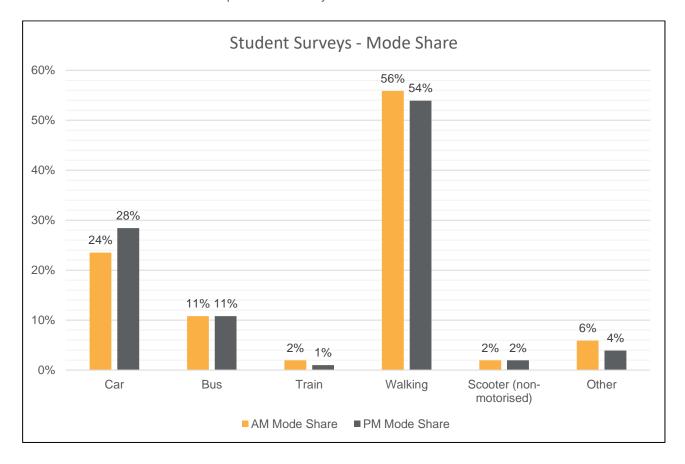


Figure 21: Student Survey Mode Share

It is noted that the 'other' category effectively captures the effects of multi-modal trips, such as being driven to a bus stop before continuing by bus to the School. Accordingly, it is considered that "other" trips would generally not include private vehicle trips directly to the school itself.

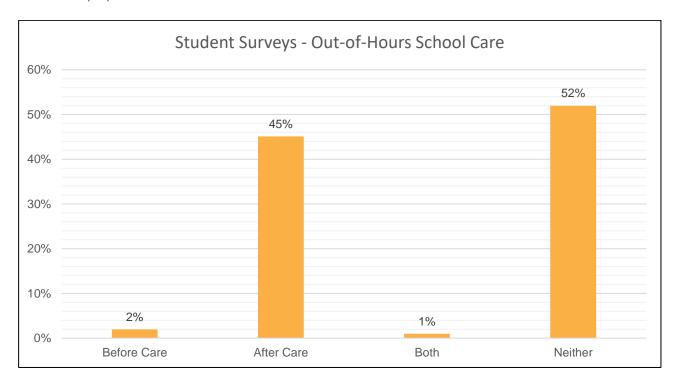
Summarising the results, the following key points are concluded:



- The school demonstrates a high dependency on walking to and from the School both before and after school, capturing between 54% and 56%.
- Active Travel Modes (Walking, Scooter Riding and Bicycle Riding) constitute approximately 56% 58% of total trips to and from the School.
- Public transport modes (accounting for Bus, Train, as well as 'Other') account for 16% 19%, with bus usage forming the highest proportion of public transit trips to/from the school.
- Vehicle ridership accounts for approximately a quarter (24% 28%) of total trips to the School.

#### 2.8.2 Out of School Hours Care

As part of the student surveys, the proportion of students utilising Out-of-Hours School Care was assessed to gain an appreciation for potential impacts to traffic generation. Based on the results, the following table defines the proportion of students in attendance of OSHC.



The figure demonstrates that approximately 47% of students attend OSHC programs during the AM or the PM session, with a further 1% indicating attendance of both. Of the 47%, the vast majority (45%) of students indicated attendance of after hours care only.

Further to the survey responses, Ason has engaged in discussion with the school, who have indicated that the OSHC programs are highly utilised during the PM (typically above 90% capacity) with a slightly lower usage during the AM period.

#### 2.8.3 Car Pooling

With reference to multi-passenger vehicle trips, the initial results demonstrate that degree of vehicle trips with more than one student is an uncommon occurrence, constituting only 1% of total private vehicle trips. Thus, early results indicate that car pooling is not prevalent in this instance.



#### 2.8.4 Transport Initiatives

In addition to travel behaviour, the student survey included a feedback format with the provision of suggestions relating to improvements for public and active transport. The survey was designed to gauge community interest and direct the efficacy of future transport plans for the School.

A summary of the results provided for the transport initiatives is provided below in Figure 22.

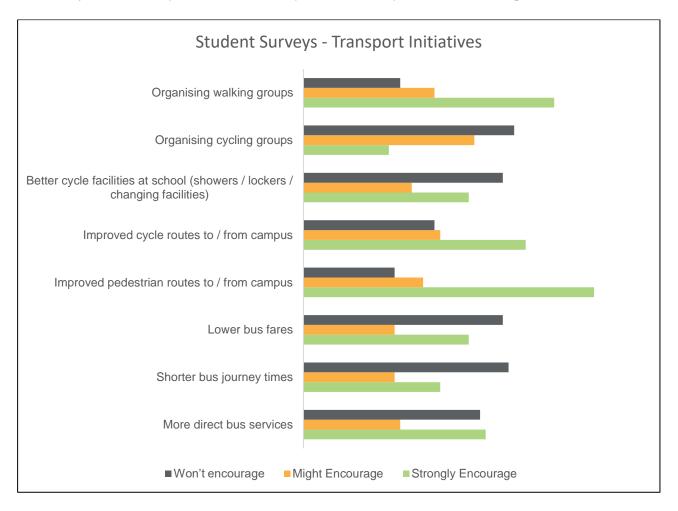


Figure 22: Transport Initiatives Feedback

Having regard for the feedback above, the transport initiatives more likely to be supported by parents of students in attendance of the School are predominantly suggestions related to pedestrian infrastructure improvements, or active community programs to promote walking.

Broadly, suggestions relating to public transport – specifically buses – demonstrated more cautionary or less encouraging feedback.



### 2.9 Staff Travel Mode Share (August 2021)

At this current time, a total 35 responses have been received from staff, representing approximately 44% of the 80 staff members. As the STP is intended to be a live document, this staff survey information will be appropriately updated as responses to the surveys increase.

Having regard for modal travel, the staff survey captures both the primary and secondary travel mode preferences for the Site, with the secondary mode preference indicating situations when the primary mode is currently unavailable.

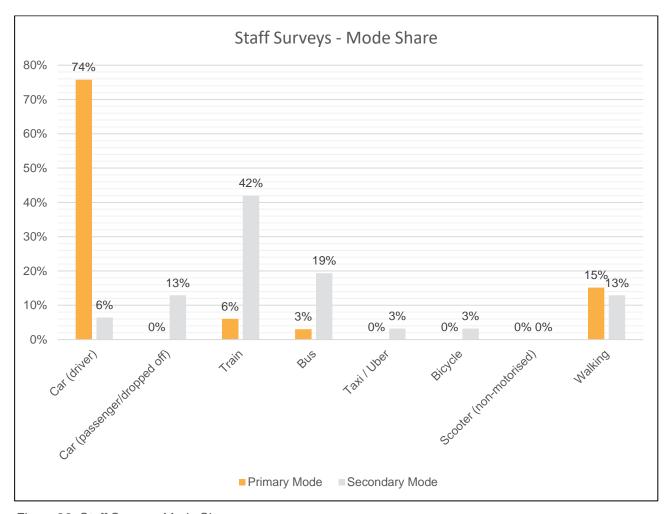


Figure 23: Staff Surveys Mode Share

The above figure demonstrates a typically higher dependency on car ridership (predominantly as driver), with a secondary dependency on walking. In our experience, teachers within NSW exhibit lower dependency on public transport modes and private vehicle (as passenger) as they are generally required to bring equipment and materials to and from the workplace. This is further supported by the majority of staff (62.5%) having access to dedicated on-site parking spaces. As such, these factors are likely to impact the viability of modal shift towards public and active travel modes, which do not necessarily accommodate staff requirements.

The predominant secondary mode of travel is demonstrated to be train or bus to the School.

The below figure defines the typical arrival and departure timing for staff to and from the Site.

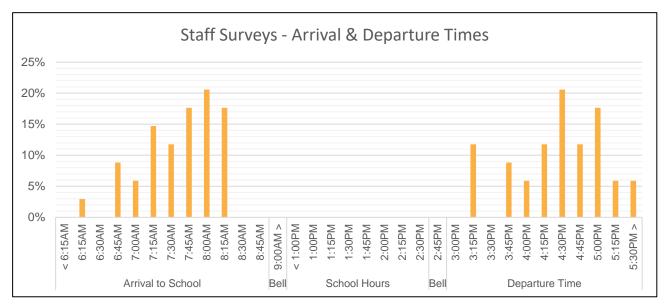


Figure 24: Staff Arrival & Departure Times

The above figure captures 15-minute peak periods for arrival and departure for 8:00AM - 8:15AM and 4:30 – 4:45PM. It is noted that generally, these periods align with typical road network peaks, particularly during the PM Peak which denotes a staggered leaving time between 3:45PM and 5:30PM.

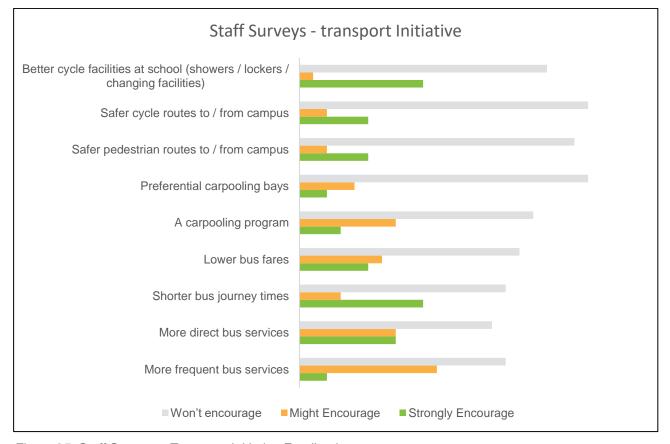


Figure 25: Staff Surveys - Transport Initiative Feedback

Having regard for the abovementioned feedback, the results demonstrate that the staff population typically do not see broader benefits based from improvements to public and active transport provisions for the Site.

Summarising the abovementioned assessments, key takeaways include:

- Car Driver is the primary mode of choice for staff travelling to and from the school. This is underpinned by the requirements to bring heavy materials and equipment to and from the workplace, as well as the adequate provisions of on-site parking.
- Typically, ingress and egress to the school generally aligns with the road network peak periods, more traditionally defined by core business hours. Key peak periods for arrival and departure from the school occur between 8:00AM - 8:15AM and 4:30 - 4:45PM.
- The staff population have generally indicated that there is no desire for modal shift towards active and public transport modes, despite suggestions to improve public and active infrastructure and site provisions.

### 2.10 Student Travel Mode Share (August 2022)

#### 2.10.1 Student Travel Mode

At the time of preparation of the report, a total 156 responses have been received for the issued student surveys, representing approximately 20% of the 767 enrolled students. As the STP is intended to be a live document, this student survey information will be appropriately updated as responses to the surveys increase.

Notwithstanding, the results of the surveys are discussed below.

As part of the undertaken student surveys, an appreciation for modal travel has been obtained to provide indicators for travel behaviour and interactions with the School. Accordingly, Figure 21 below demonstrates the modal breakdown of student trips to the Primary School.

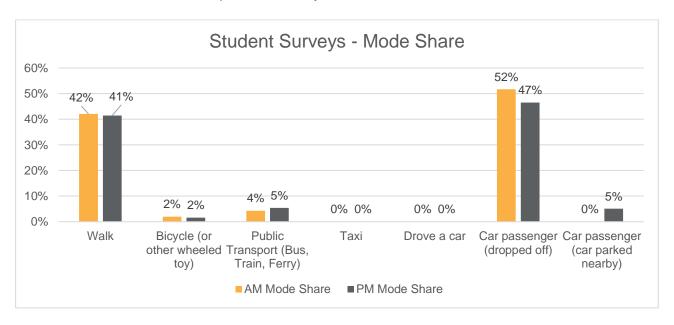


Figure 26: Student Survey Mode Share

Summarising the results, the following key points are concluded:



- The school demonstrates a high dependency on walking to and from the School both before and after school, capturing between 42% and 41%.
- Active Travel Modes (Walking, Scooter Riding and Bicycle Riding) constitute approximately 43% 44% of total trips to and from the School.
- Public transport modes (accounting for Bus, Train, as well as 'Other') account for 4% 5%, with bus usage forming the highest proportion of public transit trips to/from the school.
- Vehicle ridership accounts for approximately a quarter (47% 52%) of total trips to the School.

There is a noticeable drop in the active travel and public transport mode shares between 2021 and 2022 which can be accounted for by the wetter than average weather conditions as well as the continuing Covid-19 pandemic.

#### 2.10.2 Out of School Hours Care

As part of the student surveys, the proportion of students utilising Out-of-Hours School Care was assessed to gain an appreciation for potential impacts to traffic generation. Based on the results, the following table defines the proportion of students in attendance of OSHC.

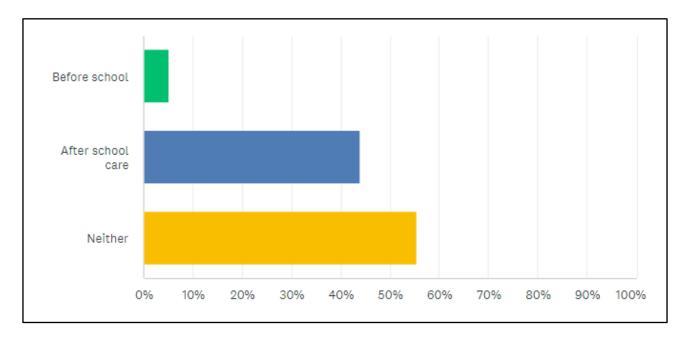


Figure 27: OHSC Attendance August 2022

The figure demonstrates that approximately 46% of students attend OSHC programs during the AM or the PM session. Of the 46%, the vast majority (44%) of students indicated attendance of after hours care only.

Further to the survey responses, Ason has engaged in discussion with the school, who have indicated that the OSHC programs are highly utilised during the PM (typically above 90% capacity) with a slightly lower usage during the AM period in comparison with about 60 students attending.



#### 2.10.3 Car Pooling

With reference to multi-passenger vehicle trips, the initial results demonstrate that degree of vehicle trips with more than one student is an uncommon occurrence, constituting only 1% of total private vehicle trips. Thus, early results indicate that car pooling is not prevalent in this instance.

### 2.11 Staff Travel Mode Share (August 2022)

At this current time, a total 43 responses have been received from staff, representing approximately 61% of the 70 staff members. As the STP is intended to be a live document, this staff survey information will be appropriately updated as responses to the surveys increase.

Having regard for modal travel, the staff survey captures both the primary and secondary travel mode preferences for the Site, with the secondary mode preference indicating situations when the primary mode is currently unavailable.

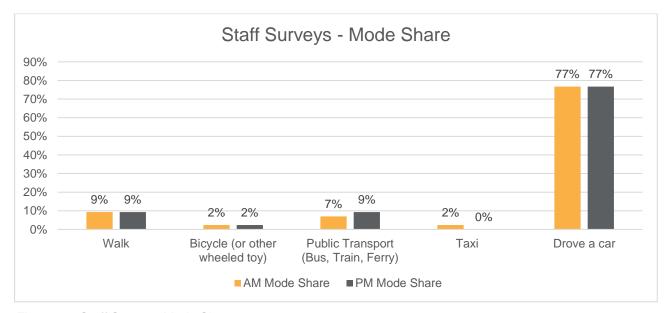


Figure 28: Staff Surveys Mode Share

The above figure demonstrates a typically higher dependency on car ridership (predominantly as driver), with a secondary dependency on walking. In our experience, teachers within NSW exhibit lower dependency on public transport modes and private vehicle (as passenger) as they are generally required to bring equipment and materials to and from the workplace. This is further supported by the majority of staff (95%) having access to dedicated on-site parking spaces. As such, these factors are likely to impact the viability of modal shift towards public and active travel modes, which do not necessarily accommodate staff requirements.

The predominant secondary mode of travel is demonstrated to be walking to the School.

#### 2.11.1 Arrival and Departure Times

The below figure defines the typical arrival and departure timing for staff to and from the Site.



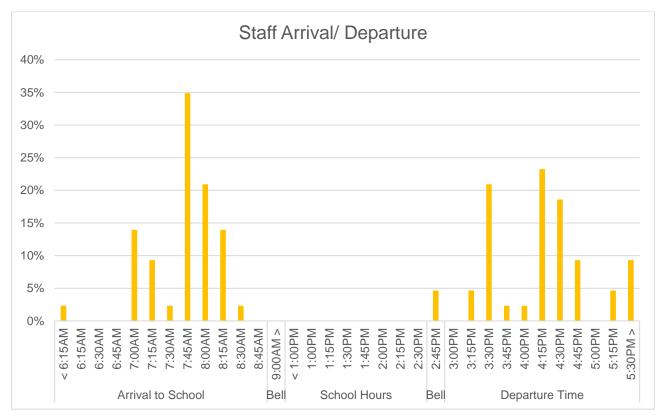


Figure 29: Staff Arrival & Departure Times

The above figure captures 15-minute peak periods for arrival and departure for 8:00AM - 8:15AM and 4:30 – 4:45PM. It is noted that generally, these periods align with typical road network peaks, particularly during the PM Peak which denotes a staggered leaving time between 3:45PM and 5:30PM.

Summarising the abovementioned assessments, key takeaways include:

- Car Driver is the primary mode of choice for staff travelling to and from the school. This is underpinned by the requirements to bring heavy materials and equipment to and from the workplace, as well as the adequate provisions of on-site parking.
- Typically, ingress and egress to the school generally aligns with the road network peak periods, more traditionally defined by core business hours. Key peak periods for arrival and departure from the school occur between 8:00AM - 8:15AM and 4:30 - 4:45PM.
- The staff population have generally indicated that there is no desire for modal shift towards active and public transport modes, despite suggestions to improve public and active infrastructure and site provisions.



## 3 School Travel Plan Framework

### 3.1 Transport Objectives

The primary objectives of this Plan are to:

- Reduce the environmental footprint of the school,
- Promote the use of 'active transport' modes such walking and cycling, particularly for short-medium distance journeys,
- Promote the use of 'public transport' modes including a bus network with full coverage of the catchment area.
- · Reduce reliance on the use of private vehicles for travel to / from the School, and
- Encourage a healthier, happier, and more active social culture.

Having regard for the above, this Plan adopts the following movement hierarchy with priority given to 'active transport' followed by mass public transport and lastly the use of cars and other private vehicles. This hierarchy is reflected in the recently released Road User Space Allocation Policy, January 2021 prepared by TfNSW.

