# Chatswood High School School Travel Plan

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The Transport Planning Partnership



# Chatswood High School School Travel Plan

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# APPENDICES

- A. CV FOR SCHOOL TRAVEL PLAN AUTHORS
- **B.** CONSULTATION REGISTER
- C. CHATSWOOD HIGH SCHOOL TRAVEL ACCESS GUIDE (TAG)



# 1 Introduction

# 1.1 Scope of Works

The Transport Planning Partnership (TTPP) has been engaged by School Infrastructure NSW (SINSW) to prepare a School Travel Plan for the approved upgrades to the Chatswood High School site as detailed in the State Significant Development (SSD) application (SSD 9483).

The proposed upgrades to Chatswood High School represented in the approved SSD are designed to facilitate anticipated future demand for enrolment at the school along with planning for other existing and planned future schools in the surrounding locality and more broadly across the State.

Specifically, this School Travel Plan has been developed to address Condition D18 of the consent for SSD 9483 with regard to the arrangements to manage the transport demands associated with the Chatswood High School.

The specific requirements of Condition D18 and how they are addressed in this School Travel Plan for the Chatswood High School are set out in Table 1.1.

In a general sense, this School Travel Plan has been prepared to support the proposed upgrades and sets out measures to manage travel behaviour of students and staff in a sustainable manner.

# 1.2 School Operational Details

The approved upgrades to Chatswood High School represented in the SSD application are designed to facilitate the anticipated demand for enrolments at the school.

The approved upgrades will facilitate up to 2,000 high school students ranging between Year 7 and Year 12.

While the Chatswood High School will have the capacity to accommodate up to 2,000 students at the school, when and if this level of school population will be achieved is unknown.

The hours of operation for the Chatswood High School are as follows:

- School bell times): 7:50am 4:10pm
- Core teaching hours 8:50am-3:10pm



### Table 1.1: Condition D18 Requirements

| Requirement   | Comment  | Addressed in this<br>School Travel plan  |
|---|--|--|
| Prior to the commencement of operation, a School Travel (Transport) Plan (STP),   | must be submitted to the satisfaction of the Planning Secretary. The plan r  | nust:  |
| (a) be prepared by a suitably qualified consultant in consultation with Council and TfNSW;  | TTPP staff are suitably qualified traffic and travel planners with<br>appropriate skills and experience to prepare a School Travel plan.<br>TTPP prepared the traffic and transport assessment as part of the SSDA<br>process and following lodgement of the SSDA engaged with Council,<br>TfNSW, SINSW and School staff regarding the traffic and transport<br>arrangements for the school and development of a School Travel<br>Plan.<br>Additional consultation with Council and TfNSW has been undertaken<br>in the preparation of this School Travel Plan [yet to be completed].<br>Details of the consultation are presented in Appendix B.<br>CVs for the key authors of this School Travel Plan are provided in<br>Appendix A. | Section 1.6<br>Appendix A – CV's<br>Appendix B –<br>Consultation Register          |
| <ul> <li>(b) include arrangements to promote the use of active and sustainable transport modes, including: <ul> <li>objectives and modes share targets (i.e. Site and land use specific, measurable and achievable and timeframes for implementation);</li> <li>specific tools and actions to help achieve the objectives and mode share target of 16% reduction in car trips;</li> <li>measures to increase use of the Pacific Highway overhead bridge by staff and students including (but not limited to) installation of signage in consultation with Council and education / awareness program to promote use of the overhead bridge.</li> <li>iv. 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.</li> </ul> </li> </ul> | <ul> <li>i. The target for mode share reduction for private vehicle trips is provided in Section 3.1. The targets utilise the surveyed existing mode share described in Section 2.9.</li> <li>ii. The tools and actions to achieve mode share targets are set out in Section 3.2 – 3.5. Actions and responsibilities are set out in Section 3.6.</li> <li>iii. Measures to address increased use of the Pacific Hwy overbridge are specifically addressed in Section 3.2.2.</li> <li>iv. The review and monitoring program details are set out in Section 6.</li> </ul>  | i. Section 2.9 & 3.1<br>ii. Section 3.2-3.5<br>iii. Section 3.2.2<br>iv. Section 6 |
| (c) include operational transport access management arrangements, including:  | The transport actions to achieve mode share targets have been set<br>out in Section 4 of this report. These actions are supported by the<br>details to be contained in the Travel Access Guide (TAG). The TAG is   | Section 4.1-4.6<br>Appendix C  |



| i.    | detailed pedestrian analysis including the identification of safe route<br>options to identify the need for management measures such as<br>staggered school start and finish times to ensure students and staff are<br>able to access and leave the Site in a safe and efficient manner during<br>school start and finish; | provided in Appendix C. Section 6 discusses arrangements for the<br>monitoring and maintenance of the TAG and other aspects of travel<br>planning for the School.     |                   |
|-------|--|---|-------------------|
| ii.   | the location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.);   |   |                   |
| iii.  | the location and operational management procedures of the drop-off<br>and pick-up parking, including staff management/traffic controller<br>arrangements;  |   |                   |
| iv.   | the location and operational management procedures for the drop-off<br>and pick-up of students by buses and coaches including staff<br>management/traffic controller arrangements;   |   |                   |
| ٧.    | 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<br>measures to minimise impacts, including measures to mitigate queuing<br>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  |   |                   |
| inclu | neasures to promote and support the implementation of the plan,<br>Iding financial and human resource requirements, roles and responsibilities<br>elevant employees involved in the implementation of the plan; and  | The various measures to promote and support the plan are set out in Section 3 of this report. This includes the mode targets and actions to achieve the mode targets. | Section 3.1 - 3.7 |
| (e) c | a monitoring and review program.   |   | Section 6.1 – 6.4 |



# 1.3 What is a School Travel Plan

A School Travel Plan is a document that outlines how a school intends to make travel to and from their campus safer and more sustainable for students, families, and staff.

A School Travel Plan is a package of coordinated strategies and measures to promote and encourage active and sustainable travel.

A School Travel Plan aims to influence the way students, staff, parents and visitors travel to and from the school to deliver better environmental outcomes and provide a range of travel choices, whilst also reducing reliance on private car usage, particularly single occupancy car trips (for staff and high school students) and single passenger car trips (for students).

In its simplest form, a School Travel plan encourages use of transport modes that have low environmental impact, such as active transport modes (e.g. walking, cycling), public transport, and better management of car use.

Active transport presents a number of interrelated benefits including:

- improved health benefits
- reduced traffic congestion, noise and air pollution caused by cars
- greater social connections with communities
- cost savings to the economy and individual.

A School Travel Plan is designed to addresses site specific local traffic issues around the school, while encouraging active, safe, and sustainable travel methods, such as active transport, public transport and car-sharing.

A School Travel Plan should be designed to correlate with the school's overall aspirations and is a document that is monitored and reviewed at regular documented intervals to ensure that the measures in the plan are effectively meeting the desire goals of the plan.

## 1.4 School Travel Plan Process

The development and implementation process of the School Travel Plan can be summarised to be as follows:

 Understanding Existing Travel Patterns and Infrastructure: Background information is collected about the existing site, such as existing travel patterns, local public transport facilities, walking routes and cycling facilities.



- Setting Achievable Targets: With reference to the existing conditions, a range of targets should be developed to meet the aims of the plan. The targets would involve reducing private vehicle mode share and reducing the vehicle kilometres travelled.
- Developing Actions: A range of actions have been developed to facilitate meeting the targets.
- Monitoring and Revision: It is intended that this plan is reviewed and, if necessary, updated every 12 months with the targets and actions reviewed in accordance with SSD 9483 Condition E15.

# 1.5 Responsibilities for Implementation and Governance of the School Travel Plan

Consultation with TfNSW, has highlighted that key factor to the success of a School Travel Plan is the appointment of a Travel Plan Coordinator who will be responsible for the School Travel Plan implementation and governance.

The School Travel Plan will benefit from a strong steering group or committee created with relevant internal and external stakeholders to inform future targets and the ongoing monitoring and revision of the STP for five years post-occupancy.