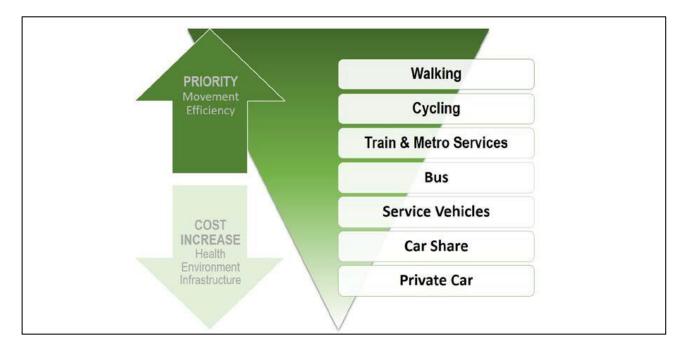


Figure 30: Movement Hierarchy

In a broad sense, this Plan is intended to encourage the use of active transport thereby reducing the overall distance travelled by private vehicles.

### 3.2 Implementation Plan

#### 3.2.1 Implementation Plan Measures

The following specific actions have been identified to aid achievement of the STP targets. These identified strategies include promotion of some event or day-specific activities. In isolation, these may not dramatically alter the day-to-day travel of staff. However, there are benefits of such activities whereby participation can increase awareness of alternative modes of travel that can then form the basis of future travel patterns. Precise



planning that would allow for specific completion dates is unfeasible, however the task owner is specified within the 'Responsibility' column which they would be the person who is to decide how the initiatives will be carried out.

### **TABLE 12: IMPLEMENTATION PLAN MEASURES**

IADEL	12: IMPLEMENTATION PLAN N	ILAGOREG					
Item No.	Action / Description	Responsibility	Response				
1. Gener	eneral						
1.1	Establish a centralised Travel Plan Coordinator (TPC) who is to take responsibility for the ongoing review and monitoring of this Plan. This person(s) shall also provide direction to staff/parents in relation to specific requirements arising from the Plan.	School	For SINSW / Department of Education to engage / appoint a Travel Plan Coordinator within 2 months of occupation of Block J				
	The estimated annual budget for a TPC assuming 10 weeks per term, 4 terms, and 10 hours per week is \$80,000 excl. GST						
1.2	Provide a 'Travel Welcome Pack' for newly employed staff, highlighting alternate modes of transport other than the use of a private vehicle.	TPC	Travel Welcome Pack to be provided on Day 1 for all staff				
1.3	Review of the Plan as a regular item on the agenda of staff / management meetings.	School	To be undertaken every school term				
1.4	Preparation of a Transport Access Guide (TAG) and review following changes stipulated by the TPC	TPC	A Transport Access Guide will be provided to all staff, students and parents				
2. Walkir	ng and Cycling						
2.1	Promote National Ride2Work Day and coincide with participation in Ride-To-School Day. This provides an opportunity for students, parents, and staff to try riding to school as well as celebrating those that currently utilise bicycles.	School / TPC	Consultation with School has been undertaken and the School is aware of the initiative.  To be promoted by the Travel Plan Coordinator yearly.				
2.2	Promote Walk to Work Day and coincide with participation in "Walk Safely to School" Day. Similar to the above, it would encourage alternative modes of transport.  Older students can be paired with younger students who live close together to walk to school as a pair or group	School / TPC	Consultation with School has been undertaken and the School is aware of the initiative.  To be promoted by the Travel Plan Coordinator yearly.				
2.3	Develop further school-specific activities designed to get people moving with reward participation. For example, a competition to see which staff and/or student in each year can get the most 'steps' in a	School / TPC	Consultation with School has been undertaken and the School is aware of the initiative.  To be promoted by the Travel Plan Coordinator yearly.				



	given time period; is similar to Steptember activities.				
2.4	Encourage volunteers to organise a 'walking school bus'. This allows students to travel to school in an organised group guided by two adults. This would require liaising with the TPC.	School / TPC / Parents	Consultation with School has been undertaken and the School is aware of the initiative.  To be promoted by the Travel Plan Coordinator yearly.		
2.5	Advocate, provide, and maintain safe pedestrian and bicycle facilities to and from the school.	School	Consultation with School has been undertaken and the School is aware of the initiative.  To be promoted by the Travel Plan Coordinator yearly.		
2.6	In accordance with the cycling mode share targets identified, sufficient secure parking spaces and 'EoJ' facilities shall be provided and maintained.	School	Consultation with School has been undertaken and the School is aware of the initiative.  To be promoted by the Travel Plan Coordinator yearly.		
2.7	Continue to monitor and review the demand for bicycle parking and end of trip facilities, including showers for staff, change rooms for staff and the need for lockers for staff and students. Seek opportunities to increase supply of bicycle parking and end of trip facilities at the school.	School / TPC	To be undertaken by the Travel Plan Coordinator once school upgrade is operational on a yearly basis.		
3. Educa	3. Education Initiatives				
3.1	For Year K-2 students include education programs teaching road awareness using play-based learning	School / TPC	Consultation with School has been undertaken and the School will participate in the Council road safety initiatives.  To be undertaken by the School Principal per existing arrangements.		
3.2	For Year 3 students include education programs teaching road safety with a focus on walking independently to school.	School / TPC	Consultation with School has been undertaken and the School will participate in the Council road safety initiatives.  To be undertaken by the School Principal per existing arrangements.		
3.3	For Year 4 students include education programs to teach road safety with a focus on cycling independently to school. This may include an experience or an excursion.	School / TPC	Consultation with School has been undertaken and the School will participate in the Council road safety initiatives.  To be undertaken by the School Principal per existing arrangements.		
3.4	For Year 5-6 students include education programs to teach how to travel independently on the public bus system in preparation for travelling to high school and other destinations.	School / TPC	Consultation with School has been undertaken and the School will participate in the Council road safety initiatives.  To be undertaken by the School Principal per existing arrangements.		
4. Public	Transport				
4.1	Display route maps and timetables (for services within 10 minutes walking distance) in high trafficable areas within the school.	School / TPC	To be undertaken once school is operational.		



4.2	Advocate for TfNSW to improve public transport services in response to increased development within the surrounding area.	TPC	To be undertaken following first term of operations following upgrades for reassessment by TfNSW
4.3	Update this Plan and TAG to reflect changes to any bus routes and service times.	TPC	To be undertaken when changes to any bus routes and service times take place
4.4	Undertake a review to promote initiatives for staff using public transport. This may include a review of potential tax incentives for Government employees that use public transport.	School / TPC	To be undertaken following first term of operation travel mode surveys
4.5	Promote the use of public transport for students. i.e., students are provided incentives to travel to and from the school.	School / TPC	School buses are currently operational for this school – promotion of public transport options will be undertaken following occupation of Block J.  Regular promotion of public transport options in School Social Media once per School Term.
4.6	Liaise and discuss with TfNSW the feasibility of providing bus services for students outside of the 2.3km driving distance from the School.	TPC / TfNSW	School buses are currently operational for this school.  Encourage families to sign up for the SSTS scheme annually to enable planning and refinements to school bus routes.
5. Reduc	cing Car Travel		
5.1	Review initiatives for staff and parents to promote car-pooling. This may include (but is not limited to) the provision of online services or forums to facilitate ease of finding carpooling scheme participants.	TPC	To be undertaken follow review of staff travel mode share per school term.
5.2	Potentially introduce and enforce parking restrictions around the school. This is to be discussed and implemented in collaboration with Council's Road Safety Officer	TPC / Council	Refer to Signage and Line-marking Plan for parking restrictions around the school. School will be in continuous liaison with the Road Safety Officer once in operation.
5.3	Liaise with staff to discuss the feasibility of a parking management scheme which would discourage the use of single-occupant car travel to the site while incentivising employees to travel by alternative modes of transport.	School / TPC	To be undertaken once school is operational.  To be reviewed per school term following travel mode surveys.
5.4	Parking Management Strategy for staff to prioritise use by staff on a needs basis, e.g. preference for staff are carpooling or car sharing	School / TPC	To be implemented within one school term following completion of upgrade works.



## 3.3 Communications Strategy

With consideration to the above measures, a communication strategy has been developed that can be adopted by the future school administration and TPC to communicate the measures detailed above. It should be noted that this communication strategy is subject to review following further discussions with the School administration.

### **TABLE 13: COMMUNICATIONS STRATEGY**

What	When	Method	Target	Responsibility
Share objectives and goals with the student body and staff	Prior to school opening and every term during operation	<ul><li>Welcome packs to new staff and families.</li><li>Social media.</li><li>Website.</li></ul>	Staff, Students, Parents	TPC
Provide information regarding transport options to and from the school, and onsite end-of-trip facilities.	Prior to the school opening. This information is to be available always and presented every term	<ul><li>Welcome packs to new staff and families.</li><li>Website.</li><li>Information boards within school grounds.</li></ul>	Staff, Students, Parents	TPC
Provide details regarding school-promoted initiatives that encourage alternative modes of transport, such as Ride-To-School Day, Walk-To-School Day, Steptember, etc.	Annually prior to the event	<ul><li>Social Media.</li><li>Website.</li><li>School newsletter App</li><li>E-newsletters.</li></ul>	Staff, Students, Parents	TPC
Provide details regarding the safety and volunteer process to manage a walking school bus	This information is to be available always and presented every term	<ul><li>Welcome packs to new families.</li><li>Website.</li><li>School newsletter App</li><li>E-newsletters.</li></ul>	Students and Parents	TPC
Provide details regarding the availability of student bus passes	Prior to, and at school opening. This information is to be available always and presented every term	- Welcome packs to new families. - Website.	Students and Parents	TPC
Liaise with parents regarding the education programs provided by the school that encourage alternative transport modes	Prior to the school opening. This information is to be available always and presented every term	- Welcome packs to new families. - Website.	Students and Parents	TPC



Link key resources regarding the operation of school zones, road safety, and parking restrictions within the local area.	Prior to, and at school opening. This information is to be available always and presented every term.	<ul><li>Welcome packs to new families.</li><li>Social Media</li><li>Website.</li><li>School newsletter App</li></ul>	Parents	TPC
		- E-newsletters.		
Detail information regarding the operation of the drop-off / pick-up area	Prior to, and at school opening. This information is to be available always and presented every term.	<ul><li>Welcome packs to new families.</li><li>Social Media</li><li>Website.</li><li>School newsletter App</li><li>E-newsletters.</li></ul>	Parents	TPC

#### 3.3.1 Welcome Packs

As detailed above, new staff and families shall be provided with a 'welcome pack' as part of the on-site induction process which includes the Transport Access Guide and other information in relation to sustainable transport choices. This pack shall include a copy of the Transport Access Guide as well as general information regarding the health and social benefits of active transport. Advice on where to find further information should also be included.

#### 3.3.2 Accurate Transport Information

In addition to these 'welcome packs', a Transport Access Guide (TAG) shall be provided to all staff.

A copy of the TAG should also be displayed prominently in staff areas, such as lunchrooms and foyer areas, and information boards throughout the school for parents and students. The TAG shall be presented in a form that is reflective of the commitment to achieving positive transport objectives. The TAG is attached in Appendix F. Included in the TAG is advisement for students and staff that additional information for how to travel to school is available on the Trip Planner at transportnsw.info/. Bus, train, walking, and bicycle routes are displayed on the TAG, with the frequency of the service being displayed, this is not the time, but it allows parents to develop an idea of which buses they should look into using the advised Trip Planner. The zoning for the kiss and ride locations are displayed in the bottom left of the graphic along with the locations of end of trip facilities. The number of these is up to date.



### 3.4 Mode Share Targets

The following student and staff target mode shares have been identified with consideration for the public transport and active transport coverage, catchment analysis and existing and future residential occupancy within the catchment area. Three scenarios are established for the School with the following corresponding timeframes:

Base: 1 - 3 years of operation Moderate: 3 - 5 years of operation Reach: 5 – 10 years of operation

Note all calculations below are based on the school being at full capacity post construction.

TABLE 14 MODE SHARE TARGETS – STUDENTS						
Travel Mode	Ва	ase	Moderate		Reach	
	#	%	#	%	#	%
Car (as driver)	-	-	-	-	-	-
Car (as passenger)	520 / 1012	51.5%	363 / 1012	30%	332 / 1012	25%
Public Transport	45 / 1012	4.5%	122 / 1012	15%	152 / 1012	17%
Walking	426 / 1012	42%	486 / 1012	50%	557 / 1012	52%
Cycling	21/ 1012	2%	41 / 1012	5%	71 / 1012	6%

As detailed in Section 2.5, the walking catchment analysis demonstrates approximately 62% of students live within the 15-minutes walking distance and approximately 42% of students currently walk to / from school which is a drop from the 48% of students walking to / from school before June 2021.

Cycling catchment analysis demonstrates 96% of students reside within the 15-minute cycling distance to the school, however, elevation and gradient changes indicate constraints for student under 16 years of age and is considered unsuitable for primary school student travel. As such, a small increase in student travel mode share through cycling is expected as more students located within the rideable area progress into senior years.

As detailed in catchment analysis, approximately 91% of students reside within the SSTS exclusion zones, with only 9% of students living outside of the zones and hence eligible for free public transport but all students have access to public transport. Therefore, student travel via public transport is anticipated to be a viable main mode of travel for younger year students.

In the medium term (3-5 years of operation), the effects of COVID-19 are expected to diminish and the walking / public transport mode shares are expected to bounce back to pre-COVID levels if not exceed it.

A review of the School's catchment area and forecasted future developments over the medium to long term (i.e., 5 – 10 years) shows that majority of planning approvals are for commercial and retail developments, with limited amount of residential developments anticipated. Therefore, we are not expecting a significant change in travel mode choices, rather, some minor mode shift and an increase uptake of active travel and use of public transport.



#### TABLE 15 MODE SHARE TARGETS – STAFF

Travel Mode	Base		Moderate		Reach	
	#	%	#	%	#	%
Car (as driver)	52 / 70	74%	46 / 70	67%	40 / 70	57%
Carpool	2/70	3%	5/70	6%	6 / 70	7%
Public Transport	6 / 70	8%	10 / 70	14%	15 / 70	21%
Walking	8 / 70	9%	7 / 70	10%	7 / 70	10%
Cycling	2/70	2%	2/70	3%	2/70	3%

Staff travel mode share targets are established with reference to the Journey-to-work analysis for the 2016 census year for North Sydney area as well as the typical staff travel behaviour, which demonstrates high dependency on vehicle (as driver) for staff members. Consultation with the School Principal also indicates that most staff are expected to be living outside of the active travel catchment and require commute to the School via private vehicle or public transport.

A fall was observed in the active travel and public transport usage following COVID-19 but in the medium term (3-5 years of operation), the effects of Covid-19 is expected to diminish and the walking / public transport mode shares are expected to bounce back to pre-Covid levels if not exceed it.

A review of the School's catchment area and forecasted future developments over the medium to long term (i.e., 5 – 10 years) shows that majority of planning approvals are for commercial and retail developments, with limited amount of residential developments anticipated. Given the on-going traffic congestion experienced in Metropolitan Sydney, it is anticipated that there will be an increase in mode shift from use of private vehicles to active travel and public transport modes. It is not expected that teachers live within the active travel catchment, and most likely can travel to / from the school by public transport given the school's proximity to the fixed rail network and the future Sydney Metro station.

Further analysis with reference to student and staff travel mode survey and depersonalized staff location data will be conducted. It is expected that the proposed student and staff travel mode share target would be reviewed on a yearly basis as part of the ongoing Operational School Transport Plan process.



## 4 School Transport Operations and Access Management Plan

## 4.1 Operational management Measures

#### 4.1.1 Plan of Management

The School can and will coordinate pedestrian and vehicles on-site and within the local road network to meet operational requirements and ensure the safety of students with maintaining efficiency on-street. The following management measures are proposed.

#### 4.1.2 Key Responsibilities of management

#### Management shall:

- Ensure all staff are provided with sufficient training to undertake the required tasks. This includes responsibility for measures to ensure that all staff, parents/carers, visitors, and students are familiar with site specific rules through appropriate site induction procedures.
- Be familiar with and address their respective duty of care requirements in accordance with the applicable state Work Health and Safety legislation.
- Ensure WHS Incident logbooks are maintained and undertake necessary action(s) in relation to any reported issues.

#### 4.1.3 Hours of Operations

The School is accessible from 6:30 AM - 6:30 PM on weekdays with restricted access outside of these hours. The bell times are as follows:

Start Time: 8:55 AMFinish Time: 2:55 PM

The school also offers on and off-site Out of School Hours Care (OSHC) services between the following times:

Before School: 7:00 AM to 8:55 AMAfter School: 3:00 PM to 6:00 PM

The current OSHC facilities operate as follows:

- 60 place Kindergarten at North Sydney Oval (off-site). Students are transported by bus to the off-site facility, with the bus departing the school at 3:45 PM
- 60 place Year 1 to 2 (on-site);
- 60 place Years 3-6 operated by KU (on-site).
- 60 places at the North Sydney Leisure Centre, typically Years 3-6 (off-site). Staff from the centre walk to the school and collect the students, walking the group of students across the road to the North Sydney Leisure Centre site.



A new forecourt and main entrance to the school is to be provided along Bay Road, which shall be designed to accommodate accessible access. Note that following consultation with the principal, post construction only the new access will be in use on Bay Road while all three existing accesses on McHatton Street will be retained.

A detailed pedestrian analysis has been conducted for students that live within the 1200m on-path (15minute) walking catchment to the School. Six walking route options utilizing existing pedestrian footpath and crossing facilities have been identified to support the school walking bus group and are demonstrated in Figure 31 below.