The arrangements for the implementation and governance of the School Travel Plan are set out in Section 5 of this Plan.

## 1.6 Consultation

The preparation of this School Travel Plan has been undertaken in consultation with representatives from the following agencies:

- Chatswood High School
- Willoughby City Council
- Transport for NSW
- School Infrastructure NSW

Feedback obtained through the consultation process has been utilised to develop and refine this School Travel Plan.



Key issues raised in the consultations included:

- Establishment of ambitious mode share targets towards public and active transport modes
- Implementation and governance of the School Travel Plan
- Arrangements of ongoing management of the School Travel Plan
- Importance of cycling and car pooling as a means to achieve mode share targets
- Aligning the implementation of travel mode management measures within the School Travel Plan with the growth of the school population over time.

Details regarding the consultation are provided in Appendix B.



# 2 Site Conditions

# 2.1 Site Location

Chatswood High School is located at 24 Centennial Avenue. As shown in Figure 2.1, the school site has accessible road frontages to:

- Centennial Avenue
- Eddy Road
- De Villiers Avenue
- Oliver Road
- Freeman Road

The Chatswood High School site is located within close proximity to the Chatswood Public School site, which is located on the northern side of Centennial Avenue.

Improvements to both the Chatswood Public school and Chatswood High School sites were approved as part of SSD 9483. The operation of and interaction between the two schools has been considered in the development of this School Travel Plan.



### Figure 2.1: Locality Map



# 2.2 Surrounding Road Network

The Chatswood High School site is surrounded by a network of state and local roads including Pacific Highway, Centennial Avenue and Jenkins Street.

A description of these roads is provided below.

### Pacific Highway

Pacific Highway is a Roads and Maritime classified State Road and travels along the eastern boundary of Chatswood Public School.

The Highway serves as a major north-south arterial link, providing connectivity between the Warringah Freeway and M1 Pacific Motorway. Within the vicinity of the site, the Pacific Highway has a posted speed limit of 60km/h, with 40km/h school zone restrictions applicable during school hours (i.e. 8am-9.30am and 2.30pm-4pm).

At the Chatswood Public School frontage, the Highway is generally configured with six traffic lanes, with three traffic lanes in each direction, across an 18m wide road carriageway. No kerbside car parking is permitted on either side of the road. Tidal traffic flow arrangements are in place during evening peak periods within the vicinity of the site to provide four traffic lanes in the northbound and two traffic lanes in the southbound direction.

As shown in Figure 2.2, an overhead pedestrian bridge across the Pacific Highway is provided on the southern side of the Pacific Highway / Victoria Avenue intersection. This crossing of the Pacific Highway is located on one of the key pedestrian routes between the Chatswood High School and the Chatswood Transport Interchange.

This pedestrian bridge has stair and escalator access on both sides of the Highway. The western side of the pedestrian bridge lands on the footpath on the Chatswood Public School's frontage to the Highway. It is acknowledged that there are ongoing issues associated with escalator maintenance and operation.





### Figure 2.2: Pedestrian Bridge over Pacific Highway at Public School Site

### **Centennial Avenue**

Centennial Avenue is a two-way, two-lane local road with on-street car parking provided on both sides of the road. It has an east-west alignment and predominately serves access to/from key drop off areas associated with both Chatswood Public School and Chatswood High School. It has a posted speed limit of 50km/h, with 40km/h school zone restrictions applicable during school hours.

### Victoria Avenue

Victoria Avenue is a local road connecting to the Pacific Highway at a signalised intersection. Victoria Avenue provides both vehicle and pedestrian connections between the Highway and the western side of the Chatswood interchange.

A number of bus services arrive at / depart from the bus stands in Victoria Avenue to service areas to the west of the north shore rail line.

### Oliver Road

Between the Pacific Highway and Whitton Road, Oliver Road is a one-way, one-lane westbound road, generally aligned in an east-west direction. To the west of Whitton Road, Oliver Road is a two way road ending at a cul-de-sac with vehicle and pedestrian access to the Chatswood High School.

A dedicated marked bicycle lane is provided on the north side of the road.



Additionally, unrestricted kerbside car parking provided on the south side of the road and is generally well-occupied throughout the day due to commuter car parking to Chatswood Station.

Footpaths are provided on both sides of Oliver Road providing pedestrian links between the Chatswood High School access and the Pacific Highway.

The intersection of the Pacific Highway and Oliver Road is signalised with a signalised pedestrian crossing of the Highway on the southern approach. This crossing is heavily utilised by High School students walking between the High School site and the Chatswood CBD / Chatswood Transport Interchange.

Oliver Road also provides good connectivity between Pacific Highway and Whitton Road, including to / from the Bush Campus staff park at the west end of the road.

### Freeman Road

Freeman Road is a two-way local cul-de-sac road with an unsignalized priority controlled intersection at the Pacific Highway at the eastern end of the road. The road has a posted speed limit of 50km/h with 40km/h school zone restrictions during school hours. Kerbside car parking is provided on the north side of the road. No Parking restrictions during school hours are provided on the south side of the road.

### Eddy Road

Eddy Road functions as a local road, generally aligned in an east-west direction along the southern boundary of the Centennial Avenue site. Access to this road is generally provided off Pacific Highway on the western end of the road. Kerbside car parking is generally made available on one or both sides of the road. It has a posted speed limit of 50km/h, with 40km/h school zone restrictions applicable during school hours.

### De Villiers Avenue

De Villiers Avenue functions as a local road, generally aligned in a north-south direction along the western boundary of the Centennial Avenue site. This road provides vehicle access to the staff car park within the Centennial Avenue site. It has a posted speed limit of 50km/h, with 40km/h school zone restrictions applicable during school hours. No kerbside car parking is generally made available on either side of the road between De Villiers Avenue and Eddy Road.



# 2.3 Proximity of School to Public Transport Services

The Chatswood Interchange provides a number of high frequency public transport services for both rail and bus services.

The interchange is located east of the site, approximately 500m (10-15 minute walk) from Chatswood High School. The school's proximity to the transport interchange is shown in Figure 2.3.



### Figure 2.3: Proximity of School's to Public Transport Services

Basemap Source: Google Maps Australia

# 2.4 Existing Rail Services

Rail services are available at Chatswood Train Station and Chatswood Metro Station located approximately 500m (10-15 minute walk) from Chatswood High School.

Chatswood Train Station provides frequent train services for T1 North Shore, Northern, and Western Line. During peak hours, T1 trains traveling from Chatswood to Sydney CBD, northern and western suburbs arrive at the station approximately every two minutes. In addition to this, the Sydney Metro between Chatswood Station and Tallawong Station arrives every four minutes during peak periods and every 10 minutes outside of peak periods.

A map of the existing rail network is provided in Figure 2.4.

Train timetable obtained from Transport for NSW (June 2023) indicate that there are currently 426 train services that run on weekdays at Chatswood Station in both directions.



A total of 108 trains service Chatswood Station during the school AM and PM peak (i.e. from 7am to 9am and from 2pm to 4pm on weekdays).

A summary of the existing rail services frequency at Chatswood Station during school peak hours is provided in Table 2.1.





Source: Transport for NSW (retrieved 02 May 2019)



| Train Service   | Cordon                   | AM Period            | PM Period   |  |
|-----------------|--------------------------|----------------------|---|--|
| Irdin Service   | Cordon                   | 7am-9am              | 2pm-4pm   |  |
| T1 Line – North | To City                  | Every 2 to 3 minutes | Every 4 to 5 minutes  |  |
| Shore Line      | From City                | Every 3 to 4 minutes | Every 4 to 5 minutes  |  |
| T1 Line –       | To City                  | Every 2 to 3 minutes | Every 4 to 5 minutes  |  |
| Western Line    | From City                | Every 3 to 4 minutes | Every 4 to 5 minutes  |  |
| T9 Line –       | From Gordon To<br>City   | Every 15 minutes     | Every 15 minutes  |  |
| Western Line    | From Hornsby via<br>City | Every 15 minutes     | Every 15 minutes  |  |
| Metro Line      | From Chatswood           | Every 4 minutes      | Before 3:43pm: Every 10 minutes<br>From 3:43pm: Every 4 minutes |  |
| MEILO LILIE     | Arriving at<br>Chatswood | Every 4 minutes      | Before 3:01pm: Every 10 minutes<br>From 3:01pm: Every 4 minutes |  |

### Table 2.1: Summary of Rail Services at Chatswood Station During School Peak Hours

### 2.5 Bus Services

Chatswood Bus Interchange provides good connection to a wide range of bus services operating to/from areas of Sydney CBD, Northern Beaches, North Shore, Willoughby, Parramatta, Macquarie University, and Bondi. Chatswood Interchange bus stands are located along Victoria Avenue, Railway Street and Orchard Road.