Each of the six walking routes is able to accommodate the following number of students:

- Route 1 Shirly Road to McHatton St school gate: 55 students
- Route 2 Sinclair St to McHatton St school gate: 48 students
- Route 3 Carr St to Bay Rd school gate: 46 students
- Route 4 Union St to Bay Rd school gate: 30 students
- Route 5 West St to Bay Rd school gate: 31 students this is the path students take coming from the north, however if students are coming from the western side of the Pacific Highway they can walk along the south side of Crows Nest Road until the crossing which would allow them to safely access the site
- Route 6 Miller St to Bay Rd school gate: 96 students

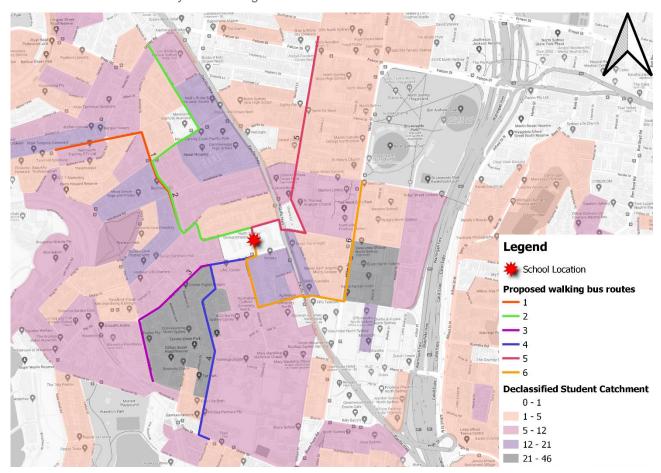


Figure 31: Proposed Walking Bus Routes

The existing pedestrian network was deemed satisfactory upon approval on 21 February 2022. Furthermore, on site investigations completed 16 July 2021 and 26 August 2022 indicate the surrounding pedestrian



network is operating satisfactorily, the network is expected to be able to facilitate the minor uptake in students resulting from the upgrade.

#### 4.1.5 Bicycle Access

A new bicycle storage area containing 63 bicycle parking spaces are being created to replace the old storage, related end of trip facilities have been built to provide a comfortable end of trip experience. Which can be found in an undercroft pedestrian access area.

Cyclists will be able to enter the site through the pedestrian access points.

#### 4.1.6 Visitor Access

Visitor access to the school will be via the new main access gate on Bay Road.

As per the current arrangements, all gates to/from the school except the main gate shall be locked between 9:30 AM and 2:30 PM, with all visitors required to enter via the main gate and proceed directly to the school office to sign in.

Consistent with the existing arrangements, visitors to the school will utilise on-street parking. All visitors will be notified of access arrangements via the Transport Access Guide detailed in Appendix E.

#### 4.1.7 Out of Hours Access

The on-site OSHC hours are expected to continue as per the current operations, with the following operational hours of between 7:00 AM and 6:00 PM. Regarding the general site as a whole; access will be restricted to between the times:

weekdays: before 6:00am and after 6:30pm
 weekends and public holidays: before 8:00am and after 6:00pm

#### 4.1.8 Vehicle Access

Given the nature of the Site, different vehicle types will be required to access the School and will also utilise the drop-off / pick-up areas. The School proposes to provide two drop-off / pick-up locations along the Bay Road and McHatton Road frontages, as well as maintaining the bus bay along Bay Road. Service Vehicles will continue to service the site from within the staff car park, as per the current arrangements.

These arrangements are shown in **Figure 32** below, with the management procedures of these amenities discussed below.



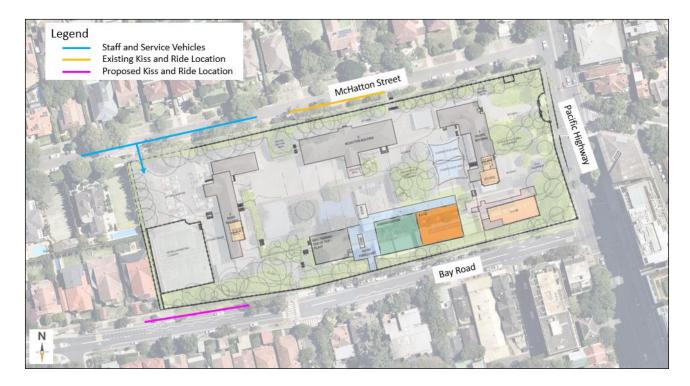


Figure 32: Vehicular Access

#### 4.1.9 Kiss and Ride

Two Drop-Off / Pick-Up (DOPU) otherwise known as Kiss & Ride facilities will be provided along McHatton Street and Bay Road, as shown in Figure 32.

The overall provision of kiss and ride spaces for the site is similar to the existing provision, however, it has been split between Bay Road and McHatton Street due to the new accessible main pedestrian entrance along Bay Road. The proposed Bay Road kiss and ride locations, including in front of No. 11 Bay Road effectively replaces the existing ¼P parking restrictions during school pick-up and drop-off periods. Calculations show that the kiss and ride location along Bay Road is able to handle the increased number of drop off/pickups with by sharing the load with the kiss and ride location along McHatton Street.

As part of the Indicative Parking Restrictions Plan prepared by Ason Group, the kiss and ride locations shown in Figure 32 will be signposted as "No Parking" between specific operational hours during the day. As per the typical 'No Parking' restrictions, parents must remain within 3 metres of their vehicle and are unable to stay for longer than 2 minutes.

TfNSW (formerly RTA) has prepared an information documentation titled 'Drop-off & Pick-up' initiative around schools, which details additional methods that can be adopted to assist in a safe and efficient management system for drop-off / pick-up areas. This has been attached in Appendix G.

It is noted that any changes to the surrounding parking restrictions requires Council consent and approval. Based on initial discussion, Council is not opposed to the changes, subject to the overall changes not resulting in a net loss to the number of on-street car parking spaces.



It is envisaged that the change in kiss and ride facility location with a similar number of total kiss and ride spaces provision will not generate significant traffic on surrounding road networks. Operation of the kiss and ride facilities will be continuously monitored by the School, review of the management plan and mitigation measures will be implemented to mitigate queuing along roadways and minimize traffic impacts on surrounding road networks.

As per the existing operation detailed during the school principal questionnaire on 26 August 2022, staff will continue to manage students within the school gate by releasing each student when the car of their respective parent is stationary within the DOPU location.

With reference to Appendix J, the DOPU facilities will operate with no vehicle queuing. The DOPU will continue to be monitored by staff from within the school with further action taken should it be required. This will include notifying parents of the DOPU guidance included in Appendix F via social media.

#### 4.1.10 Staff Carpark

Access to the staff carpark remains unchanged, with access via a double width crossover to/from McHatton Street at the western end of the site. The car park accommodates 50 parking spaces including 2 accessible spaces.

#### 4.1.11 Parking Management

Parking allocation shall be arranged by School administration. Consultation with school principal on 16 July 2021 indicates that 4 car parking spaces are reserved for principal, deputy principal and administrator.

Of the remaining 46 spaces, up to 4 spaces shall be allocated for the promotion of carpooling based on the mode share targets stipulated in Section 3.4 for staff. Should the need arise for additional carpooling spaces, the School shall prioritise the remaining spaces to facilitate carpooling, otherwise the spaces shall be allocated on an a needs basis. Priority shall be given to staff members living with a disability.

#### 4.1.12 Bus Stops

Consistent with the current arrangements, the school shall utilise the existing bus stop along the Bay Road, frontage, as shown in Figure 33.





Figure 33: Bus Stop Location

Based on current discussion between the school and bus operators, the current bus stop design is sufficient to cater for the current and future bus requirements during peak pick-up and drop-off periods.

#### 4.1.13 Servicing

All major deliveries and waste collection will occur within the staff car park, as per the current arrangements. It is noted that the proposed upgrades (including additional students and staff population) are not anticipated to significantly alter the servicing requirements for the school.

It is understood that that waste is currently collected as follows:

- General Waste Twice weekly on Wednesday (before 7:00am) and Saturdays; and
- Recycling Weekly between Friday evening and Sunday evening.

It is noted that delivery times would be strictly managed, whereby regular services are subject to strict timelines that to ensure the minimum movements possible and these occur outside of the school peak periods. Deliveries will be managed by the School's administration and management staff and will ensure that drivers are familiar with the details of the Plan, as well as the Code of Conduct discussed below.

#### 4.1.14 Driver Code of Conduct

All drivers are to operate in a manner consistent with the requirements of applicable Work Health and Safety (WHS) legislation and other business specific policies.



All commercial vehicle drivers are to be familiar with the Driver Code of Conduct before attending the Site. A copy of the Code is included in <b>Appendix H.</b>

## 5 Governance and Support

### 5.1 Travel Plan Coordinator

To assist with the management of the School Travel Plan, a person(s) shall be nominated as the Travel Plan Coordinator (TPC) and be responsible for:

- Engagement with the staff and parent bodies,
- Implementation and promotion of the School Travel Plan actions,
- Monitoring the effectiveness of the Plan (refer to monitoring requirements outlined in Section 6) and ongoing maintenance of the School Travel Plan,
- Provide advice in relation to transport-related subjects to staff, management, and visitors, as required,
- Liaise with external parties (i.e., Council, public transport, and car share operators) in relation to Travel Plan matters.

This role does not necessarily require a full-time position; however, it should be clearly designated among the key responsibilities of the building management group.

This may include financial incentives for staff to use active transport and public transport to travel to work. However, this is not a mandatory requirement and would be subject to management discretion.

### 5.2 Resourcing

It is not anticipated that the maintenance of this Plan will have significant ongoing cost implications and shall be reviewed on an annual basis by the TPC in order for the best outcome. To fund the monitoring of the PSTP, it is recommended that \$80k per year be allocated by DoE for the initial 2-years of implementation of the School Travel Plan.



## 6 Monitoring and Review Process

#### 6.1 Plan Maintenance

This Plan shall be subject to ongoing review, on a biannual basis and will be updated accordingly. Regular reviews will be undertaken by the TPC, as required.

Key considerations regarding the review of the Plan shall be:

- Updating baseline conditions to reflect any changes to the transport environment in the vicinity of the Site such as changes to bus services, new cycle routes, new roads, etc. In this regard, a review of the Plan and associated TAG in particular may be undertaken on a more frequent basis,
- Tracking progress against proposed travel mode targets,
- Analysis and assessment of monitoring data collected to identify challenges preventing the school from achieving their targets and prepare solutions to address the challenges,
- To identify any shortfalls and develop an updated action plan to address issues, and
- Ensure travel mode targets are updated (if necessary) to ensure they remain realistic but also ambitious

### 6.2 Monitoring and Review Actions

To assess the efficacy of the Plan strategies, the following actions are to be undertaken by the TPC:

- Review updated de-personalised data from the Department of Education with GIS analysis.
- Travel mode surveys to determine the proportion of staff travelling to/from the site by each transport mode. This will be in the form of annual travel mode questionnaire surveys to be completed by all staff attending the Site, as far as practicable. This survey may be undertaken online or in-person at the discretion of the TPC once a term in the first year of operations. See **Appendix H** for examples of the student and staff travel mode surveys.<sup>6</sup>
- Conduct "hands up" travel mode surveys to determine the proportion of students travelling to/from the site by each transport mode. The surveys are to be conducted by the respective staff member of each classroom between the 2<sup>nd</sup> and 10<sup>th</sup> week of each school term. The surveys will be completed from the 2<sup>nd</sup> year of school operations through to the 10<sup>th</sup> year.
- Analysis and assessment of monitoring data collected to identify challenges preventing the school from achieving their targets and prepare solutions to address the challenges.
- Review information regarding participation in active travel programs.
- Undertake community consultation to gauge feedback regarding implemented strategies and areas for improvement to further encourage the use of alternative modes of transport.
- Periodic on-site review of facilities such as the drop-off / pick-up area, and bicycle racks.

An initial audit will be undertaken within 6-months of the school opening to establish baseline mode share as early as possible.

Following the review process, the Plan would be updated with consideration for the findings and resubmitted to DPE. It should be noted that the initial review of the STP will be undertaken in Term 3, 2024.

<sup>&</sup>lt;sup>6</sup> Travel Mode Survey for Staff and Students are based on questions and sequence of questions set by SINSW in accordance with their Transport Planning procedure. Customisation of surveys for North Sydney Public School will be undertaken in Week 3 or 4 of first term of upgrade opening.



## 6.3 Feedback Framework

Following the actions undertaken as part of the review process, feedback is to be provided to key stakeholders including: the community, TfNSW, Council, and the Department of Education, detailing the efficacy of the strategies. The strategies and Plan will be adapted accordingly



## **Appendix A. Author CVs**







Principal Lead - Traffic Management & Operations

Email: dora.choi@asongroup.com.au

Phone: 0450 923 889

Dora has 20 years of professional experience across the fields of urban planning, and traffic and transport engineering. With specialities in concept and schematic traffic design, road safety engineering, construction traffic management planning and major event traffic and transport operations planning, Dora focus on achieving practical, customer centred solutions commensurate with the project type, purpose and level of user experience established in collaboration with clients, delivery partners and project teams.

Dora's expertise in land use development planning and design has specific focus on car park design, traffic

#### **QUALIFICATIONS & EDUCATION**

- Post Graduate Diploma in Transport and Traffic (Monash)
- Post Graduate Diploma Planning & Design (Melbourne)
- Bachelor of Science (Auckland)

management system design, and loading facilities design and design of traffic systems based on the operational requirements as well as future adaptability of spaces. Dora has been involved in a broad range of traffic and transport projects providing high quality service and end to end project advice to a range of public and private sector clients.

Dora has worked on a broad range of inter-disciplinary design teams where she collaborated with clients and consultants of various disciplines in achieving forward thinking outcomes that considers both current and future needs of end users.

- Current Ason Group (Principal Lead: Traffic Management & Operations)
- 2018 2020 GTA Consultants (Associate Director)
- 2008 2018 Ratio Consultants (Senior Associate)
- 2013 2014 G20 Taskforce, Department of the Prime Minister and Cabinet (Assistant Director – Transport)
- 2007 2008 City of Melbourne (Senior Traffic Engineer)
- 2006 2007 City of Port Phillip (Transport Engineering Officer)
- 2005 2006 City of Port Phillip (Melbourne 2006 Commonwealth Games Operations Planner)
- 2000 2005 City of Port Phillip (Various Roles)

#### PROFESSIONAL BACKGROUND

#### **KEY SKILLS**

- Transport Management and Operations Planning
- Transport Design
- Event Traffic and Transport Management Operations Planning and Delivery
- · Stakeholder management

#### **KEY PROJECTS**

## Warrick Lane Precinct, Blacktown NSW Blacktown City Council

The Warrick Lane Precinct (The Precinct) is located within the Blacktown City Centre, 500 metres east of Blacktown Railway Station. The 2.8-hectare site has been identified for redevelopment as part of the of the Blacktown City Centre Transformation. The objective of the transformation is to provide employment, housing, social, cultural,





recreation and transport infrastructure within a framework of sustainability and design excellence.

Dora was engaged by Blacktown City Council to provide traffic and transport advice on the transformation project, and managed the delivery of a range of transport engineering output including schematic and detailed design input to the Project, Transport Impact Assessment in multiple phases, DA stage and Detailed Stage Construction Traffic and Pedestrian Management Plan preparation and worked closely with the broader project team.

## Blacktown Health Precinct, Blacktown NSW Blacktown City Council

Blacktown Health Precinct is located to the east of the Blacktown City Centre. The Health Precinct has been identified as a transformation project of the Blacktown City Council to support the forecasted growth in population planned for Blacktown. The objective of the transformation is to provide employment and social infrastructure within a framework of sustainability and design excellence.

Dora was engaged by Blacktown City Council to provide traffic and transport advice on the transformation project, and managed the delivery of a range of transport engineering output including masterplan, strategic transport analytics and design input to the Project.

### Woolworths National Loading Facilities Transport Management Safety Review | Woolworths

Dora was the National Technical Leader for the development and delivery of a loading facilities transport management safety review program for the Supermarkets branch of Woolworths which involved the development and delivery of a transport management inspection, review and reporting program involving over 1000 stores. Dora worked closely with the Health and Safety section of Woolworths and was a key member of the delivery team of the study.

# Woolworths Drive Program Design Standards Development and Test Fit | Woolworths

Dora was the National Technical Design Lead for the review and provision of technical design advice to inform the development of standard layout and the design guideline of drive through facilities for Woolworth Supermarket assets.

#### Principal Lead - Traffic Management & Operations

Email: dora.choi@asongroup.com.au

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Dora has completed a series of test fits across a number of stores located in NSW, SA, WA and NT reviewing and providing design options to retrofit drive through facilities.

# Woolworths Minchinbury Distribution Centre (NSW) | Woolworths

Dora was the Project Director and Transport Engineering Lead for the redesign of loading, circulation and parking facilities within the existing Woolworths Minchinbury Distribution Centre and associated Development Application Transport Assessment and Modification application.

# Woolworths Fresh Refrigerated Distribution Centre (VIC) | Fabcot

Dora was the Transport Engineering Lead from feasibility phase of the project, to completion of Planning Permit application and associated Concept to Schematic Design phases of the Woolworths Fresh Project in Truganina, Victoria. The project involved the development of a fourth leg to a roundabout, B-Double queuing areas, vehicle circulation, as well as parking facilities and design of a channelised right turn facility along Foundation Road.

# Woolworths Melbourne South Regional Distribution Centre (VIC) | Fabcot

Dora was the Transport Engineering Lead for the project and has provided transport engineering input from the development of the Principal's Project Requirement, assisting the Project Architect in the development of a reference design, assistance in provision of transport engineering advice to inform site selection, subsequent Concept and Schematic Design work, and Transport Impact Assessment for the Planning Application.

### Victoria Police Centre (2016 – 2020) and City West Police Complex (2011 – 2015), Melbourne | Cbus Property

The recently completed Victoria Police Centre and the City West Police Complex located at the corner of Spencer Street and La Trobe Street, Melbourne forms a custom-designed, integrated precinct.

Dora was the Transport Engineering Lead for the project since 2011 and has worked collaboratively with both the Project Principal, representatives of Victoria Police and the Project Design Team to develop custom designed solutions





Principal Lead – Traffic Management & Operations

Email: dora.choi@asongroup.com.au

Phone: 0450 923 889

development of Preliminary School Transport Plan, and liaison with Council.

Murrumbateman Public School | NSW Department of

## Murrumbateman Public School | NSW Department of Education

Dora is the Transport Engineering Lead for the project, and assisted in the preparation of responses to Response to Submissions, development of site access design, School Transport Plan, and liaison with key stakeholders.

#### Googong Public School | NSW Department of Education

Dora is the Transport Engineering Lead for the project, and assisted in the preparation of responses to Response to Submissions, development of site access design, School Transport Plan, and liaison with key stakeholders.

## North Sydney Public School | NSW Department of Education

Dora is the Transport Engineering Lead for the project, and assisted in the preparation of contingency parking and site access design, responses to Response to Submissions, development of School Transport Plan, and liaison with Council.

#### Mixed Use

Langston Place, Epping (NSW) | Cbus Property

88 Walker Street, North Sydney | Billbergia

1 Dension Street, North Sydney | Multiplex and The Winten Property Group

435 Collins Street, Melbourne (VIC) | Cbus Property

140 - 150 Queen Street, Melbourne (VIC) | Cbus Property

#### Community

Tom Wills Community Oval | Sydney Olympic Park Authority

to traffic and transport facilities associated with the development. Dora prepared Transport Assessment reports, technical memorandums, and heavily involved in consultation with authorities and stakeholder consultation.