The existing bus network maps are presented in Figure 2.5 and Figure 2.6.

As shown in Figure 2.5, Bus Route 255 service the stops along the local roads surrounding the site. This bus route provides link between Chatswood Station to Beaconsfield Road via Chatswood Public School and Chatswood High School.

A more detailed map showing the bus route is presented in Figure 2.7.





#### Figure 2.5: Existing Bus Network Map – North Shore and West Network

Source: Transport for NSW (State Transit), North Shore & West Bus Network Map





#### Figure 2.6: Existing Bus Network Map – Northern Beaches and Lower North Shore

Source: Transport for NSW (State Transit), Northern Beaches and Lower North Shore Bus Network Map





### Figure 2.7: Existing Bus Network Map – Bus Route 255

Figure 2.8: Existing Bus Network Map – School Bus Route 683W





# 2.6 Pedestrian Infrastructure

Well-established pedestrian facilities are available in the immediate vicinity of the Chatswood High School site with a network of paved footpaths on both sides of the roads.

Victoria Avenue, Pacific Highway, Centennial Avenue and Oliver Road are the most utilised roads in terms of pedestrian activity as these roads provide direct connections between the Chatswood High School site and the Chatswood Transport Interchange and Chatswood CBD.

The following pedestrian facilities are currently provided within the vicinity the site:

- signalised pedestrian crossing on all approaches at the intersection of Pacific Highway and Victoria Avenue
- pedestrian bridge on the southern leg of Pacific Highway and Victoria Avenue intersection, equipped with escalators and stairs on both ends
- signalised pedestrian crossing on west approach at the intersection of Pacific Highway and Centennial Avenue
- signalised pedestrian crossing on the east, west and south approaches at the intersection of Pacific Highway, Albert Avenue and Oliver Road
- pedestrian (zebra) crossings along Centennial Avenue and Edgar Street
- concrete footpaths are provided on both sides of the roads surrounding the school.

These pedestrian facilities provide good connectivity between the Chatswood High School and key transport nodes and attractions in the area.

It is noted that the existing pedestrian bridge over the Pacific Highway connecting the Chatswood Public School (and Chatswood High School) site to the Chatswood Transport Interchange is currently under-utilised due largely to maintenance issues associated with the escalators and perceived convenience of the at-grade traffic signals crossing of the Pacific Highway.

Potential measures to increase utilisation of the pedestrian bridge are documented in subsequent sections of this School Travel plan.

A dedicated marked pedestrian crossing is provided across Centennial Avenue between Jenkins Street and Whitton Road adjacent to the Chatswood Public School frontage. This marked crossing is staffed by a TfNSW accredited school crossing traffic controller on school days between 8:00am – 9:30am and 2:30-4:00pm to manage the safe and efficient movement of pedestrians across Centennial Avenue.



Another marked pedestrian crossing of Centennial Avenue to the west of Edgar Street is located at the High School's main pedestrian access on Centennial Avenue.

The existing pedestrian catchment within a 30-minute walking radius to/from the school is presented in Figure 2.9. Notably, the majority of these streets within this catchment have well-established pedestrian paths available.

Notably, the Chatswood Transport Interchange and the Chatswood CBD are located within a 10-15 minute walk of the Chatswood High School site.

# 2.7 Cycling Infrastructure

There currently exists a well-established cycling network providing a number of dedicated shared cycling paths and routes in the vicinity of the site. The existing cycle network surrounding the Chatswood High School site is presented in Figure 2.10.

Notwithstanding the proximity of the Chatswood High School site to existing cycling infrastructure, it is acknowledged that the school's location on the Pacific Highway (busy traffic route) with surrounding hilly terrain presents a significant potential barrier to cycling as a mode of transport for students.

As indicated by the travel mode surveys undertaken during the SSDA assessment, 0% of students and 0% of staff cycled to the Chatswood High School.

However, TTPP's recent (2023) observations of student arrival / departure activity has indicated that a very small percentage of High School students travel to and from school using bicycles and scooters.

Notwithstanding the above, it is noted that Willoughby Council has recently constructed a number of cycleways between St Leonards and Chatswood, including a shared path on the eastern side of the Pacific Highway between St Leonards and Mowbray Road.

Additionally, a shared path has been recently constructed on the western side of the Pacific Highway between Mowbray Road and Oliver Road. It is understood that there are plans to duplicate the shared path on the eastern side of the Highway in the future.

Such future facilities would improve the existing cycle connections to and from the Chatswood High School.



# 30 MIN. Ŕ NORTH WILLOUGHBY Ō CHATSWOO WILLOU LANE COVE NORTH WILLOUGHBY Chatswood High School Site Location 5 Min 30 Min

### Figure 2.9: Walking Catchment Area for Chatswood High School



# 2.8 On-Street Student Drop Off / Pick Up Zone

On-street student drop off / pick zone facilities are provided along the Chatswood High School's frontage to Centennial Avenue between Jenkins Street and the main High School pedestrian access / pedestrian crossing.

# 2.9 Baseline (2019) Travel Mode Share

### 2.9.1 Overview of Travel Survey

As part of the SSDA Transport Assessment, a 2019 travel mode survey was undertaken by TTPP for students and staff of the Chatswood High School.

The key objective of the travel mode survey was to determine travel mode types, trip generation and parking demand of the school.

The travel survey establishes baseline conditions for which the implementation of travel demand measures can be assessed.

The detailed methodology and findings of the mode share analysis are presented in the SSDA Transport Assessment.



#### **Chatswood High School** PECKHAN Lower UTS Bush PORT HILL: Fullers Park BLUE AN KAREELA RD Millwood RD FULLERS Northern Suburbs Howth Church HELP ST Ś FULLERS RD CLANWILLIAM NORTH LANE COVE NATIONAL PARK Bale RANELAGH CR 3 CENTENNIAL Owen St FRY ST Lea Av 3 LAUREL River CHATSWOOD GOLF CLUB Mowbray Park AVIAN Q LANE CI ち NORTI ULM N Ser HART Wart BEAC FARRAN SHEPHERD yn St COOLARO RD MOWBRAY RD PH MINDARIE ŝ ST Sta GORDON 35 KULLAH PDE B ILIAN RYMPLE Å LANE COV C non 1 MOWBRAY WEST Sam Jo Wyale Batten Canek Cameron Av Pyri Rd Cooney Rd e. marten • es Roslyn St diff. Lucknow S BURRA MURRAY KARILLA AV RD Legend PARKLANDS AV LANDERS RD Rd TCN Nundah St ANE Future KARA TUNNEL de OLYMPIA Park Seperated Bicycle Path Shar Marked Or S **Bicycle Poute** e Use RD if separated paths are not provided) B ct. 🚲 Bike Shop 🚲 Bike Locker 🗛 Bike Pump 🕑 Parking 🛟 Hospital 🛞 Police :> he. Penn

### Figure 2.10: Surrounding Cycling Network

Source: North Shore Bike Map



### 2.9.2 Baseline (2019) Staff Mode Share

Figure 2.11 provides a summary of the surveyed baseline travel modal percentages for staff at Chatswood High School.

It can be seen from this figures that private car travel is the primary mode of travel for High School staff (i.e. 80%).

The results indicate a high dependency on car usage for staff, despite the site's close proximity to high frequency public transport services.

Noticeably, there is a lack of active transport modes (walking and cycling) by staff.



### Figure 2.11: Baseline (2019) Modal Split – Chatswood High School Staff



### 2.9.3 Baseline (2019) Student Mode Share

A summary of the surveyed baseline travel modal percentages for students is presented in Figure 2.12.