#### Secure Facilities, Melbourne | Reserve Bank of Australia

Dora was the Traffic Management Lead for the Secure Facilities developed by the Reserve Bank of Australia in Craigieburn, Melbourne.

Dora was engaged to develop traffic management arrangements, functional requirements and specifications embedded into the architectural, civil and security arrangements of the project.

#### **Other Select Projects:**

#### Education

## Alex Avenue Public School | NSW Department of Education

Dora was the Transport Engineering Lead for the project, and assisted in the preparation of contingency parking and site access design, responses to Response to Submissions, development of School Transport Plan, and liaison with Council.

#### Estella Public School | NSW Department of Education

Dora was the Transport Engineering Lead for the project, and assisted in the preparation of responses to Response to Submissions, development of site access design, School Transport Plan, and liaison with key stakeholders.

## Barramurra Public School | NSW Department of Education

Dora was the Transport Engineering Lead for the project, and assisted in the preparation of responses to Response to Submissions, development of site access design, School Transport Plan, and liaison with key stakeholders.

# Hastings Secondary College (Port Macquarie Campus) | NSW Department of Education

Dora was the Transport Engineering Lead for the project, and assisted in the preparation of contingency parking and site access design, responses to Response to Submissions,





Senior Traffic Design Engineer - Ason Group

Email: wendy.zheng@asongroup.com.au

Phone: +61 2 9083 6601

Wendy is a qualified civil engineer with eight years of work experience across project management, traffic engineering, construction management, and civil and drainage design

During this time, Wendy has been involved in numerous projects for both private organisations and government agencies in Australia and United Kingdom.

Wendy has demonstrated her ability across numerous areas of traffic engineering, transport construction, and civil design and has been involved in many significant projects.

Past projects have ranged in size from detailed design of intersection upgrades to the preparation of Construction Traffic Management Plans, Traffic Control Plans, and Construction and Occupation Certification for both private

and public clients. Wendy also has experience dealing with the Transport Management Centre to obtain Road Occupancy Licenses as well as negotiating with Sydney Coordination Office for CTMP approvals.

While working in the UK Wendy was involved in the management, design and delivery of several large-scale precinct planning and design projects for local councils such as the School Streets project for Haringey and Liveable Streets programme in Tower Hamlets.

Wendy has worked on a broad range of inter-disciplinary design teams where she collaborated with clients and consultants of various disciplines in achieving forward thinking outcomes that considers both current and future needs of end users.

#### **QUALIFICATIONS & EDUCATION**

- Master of Engineering Management (University of Technology Sydney)
- BE Civil Engineering w Architecture (University of New South Wales)
- RMS Prepare a Work Zone Traffic Management Plan Card (Combined orange and red card)
- WorkCover Occupational Health and Safety Construction Induction Card.
- · Member of Engineers Australia

#### PROFESSIONAL BACKGROUND

2020 – Current: Ason Group

Senior Traffic Design Engineer

• 2019 – 2020: Project Centre Limited (UK)

Senior Traffic Engineer

• 2019 – 2019: WSP (UK)

Senior Engineer

2016 – 2019: GTA Sydney

Consultant and Senior Consultant

• 2012 – 2016: The Hills Shire Council

Graduate, and Civil Design Engineer

#### **KEY SKILLS**

- Transport Management and Operations Planning
- Transport Design
- Civil and Drainage Design

- Stakeholder management
- Autocad suite / Microstation
- · Vehicle tracking / Autoturn

#### **KEY PROJECTS & EXPERIENCE**

#### Warrick Lane Precinct, Blacktown | Blacktown Council

Wendy was the Traffic Management Lead for the Construction Traffic Management Planning for the development for the demolition phase.

#### **Liveable Streets, Tower Hamlets | Tower Hamlets Council**

Wendy was the Project Manager and Design Lead for the Brick Lane commercial precinct and Shadwell residential precinct re-design to encourage active travel and increase street frontage activation. Lead the project from early engagement phase with residents through to final consultation

with local stakeholders and precinct wide resident surveys for presentation to Council.

She was the post-consultation phase Design Lead for the Wapping residential precinct Liveable Streets implementation of LATM treatments and road closures / re-alignments.

Wendy was the Design Lead for the first phase of the Whitechapel hospital precinct re-design engaging with local stakeholders and residents to establish the parameters of the Liveable Streets programme.

#### **Telopea Masterplan | Land and Housing Corporation**

Wendy was the Design Lead for the masterplan business case study of the traffic impact on the surrounding road network in collaboration with the modelling team to produce sketches of the upgraded intersection in accordance to the Microsim and SIDRA results.

#### **VISY Smithfield | VISY**

Wendy is the Project Manager and Design Lead for precinct re-design of the VISY Smithfield site to resolve the congestion issues while accounting for six different stakeholders in collaboration with the modelling team to produce multiple concept designs for AIMSUM modelling, stakeholder consultation and eventual DA submission.

#### **Soper Place Penrith | Penrith Council**

Wendy is the Project Manager and Design Lead for Soper Place development of a multi-storey carpark in the existing Council atgrade carpark where she was involved in the design investigations for the surrounding road network in collaboration with modelling for DA submission.

#### North Shore Health Hub | Dexus

Wendy was the Project Manager and Design Lead for North Shore Health Hub during the design development and construction phases of the project. In the design development she investigated and validated both the internal and external access design including intersection upgrade designs for presentation to Council. During the construction phase she lead the construction traffic management planning for the development.

#### School Streets, Haringey | Haringey Council

Wendy was the Project Manager and Design Lead for the investigation into School Street programme implementation at all 57 of Haringey Council's public primary schools. She coordinated site visits to all the schools during pick up or drop off to observe travel behaviour and design to address the issues observed with the aim of increasing active travel. During the design process and after submission she was in active consultation with Council and the school stakeholders to ensure that the designs and report submitted are suitable for project aims and TfL funding requirements.





Principal Traffic Engineer – Ason Group

Email: tim.lewis@asongroup.com.au

Phone: +61 2 9083 6601

Tim has been working in the traffic engineering and transport planning industry for over 17 years. During this time, Tim has undertaken numerous projects for both private developers and Government Agencies, including Councils and Transport for NSW across a range of industry sectors.

Tim has demonstrated ability in all areas of traffic engineering and transport planning, and has been involved in many significant studies. Tim is also an accredited Road Safety Auditor (Level 2) with the Register of Road Safety Auditors; and has represented on numerous occasions to the NSW Land & Environment Court as an Expert Witness.

Tim's projects have ranged in size from detailed design advice in relation to small residential developments with highly constrained access opportunities; to the preparation of Traffic Impact Assessment (TIA) and Transport Management and Accessibility Plans (TMAPs) for large Planning Proposal and State Significant Development submissions.

Tim has been trained in and worked with numerous transport planning models and this experience allows him to provide strategic and specialist advice on transport planning issues. These models and programs include AutoCAD, AutoTrack, SIDRA, Quadstone Paramics and LinSig.

#### **QUALIFICATIONS & EDUCATION**

- BE Civil (Sydney University)
- Level 2 Road Safety Auditor
- Member Engineers Australia (incl. Transport Society)

#### PROFESSIONAL BACKGROUND

2016 - Present Ason Group

Principal Traffic Engineer

• 2006 – 2015 TRAFFIX

Associate / Senior Engineer

#### **KEY SKILLS**

- Traffic Impact Assessments
- Master Planning & Feasibility Studies
- Sustainable Transport Planning
- Green Travel Plans & Transport Access Guides
- Local Area Traffic Management (LATM) Plans
- Road Safety Audits
- · Pedestrian crossing safety review and modelling

- Movement & Place planning & design collaboration
- Transportation Modelling Analysis
- Car Park & Loading Dock Design & Assessment
- Construction & Occupancy Certification
- Construction Traffic Management Plans
- · Strategic infrastructure and staging advice
- · Project Management

#### **PROJECTS**

- Ed.Square (Edmondson Park South Frasers Town Centre) – mixed use town centre – multiple MODs, including Aimsun modelling, sustainable travel plan, operational and construction traffic management plans, design statements for Construction and Occupation
- · Keyhole Land Rezoning, Horsley Park
- 42 Boorea Street, Lidcombe multi-level warehouse
- Mixed Use Tower Rosehill St. Redfern
- Access Logistic Park, Mamre Road, Kemps Creek

- Aspect Industrial Estate, Mamre Road, Kemps Creek masterplan and multiple DA/MODs
- 42 Raymond Avenue, Matraville multi-level industrial
- Pymble Golf Club rezoning seniors living
- Rhodes Waterside Shopping Centre retail fit-out and traffic management
- Mercedes Benz, Castle Hill
- Private Hospital Goulburn Street, Liverpool



### Sadeepth Bandaranayake

Traffic Engineer – Ason Group Email:

sadeepth.bandaranayake@asongroup.com.au

Phone: +61 2 9083 6601

Sadeepth has a Bachelor of Civil Engineering and Bachelor of Accounting with over 2 years of experience in transport engineering and design.

During this time, Sadeepth has been involved in numerous projects for both private organisations and government agencies including, Transport for New South Wales (TfNSW) and a variety of different Councils.

Sadeepth has demonstrated his ability across numerous areas of traffic engineering, transport construction, and transport planning and has been involved in many significant studies.

Past projects have ranged in size from detailed design advice in relation to the preparation of reviews and due diligence advice, to the preparation of Construction Traffic Management Plans (CTMP), Traffic Control Plans (TCP), and Traffic Impact Assessment (TIA) for Councils.

Sadeepth has been trained in and worked with numerous transport planning models and this experience allows him to provide strategic and specialist advice on transport planning issues. These models and programs include AutoCAD and SIDRA

#### **QUALIFICATIONS & EDUCATION**

- Bachelor of Civil Engineering (University of Technology, Sydney)
- Bachelor of Accounting (University of Technology, Sydney)
- 2022 2022: Ason Group
  - Traffic Engineer
- 2021 2022: Ason Group
  - Graduate Traffic Engineer
- 2020 2021: Peopletrans
  - **Graduate Traffic Engineer**

#### PROFESSIONAL BACKGROUND

#### **KEY SKILLS**

- Transport Assessments and technical documentation
- Transport Design car park design and compliance
- Construction Traffic Management Plans
- Operational Traffic Management Plans
- Loading Dock Management Plans

- AutoCAD, AutoTURN, Vehicle Tracking
- Transport modelling SIDRA
- Australian Standards (AS2890) compliance

#### **KEY PROJECTS & EXPERIENCE**

#### Schools Infrastructure Projects

Narrabeen Education Precinct
 School Travel Plan providing recommendations to improve the operational traffic management measures for the established Narrabeen North Public School and Narrabeen Sports High School.

#### Residential, Commercial & Mixed-Use

Bellambi Estate

Traffic Assessment for analysis of traffic and impacts on the surrounding road network as a result of the proposed commercial and 600+ residential dwellings. Also, to provide guidance with respect to the layout of the estate most suitable from a traffic perspective.

- Compass 2 Warehouse and Distribution Centre
   Provision of design advice, swept path assessment,
   SIDRA modelling, Transport Assessment documentation,
   Construction Traffic documentation and Green Travel documentation for the development.
- 113-153 Aldington Road
   Provision of design advice, swept path assessment,
   Transport Assessment documentation, Construction
   Traffic documentation and Green Travel documentation for the development.
- Port Air Industrial Estate
   Provision of design advice, swept path assessment,
   Traffic Management Plan

#### Transport Planning/ Traffic Studies

 B-Line Benefits Realisation Plan (Stage 2)
 Site inspection, cost/benefits analysis, impact assessment of the project using bus boarding/alighting analysis and trip time analysis.

## **Appendix B. Record of TfNSW Consultation**



#### **Tim Lewis**

From: Sadeepth Bandaranayake <sadeepth.bandaranayake@asongroup.com.au>

Sent: Friday, 25 August 2023 8:42 AM

To: Isidro Flores-Coni
Cc: Josh Johnston

**Subject:** RE: North Sydney Public School - SSD-11869481

"Don't get caught out" - This email has come from an external source. Do not click on any links or open any attachments unless you are expecting them.

Hi Isidro,

Further to the email from council, please see endorsement from TfNSW below. This will be included in the report.

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

From: Sophia Grieve <Sophia.Grieve@transport.nsw.gov.au>

Sent: Thursday, August 24, 2023 2:25 PM

To: Sadeepth Bandaranayake <sadeepth.bandaranayake@asongroup.com.au>

**Cc:** Rosie Selby <Rosie.Selby@transport.nsw.gov.au> **Subject:** FW: North Sydney Public School - SSD-11869481

Importance: High

#### Hi Sadeepth

Thanks very much for making all of the revisions requested from us.

I can confirm that TfNSW team is now satisfied with the content of the School Travel Plan (STP) for North Sydney Public School SSD-11869481; and for the requirement for the proponent to consult with Transport for NSW on the STP, as per **Condition 19** sections a) and b) c) d) and e).

Many thanks Cheers Sophia

**OFFICIAL** 

**OFFICIAL** 

From: Sadeepth Bandaranayake <a href="mailto:sadeepth.bandaranayake@asongroup.com.au">sadeepth.bandaranayake@asongroup.com.au</a>

Sent: Tuesday, 22 August 2023 12:29 PM

To: Sophia Grieve < Sophia. Grieve@transport.nsw.gov.au >

Cc: Maryam Yadak < <a href="Maryam.Yadak@transport.nsw.gov.au">Maryam.Yadak@transport.nsw.gov.au</a> Subject: RE: North Sydney Public School - SSD-11869481

**CAUTION**: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi Sophia,

Thanks for getting back to me. I believe it was v02 of the STP I originally sent you back on the 8<sup>th</sup> of June, we had changed the student mode share by the previous version you reviewed (v04) with a response on the 18<sup>th</sup> of August but not the staff mode share. The latest version (v05) has changes to both. Please see v02 and v05 of the report attached for your convenience.

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

#### **OFFICIAL**

From: Sophia Grieve < Sophia. Grieve@transport.nsw.gov.au >

Sent: Tuesday, August 22, 2023 11:31 AM

To: Sadeepth Bandaranayake < sadeepth.bandaranayake@asongroup.com.au >

Cc: Maryam Yadak < Maryam. Yadak@transport.nsw.gov.au > Subject: FW: North Sydney Public School - SSD-11869481

Hi Sadeepth

Thank you for this – unfortunately I cannot see any changes in staff mode share in this current OSTP.

Could you advise of what changes you have made and send through the updated OSTP?

Thanks very much Cheers Sophia

#### **OFFICIAL**

From: Sadeepth Bandaranayake < sadeepth.bandaranayake@asongroup.com.au >

Sent: Monday, 21 August 2023 9:09 AM

To: Sophia Grieve <Sophia.Grieve@transport.nsw.gov.au>

Cc: Maryam Yadak < Maryam. Yadak@transport.nsw.gov.au >; Isidro Flores-Coni < Isidro.Flores-Coni@turntown.com >

Subject: RE: North Sydney Public School - SSD-11869481

**CAUTION**: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Good morning Sophia,

I hope you had a great weekend. Please see the updated STP attached with the updated mode share.

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

#### **OFFICIAL**

From: Sophia Grieve <Sophia.Grieve@transport.nsw.gov.au>

Sent: Friday, August 18, 2023 2:56 PM

To: Sadeepth Bandaranayake < sadeepth.bandaranayake@asongroup.com.au >

Cc: Maryam Yadak < <u>Maryam.Yadak@transport.nsw.gov.au</u>>
Subject: FW: North Sydney Public School - SSD-11869481

Importance: High

#### Hi Sadeepth

TfNSW Travel Demand Management team (TDM) has reviewed the School Travel Plan (STP) prepared by ASON for the proposed development of North Sydney Public School, Condition D19 of the Development Consent SSD-11869481. Please note that the TfNSW Travel Demand Team can only advise on Condition 19 sections a) and b).

#### Recommendations:

The TfNSW Travel Demand Management team (TDM) appreciates the work done on the School Travel Plan (STP) for the proposed development of North Sydney Public School sent in August 2023. TfNSW TDM team provides the following updated recommendations to update the STP. If the applicant could please address the below yellow recommendations.

**Mode share targets:** TfNSW notes that the STP provides a table to identify and provide existing and future mode share targets for staff and students to take sustainable active and public transport travel to and from the site. Given the close proximity of the site to buses, trains, pedestrian and cycling routes, we ask that mode shares for staff car use (as driver) be reduced, over both the short and long term.

TfNSW TDM Team – No further action – item closed

**Parking:** TfNSW TDM team understand there are currently 50 on-site car parks existing onsite, and ask the applicant to implement as part of their Implementation Plan, a Parking management strategy that prioritises use by staff on a needs basis, and that the strategy actively encourages staff to use the sustainable transport options that are available. Carpooling should also be encouraged in this strategy, and allocates priority parking for those who carpool.

TfNSW TDM Teaam – No further action – item closed

Travel Access Guide: TfNSW appreciates that a TAG has been placed in the STP. TfNSW asks that the TAG includes:

- A more comprehensive map showing all modes of public and active transport, including buses (private and public), trains, walking and cycling routes, as well as times for these public transport options and kiss and drop zones for parents.
- Provide information advising students and staff that additional information about service routes and timetables for buses and trains is available on the Trip Planner at <a href="mailto:transportnsw.info/">transportnsw.info/</a>
- Provide information advising students and staff that additional information about walking routes is available on the Trip Planner at <u>transportnsw.info/</u>
- Update number and location of End of Trip facilities (bike racks, showers, lockers, change rooms) and locate on map.
- For further helpful information please check this link How to Create a Travel Access Guide doc here.

TfNSW TDM Team no further action - closed

**Travel Survey:** TfNSW appreciate that an annual travel survey (2021 and 2022) has been included in the STP, but asks that the STP travel survey included in the appendix, be updated and distributed three months post-occupancy, and every

year for lifecycle of the development. The surveys should include questions to ask obtain staff and student residential postcodes to identify travel origin and destination patterns. An example of a travel survey can be found <a href="https://example.com/hereaction-closed">here</a>.