Figure 2.12: Baseline (2019) Modal Split – Chatswood High School Student

Based on the above results, public transport is the primary mode of travel to / from Chatswood High School (57%) among the students, followed by walking (26%).

Noticeably there is a relatively high percentage of 'walk' trips (26%) yet low to nil cycling trips by students.

Car trips (passenger and driver) are relatively low at 17% of all trips by students.



# 3 School Travel Plan Actions

# 3.1 Travel Mode Share Targets

As set by Condition D18(a)(ii) of the consent, the School Travel Plans for the Chatswood High School and Chatswood Primary School are tasked with developing measures to achieve a 16% reduction in car trips for future traffic generation associated with a 3,600 student population across both the Public and High School campuses.

It needs to be acknowledged that the 16% reduction in future car trips is not the same number as a 16% of all trips.

As noted in the preliminary Green Travel Plan<sup>1</sup> submitted with the SSDA a 16% reduction in car trips is required to achieve 'no net additional traffic' to the surrounding road network with a future combined High School and Public School population of 3,600 students compared to the existing combined schools' population.

Thus, this does not necessarily translate to a 16% mode shift from car use because of the following factors:

- some car trips occur outside the identified peak hour of the surrounding road network
- students who travel by car have an average occupancy rate of 1.65 to 1.76 students per car, and
- the assumed directional split during the morning peak hour is 85% inbound and 15% outbound (reverse in the afternoon peak) and therefore a student or staff who travel by car could potentially generate two car trips per hour (i.e. one trip inbound and one outbound).

The documented mode share targets for Chatswood High School staff and students to achieve the 16% reduction in car trips is presented in Table 3.1. Similar targets and breakdowns are provided for the future high school population in the Chatswood Public School Travel Plan.

The following actions have been identified through the SSDA assessment process and in the preparation of this Plan as measures seeking to achieve the reduction of car trips associated with the Chatswood High School.

It is acknowledged that to evaluate the success of a School Travel Plan, there is the need to monitor the School Travel plan policy and measures at regular intervals or when events/decisions occur that require a change in the plan.

<sup>&</sup>lt;sup>1</sup> Upgrades to Chatswood Public School and Chatswood High School – Green Travel Plan (TTPP, 17 March 2020).



| Mode of Travel | Existing Mode Share (2019) |       | Mode Shift |       | Future Mode Share |       |
|----------------|----------------------------|-------|------------|-------|-------------------|-------|
|                | Students                   | Staff | Students   | Staff | Students          | Staff |
| Car Driver     | 1%                         | 80%   | 0%         | -5%   | 1%                | 75%   |
| Car Passenger  | 16%                        | 5%    | -5%        | 0%    | 11%               | 5%    |
| Train          | 24%                        | 12%   | +1%        | +2%   | 25%               | 14%   |
| Bus            | 27%                        | 2%    | +1%        | +1%   | 28%               | 3%    |
| Bus & Train    | 6%                         | 1%    | 0%         | 0%    | 6%                | 1%    |
| Cycle          | 0%                         | 0%    | +2%        | +1%   | 2%                | 1%    |
| Walk           | 26%                        | 0%    | +1%        | +1%   | 27%               | 1%    |
| Total          | 100%                       | 100%  |            |       | 100%              | 100%  |

### Table 3.1: Chatswood High School - Mode Share to Achieve 16% Reduction in Car Trips

Reference: Upgrades to Chatswood Public School and Chatswood High School – Green Travel Plan (TTPP, 17 March 2020)

The mode share targets set out in Table 3.1 are considered to be the minimum mode share targets such as to achieve a 'no net increase' in traffic the surrounding rod network by the Chatswood High School operation.

Specifically, the mode share targets presented above reflect the target specified by Condition D18 of the consent.

Subject to the success of the implementation of the School Travel Plan travel demand management measures, more ambitious targets could be implemented to reduce car use below existing levels.

### 3.2 Walking Actions

### 3.2.1 Walking Routes

With the upgrade works to the Chatswood High School, the school will have a number of pedestrian accesses along the various site frontages to the surrounding local road network. These accesses will be maintained under the school upgrade works and continue to allow effective distribution of walking students (and potentially staff) to the surrounds without undue restrictions or excessive additional walking distances.



As noted in Section 2 of this plan, the streets surrounding the Chatswood High School generally provide footpaths on both sides of the road with kerb ramps at intersections and road crossings.

Dedicated pedestrian road crossing facilities are provided along the primary existing pedestrian routes to and from the school including:

- Marked school crossings of Centennial Avenue adjacent to the School's pedestrian access providing a connection between the Public School and the High School
- Signalised pedestrian crossings at the Pacific Highway / Victoria Avenue intersection connecting the Chatswood Public School to the Chatswood Transport Interchange via Victoria Avenue
- Signalised pedestrian crossing of Centennial Avenue at Pacific Highway
- Pedestrian bridge over the Pacific Highway connecting the Chatswood Public School to the Chatswood Transport Interchange via Victoria Avenue
- Signalised crossing of Pacific Highway (south approach) and Oliver Street.

These dedicated pedestrian road crossings provide safe pedestrian routes to the surrounding school catchment and to key attractors including the Chatswood Transport Interchange and the Chatswood CBD.

The pedestrian routes utilising these pedestrian crossing facilities form the basis of the safe pedestrian routes to and from the school as identified in the Travel Access Guide (TAG), as provided in Appendix C.

The TAG will be promoted in school communications and online systems to encourage use of the safe pedestrian routes for walking trips to and from the school.

### 3.2.2 Pacific Highway Pedestrian Bridge

One of the key pedestrian routes between the Chatswood High School and the Chatswood Transport Interchange is via Victoria Avenue and a crossing of the Pacific Highway. The pedestrian bridge over the Pacific Highway, when operational, is an attractive and safe option for pedestrian access across the Pacific Highway along this route.

It is understood that there are maintenance issues associated with the escalators which result in extensive periods when they are not operational. Discussions with Willoughby City Council indicated that the pedestrian bridge is owned and operated by the land owners of 799 Pacific Highway.

Notwithstanding the above, the Chatswood High School, through the Travel Plan Coordinator, will encourage students to use the pedestrian overbridge.



This will be achieved through:

- Promotion of the TAG and specifically the safe pedestrian walking routes identified in the TAG.
- Teacher supervision of crossing with active encouragement to use the pedestrian bridge
- Student and parent education about use of the pedestrian bridge.

### 3.2.3 Walking Programs and Strategies

There are a range of walking relating programs and strategies that could form part of the actions to achieve a mode shift away from private vehicles.

These programs shall be implemented and reviewed as to their effectiveness for the site specific conditions for the Chatswood Public School. Examples are set out below.

Examples are set out below.

### In-class Active Travel to School Education

Students will be educated about active travel to school. Not all students may be aware of different travel modes. An in-class education will be held for students to discuss public and active travel to school.

### STEPtember

Charity events such as STEPtember are opportunities for students and staff to walk to/from school and achieve walking targets for the charity. An event such as this is for the month of September and provides a great opportunity to install long-lasting effects of sustainable travel mode. It is noted that this can also be used as a friendly competition between schools in the Local Government Area to increase the number of students taking up the challenge (https://www.steptember.org.au/).

### Walk to Work Day (WTWD)

Similar to WTSD, WTWD is an annual event for all workers to walk to work and is promoted by the Pedestrian Council of Australia (<u>http://www.walk.com.au/wtw/homepage.asp).</u>

### Gamification

Gamification relies on competition and social engagement to influence behaviour.

Games can be used to encourage students to use active and public transport. One such international example which can be used for inspiration is "Beat the Street" which was created by Intelligent Health.



The project turns towns and cities into a game where people earn points as they walk, cycle, and run (<u>https://www.beatthestreet.me/</u>)

### Engagement with parents and carers

Parents and carers are the key decision-makers for how children travel to school.

Through the P&C and other means of communication (ie. website and electronic communications), the school can involve and engage parents to promote walking and cycling to school as an opportunity to stay active themselves. Parent/carer workshop could be an opportunity to initiate the discussion for active travel to school.

# 3.3 Cycling

### 3.3.1 Cycling as a Mode of Transport for Chatswood High School

It is acknowledged that the Chatswood high School's location within proximity to the Pacific Highway and hilly surrounding streets, coupled with the young age of students, does not represent overly attractive conditions for cycling to and from school for students.

This is reflected in the low use of cycling as a mode of transport to and from the school (0% of students and 0% of staff) as presented in the TTPP travel mode survey prepared during the SSDA assessment.

It is also acknowledged through consultation with School staff, that cycling as a mode of transport is not currently encouraged for Chatswood High School students.

Notwithstanding the above, generally after walking cycling is one of the most sustainable transport modes and there are cycling programs developed for school students.

As the bicycle network around the Chatswood High School is improved over time, there will be opportunities to potentially implement cycling programs and provide cycling as a mode choice alternative for travel to and from school.

Additionally, the provision of on-site 'end of trip facilities' such of bike parking and staff change areas will allow enable cycling to be offered as a realistic mode choice option.

Essentially the provision of the end of trip facilities will remove one of the barriers to cycling and allow those staff and potentially students that wish to ride to school to do so.



### 3.3.2 Cycling Network

As detailed in Section 2 of this Plan, the School's benefits from access to some off road / shared path cycleway networks and local streets.

Active promotion of the cycling network to students, parents and staff via the TAG (see Appendix C) is considered a key to achieving a mode shift towards cycling for trips to and from school.

### 3.3.3 Cycling Management Strategies

### Ride2School

Ride2School day is a national event held annually and includes competition and awards (e.g. Ride2School day 2021 includes the potential to win a new bike).

National Ride to School Day will be made an important event on the calendar as it promotes being active and healthy to young people, encouraging them to ride, roll, skate, scoot or walk to school.

### **Riding Groups**

Similar to a walking school bus, the same type of group is formed for students and staff who wish to cycle to/from school. By pairing students together can assist in breaking down fears of cycling alone, improve safety awareness as a group, and encourage others to join.

### End-of-trip Facilities

A barrier to promoting cycling as a preferred mode is the lack of quality end-of-trip facilities. It is understood that the proposal also incorporates bicycle parking with the end of trip facilities to encourage to cycle to and from school.

The proposed end of trip facilities includes 144 bicycle parking spaces across the Public and High School sites for students, staff and visitors.

Depending on uptake and changes in attitude towards cycling as a travel mode, provision of facilities such as lockers could encourage more staff to cycle to the school. The Cycling option and the School's end-of-trip facilities provided can be discussed in staff meetings to encourage staff members to travel by cycling.

### Learn to Cycle Programs

High School students will be encouraged to use bikes through learning to cycle programs at school as practical skill development.



Share or loan a bike within the school for students could be provide while taking the program.

### **Cycling Articles**

It is essential that both students and staff are aware of cycling to school options. The schools' website and newsletter transport section will be updated to include articles about the schools' bicycle facilities, cycling maps, and relevant website links.

Some useful resources include:

https://www.willoughby.nsw.gov.au/Residents/Parking-and-transport/Cycling

### 3.3.4 Wayfinding for Bicycle Parking

As directed by Condition D22 of the consent, bicycle way finding signage will be installed within the school to direct student, staff and visitor cyclists from footpath to designated bicycle parking areas.

### 3.4 Public Transport

As noted in Section 2 of this Plan, the Chatswood High School is well serviced by and has good access to a variety of public transport services.

Furthermore, there is a relatively high utilisation of public transport as a mode of travel to / from school by the student population (57%).

However, to further encourage public transport (particularly for staff) the following measures will be considered:

- A comprehensive map of the available public transport network, timetables and private bus services could be prepared showing the nearby bus stops and train station with appropriate walking routes (as shown in the TAG).
- The School Student Transport Scheme (SSTS) provides eligible school students with free or subsidised travel from home to school. The scheme includes free travel to and from home and school on approved public transport services during school term with a School Travel Pass.

An online application form must be completed. School Travel Passes are issued by Transport for NSW under the SSTS, in the form of a School Opal card.



Students in Years 7-12 are eligible for a School Travel Pass if the straight-line distance from their home address to school is more than 2.0 kilometres, or if the walking distance from home to school is 2.9 kilometres or greater. Students within this zone may be eligible for a School Term Bus Pass (see below).

Further information is available at the following link: <u>https://apps.transport.nsw.gov.au/ssts/\_</u>and <u>https://transportnsw.info/document/5560/subsidisedtravelsstspaper.pdf</u>

- Excursions Public transport would be used for school excursions, whenever appropriate. Local rail stations such as Chatswood Transport Interchange are to be contacted regarding the arrangements for any excursions via rail. Excursion travel on public transport will also help to familiarise students with the public transport system, options, and operations, and encourage them to use it in their daily travel.
- Transport Access Guide (TAG) Users often face difficulties in using sustainable travel modes due to a simple lack of awareness of their travel options. If these options can be presented to users in an easy to understand format, they may be more likely to change their travel behaviours.

A brochure has been developed (known as a Transport Access Guide, or 'TAG') which provides information on transport options for accessing the schools. The TAG can easily be given to staff, students, and parents (including as part of the orientation pack), and will be uploaded to the school website to provide information for visitors.

A TAG for the Chatswood High School is provided in Appendix C.

## 3.5 Car Pooling

Staff would be encouraged to carpool their trips to and from the Chatswood High School.

Allocation of dedicated car parking spaces within the on-site staff car parking area would be allocated for carpooling.

The existence of the carpooling system / forum could be provided in staff communications.

## 3.6 Action and Responsibilities

The key strategy and framework action table are summarised in Table 3.2.


It must be noted that the below details will be updated as required. However, it is emphasised that the availability of the suggested strategies is a key factor in influencing travel patterns.

The implementation of this School Travel plan will require a formal Travel Plan Coordinator (TPC) who will have responsibility for further developing, implementing, and monitoring the School Travel plan annually.

The Travel Plan Coordinator will have the responsibility to develop the implementation plan for the introduction and then maintenance of the School Travel Plan.



#### Table 3.2: Framework Action Table

| Item             | Action   | Responsibility          | Timeframe   |  |
|------------------|--|-------------------------|---|--|
| Walking          | Safe walking routes to be identified in the TAG and the TAG promoted via<br>online communications Travel Plan Coordinator                  |                         | Annual / bi-annual / monthly /<br>weekly  |  |
|                  | Maintenance of pedestrian bridge over Pacific Highway to be provided by the responsible contractual entity and enforced by Council / TfNSW | Council / TfNSW         | Ongoing   |  |
|                  | Improved signage for pedestrian bridge   | SINSW / Council         | Within 12 months of School Travel<br>Plan Implementation                                    |  |
|                  | Actively encourage students to use pedestrian bridge via the TAG   | Travel Plan Coordinator | From Day 1 of School Travel Plan<br>implementation  |  |
|                  | Implementation of Walking Strategies   | Travel Plan Coordinator | Within first 6 months of School<br>Travel Plan Implementation and<br>then reviewed annually |  |
| Cycling          | Implementation of Cycling Strategies   | Travel Plan Coordinator | Within first 6 months of School<br>Travel Plan Implementation and<br>then reviewed annually |  |
| Public Transport | Promote TAG  | Travel Plan Coordinator | From Day 1 of School Travel Plan<br>implementation and then<br>ongoing                      |  |
| Car              | Staff Car Pooling Program  | Travel Plan Coordinator | Within first 6 months of School<br>Travel Plan Implementation and<br>then reviewed annually |  |
| Governance       | Set up a governance arrangement with Council, bus operator, TfNSW and SINSW to review and address school travel planning issues annually.  |                         | From Day 1 of School Travel Plan<br>implementation and then<br>ongoing                      |  |
|                  | Review the School Travel plan annually   | Travel Plan Coordinator | Annual  |  |



## 4 School Operations and Access Management

- 4.1 Management of On-Site Car Parking, Service Vehicle and Emergency Vehicle Access
- 4.1.1 Staff Car Parking

As a result of the upgrade project, the total number of on site car parking spaces available on the High School site will be reduced from 122 spaces to 100 staff car parking spaces.