TfNSW – No further action - closed

**End of trip (EOT) facilities:** TfNSW understands development will have 63 bicycle parking spaces and proposed EoT facilities such as bike racks, showers and change rooms. At present, bicycle parking is located in are in a basement car park and TfNSW does not consider this location to be attractive or easily accessible to encourage more staff to use these. Please find a resource for bicycle parking and EoT: cycleway design toolkit.

TfNSW- No further action - closed

Implementation Plan: TfNSW appreciate that the STP has an Implementation Plan, but ask that the Implementation Plan includes specific timing and completion dates and a specific task owner who will be ready to carry out the Implementation Plan when occupancy occurs. The implementation plan should include your communications and engagement strategy (this can include how you plan to promote your initiatives (digital, hardcopy, how will the STP be distributed). This implementation plan should be updated both on an annual basis. Please consult the TfNSW MySydney website for more examples of proven travel demand measures for active and public transport for the preparation of the GTP soft activities and hard activities.

TfNSW TDM Team – No further action – closed

#### **School Transport Operations Access Management Plan:**

TfNSW TDM team have consulted our planning team and they would like to see if the proposed kiss and ride location along Bay Road would have sufficient capacity to accommodate the increased number of drop off/pick ups? They would like to see clarification of how students access safely from North across Pacific Highway and MacHatton Street as there is no pedestrian crossing.

TfNSW TDM team ask that the applicant contact Maryam Yadak to find the relevant planner to review this.

TfNSW TDM Team - No further action - closed

**Submission:**\_TfNSW requests that the Applicant submits the updated STP to TfNSW TDM Team with enough time to review prior to occupation.

Many thanks Cheers Sophia

#### **Sophia Grieve**

Travel Demand Project Manager Customer Journey Planning Greater Sydney

**Transport for NSW** 

E sophia.grieve@transport.nsw.gov.au transport.nsw.gov.au

0481 063 937

231 Elizabeth Street, Sydney NSW 2000



Transport for NSW



I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

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# **Appendix C. Record of Council Consultation**



#### Sadeepth Bandaranayake

**From:** Sadeepth Bandaranayake

Sent: Tuesday, 10 October 2023 10:52 AM

To: Max White

**Cc:** Tim Lewis; Isidro Flores-Coni

**Subject:** RE: NSPS - School Travel Plan - Council Comments

Hi Max,

I just tried to give you a ring regarding the below. Could you please get back to me ASAP? Much appreciated.

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

From: Sadeepth Bandaranayake

Sent: Wednesday, August 30, 2023 2:43 PM

To: Max White < Max. White@northsydney.nsw.gov.au > Subject: FW: NSPS - School Travel Plan - Council Comments

Hi Max,

I hope you're well.

Please see the school principal's responses below. Could you please provide feedback by Friday this week?

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

From: Fiona Davis <FIONA.DAVIS@det.nsw.edu.au>

Sent: Sunday, 27 August 2023 9:42 PM

To: Josh Johnston < Josh. Johnston@turntown.com >

**Cc:** Alfred Jury < <u>Alfred.Jury3@det.nsw.edu.au</u>>; Jeremy Farrington < <u>Jeremy.Farrington@det.nsw.edu.au</u>>; Roshan Joy < <u>Roshan.Joy@det.nsw.edu.au</u>>; Isidro Flores-Coni < <u>Isidro.Flores-Coni@turntown.com</u>>; Ashley Grimmond < <u>ASHLEY.GRIMMOND@det.nsw.edu.au</u>>; Aisling Duke < <u>Aisling.Duke@det.nsw.edu.au</u>>; Lisa Tonzing < lisa.tonzing@det.nsw.edu.au>

Subject: Re: NSPS - School Travel Plan - Council Comments

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Hi Josh,

My comments in purple below.

**Fiona** 

#### Fiona Davis

#### **Principal**

**North Sydney Public School** 

02 9955 2822 | nthsyddem-p.school@det.nsw.edu.au

**From:** Josh Johnston < <u>Josh.Johnston@turntown.com</u>>

Sent: 25 August 2023 13:31

To: Fiona Davis < FIONA.DAVIS@det.nsw.edu.au >

**Cc:** Alfred Jury < <u>Alfred.Jury3@det.nsw.edu.au</u>>; Jeremy Farrington < <u>Jeremy.Farrington@det.nsw.edu.au</u>>; Roshan Joy < <u>Roshan.Joy@det.nsw.edu.au</u>>; Isidro Flores-Coni < <u>Isidro.Flores-Coni@turntown.com</u>>; Ashley Grimmond < <u>ASHLEY.GRIMMOND@det.nsw.edu.au</u>>; Aisling Duke < <u>Aisling.Duke@det.nsw.edu.au</u>>; Lisa Tonzing < lisa.tonzing@det.nsw.edu.au>

Subject: NSPS - School Travel Plan - Council Comments

[External Email] This email was sent from outside the NSW Department of Education. Be cautious, particularly with links and attachments.

#### Fiona,

Please see below the comments received from North Sydney Council in relation to the School Travel Plan (as attached). This plan is one of the Authority approval conditions that we are required to have approved through the Dept. of Planning, we will need to show the plan and all of the consultation with Council and TfNSW to support the submission of the plan. Please note TfNSW have fully endorsed the plan.

Council have supplied the following statement in relation to the developed plan that has been put forward for Council endorsement. "North Sydney Council would consider supporting the plan if a genuine effort was made to reach the active transport targets identified in the plan."

Could you please provide insight to whether the school would be willing to accept any of the proposed comments as listed below:

Please note the red comments are supplied by ASOS the consultant who developed the report.

#### Cycling

- Offer financial incentives for staff to purchase bikes/e-bikes. This initiative should be taken up with the NSW
  DoE to provide additional funding. There is a limited budget provided by the DoE to manage and run the
  school this has never included financial incentives for staff.
- Offer bike/e-bike training courses for staff and students. As above, this initiative should be taken up with the NSW DoE to provide additional funding to the school. Students K-6 complete Road Safety lessons as per the

#### **Tim Lewis**

From: Sadeepth Bandaranayake

**Sent:** Friday, 1 September 2023 4:52 PM

To: Max White

**Cc:** Tim Lewis; Isidro Flores-Coni

**Subject:** FW: NSPS - School Travel Plan - Council Comments

Hi Max,

Could you please include Tim and Isidro in any correspondence relating to the below? Much appreciated.

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

From: Sadeepth Bandaranayake

Sent: Wednesday, August 30, 2023 2:43 PM

**To:** Max White <Max.White@northsydney.nsw.gov.au> **Subject:** FW: NSPS - School Travel Plan - Council Comments

Hi Max,

I hope you're well.

Please see the school principal's responses below. Could you please provide feedback by Friday this week?

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

From: Fiona Davis < FIONA.DAVIS@det.nsw.edu.au >

Sent: Sunday, 27 August 2023 9:42 PM

To: Josh Johnston < Josh. Johnston@turntown.com >

Cc: Alfred Jury < <a href="mailto:Alfred.Jury3@det.nsw.edu.au">Alfred.Jury3@det.nsw.edu.au</a>; Roshan Joy

<Roshan.Joy@det.nsw.edu.au>; Isidro Flores-Coni <Isidro.Flores-Coni@turntown.com>; Ashley Grimmond

<ASHLEY.GRIMMOND@det.nsw.edu.au>; Aisling Duke <Aisling.Duke@det.nsw.edu.au>; Lisa Tonzing

< lisa.tonzing@det.nsw.edu.au >

Subject: Re: NSPS - School Travel Plan - Council Comments

"Don't get caught out" - This email has come from an external source. Do not click on any links or open any attachments unless you are expecting them.

Hi Josh,

My comments in purple below.

**Fiona** 

#### Fiona Davis

#### **Principal**

#### **North Sydney Public School**

02 9955 2822 | nthsyddem-p.school@det.nsw.edu.au

From: Josh Johnston < Josh. Johnston@turntown.com>

**Sent:** 25 August 2023 13:31

To: Fiona Davis <FIONA.DAVIS@det.nsw.edu.au>

Cc: Alfred Jury <a li>Alfred.Jury3@det.nsw.edu.au</a>; Jeremy Farrington <a li>Jeremy.Farrington@det.nsw.edu.au</a>; Roshan Joy

<Roshan.Joy@det.nsw.edu.au>; Isidro Flores-Coni <Isidro.Flores-Coni@turntown.com>; Ashley Grimmond

<ASHLEY.GRIMMOND@det.nsw.edu.au>; Aisling Duke <Aisling.Duke@det.nsw.edu.au>; Lisa Tonzing

lisa.tonzing@det.nsw.edu.au>

Subject: NSPS - School Travel Plan - Council Comments

[External Email] This email was sent from outside the NSW Department of Education. Be cautious, particularly with links and attachments.

Fiona,

Please see below the comments received from North Sydney Council in relation to the School Travel Plan (as attached). This plan is one of the Authority approval conditions that we are required to have approved through the Dept. of Planning, we will need to show the plan and all of the consultation with Council and TfNSW to support the submission of the plan. Please note TfNSW have fully endorsed the plan.

Council have supplied the following statement in relation to the developed plan that has been put forward for Council endorsement. "North Sydney Council would consider supporting the plan if a genuine effort was made to reach the active transport targets identified in the plan."

Could you please provide insight to whether the school would be willing to accept any of the proposed comments as listed below:

Please note the red comments are supplied by ASOS the consultant who developed the report.

#### Cycling

- Offer financial incentives for staff to purchase bikes/e-bikes. This initiative should be taken up with the NSW
   DoE to provide additional funding. There is a limited budget provided by the DoE to manage and run the school
   - this has never included financial incentives for staff.
- Offer bike/e-bike training courses for staff and students. As above, this initiative should be taken up with the
  NSW DoE to provide additional funding to the school. Students K-6 complete Road Safety lessons as per the
  PDHPE syllabus. Is this initiative, something the council could fund on the weekend so all family members can
  participate in?
- Offer free bike repair services/bike maintenance courses to staff and students. It would be wonderful if the local council could offer this service for free to the students of the school.
- Ensure that the 63 new bike parking locations are selected using the principles and criteria from the Bicycle Parking Facilities; Guidelines for Design and Installation AustRoads guide. This includes, close to destinations, prominent and obvious, safe for users/bicycles, pleasant ambience and compliant with regulations. Provided.
- Where possible, increase the width of the proposed shared path along the Western Boundary to meet
   Transport for NSW share path dimensions (ideally 3.5+ metres). The existing basketball court and trees do not
   allow for the widening of the shared path. This would need to be negotiated with the neighbours....
- Provide a bike entry/exit point on McHatton Street at the share path entry/exit (similar to the Berry Street side).
   Students can and already dismount at the site entry on McHatton Street. It is a level accessible entrance that leads directly to the bike racks.

#### **Public Transport**

Provide Opal Cards to staff to subsidise or completely cover the cost of public transport. Providing free parking
for staff is a considerable cost and takes up large areas of land that could be more efficiently used for more play
space or buildings. It is therefore reasonable to also subsidise public transport. This initiative should be taken up
with the NSW DoE to provide additional funding to the school.

#### Walking

- As a part of action 2.5, prepare a TCS to upgrade traffic signal along Pacific Highway specifically for an
  additional pedestrian signal at McClaren/Pacific Highway Intersection and an additional traffic light, with
  pedestrian signals at the West Street/Pacific Highway intersection. Alternatively, provide Council with the funds
  to deliver this work. The existing
- Deliver or fund an upgrade to the existing pedestrian crossings on Bay Road kerb build outs and footpath extensions.
- Deliver or fund the installation of the pedestrian crossing on McHatton Street at the proposed share path intersection.
- Deliver or fund continuous footpath treatment on McHatton Street /Pacific Highway intersection.
- Student safety is our first priority please ensure all measures to keep our students safe are taken. I am unable
  to comment or provide advice on road safety measures. I'm sure the council can make recommendations on
  how to move forward.

#### **Car Share**

Although staff are unlikely to use car-share services for work-related activities, staff should be offered
subsidised car share membership. An organisational membership offered to staff would provide a more
affordable alternative to car use outside work hours. There is no nexus between out of work activities and the
operation of the school. This initiative should be taken up with the NSW DoE to provide additional funding to
the school.

#### **Car Parking**

Have clear criteria for how parking is allocated to staff. Parking should not be automatically deferred to
management positions or on a 'first in' basis. Managers have an important role to play in setting a culture of

sustainable transport use. Parking could also be paid for by staff, which could then subsidise public transport use. Will the school be open to a parking roster? A similar scenario is operational in Wentworth Point PS. A parking roster is not needed - all staff who drive to work are able to park in the carpark. We double park if necessary.

- Considering the increase in student numbers and zero increase in outdoor play area, parking spaces should be
  converted to spaces for students to use. This will reduce pedestrian crowding and congestion during pick-up and
  drop-off. It is not feasible to convert the carpark into a playground. It would need significant work to make it
  safe and WHS compliant, as well as suitable for students to play in. With the removal of the demountables.... we
  have actually gained playground space. We also operate on a split timetable so there is no pressure on our
  play space. The council should encourage parents to walk to pick students up from all schools.... this would
  alleviate pressure on all North Sydney streets.
  - To further support this reallocation, according to the North Sydney Council's DCP 2013: Section 10 Car Parking and Transport, the required number of parking spaces for staff of schools is 1 space per 6 staff members. This corresponds to approximately 15 parking spaces, significantly less than the 50 spaces currently available. No changes are proposed to the parking, we understand reducing parking is not feasible.
- Develop a transition strategy for reducing parking/driving to work. Identify and mitigate what the barriers are to taking other modes of transport and reserve parking for staff that require parking (such as casual/relief teachers or people living with a disability). Parking is available for all DoE personnel working at the school during the day teachers (permanent and casuals), contractors and Admin staff taking pressure off surrounding streets. It is important to note the education sector is currently experiencing a staffing crisis we will support and encourage staff to come to work any way they see fit.

Please note we request your feedback to allow a formal response to be issued to Council.

#### Regards,

#### **Josh Johnston**

Senior Project Manager, Health and Higher Education

#### **Turner & Townsend**

Level 19, One Wharf Lane, 171 Sussex Street, Sydney NSW 2000 m: +61 427 433 259 | www.turnerandtownsend.com <u>Josh.Johnston@turntown.com</u>

Turner & Townsend Project Management Pty Ltd ABN 88 123 154 585

#### Turner & Townsend Limited

For further information and registration details visit our website <a href="http://www.turnerandtownsend.com">http://www.turnerandtownsend.com</a>

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#### Sadeepth Bandaranayake

From: Max White <Max.White@northsydney.nsw.gov.au>

Sent: Tuesday, 1 August 2023 4:08 PM

To: Sadeepth Bandaranayake
Cc: Iman Mohammadi; Bec Thomas
Subject: NSC Comments - School Travel Plan

Hi Sadeepth,

Hope you are doing well.

I have reviewed the School Travel Plan for North Sydney Public School and provided the below comments. Please let me know if you have any further questions.

#### Cycling

- Offer financial incentives for staff to purchase bikes/e-bikes.
- Offer bike/e-bike training courses for staff and students.
- Offer free bike repair services/bike maintenance courses to staff and students.
- Ensure that the 63 new bike parking locations are selected using the principles and criteria from the Bicycle
  Parking Facilities; Guidelines for Design and Installation AustRoads guide. This includes, close to
  destinations, prominent and obvious, safe for users/bicycles, pleasant ambience and compliant with
  regulations.
- Where possible, increase the width of the proposed shared path along the Western Boundary to meet Transport for NSW share path dimensions (ideally 3.5+ metres).
- Provide a bike entry/exit point on McHatton Street at the share path entry/exit (similar to the Berry Street side).

#### **Public Transport**

Provide Opal Cards to staff to subsidise or completely cover the cost of public transport. Providing free
parking for staff is a considerable cost and takes up large areas of land that could be more efficiently used
for more play space or buildings. It is therefore reasonable to also subsidise public transport.

#### Walking

- As a part of action 2.5, prepare a TCS to upgrade traffic signal along Pacific Highway specifically for an additional pedestrian signal at McClaren/Pacific Highway Intersection and an additional traffic light, with pedestrian signals at the West Street/Pacific Highway intersection. Alternatively, provide Council with the funds to deliver this work.
- Deliver or fund an upgrade to the existing pedestrian crossings on Bay Road kerb build outs and footpath extensions.
- Deliver or fund the installation of the pedestrian crossing on McHatton Street at the proposed share path intersection.
- Deliver or fund continuous footpath treatment on McHatton Street /Pacific Highway intersection.

#### **Car Share**

 Although staff are unlikely to use car-share services for work-related activities, staff should be offered subsidised car share membership. An organisational membership offered to staff would provide a more affordable alternative to car use outside work hours.

#### **Car Parking**

 Have clear criteria for how parking is allocated to staff. Parking should not be automatically deferred to management positions or on a 'first in' basis. Managers have an important role to play in setting a culture of sustainable transport use. Parking could also be paid for by staff, which could then subsidise public transport use.

- Considering the increase in student numbers and zero increase in outdoor play area, parking spaces should be converted to spaces for students to use. This will reduce pedestrian crowding and congestion during pickup and drop-off.
  - To further support this reallocation, according to the North Sydney Council's DCP 2013: Section 10 Car Parking and Transport, the required number of parking spaces for staff of schools is 1 space per 6 staff members. This corresponds to approximately 15 parking spaces, significantly less than the 50 spaces currently available.
- Develop a transition strategy for reducing parking/driving to work. Identify and mitigate what the barriers
  are to taking other modes of transport and reserve parking for staff that require parking (such as
  casual/relief teachers or people living with a disability).

Kind regards,

Max

From: Max White <Max.White@northsydney.nsw.gov.au>

Date: Tuesday, 4 July 2023 at 3:35 pm

To: "sadeepth.bandaranayake@asongroup.com.au" <sadeepth.bandaranayake@asongroup.com.au>

Cc: Iman Mohammadi < Iman. Mohammadi@northsydney.nsw.gov.au >, Eoin Cunningham

<Eoin.Cunningham@northsydney.nsw.gov.au>

Subject: RE: North Sydney Public School - School Travel Plan

Hi Sadeepth,

Thanks for taking my call earlier regarding the School Travel Plan for North Sydney Public School.

Just confirming that the usual timeline for reviewing and providing feedback on Green Travel Plans is four weeks. I can aim for sooner, but it really depends on my capacity, which is currently limited.

Feel free to reach out if you need to discuss further.