Of the 100 car parking spaces, 98 spaces are provided in the main car park and 2 spaces at the Building S car parking area. Of the 100 car parking spaces, 2 spaces are designed and designated as 'accessible' parking spaces.

Additionally, 14 motorcycle parking spaces are provided within the car parking area.

Staff car parking will be accessed via the vehicle driveway at De Villiers Street (see Figure 4.1) and connected to the parking areas via internal access roads.

Access to the staff car parking areas will be managed by the school with pre-arranged access permissions and parking space allocation.

The De Villers Street access is controlled by a sliding gate with fob key access during school hours.

Special support vehicle drop off and pick up spaces are provided adjacent to Building R and are accessed via the Oliver Road driveway.

No designated visitor parking is provided onsite. Any remaining parking spaces from the general staff parking allocation may be used as visitor parking should it be required, at the discretion of school staff.

It is noted that the way-finding signage (as required under Condition D21 of the consent) shall be installed identifying the location of the staff car parking facilities.

#### 4.1.2 Bicycle Parking

A total of 84 on-site bicycle parking racks will be provided and available for both staff and students.



As shown in Figure 4.1, bicycle racks will be provided at the following locations:

- Eastern side of Building J (28 spaces)
- Western side of Building J (32 spaces)
- Southern side of Building S West Wing (24 spaces)

End of Trip facilities are located within Building T as shown in Figure 4.1.

### 4.1.3 Emergency Vehicle Access

Emergency vehicle access will be available via the Centennial Avenue vehicle access located at the western end of the school's frontage (see Figure 4.1).

#### 4.1.4 Service Vehicle Arrangements

Service vehicle access to the designated service vehicle area adjacent to Building S will be provided via the De Villiers Street access (see Figure 4.1).

Deliveries and waste collection shall be scheduled to be undertaken out of peak school start and finish times to reduce potential conflicts with peak pedestrian and vehicle activity around the school.

Service vehicle access to the onsite loading / servicing vehicle areas will be via an intercom system connected to School administration service who will remotely facilitate service vehicle access.

Waste collection vehicles will also have fob key access.





#### Figure 4.1: Car Parking and Service Vehicle Areas



## 4.2 Management of On-Street Drop Off / Pick Up Operations

On street vehicle drop off / pick up facilities will be provided along the school's frontage to Centennial Avenue for student drop off and pick ups (see Figure 4.2).

The operation of the drop off / pick up facility will continue in the same manner as the pre upgrade arrangements.

The marked pedestrian crossing of Centennial Avenue between Whitton Road and Jenkins Street will be managed by a School Crossing Supervisor. The Crossing Supervisor will assist children, disabled and other pedestrians to Centennial Avenue by stopping traffic and ensuring all pedestrians have crossed safely before allowing traffic to flow through the crossing.

The marked pedestrian crossing west of Edgar Street will not be supervised by a Crossing Supervisor.



#### Figure 4.2: Location of Centennial Avenue Drop Off / Pick Up Area and Bus Stops



## 4.3 Bus Stop Operations

The Bus Stop zones on Centennial Avenue will facilitate school bus services for student travel to and from the school.

The locations of the bus stops are shown on Figure 4.2. These locations are consistent with the pre-upgrade bus stop locations.

As per the pre-upgrade conditions, staff will not directly supervise bus stop operations.

School buses for excursions will utilise the on street bus stops as per the pre upgrade conditions. Buses will not access the School's internal roads.

## 4.4 Pedestrians and Cycle Routes

As noted in Section 3 of this School Travel Plan, pedestrian footpaths are provided on both sides of the roads surrounding the Chatswood High School.

Combined with the dedicated pedestrian crossing facilities of Centennial Avenue and the Pacific Highway, these paths provide a dedicated and safe path of travel for student and parent / carer pedestrian movements to and from the school.

The designated walking routes to and from the Chatswood Transport Interchange and CBD is provided in Figure 4.3. These routes are also presented in the School Travel Access Guide (TAG).

Similarly, the available bicycle routes to and from the school are shown in the Figure 4.3.

At school arrival and departure times, pedestrian access is via the various perimeter gates. Outside of school arrival and departure times, access via the perimeter gates is manage with fob keys available to authorised staff.

During school hours, surveillance of visitors will be undertaken with a single access point and sign in at the administration building (Building Q).





#### Figure 4.3: Walking and Cycling Routes

### 4.5 External Road Works

A range of works and improvements to the surrounding transport networks are proposed and being undertaken by others which will assist in the efficient and safety management of travel demand associated with the school.

These are set out below.

### 4.5.1 Pedestrian Countdown Timers

It is understood that pedestrian count down timers are proposed to be installed on a trial basis at the Pacific Highway / Centennial Avenue intersection.

Pedestrian countdown timers show how many seconds you have left to cross before vehicles get a green light. The countdown timers allow pedestrians to appreciate how much time is left before the traffic receives a 'green' signal and to gauge if they have enough time to fully cross before the counter reaches zero.



With regard to the Pacific Highway / Centennial Avenue site, with its high volume of school student crossing demand, it is suggested that the installation of pedestrian countdown timers has the potential to improve traffic flow and pedestrian safety by reducing the number of people on the road at the wrong time.

### 4.5.2 Centennial Avenue Intersection Upgrades

In accordance with Condition C27 of the consent, consultation between the Applicant and Council has been undertaken regarding Centennial Avenue road upgrade works in order to improve the safety and efficiency of school drop off / pick up vehicle movements.

Following consultation, it is proposed that roundabout intersections shall be installed to replace the existing priority controlled intersections at the following locations:

- Centennial Avenue / Jenkins Street
- Centennial Avenue / Edgar Street.

As at the time of this report, detail designs for the intersections have been prepared and are being assessed through a Road Safety Audit.

Notwithstanding the above, the proposed roundabout treatments will facilitate improve access to the student drop off / pick up area for the Chatswood High School (and Public School).

Potential traffic conflicts would be reduced, and pedestrian safety improved with the provision of dedicated turning facilities allowing vehicles to approach and depart the School drop off / pick up area via Centennial Avenue / Pacific Highway intersection.

## 4.6 Community Uses

The extent of community uses of the Chatswood High School site outside of school operating hours is currently limited and ad hoc. Access to on-site parking is generally restricted and relies upon school staff to be on-site with an access key to provide access to parking.

Notwithstanding the above, there is potential for various future community uses of the Chatswood Public School site.

Parking and travel arrangements for ad hoc or one off events will shall be addressed on an event by event basis addressing the specifics of each event.

Should community uses be regular and ongoing, the School Travel Plan shall be updated as part of the review process to include the measures for travel demand management associated with these community activities.



## 5 Governance and Support

## 5.1 School Travel Plan Coordinator

To assist with the implementation and ongoing 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, and
- Liaise with external parties (i.e., Council, public transport operators, TfNSW) in relation to Travel Plan matters.

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

## 5.2 Resourcing

It is not anticipated that the maintenance of this School Travel Plan will have significant ongoing cost implications and shall be reviewed on an annual basis by the Travel Plan Coordinator in order for the best outcome.

The funding arrangements for the implementation of the School Travel Plan shall be determined prior to implementation of the Plan.

As requested by TfNSW through the consultation process, funding arrangements for at least the first 5 years of the School Travel Plan operation shall be determined.

## 5.3 Other Resources

The Road Safety Education Program has provided educational resources and professional development to teachers and childhood educators throughout NSW since 1986. It forms part of the formal school curriculum and pre-service training for teachers. Through this program,



teachers are provided with professional learning and advice to equip them with the knowledge and skills to teach quality road safety education.

The program is funded by the Centre for Road Safety in government and non-government schools. Road safety is taught in the learning area of Personal Development, Health, and Physical Education (PDHPE). All students study PDHPE throughout the primary school to Year 10.

Topics covered regarding independent travel include walking to school safely, safety on public transport, always wearing a helmet when riding, and skateboarding safely.



## 6 Monitoring and Review Process of School Travel Plan

## 6.1 Purpose

Ongoing monitoring and review are crucial to the success of the School Travel Plan as it is the assessment of whether the initiatives have been successful in terms of meeting the objectives and targets.

Monitoring will enact the opportunity for introducing new incentives or ways to change the travel decisions being made by students and staff in order to achieve positive outcomes on traffic congestion, road safety, and the environment.

## 6.2 Data Collection

To monitor the effectiveness (or otherwise) of the School Travel Plan and target mode shares, travel mode surveys will be undertaken as an online platform accessible by students (eg. Survey Monkey). Online surveys will be utilised as they have a broader reach to the high school population.

Survey questions will be refined as part of the ongoing coordination with the School by the Travel Plan Coordinator.

Notwithstanding the above, the following questions will initially be asked to students and staff:

- 1. Which year group are you in? or Are you a staff member or volunteer at this school?
- 2. How did you travel to school today?
- 3. How will you travel home today?
- 4. Do you have any other feedback about traffic around the school site?

The survey is to capture student travel and staff travel mode share separately to ensure sufficient detail is captured to inform the decision-making process.

The responsibility for the design, implementation, assessment and ongoing reporting of the ongoing travel surveys will be the responsibility of the Travel Plan Coordinator.

The Travel Plan Coordinator will be responsible for the submission of the ongoing travel survey report to SINSW and presentation to Transport Working Group meetings.



## 6.3 Frequency

The on-line travel mode surveys will be undertaken bi-annually in Term 1 and Term 3. The online surveys will be undertaken during times that are representative of the School's typical operations. The interval of the review surveys must allow for sufficient behaviour change and ensure the survey is clear of public holidays or significant events that may alter behaviour.

The survey is to capture student travel and staff travel mode share separately to ensure sufficient detail is captured to inform the decision-making process.

The purpose of capturing survey responses to enable a review of the School Travel plan and whether or not target mode shares are being achieved.

The surveys and subsequent annual reviews of the School Travel Plan will provide the opportunity for introducing new incentives or ways to change the travel decisions being made by students and staff in order to achieve positive outcomes on traffic congestion, road safety and the environment.

## 6.4 Communication

When implementing the School Travel Plan document, the following will be undertaken:

- Chatswood High School to publish the School Travel Plan and TAG online via the school's website.
- Ongoing consultation and dialogue between Council, TfNSW and other stakeholders as necessary (ie. bus operators, DoE to address and operational issues with the school use of the network.
- Handover plan to train and engage with future SINISW / Department of Education Travel Plan Coordinator, new School Principal and/or other members of staff.
- The strategies to communicate the messages related to the School Travel Plan will include:
  - Transport Access Guide (TAG) on website
  - Monthly transport articles on website, newsletter, notice boards
  - o Annual transport summaries for new starters and open day kits



## Appendix A

CV for School Travel Plan Authors

20182-r05v05-231218\_High School Travel Plan





Industry Experience

30 years

#### **Qualifications & Memberships**

- BSc (Hons) (1st Class): University of New South Wales
- Australian Institute of Traffic Planning & Management (AITPM)
- Engineers Australia,
   Companion Member
- Chairman, Transport Panel, Engineers Australia 2008–2009

#### **Key Skills & Competencies**

- Traffic, transport and parking impact assessments
- Transport planning
- Integrated transport plans,
- Parking assessments
- Construction traffic
   management

#### **Professional Background**

2015 – Present The Transport Planning Partnership 2012 – 2015 GTA Consultants 2001 – 2012 Masson Wilson Twiney / Halcrow 1999 – 2001 Sinclair Knight Merz 1993 – 1999 Environmental Resources Management (formerly Mitchell McCotter)

#### **Professional Overview**

Jason has thirty years consulting experience in the field of traffic and transport planning for a broad cross-section of clients across the Australasian private and public business sector.

Jason has particular expertise in the assessment of proposed land use developments and transport infrastructure with an emphasis on the preparation of traffic and transport impact assessments, integrated transport plans, parking assessments and construction traffic management.

Jason appears as an expert witness in the NSW Land and Environment Court.

#### Industry Experience

#### **Energy Projects**

Biala Wind Farm EIS

Taralga Wind Farm EIS, Road Safety Review

Solar Farm Construction Traffic Management Plans – Narromine, Parkes, Dubbo

Newcastle Coal Loader Upgrade (Newcastle Coal Infrastructure Group)

Hills of Gold Wind Farm , Nundle (Wind Energy Partners)

North Wagga Wagga Solar Farm (Risen Energy)

Moama Solar Farm (Risen Energy)

Inverell Solar Farm (Risen Energy)

Mt Piper Waste to Energy Facility (Energy Aust) Botany Waste to Energy Facility (Suez)

#### Public Domain Transport Planning Projects

Quay & Connecting Streets (China Town) Public Domain Plan (City of Sydney) Pine Park Master Plan (Bayside Council) Kirribilli Village Centre Master Plan (North Sydney Council) Northbridge Local Centre—Public Domain &

Streetscape Upgrades (Willoughby City Council) Chatswood Chase Shopping Centre Redevelopment Entertainment Quarter, Moore Park

World Square Development, Sydney

#### **Transport Interchange Studies**

Chatswood Transport Interchange Development Epping Station Upgrade, Epping to Parramatta Rail Line Project Lidcombe Railway Station Turnback Facility NSW Randwick Racecourse Transit Hub Project Fairfield Transport Interchange Upgrade Sydney Metro, Martin Place Over Station Development

Sydney Metro. Pitt Street North Over Station Development

Macquarie Park—Talavera Rd Zero Emissions Bus Depot Transport Feasibility Assessment (TfNSW)

#### Traffic Management Plans

Sydney Harbour Casino and Pyrmont Point Construction Traffic Management Plans New Life Ultimo – Harris Street, Construction Traffic Management Plans

#### **University Transport Planning**

University of Sydney Campus Master Plan Transport Planning

Numerous University of Sydney Development Projects including:

- USyd Central
- Darlington Campus Public Domain Plan
- City Road Pedestrian Bridge
- Faculty of Law Building
- F23 & Carslaw Building Redevelopment

University of NSW – Cliffbrook School of Business

#### Transport Management & Accessibility Plan

McQuoin Park Aged Care Facility Sydney International Convention and Entertainment Centre Concept Plan Application & TMAP

#### Transport Planning & Assessments

NSW Ambulance Service, Site Selection and Feasibility Assessments for Ambulance Stations in Sydney Metropolitan Area

1 Bligh Street, Sydney (Commercial Development)

Newcastle CBD Light Rail Project Review (Newcastle city Council)

Jacksons Landing, Pyrmont, Residential Development

286 Sussex Street, Sydney Mixed Use Development

495 Harris Street, Pyrmont Mixed Use Development

Potts Hill Reservoir Employment and Residential

Kings Hills Urban Release Area





Industry Experience

8 years +

#### **Qualifications & Memberships**

- BE Civil (Hons), UNSW
- Prepare a Work Zone Traffic
   Management Plan Card
- Road Safety Auditor
- White Card
- AITPM Member
- Engineers Australia Member

#### Key Skills & Competencies

- Traffic, transport and parking impact assessments
- Transport planning
- Parking assessments
- Construction Traffic
   Management
- Traffic Control Plans
- Road Safety Audits

#### **Professional Background**

2016 – Present The Transport Planning Partnership 2016 – 2016 GTA Consultants 2015 – 2016 Manly Council 2014 – 2015 City of Ryde Council

#### **Professional Overview**

Jessica has over eight years of experience in traffic and transportation engineering in both public and private sectors. Jessica is experienced in assessing traffic, transport and parking impacts through her involvement in various small to large scale developments.

She has been involved in projects such as traffic impact assessments, traffic modelling using SIDRA intersection software, car park design, Local Area Traffic Management (LATM) studies, City Centre car parking strategies, construction traffic management planning and traffic control plans. In addition, Jessica is an accredited Level 1 Road Safety Auditor and has certification to prepare work zone traffic management plan.