Kind regards,

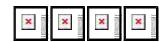
Max



#### **Max White**

Sustainable Transport Project Co-ordinator

**P** +61 2 9936 8529 **| M** +61 468 650 608 Max.White@northsydney.nsw.gov.au





From: Sadeepth Bandaranayake < sadeepth.bandaranayake@asongroup.com.au >

Sent: Monday, July 3, 2023 11:09 AM

To: Iman Mohammadi < Iman. Mohammadi@northsydney.nsw.gov.au>

Subject: RE: North Sydney Public School - School Travel Plan

You don't often get email from sadeepth.bandaranayake@asongroup.com.au. Learn why this is important

CAUTION: Do not click links or open attachments unless you recognise the sender and know the content is safe. Hi Iman,

I just tried to give you a ring regarding the below. It would be greatly appreciated if you could get back to me regarding this.

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

From: Sadeepth Bandaranayake

Sent: Thursday, June 8, 2023 1:32 PM

To: Rosie.Selby@transport.nsw.gov.au; Iman.Mohammadi@northsydney.nsw.gov.au;

 $\underline{developments.sydney@transport.gov.au}$ 

Cc: Dora Choi < dora.choi@asongroup.com.au >

Subject: North Sydney Public School - School Travel Plan

Hi Rosie, Iman, and the Developments Sydney Team,

The School Travel Plan has been updated to address Condition D19 of the Development Consent SSD-11869481 issued by Department of Planning and Environment on 21 February 2022.

Please find the link to the updated School Travel Plan below for your review and consideration.

[1903] North Sydney PS

If helpful, we can arrange a time for a meeting where we can present and step through the document for approval.

If you had any questions, please don't hesitate to reach out to Dora or myself.

Kind regards,

#### Sadeepth Bandaranayake

Traffic Engineer | Ason Group

T: +61 2 9083 6601 | M: 0490 074 048 | E: sadeepth.bandaranayake@asongroup.com.au

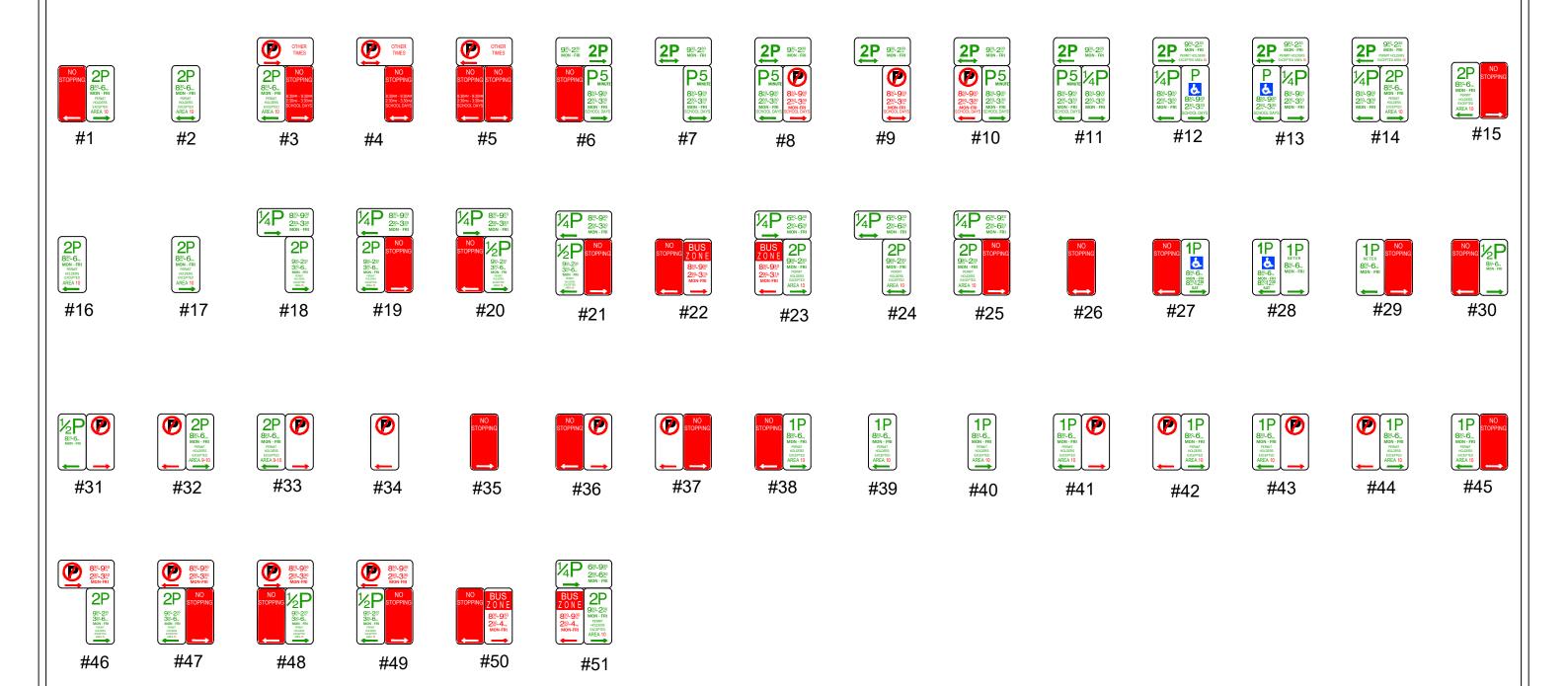
A: Suite 17.02, Level 17, 1 Castlereagh Street, Sydney NSW 2000

\*

### **Appendix D. Signage and Line-marking Plan**



# SIGN SCHEDULE



Notes:

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Document Info:

Client:

SINSW

Drawn by: Tanya Chen File name: AG1723 - 03 - v02.dwg

182 PACIFIC HIGHWAY, NORTH SYDNEY

Drawing Title:

Project:

AG 1723

PUBLIC RELM CAR PARKING RESTRICTIONS SIGNAGE SCHEDULE

Date:

20-Aug-21

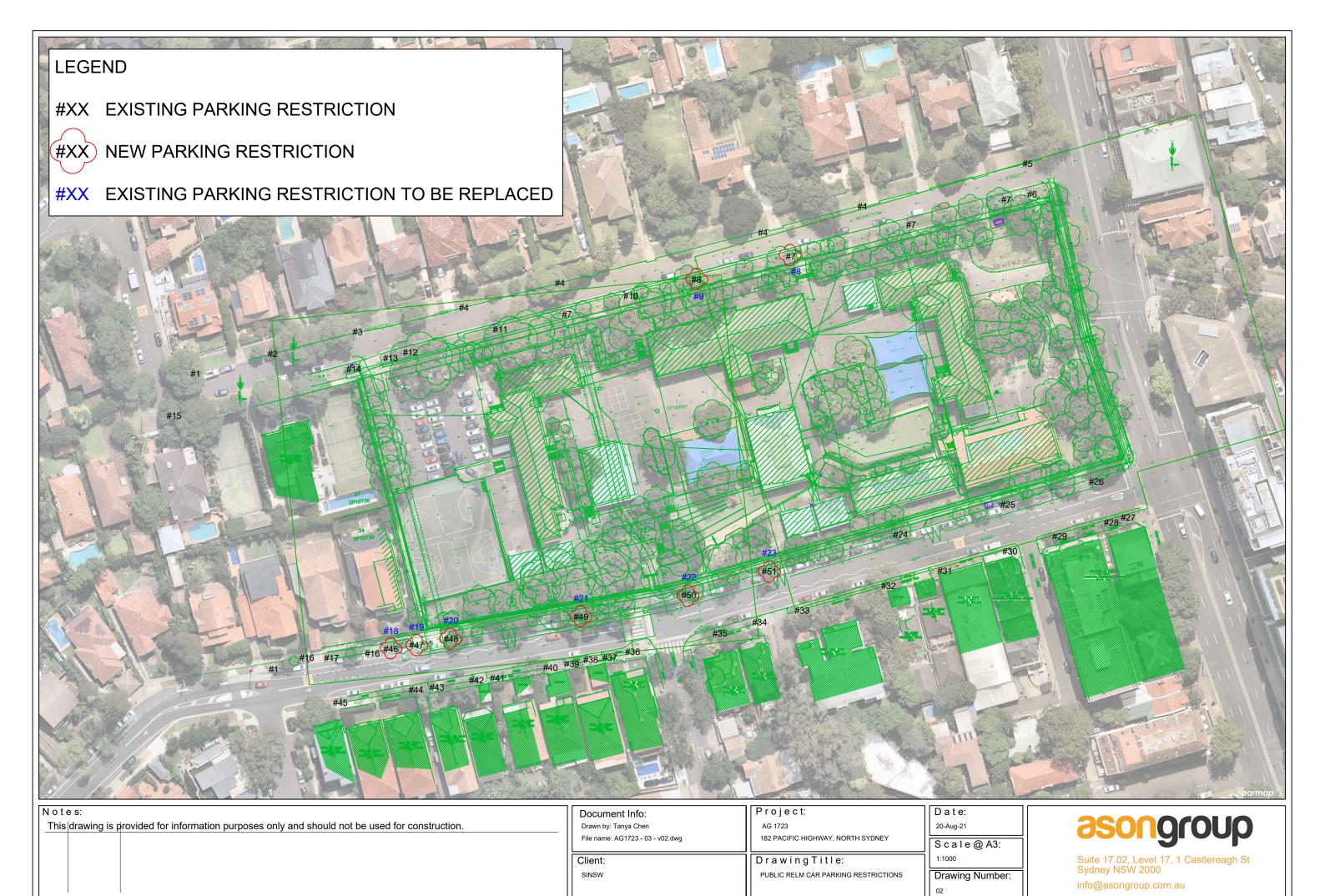
Scale @ A3:

1:1000

Drawing Number:

asongroup

Suite 17.02, Level 17, 1 Castlereagh St Sydney NSW 2000 info@asongroup.com.au



### **Appendix E. Transport Access Guide**



#### NSW Department of Education – School Infrastructure



### **North Sydney Public School**

### Travel Access Guide

#### **Project overview**

North Sydney Public School is committed to providing students with safe, easy, and sustainable ways of getting to and from School. The options below include walking, cycling, catching public transport, or by car.

#### Active ways to get to school



#### Walking to School

Students living around North Sydney could walk to school in 15 minutes or less, saving the need for drop-off and pick-up by car.

The map over the page shows safe and accessible walking trails for your child to travel to and from home and North Sydney Public School. Footpaths are typically available on both sides of all streets.

A raised zebra crossing is available on Bay Road immediately south of the school which connects to another raised zebra crossing on Edward Street. Signalised pedestrian crossings provide full movement across Pacific Highway. A pedestrian only laneway connects Bay Road and McHatton Street from where students continuing further north can access the raised zebra crossings on Crows Nest Road and Morton Streets.

Investigations into additional footpath facilities and or upgrades are currently being undertaken.

For more information about walking routes available, please check out Trip Planner at transportnsw.info/



#### Cycling to School

Families who live approximately 2km from the school, have the options of cycling to school. Children under 16 and adult riders accompanying and

supervising them may ride on the footpath unless there are signs specifically prohibiting cycling.

The map over the page shows safe and accessible cycling paths for your child to travel to and from home and North Sydney Public School. In particular, Bay Road has a marked on-road bicycle lane, and a number of streets surrounding the School have been identified as potential future bicycle routes.

Children can then secure their bicycle at the school's bicycle parking spaces.

### **Public Transport**



Students may be eligible for a free or discounted transport pass. The School Student Transport Scheme (SSTS) provides free public travel to and from home for eligible

#### 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

students. All students in Years K-2 are eligible, while students in Years 3-6 are eligible if the straight line distance is no more than 1.6km, or if the walking distance is 2.3km or further.

Families can register students with Transport for NSW via the School Student Transport Scheme (SSTS) portal at https://apps.transport.nsw.gov.au/ssts/.

There are numerous bus routes available to students that are in walking distance of the school and within the broader regional area. See overleaf for details of the bus routes.

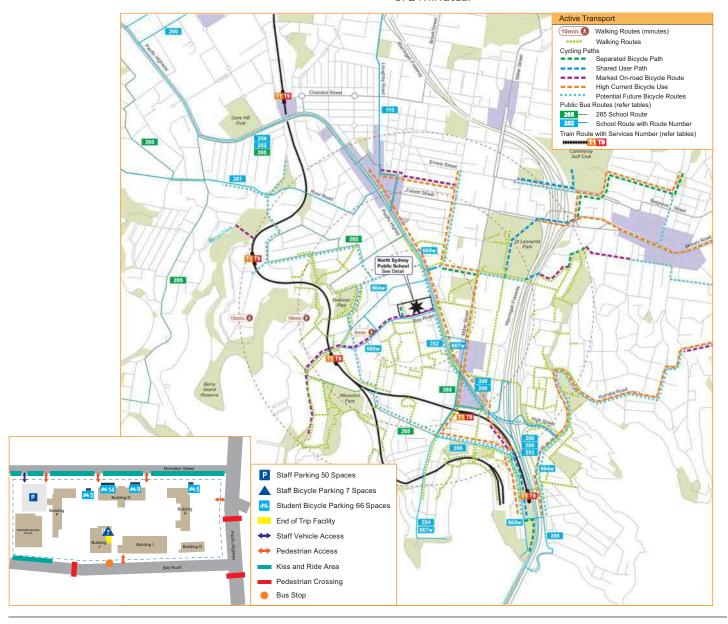
In addition, the school is located in proximity to North Sydney, Waverton and Woolstonecraft Train Stations, which are accessible via the local bus routes. More details on the bus and train routes are available on the Transport NSW Trip Planner website: https://transportnsw.info/trip#/trip



#### Ca

Carpooling is a great way to share the daily school drop off. Parents and carers are encouraged to get in touch with each other to make carpooling arrangements that suit them.

For parents who drive their children to school, the Kiss and Ride area is located along Bay Road and McHatton Street in signposted "No Parking" areas. The School's expectation for those using the Kiss and Ride areas are that parents / carers must remain within the vehicle and may stop for up to a maximum of 2 minutes.

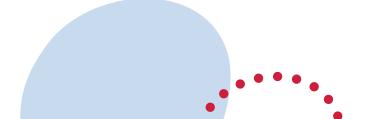


#### For more information contact:

School Infrastructure NSW Email: schoolinfrastructure@det.nsw.edu.au

Phone: 1300 482 651

www.schoolinfrastructure.nsw.gov.au





### | NSW Department of Education – School Infrastructure

LINE	NAME	FREQUENCY
T1	North Shore & Western Line	Moderate Frequency (5-10 services per hour)
Т9	Northern Line	Low Frequency (2-4 services per hour)
CCN	Central Coast & Newcastle Line	Low Frequency (1-2 services per hour)

ROUTE	DESCRIPTION	SERVICES
265	Lane Cove to North Sydney via Greenwich	1 modified bus route for school service during AM Peak

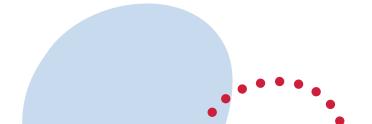
ROUTE	DESCRIPTION	ROUTE	DESCRIPTION
115	Chatswood to City Bridge St via North Sydney	286	Denistone East to Milsons Point via St Leonards & North Sydney
200	Gore Hill to Bondi Junction	287	Ryde to Milsons Point via St Leonards & North Sydney
252	Gladesville to City King Street Wharf via North Sydney	290	Epping to City Erskine St via Macquarie University & North Sydney
254	Riverview to McMahons Point	291	Epping to McMahons Pt
261	Lane Cove to City King Street Wharf via Longueville	230	Gore Hill to Mascot

ROUTE	DESCRIPTION	SERVICES
265	Lane Cove to North Sydney via Greenwich	1 modified bus route for school service during AM Peak
568W	North Sydney Demonstration School to Wollstonecraft Station	1 School PM service
664W	North Sydney Demonstration School to Milson Point	1 School PM service
665W	Milsons Point to Crows Nest	1 School AM service
667W	North Sydney Demonstration School to McMahons Point	1 School PM service

#### For more information contact:

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

www.school in frastructure.nsw.gov. au





# Appendix F. School Drop Off and Pick Up Guidance

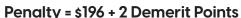




## Road rule reminders for school zones:

#### **NO PARKING ZONES**

You can stop here for a maximum of 2 minutes and must stay within 3 metres of your vehicle. They are used as a drop-off and pick-up area.





### U-TURNS/THREE-POINT TURNS

These can be dangerous and difficult to manoeuvre and should be avoided.

Penalty = \$352 + 3 Demerit Points



#### **NO STOPPING ZONES**

You cannot stop in a No Stopping zone for any reason.

Penalty = \$352 + 2 Demerit Points



#### INTERSECTIONS

It is illegal to stop in or within 10m of an intersection with no traffic lights.

Penalty = \$469 + 2 Demerit Points



#### **BUS ZONES**

You cannot stop in a Bus Zone for any reason.

Penalty = \$352 + 2 Demerit Points





#### **SPEEDING**

A 40km/h speed limit applies in school zones.

Penalty = from \$205 up to \$2,704 and 2 Demerit Points up to 7 Demerit Points



#### **DOUBLE PARKING**

Blocks visibility and forces other cars to go around you.

Penalty = \$352 + 2 Demerit Points



#### **PEDESTRIAN CROSSINGS**

You must not park on or too close to a pedestrian crossing.

Penalty = \$469 + 2 Demerit Points



### DRIVEWAYS AND FOOTPATHS

It is illegal to park on or across driveways and footpaths.

Penalty = \$352 + 2 Demerit Points



#### **MOBILE PHONES**

It is illegal to use mobile phones while driving.

Penalty = \$469 + 5 Demerit Points



Remember, rules and parking signs are in place for the safety of all children. Reduce traffic, improve road safety, and avoid the risk of a fine by walking all or some of the way to school!





# Keeping your children safe when dropping off and picking up at school

Here are a few things you can do to help keep your children and others safer during drop-off and pick-up times during the school week:

- Make sure your children are fastened in the correct child car seat for their age and size and that it is fitted correctly.
- Stick to the 40km/h speed limit in a school zone and look out for children who may be about.
- Watch for flashing lights on buses. They let you know that there may be children crossing or about to cross the road. A 40km/h limit applies when school bus lights flash.
- Always give way to pedestrians particularly when entering and leaving driveways.

- Always park and turn legally around schools.
   Manoeuvres such as U-turns and three-point turns are dangerous during busy school drop-off and pick-up times.
- Drop your children off and pick them up on the school side of the road in your school's designated drop-off and pick-up area. Never call out to them from across the road they may run to you without checking for traffic.
- It's safest for children to get out of the car through the Safety Door, away from passing traffic. This is the rear footpath side door of the car.





# Walking together safely to and from school

Walking to school and back home again is a great way to spend time with your children and encourage safe and healthy behaviours.

Here are a few things you can do to help keep your children safer as a pedestrian:

- Talk with your children about being alert in the road environment.
- Plan and practice your trip to school so you use pedestrian crossings where possible.
- Always hold your child's hand. Children need your help to spot dangers such as vehicles coming out of driveways. They can also be easily distracted and wander into traffic.
- Meet your child near the school gate and don't call them from across the road.
- Explain why the place you have chosen is the safest place to cross.
- Remind your child to STOP! LOOK! LISTEN!
  THINK! every time they cross the road
  and keep checking until safely across.
- Talk to them about why they should stop, look, listen, think before crossing a driveway, road or carpark.

Young children can learn and practice these safe pedestrian behaviours with you. This will help them to be safer pedestrians when they are old enough to travel alone.

For more information on keeping our kids safe around schools visit the **families** section on **safetytown.com.au** 



## Messages to share with your children in Kindergarten to Year 2

- Hold a grown up's hand when:
  - you cross the road
  - you're on the footpath
  - you're in a car park

### Messages to share with children in Years 3 to 6

- Use a safe place to cross the road
- Stop! Look! Listen! Think! every time you cross the road and keep checking until safely across

#### **STOP!**

one step back from the kerb

#### LOOK!

continuously both ways

#### **LISTEN!**

for the sounds of approaching traffic

#### THINK

whether it is safe to cross and keep checking until safely across





# Keeping children safe in and out of the car

A child who is properly secured in an approved child car seat is less likely to be killed or injured in a crash than one who is not.

Children aged between four and seven years cannot travel in the front seat of a vehicle with two or more rows, unless all other back seats are occupied by children younger than seven years in a child car seat.

National child restraint laws require your child to be restrained in the car as follows:

#### 0 - 6 months

Approved rear-facing child car seat.

#### 6 months – 4 years

Approved rear or forward-facing child car seat.

#### 4+ years

Approved forward-facing child car seat or booster seat.

#### 145cm or taller

Suggested minimum height to use adult lap-sash belt.

For more information and to find and compare a range of child car seats, visit

#### childcarseats.com.au

Here are a few things you can do to help keep your children safe in and out of the car:

- Children should remain in the car until an adult opens the 'Safety Door'. This is the rear footpath side door of the car.
- A sleeping child must remain firmly buckled up while in the car.
- Assist your children to buckle up always check the seatbelt is buckled up firmly and not twisted.

- Make it a rule that every passenger must be securely buckled into a seatbelt or child car seat before you start the car.
- Always help your child get in and out of the car through the 'Safety Door'.

Never leave a child of any age in a vehicle without adult supervision. Children may rapidly suffer from dehydration, heat exhaustion and organ failure if left unattended, especially on hot days.

For more information on keeping our kids safe around schools visit the **families** section on **safetytown.com.au** 



#### Messages to share with your children

- Click, clack, front and back
- Always buckle up safely
- Get in and out of the car on the footpath side





### Hold your child's hand

As pedestrians, children can be easily distracted and are often too small to be seen by drivers. They may be unable to predict or identify dangers and tend to act impulsively.

Talk with your child about safe behaviour on the footpath – it's not a safe place to play as it is near the road and vehicles may be entering or exiting driveways.

Until your child is at least eight years old, hold their hand:

- on the footpath
- in the car park
- when crossing the road.

Up until at least 10 years old, supervise your child very closely, holding their hand when crossing the road.

If you can't be with your child, organise for another trusted adult to accompany them.

After school, meet your child at the school gate. At the end of the school day children may be excited, distracted or tired and often not concentrating on their own safety.

For more information on keeping our kids safe around schools visit the families section on safetytown.com.au



### Messages to share with your children in Kindergarten to Year 2

- Hold a grown up's hand when:
  - you cross the road
  - you're on the footpath
  - you're in a car park
- Hold an adult's hand when you cross the road

### Messages to share with children in Years 3 to 6

- Use a safe place to cross the road
- Stop! Look! Listen! Think! every time you cross the road and keep checking until safely across







### Wearing helmets and riding safely

#### **Wearing helmets**

Your child must wear a helmet when riding a bike in any public place – it's the law. The helmet must comply with the Australian and New Zealand standards and needs to be securely fitted and fastened on your child's head. It should be buckled firmly so it fits without wobbling or slipping to the sides.

Always remember to check that your child is wearing a helmet whenever they're playing or riding on wheels –

- Bikes
- Foot scooters
- Rollerskates
- Skateboards
- Rollerblades.

#### Riding safely

Although children quickly learn to pedal, steer and brake, they aren't ready to cycle near traffic or on the road. Until they are at least 10 years old, your child should ride off-road away from vehicles and driveways.

The safest places to ride bikes, scooters and skateboards are within fenced areas. This helps your child from riding or falling onto the footpath or the road. Children under **16** and their

accompanying supervising adult riders may ride on the footpath, unless there are signs specifically prohibiting cycling. Riders need to take special care at driveways where vehicles may be driving in or out.

At intersections, riders must dismount and wheel the bicycle across the road as a pedestrian, following the **STOP! LOOK! LISTEN! THINK!** procedure.

For more information on keeping our kids safe around schools visit the **families** section on **safetytown.com.au** 

### Messages to share with your children in Kindergarten to Year 4

- Always wear a helmet when you ride or skate
- Ride your bike away from the roads

### Messages to share with your children in Years 5 and 6

- Always wear a helmet when you ride or skate
- Ride your bike away from busy roads





Too many lives lost on NSW roads.

Our goal is zero.



# Your guide to driving and parking safely near schools

The beginning and end of the school day are busy times for pedestrians and vehicles outside the school. That's why you need to take extra care in 40km/h school zones.

- Park safely and legally, even if it means walking further to the school gate. Parking signs are planned with children's safety in mind.
- Slow down to 40km/h in the school zone and stay aware of crossings.
- Always park and turn legally around the school.
- Never double park as it puts children at risk.
- Manoeuvres such as U-turns and three-point turns are dangerous.
- Never park in a bus zone or in the school bus bay.
- Make sure your children use the Safety Door (rear footpath side door) to get in and out of the car.
- At a supervised crossing, observe the directions of the school crossing supervisor.
- Model safe and considerate behaviour for your child they will learn from you.

Remember to always give way to pedestrians particularly when entering and leaving driveways. Don't park across the school driveway or the entrance to the school car park. It's always a good idea to use the drop off and pick up area suggested by your school. This will help keep all children as safe as possible during the busiest times of the school day.







### Keeping safe around school crossings

For your child's safety, it's very important to ensure they use the school crossing.

At all crossings you must wait on the footpath, at least one step back from the edge of the road.

If there's a School Crossing Supervisor, wait until they have stopped the traffic and called you to cross.



If you are driving, you must not proceed until the School Crossing Supervisor's hand-held sign is no longer displayed, or until the crossing supervisor indicates that you may proceed through the crossing.

#### **Children's crossings**

Children's crossings are usually part-time crossings that operate before and after school hours. They can also operate at other times when children use the crossing for excursions or during break times. When 'Children Crossing' flags are displayed, you must stop at the white line if pedestrians are waiting to cross. Drivers must remain stationary until the crossing is clear of pedestrians.







### 40km/h school zones

40km/h school zones slow traffic on the roads around schools. This is to help protect children on their way to and from schools at the times and places where they are often in high numbers. Most 40km/h school zones operate between 8.00am and 9.30am and from 2.30pm until 4.00pm. The 40km/h school zone speed limit must be observed even if school children cannot be seen.

A 40km/h school zone operates on all notified school days including staff development days (student-free days). While some schools may operate on different term dates, school zone speed limits must be followed during NSW Government determined school terms.

You can find the school term dates on the following websites:

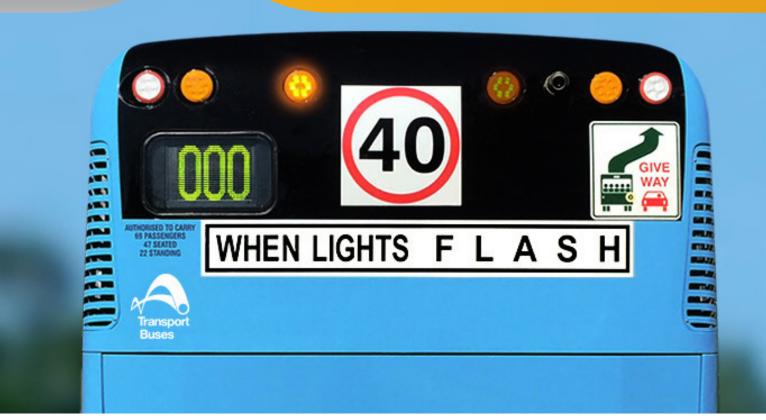
- · roadsafety.transport.nsw.gov.au
- · educationstandards.nsw.edu.au
- education.nsw.gov.au

To increase motorists' awareness of 40km/h school zones, triangular 'dragon's teeth' road markings indicate that the vehicle is entering a school zone.

Fines and a loss of demerit points will apply if the 40km/h speed limit isn't followed. For more information on fines and demerit points, visit transport.nsw.gov.au







### **Driving safely near school buses**

There is a 40km/h speed limit for traffic passing a school bus that is setting down or picking up school children. This speed limit is for all traffic travelling in the same direction as the bus, whether the bus is stationary or moving.

Lights will flash on the front and back of the bus reminding drivers that there may be children crossing or about to cross the road.

Buses can't stop quickly because they are large and heavy vehicles. So, remember:

- Reduce speed to 40km/h when bus lights are flashing
- Give way to buses
- Watch out for children crossing
- Never park in or near a bus stop or bus zone.

#### Informal school bus stops

Informal bus stops are not sign posted and are usually found in rural areas. They may be at the front of a property, or on the side of the road, which may make children difficult to see.





### Helping children on and off the bus safely

Your children are most at risk in the minutes after getting off the bus. Here are some ways you can reduce this risk:

- Always meet your child at the bus stop. Never meet them on the opposite side of the road and call them across
- Wait until the bus has gone, then choose a safe place to cross the road. Remember to Stop! Look! Listen! Think!
- If you cannot meet your child, organise for another trusted adult to take your place.
- Wait at the bus stop and stand at least one step back from the edge of the road.
- Always wait until the bus has gone, then use a safe place to cross.
- Buckle up if the bus has seatbelts.

Model safe pedestrian behaviour. Children learn safe road user habits from you and will continue them later on when they are old enough to travel alone.

Until your child is at least eight years old, hold their hand on the footpath, in the carpark and when crossing the road. Up until at least 10 years old, supervise your child very closely, holding their hand when crossing the road.

#### STOP!

one step back from the kerb

#### LOOK!

continuously both ways

#### LISTEN

for the sounds of approaching traffic

#### THINK!

whether it is safe to cross and keep checking until safely across

### Messages to share with your children in Kindergarten to Year 2

Hold a grown up's hand when:

- you cross the road
- you're on the footpath
- you're in a car park

### Messages to share with your children in Years 3 and 4

- Hold an adult's hand when you cross the road
- Use a safe place to cross the road

### Messages to share with children in Years 5 and 6

 Stop! Look! Listen! Think! every time you cross the road and keep checking until safely across

#### **Kindergarten to Year 6**

 Wait until the bus has gone and then use a safe place to cross





### **Appendix G. Drivers' Code of Conduct**

### - Driver Code of Conduct -

#### **Drivers Code of Conduct**

Safe Driving Policy for the North Sydney Public School Upgrade

#### **Objectives of the Drivers Code of conduct**

- Minimise conflict with other road users;
- · Minimise road traffic noise; and
- Ensure minibus and bus drivers use specified routes.

#### **Code of Conduct**

All vehicle operators accessing the site must:

- Take reasonable care for his or her own personal health and safety.
- Not adversely, by way of actions or otherwise, impact on the health and safety of other persons.
- Notify their employer if they are not fit for duty prior to commencing their shift.
- Obey all applicable road rules and laws at all times.
- In the event an emergency vehicle behind your vehicle, pull over and allow the emergency vehicle to pass immediately.
- Obey the applicable driving hours in accordance with legislation and take all reasonable steps to manage their fatigue and not drive with high levels of drowsiness.
- Obey all on-site signposted speed limits and comply with directions of traffic control supervisors in relation to movements in and around temporary or fixed work areas.
- Ensure all loads are safely restrained, as necessary.
- Operate their vehicles in a safe and professional manner, with consideration for all other road users.
- Hold a current Australian State or Territory issued driver's licence.
- Notify their employer or operator immediately should the status or conditions of their driver's license change in any way.
- Comply with other applicable workplace policies, including a zero tolerance of driving while under the influence of alcohol and/or illicit drugs.
- Not use mobile phones when driving a vehicle or operating equipment. If the use of a mobile device is required, the driver shall pull over in a safe and legal location prior to the use of any mobile device.
- Advise management of any situations in which you know, or think may, present a threat to workplace health and safety.
- Drive according to prevailing conditions (such as during inclement weather) and reduce speed, if necessary.
- Have necessary identification documentation at hand and ready to present to security staff on entry and departure from the site, as necessary, to avoid unnecessary delays to other vehicles.



#### **Crash or incident Procedure**

- Stop your vehicle as close to it as possible to the scene, making sure you are not hindering traffic. Ensure your own safety first, then help any injured people and seek assistance immediately if required.
- Ensure the following information is noted:
- Details of the other vehicles and registration numbers
- Names and addresses of the other vehicle drivers
- Names and addresses of witnesses
- Insurers details
- Give the following information to the involved parties:
- Name, address, and company details
- If the damaged vehicle is not occupied, provide a note with your contact details for the owner to contact the company.
- Ensure that the police are contacted should the following circumstances occur:
- If there is a disagreement over the cause of the crash.
- If there are injuries.
- If you damage property other than your own.
- As soon as reasonably practical, report all details gathered to your manager.



# **Appendix H. North Sydney PS Travel Mode Survey**





#### Privacy

Thank you for participating in our survey. Your feedback is important for the future development of the school.

All information provided in this survey is completely anonymous and there is no collection of any personal information or tracking.





. Do you work:	
Full time	Contract / Temp
Part Time	Casual
Other (please specify)	
. How often do you travel to Scho	
>5 days a week	2 days a week
5 days a week	1 day per week
4 days a week	Once every 2 weeks
3 days a week	Monthly or less



. What is your usual tin	ne of arrival?	
Before 6:15AM		7:45-8:00AM
6:15-6:30AM		8:00-8:15AM
6:30-6:45AM		8:15-8:30AM
6:45-7:00AM		8:30-8:45AM
7:00-7:15AM		8:45-9:00AM
7:15-7:30AM		After 9:00AM
7:30-7:45AM		
5. What is your usual tin	ne of departure?	
Before 1:00PM	2:30-2:45PM	4:15-4:30PM
1:00-1:15PM	2:45-3:00PM	4:30-4:45PM
1:15-1:30PM	3:00-3:15PM	4:45-5:00PM
1:30-1:45PM	3:15-3:30PM	5:00-5:15PM
1:45-2:00PM	3:30-3:45PM	5:15-5:30PM
2:00-2:15PM	3:45-4:00PM	After 5:30PM
	4:00-4:15PM	



Before School	
After School	
Neither	
If you do participate in co-cur	ricular activities, how frequently?
1 day a week	5 days a week
2 days a week	Once every 2 weeks
3 days a week	Monthly or less
4 days a week	I don't participate in co-curricular activitie



Car (driver) and parked on site	Taxi / Uber
Car (driver) and parked nearby	Bicycle
Car (passenger/dropped off)	Scooter (non-motorised)
) Train	Walking
) Bus	
Other (please specify)	
What is your usual main mode of travel <b>fro</b>	om school?
Car (driver)	Taxi / Uber
Car (passenger/picked up)	Bicycle
) Train	Scooter (non-motorised)
) Bus	Walking
Other (please specify)	
If you drove, what is your primary reason	o for doing so?
Dropping off / picking up child(ren)	Lack of transport options (e.g. no bus ser
	footpath)
Need the car to drive elsewhere before school (e.g sport, work, an appointment)	Worried about road safety / busy roads
Need the car to drive elsewhere after school	Worried about heat / shade
(e.g sport, work, an appointment)	Worried about weather variation (rain, ha
Health reasons	wind)
Convenience	Oid not drive
Other (please specify)	



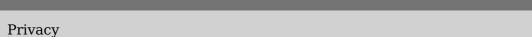
Yes	
O No	
_	
f you answer	red " <b>Yes</b> " to Question 14, how many of your children are attending?
3. If you ansv	wered " <b>Yes</b> " to Question 14, does your child/children travel with you
Yes	
O No	
○ N/A	



14. Please indicate how likely it is that the following measures would encourage you to walk or cycle more:
Lower speed roads
Place to store my helmet
Place to store my scooter / skateboard
Better lighting
More shade
More weather protection (eg covered walkways)
Back up options in case of inclement weather (bus, train or car for rainy days or days when the weather changes)
Shower / change rooms
Safe bicycle parking
Information on safe routes
Bicycle group so I can ride with others
Walking group so I can walk with others
Loan / discount to buy a bicycle / helmet
Other (please specify)
15. Please indicate how likely it is that the following measures would encourage you to use public transport? If you already use public transport, what would you like to see more?
Cheaper public transport
More frequent public transport
Bus route to my neighbourhood
Improved waiting area at school (shade / weather protection)
Improved waiting area at home (shade / weather protection)
Better connections to other transport (train or bus)
Public transport group so I can ride with others
Information about public transport
Other (please specify)

carpo		
1 1 1		
	Help finding someone to carpool with	
	Reduced parking cost	
	Know the driver personally	
	Free parking	
	Sharing driving responsibility	
	Certainty in finding a car space (ie dedicated car space for carpoolers)	
	Secure parking	
A	A ride home if I needed to assist with a sick child / personal responsibilities	
Other (	(please specify)	
	rt feedback for our team?	





Thank you for participating in our survey. Your feedback is important for the future development of the school.

All information provided in this survey is completely anonymous and there is no collection of any personal information or tracking.



1. What school year is your child/children c	currently in? Select all that are applicable.
Kindergarten	Year 4
Year 1	Year 5
Year 2	Year 6
Year 3	
2. What is the suburb and the postcode you tr	avelled to / from today?