#### **Industry Experience**

#### **Traffic Impact Assessments**

Royal North Shore Hospital Precinct Bass Hill Shopping Centre Expansion Crossroads & Prospect Homemaker Shopping Centres Proposed Residential Development at Rickard

Road & Byron Road Leppington

Rouse Hill Northern Town Centre Upgrade Mirvac Mixed Use Development at Figtree Drive, Sydney Olympic Park & Carrington Road Marrickville Proposed East Quarter Development, Forest

Road, Hurstville

Proposed North Shore Private Hospital Thornton Central, Penrith Redevelopment Fairfield West Child Care Centre Various Ambulance NSW Sites City of Tattersalls Club, Sydney Proposed Jardan Furniture Store, Paddington Bligh Street Hotel Development

Crystal Car Wash Kingsford

#### School / Education Projects

Chatswood Education Precinct:

- Transport Study
- Green Travel Plan

- Construction Traffic Management Plan Cecil Hills High School Transport Study Neutral Bay Primary School Transport Study Moriah College Transport Assessment Waitara Public School Green Travel Plan Wadalba Community School Upgrade Meadowbank TAFE :

- Phase 1 Interim Works Traffic Assessment
- Phase 1 Green Travel Plan
- Phase 1 Safety Design Assessment

#### Car Park Review / Design

Harold Park Proposed Residential Development Proposed Horizon Residential Development at 20 -28 Cambridge St, Epping

Rouse Hill Town Centre Northern Car Park Expansion

Proposed Intersection Redesign of Burton and Palmer Street , Darlinghurst Randwick Newmarket

#### **Transport Planning**

Liverpool City Centre Car Parking Strategy Prince of Wales Hospital Masterplanning Carnes Hill Shopping Centre Feasibility Study Warringah Mall Redevelopment Kurnell Peninsula Gipps Street Open Space Precinct Leppington Open Space Precinct

#### **Construction Traffic Management Plans**

Northern Beaches Hospital Connectivity and Enhancement Project Proposed Mirvac Mixed Use Development at 2 Figtree Drive, Sydney Olympic Park Castle Towers Shopping Centre Westmead Hospital Redevelopment - Acute Services Building 146-150 Campbell Parade, Bondi DFS Galleria Sydney North Shore Private Hospital, St Leonards 1A Coulson Street, Erskineville

#### **Road Safety Auditing**

Curlewis Street Cycleway Various Stages for Westconnex 3B Various Stages of Western Sydney Airport Northern Beaches Hospital Connectivity and Enhancement Project Sydney Metro Martin Place



## Appendix B

Consultation Register



### Table B.1: Consultation Register

| Agency /<br>Stakeholder   | Date                      | Agency Comments  | Response to Agency Comments  |
|---|---------------------------|--|--|
| TfNSW & Willoughby City Council   | During SSDA<br>assessment | Both TfNSW and Council was consulted during the SSD assessment stage and lead to the formulation of the Conditions of Consent.   | School Travel Plans have been developed to<br>address the Conditions of Consent, specifically<br>Condition D18-School Transport Plan.  |
| Chatswood Public School, Chatswood High<br>School, School Infrastructure, RCC, TIPP   | 31/5/23                   | Both the Public School and High School<br>representatives provided comment and<br>operational input to the Travel Plans  | Comments / inputs provided by the schools have<br>been incorporated into the School Travel Plans.<br>It is noted that at the request of the schools,<br>separate School Travel Plans have been prepared. |
| Meeting Willoughby City Council / School<br>Infrastructure / School representatives   | 28/6/23                   | It is understood from the meeting that TfNSW is<br>proposing to install and trial count down timers on<br>the pedestrians lanterns at the signalised Pacific<br>Highway / Centennial Avenue intersection.  | Noted  |
| Willoughby City Council<br>Daniel.Sui@Willoughby.nsw.gov.au<br>Adeline.Sim@Willoughby.nsw.gov.au<br>Clare.Woods@willoughby.nsw.gov.au | 6/9/23                    | Draft High School Travel Plan (v03) issued to Council for comments   | -  |
| Transport for NSW<br>Sophia.Grieve@transport.nsw.gov.au   | 6/9/23                    | Draft High School Travel Plan (v03) issued to Council for comments   | -  |
| Consultation Responses  |                           |  |  |
| Transport for NSW<br><u>Sophia.Grieve@transport.nsw.gov.au</u>  | 12/9/23 &<br>23/10/23     | <ul> <li>Further information required in the Plan addressing:</li> <li>Car parking provisions and usage</li> <li>Mode Share targets</li> <li>End of Trip Facilities</li> <li>Governance of the School Travel Plan<br/>and Implementation</li> <li>Use of standardise School Travel Plan<br/>Templates</li> </ul> | Further information addressing the matters raised<br>have been incorporated into an updated School<br>Travel Plan.<br>The TAG has been updated using standard<br>templates as provided by TfNSW.         |



| Transport for NSW<br>Ben.Borger@transport.nsw.gov.au | 25/9/23 | <ul> <li>Further consideration required in the School Travel<br/>Plan regarding:</li> <li>Bicycle parking and cycling routes</li> <li>Car Pool arrangements</li> <li>Monitoring of School Travel Plan<br/>effectiveness and implications to road<br/>network of not achieving mode targets</li> </ul> | The School Travel Plan have provided additional<br>information pertaining to the operation of the<br>various travel modes.<br>It is noted that external rods works beyond thus<br>assessed as necessary for the SSDA approval are<br>being undertaken, namely the Centennial Avenue<br>roundabouts. These works will specifically address<br>potential traffic issues associated with congestion<br>and conflicts at school drop off and pick up times. |
|--|---------|---|---|
| Willoughby City Council                              | 26/9/23 | <ul> <li>Further information required regarding:</li> <li>External road works being undertaken in<br/>Centennial Avenue</li> <li>Pedestrian facilities at the Pacific<br/>Highway pedestrian crossings</li> </ul>   | Reference to the external road works in centennial<br>Avenue have been incorporated in the School<br>Travel Plan. The works once complete will assist<br>minimise future traffic conflicts generated by the<br>School(s) and general public.<br>It is noted that the School and Council will have an<br>ongoing dialogue regarding pedestrian safety and<br>management, including the management of the<br>Pacific Highway crossings.                   |



## Appendix C

Chatswood High School Travel Access Guide (TAG)

### NSW Department of Education – School Infrastructure



## **Chatswood High School**

Travel Access Guide

#### 18 December 2023

### **Project overview**

Chatswood High School has been upgraded with new and improved education facilities to support the student community.

# Using public transport to get to school



The nearest bus stops are located along the school frontage on Pacific Highway and Centennial Avenue. The bus routes that service these bus stops are 255 and 530.

The nearest train/ metro station is Chatswood Station which is serviced by Metro North West Line, T1 (North Shore & Western Line) and the T9 (Northern Line).

## Apply for a School Opal Card

- Step 1: Complete the on-line application form at transportnsw.info/school-students.
- Step 2: The school will check the on-line application and approve the issue of the Card. Once approved, Transport for NSW sends the School Opal card to the home address given in the application. For more information on the School Opal card and the School Student Travel Scheme (SSTS), please visit transportnsw.info/school-students.



## Walking is an active and healthy way to get to school

- Look both ways before crossing the road.
   Only cross the road at dedicated crossing
- Only cross the road at dedicated crossing facilities. For example at zebra crossings or signalised pedestrian crossings.

### Ride your bike

- Wear a helmet when riding your bike
- Ride your bike on bike-friendly routes
- Park your bike in the racks inside the school
- Ride with school friends and or a parent /

#### Ride your scooter

- Wear a helmet when riding your scooter
- Park your scooter in the racks inside the school
- Ride with school friends and or a parent / carer

### Drop Off / Pick Up Code of Conduct

- Student Drop Off / Pick Up by vehicles will be along Centennial Ave
- Park legally within the drop off / pick up area
- Do not stop in the travel lane to drop off / pick up children
- Please follow the direction of staff supervisors

## Plan your trip to School

You can plan ahead to make sure you get to school on time. Additional information about service routes, timetables for buses and trains along with walking / cycling routes can be found at transportnsw.info/trip#/trip.



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





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