8:15 8:30	0-8:15AM 5-8:30AM 0-8:45AM
8:30	
	)-8:45AM
O 45	
8:45	5-9:00AM
Afte	er 9:00AM
nat is the usual denaments	re time for your child/children fr
iat is the usual <b>departur</b>	e time for your china/chinaren ir
2:30-2:45PM	4:15-4:30PM
2:45-3:00PM	4:30-4:45PM
3:00-3:15PM	4:45-5:00PM
3:15-3:30PM	5:00-5:15PM
3:30-3:45PM	5:15-5:30PM
3:45-4:00PM	After 5:30PM
4:00-4:15PM	
	2:45-3:00PM 3:00-3:15PM 3:15-3:30PM 3:30-3:45PM 3:45-4:00PM



5. Does your child/children attend Out of So	chool Hours care on school grounds?
Before school	J
After school care	
Neither	
6. If they do attend Out of School Hours can	re, how frequently?
1 day a week	5 days a week
2 days a week	Once every 2 weeks
3 days a week	Monthly or less
4 days a week	They don't attend Out of School Hours care



Con (necessary / drenned off)	nool?
Car (passenger / dropped-off)	Bicycle
Car (parked nearby) and walked with children	Scooter (non-motorised)
Train	Skateboard
Bus	Walking
Taxi / Uber	
Other (please specify)	
How does your child/children travel <b>from</b>	school?
Car (passenger / picked up)	Bicycle
Walked with children and Car (parked nearby)	Scooter (non-motorised)
Train	Skateboard
Bus	Walking
Taxi / Uber	
Other (please specify)	
	se be specific (e.g. to work in the Crows
you drove, where did the car go next? Pleas	oo zo opoomo (o.g. to worm m one orow
<del>-</del>	
you drove, where did the car go next? Pleas	



10. Please indicate how likely it is that the following measures would encourage you to walk or ride a bicycle with your child / children more:
Lower speed roads
Place to store my helmet
Place to store my scooter / skateboard
Better lighting
More shade
More weather protection (eg covered walkways)
Back up options in case of inclement weather (bus, train or car for rainy days or days when the weather changes)
Shower / change rooms
Safe bicycle parking
Information on safe routes
Bicycle group so I can ride with others
Walking group so I can walk with others
Loan / discount to buy a bicycle / helmet
Other (please specify)
11. Please indicate how likely it is that the following measures would encourage you to use public transport with your child / children more:
Cheaper public transport
More frequent public transport
Bus route to my neighbourhood
Improved waiting area at school (shade / weather protection)
Improved waiting area at home (shade / weather protection)
Better connections to other transport (train or bus)
Public transport group so I can ride with others
Information about public transport
Other (please specify)

Help finding someone to carpool with Reduced parking cost Know the driver personally Free parking Sharing driving responsibility Certainty in finding a car space (ie dedicated car space for carpoolers) Socure parking A ride home if I needed to assist with a sick child / personal responsibilities Other (please specify)  The there any transport initiatives you would like to see implemented or any other port feedback for our team?	rpool w	nding comes-	o to comoo!	with				
Know the driver personally  Free parking  Sharing driving responsibility  Certainty in finding a car space (ie dedicated car space for carpoolers)  Secure parking  A ride home if I needed to assist with a sick child / personal responsibilities  Other (please specify)  The there any transport initiatives you would like to see implemented or any other				with				
Free parking  Sharing driving responsibility  Certainty in finding a car space (ie dedicated car space for carpoolers)  Secure parking  A ride home if I needed to assist with a sick child / personal responsibilities  Other (please specify)  The there any transport initiatives you would like to see implemented or any other	_							
Sharing driving responsibility  Certainty in finding a car space (ie dedicated car space for carpoolers)  Secure parking  A ride home if I needed to assist with a sick child / personal responsibilities  Other (please specify)  The there any transport initiatives you would like to see implemented or any other	_		sonally					
Certainty in finding a car space (ie dedicated car space for carpoolers)  Secure parking  A ride home if I needed to assist with a sick child / personal responsibilities  Other (please specify)  The there any transport initiatives you would like to see implemented or any other	_							
Secure parking  A ride home if I needed to assist with a sick child / personal responsibilities  Other (please specify)  The there any transport initiatives you would like to see implemented or any other	_							
A ride home if I needed to assist with a sick child / personal responsibilities  Other (please specify)  the there any transport initiatives you would like to see implemented or any other	_		a car space (i	ie dedicated c	ar space for c	arpoolers)		
Other (please specify)  e there any transport initiatives you would like to see implemented or any other	_							
re there any transport initiatives you would like to see implemented or any other	_			with a sick chi	ild / personal i	responsibilities	5	
	Other	please specif	y) 					
					1			

# Appendix I. Response to TfNSW and Council Comments



#### TFNSW COMMENTS **ASON GROUP RESPONSE** Mode share targets: TfNSW notes that the STP provides a table to identify and provide existing and future mode share targets for staff and students to take sustainable active and public transport travel to and from the site. Given the close Mode share targets have been updated, proximity of the site to buses, trains, refer to Section 3.4. pedestrian and cycling routes, we ask that mode shares for staff car use (as driver) be reduced, over both the short and long term Parking: TfNSW TDM team understand there are currently 50 on-site car parks existing onsite, and ask the applicant to implement as part of their Implementation Plan, a Parking management strategy that prioritises use by staff on a needs basis, and that the strategy actively encourages Refer to Section 3.2 and Section 4.1.11. staff to use the sustainable transport options that are available. Car-pooling should also be encouraged in this strategy, and allocates priority parking for those who carpool. Travel Access Guide: TfNSW appreciates that a TAG has been placed in the STP. TfNSW asks that the TAG includes: A more comprehensive map showing all modes of public and active transport, including buses (private and public), trains, walking and cycling routes, as well as times for these public transport options and kiss and drop zones for parents. **Provide information advising students** and staff that additional information about service routes and timetables for buses The Travel Access Guide has been and trains is available on the Trip Planner updated and accepted by Sophia Grieve at transportnsw.info/ on behalf of TfNSW 30 June 2023 via Provide information advising students phone call. and staff that additional information about walking routes is available on the Trip Planner at transportnsw.info/ Update number and location of End of Trip facilities (bike racks, showers, lockers, change rooms) and locate on map. For further helpful information – please check this link How to Create a Travel Access Guide doc here.



Travel Survey: TfNSW appreciate that an annual travel survey (2021 and 2022) has been included in the STP, but asks that the STP travel survey included in the appendix, be updated and distributed three months post-occupancy, and every year for lifecycle of the development. The Refer to Section 3.4. surveys should include questions to ask obtain staff and student residential postcodes to identify travel origin and destination patterns. An example of a travel survey can be found here. End of trip (EOT) facilities: TfNSW understands development will have 63 bicycle parking spaces and proposed EoT facilities such as bike racks, showers and Confirmation of bicycle parking at grade change rooms.. At present, bicycle was had between Dora Choi and Sophia parking is located in are in a basement car Grieve on 30 June 2023 via phone call. park and TfNSW does not consider this Sophia accepted the location of the bicycle location to be attractive or easily parking. accessible to encourage more staff to use these. Please find a resource for bicycle parking and EoT: cycleway design toolkit. Implementation Plan: TfNSW appreciate that the STP has an Implementation Plan, but ask that the Implementation Plan includes specific timing and completion dates and a specific task owner who will be ready to carry out the Implementation Plan when occupancy occurs. The implementation plan should include your communications and engagement strategy (this can include Refer to Section 3.2. how you plan to promote your initiatives (digital, hardcopy, how will the STP be distributed). This implementation plan should be updated both on an annual basis. Please consult the TfNSW MySydney website for more examples of proven travel demand measures for active and public transport for the preparation of the GTP soft activities and hard activities. School Transport Operations Access The proposed student numbers have been **Management Plan:** approved as part of the approval under TfNSW TDM team have consulted our SSD 11869481. Nevertheless, a queueing planning team and they would like to see assessment has been included as if the proposed kiss and ride location Appendix J. indicating the 95th percentile along Bay Road would have sufficient queue is 0, with 15 bays and a service capacity to accommodate the increased time of 45 seconds. number of drop off/pick ups? They would Refer to **Section 4.1.4** for pedestrian like to see clarification of how students access information.



access safely from North across Pacific

Highway and MacHatton Street as there is no pedestrian crossing.

COUNCIL COMMENTS	ASON GROUP RESPONSE
Cycling	
Offer financial incentives for staff to purchase bikes/e-bikes	Not agreed to be funded by the School due to budget constraints.  Investigate options as part of future updates to the STP.
Offer bike/e-bike training courses for staff and students.	Refer to <b>Section 3.2</b> .
Offer free bike repair services/bike maintenance courses to staff and students.	Not agreed to be funded by the School due to budget constraints.  Investigate options as part of future updates to the STP.
Ensure that the 63 new bike parking locations are selected using the principles and criteria from the Bicycle Parking Facilities; Guidelines for Design and Installation AustRoads guide. This includes, close to destinations, prominent and obvious, safe for users/bicycles, pleasant ambience and compliant with regulations.	Refer to <b>Section 4.1.5.</b>
Where possible, increase the width of the proposed shared path along the Western Boundary to meet Transport for NSW share path dimensions (ideally 3.5+ metres).	The existing netball/basketball courts and line of significant trees along that boundary do not allow for foot path widening. As such, this is not deemed a viable option.
Provide a bike entry/exit point on McHatton Street at the share path entry/exit (similar to the Berry Street side).	The school does not have a frontage/access from Berry Street. Students will continue to access the school via the McHatton Street gates, a per existing arrangements. It is a level accessible entrance - that leads directly to the bike racks.
Public Transport	
Provide Opal Cards to staff to subsidise or completely cover the cost of public transport. Providing free parking for staff is a considerable cost and takes up large areas of land that could be more efficiently used for more play space or buildings. It is therefore reasonable to also subsidise public transport.	Not agreed to be funded by the School due to budget constraints. Investigate options as part of future updates to STP.
Walking	
As a part of action 2.5, prepare a TCS to upgrade traffic signal along Pacific Highway – specifically for an additional pedestrian signal at McClaren Street/Pacific Highway Intersection and an additional traffic light, with pedestrian signals at the West Street/Pacific Highway intersection. Alternatively, provide	Not agreed to be funded by the School, as these are broader network matters outside of control and responsibility of the School.  There is an existing pedestrian signal across McLaren Street and Pacific Highway at the McClaren Street/Pacific Highway intersection. Addition of a another E-W crossing on the northern leg



Council with the funds to deliver this work.

would benefit pedestrian access for only a small proportion of the school catchment. Furthermore, it is generally TfNSW policy to provide signalised pedestrian crossings on all legs of signalised intersections. As such, the absence of a crossing on the northern leg is assumed to be a direct result of network operational factors (congestion and safety generally).

West Street is located less than 100 metres from the McLaren Street signals. As such, an additional signalised intersection at that location is not supported on road safety grounds, with TfNSW generally requiring more separation between new signalised junctions. Bay Road and McLaren Street already operate as a coordinated pair of signalised junctions. To add another signalised intersection within a 200m stretch would be problematic from a network performance and safety perspective. Bay Road and McLaren Street already

Deliver or fund an upgrade to the existing pedestrian crossings on Bay Road – kerb build outs and footpath extensions.

Deliver or fund the installation of the pedestrian crossing on McHatton Street at the proposed share path intersection.

The existing pedestrian (zebra) crossing on Bay Road already includes localised kerb extensions within the carriageway.

Kerb extensions are not feasible at the signalised crossing at Pacific Highway due to need to retain dedicated left and right turn lanes on approach to that intersection for network performance reasons.

As outlined above, a new Shared Path along the western boundary is not feasible. Furthermore, the construction of a pedestrian crossing in McHatton Street is not agreed to be funded by the School due to budget constraints and potential impacts to Kiss & Drop operations within McHatton Street.

Deliver or fund continuous footpath treatment on McHatton Street /Pacific Highway intersection.

Not agreed to be funded by School due to budget constraints.

Investigate options as part of future updates to STP. It is also noted that footpath upgrades have been delivered along the school's frontage along McHatton Road and Pacific Highway in 2020.

#### **Care Share**

Although staff are unlikely to use carshare services for work-related activities, staff should be offered subsidised car share membership. An organisational membership offered to staff would provide a more affordable alternative to car use outside work hours.

There is no nexus between out of work activities and the operation of the school.

The School is located within close proximity to a range of public transport, services and other amenities within the North Sydney CBD area.

As such, no Car Share membership provisions are proposed by the School.



Car Parking	
Have clear criteria for how parking is allocated to staff. Parking should not be automatically deferred to management positions or on a 'first in' basis. Managers have an important role to play in setting a culture of sustainable transport use. Parking could also be paid for by staff, which could then subsidise public transport use.	Refer to <b>Section 4.1.11</b> .
Considering the increase in student numbers and zero increase in outdoor play area, parking spaces should be converted to spaces for students to use. This will reduce pedestrian crowding and congestion during pick-up and drop-off.  To further support this reallocation, according to the North Sydney Council's DCP 2013: Section 10 – Car Parking and Transport, the required number of parking spaces for staff of schools is 1 space per 6 staff members. This corresponds to approximately 15 parking spaces, significantly less than the 50 spaces currently available.	Changes to the staff car park are not contemplated by the plans.  Removal of that existing parking – which is currently used extensively by staff – could be expected to displace demands to surrounding streets and impact local residents.  The staff car park will continue to operate as per the existing arrangement, no changes are proposed to car parking numbers as part of the school upgrade.
Develop a transition strategy for reducing parking/driving to work. Identify and mitigate what the barriers are to taking other modes of transport and reserve parking for staff that require parking (such as casual/relief teachers or people living with a disability).	The implementation strategy seeks to increase sustainable transport use. Refer to <b>Section 3.2.</b>



## **Appendix J. Vehicle Queueing Analysis**



*No Occupancy rate applied	Students	Car Travel Share	Occupancy		Total Arrivals
	1012	!	55%	1.6	347.875
Inputs					

inputs			
Time period	30	min	blue text are parameters that can be adjusted
Total arrivals	347.88	veh	black text generally shouldn't be adjusted
Service time	0.75	min/ veh	take care with the units! The default is x mins per veh
Number of servers	15		e.g. boom gates, drop-off bays, etc.
x-th percentile queue	95.00%		adjust this for desired percentile
Acceptable queue length	10	veh	excludes vehicles being serviced

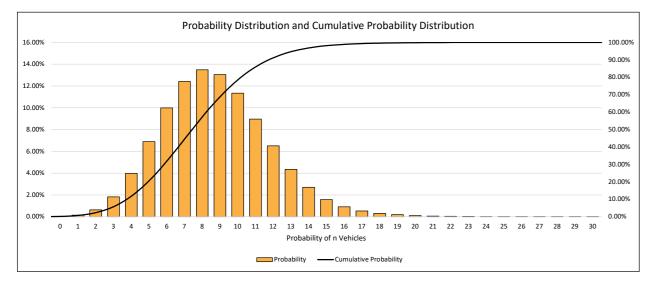
#### Mode

11.60	veh/ min	
1.33	veh/ min	
15		
8.70		Eqn
58%		Eqn
0.02%		Eqn
	1.33 15 8.70 58%	58%

if utilisation exceeds 100%, the model cannot accommodate the demand

	INO. Gais	Lengin (III) required	
Outputs	15	105	5
95th Percentile Queue	0	veh	excludes vehicles currently being serviced
Probability of queuing	2.16%		
Average queue length	0.05	veh	Eqn 4
Average time in queue	0.00	min/ veh	Eqn 6
Average time in system	0.75	min/ veh	Eqn 5
Average vehicles in system	8.75	veh	Eqn 7
Probabilty of no vehicles	0.02%		gran

graph range may require manual adjustment



Probability Table	Eqn 3			Formulae			
Probability of n vehicles (Pn)		Cumulative probability	Eqn 1	Traffic Intensity		Calculation	
0				λ ρ λ	nc		denominator 1
1				$ ho = rac{\lambda}{\mu}$ Utilisation $= rac{ ho}{N} = rac{\lambda}{N\mu}$		0 1	1.00
2						1 1	
3				Utilisation needs to be <1 for the service to accommodate the demand		2 1	
4						3 1	
5			Eqn 2	Probability of no vehicles		4 1	
6				1		5 1	
7				$P_0 = \frac{1}{\sum_{n_c=0}^{N-1} \frac{\rho^{n_c}}{n_c!} + \frac{\rho^N}{N! (1 - \rho/N)}}$		3 1	
8				$\sum_{n=0}^{N-1} \frac{P}{n_{o}!} + \frac{P}{N!(1-\rho/N)}$		7 1	
9				··(1 )// (1 )// (1 )		3 1	
10						9 1	
11			Eqn 3	Probability of n vehicles	10		
12				$\rho^n P_0$ $\rho^n P_0$	1		
13				$P_n = \frac{\rho^n P_0}{n!}$ for $n \le N$ $P_n = \frac{\rho^n P_0}{N^{n-N}N!}$ for $n \ge N$	12		
14				IV IV:	13		
15					14		162.43
16			Eqn 4	Average Length of Queue	1		
17				$P_{\circ} o^{N+1} \begin{bmatrix} 1 \end{bmatrix}$	10		
18				$\bar{Q} = \frac{P_0 \rho^{N+1}}{N!  N} \left[ \frac{1}{(1 - \rho/N)^2} \right]$	17		
19				$N!N \left[ (1-\rho/N)^2 \right]$	18		
20					19		
21			Eqn 5	Average Time Spent in System	20		
22				$\rho + \bar{O}$	2		
23				$\bar{t} = \frac{\rho + \bar{Q}}{\lambda}$	22		
24				Λ	23		
25		99.99%			24		
26		99.99%	Eqn 6	Average Time Waiting in Queue	2		
27				$\rho + \tilde{0}$ 1	20		
28				$\bar{w} = \frac{\rho + \bar{Q}}{\lambda} - \frac{1}{\mu}$	2		
29				λ μ	28		
30					29		
31			Eqn 7	Average Vehicles in System	30		
32				$L = \bar{L_q} = \rho$	3.		
33				<i>q P</i>	32		
34					33		
35					34		
36					3		
37					30		
38					3		
39					38		
40					39		
41					40		
42					4		
43					42		
44					43		
45					44		
46					4		
47					40		
48					4		
49					48		
50	0.00%	100.00%			49	9	

P1903x03v02 - Kiss&Drop Queuing Model