Newcastle High School
School Transport Plan

School Transport Plan for Newcastle High School to satisfy Condition D21 of SSD-41814831

Prepared for:
NSW Department of Education

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Prepared by:
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Project/File:
300304017

Stantec Australia Pty Ltd

Revision Schedule

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G	17/07/2025	Rev G	Preet Desai	Volker Buhl	Matt Todd	Volker Buhl

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Response to SSD-41814831

This School Transport Plan (STP) has been prepared in response to a request from the Minister for Planning and Public Spaces, addressing Condition D21 of SSD-41814831 for the development of Newcastle High School at 25A National Park Street, Newcastle West. The development supports staged upgrades to Newcastle High School comprising demolition, relocation and refurbishment of existing buildings, construction of new buildings, covered walkways, drop-off/pick up, waste and sporting facilities, tree removal, landscaping, and ancillary works including public domain infrastructure.

Table 0-1: Administrative Conditions (D21)

Condition		Description	Stantec Response
D21 (a)		be prepared by a suitably qualified consultant in consultation with Council and TfNSW;	Stantec is a fully qualified engineering and advisory consultancy that has supported NSW School Infrastructure by providing traffic and transport advice to numerous schools across Metropolitan Sydney and NSW. Extensive consultation was conducted with Council and TfNSW as part of the 2023 STP process, leading to significant changes in public domain works around the school to enhance child safety. This documented in Section 8 and Appendix D of this report.
D21 (b)		include arrangements to promote the use of active and sustainable transport modes, including:	
	(i)	objectives and modes share targets (i.e. site and land use specific, measurable and achievable and timeframes for implementation)	Mode share targets have been provided in section 6. As part of the mode share development Stantec undertook a new school travel survey for the 2025 enrolment at Newcastle High School and compared it to the previous survey results and targets which were set.
	(ii)	specific tools and actions to help achieve the objectives and mode share targets, including a travel access guide and car parking management strategy;	A Travel Access Guide (TAG) has been attached in Appendix B for distribution at the school. A car parking management strategy has been provided in section 3.3.
	(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.	Details regarding the monitoring and review of the STP mode share targets and objectives has been provided in section 7.6.
D21 (c)		include operational transport access management arrangements, including:	

Condition		Description	Stantec Response
	(i)	detailed pedestrian analysis including the identification of safe route options to identify the need for management measures such as staggered school start and 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;	A detailed pedestrian analysis was undertaken as part of the 2023 STP which has been attached in Appendix A. References to walking infrastructure and safe routes to school have been documented in section 2.1.
	(ii)	the location of all car parking spaces on the school campus and their allocation (i.e. staff, visitor, accessible, emergency, etc.);	Details on parking availability at NHS has been provided in section 3.3.
	(iii)	the location and operational management procedures of the drop-off and pick-up parking, including staff management/traffic controller arrangements;	The location and operational management of the drop-off and pick-up zones has been provided in section 3.4.
	(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;	The location and operational management of the bus drop-off and pick-up zones has been provided in section 3.4.
	(v)	delivery and services vehicle and bus access and management arrangements;	Details on vehicle access arrangements is provided in section 3.2.
	(vi)	management of approved access arrangements;	Approved access arrangements are documented in section 3.
	(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;	Impacts to the surrounding road networks were undertaken as part of the 2023 STP analysis. This can be found in section 6 in Appendix A.
	(viii)	car parking arrangements and management associated with the proposed use of school facilities by community members; and	The management of car parking arrangements has been documented in section 3.3
	(ix)	monitoring and management each drop-off and pick-up zone and the bus zone;	The monitoring and management of the drop-off and pick up zones is documented in section 3.4.
D21 (d)		measures 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	Measures to promote and support the implementation of the plan have been provided in in section 7.6.
D21 (e)		an annual monitoring and review program for the duration of operation.	The monitoring and review program for this STP is documented in section 7.6

1 Introduction

In June 2021, the NSW Government announced the delivery of the Newcastle Education Campus (NEC) development which will upgrade the main Newcastle High School campus to a stream nine school. The proposed upgrades to the site will include a new learning hub, library and multi-purpose hall. A future development stage for a new primary school at the site will be explored when the service needs demand is required.

NEC will cater for high school students from years seven to twelve and increase the total capacity from approximately 1,200 to 1,400 students. To meet this increase in demand, the current school intake zone will expand to include the Merewether Heights Primary School catchment as shown in Figure 1.

NEC is situated within the City of Newcastle local government area, within the suburb of Newcastle West. The site is bounded by Parkway Avenue, National Park Street and Smith Street. The site is located less than one-kilometre southwest of Honeysuckle Light Rail stop which provides access to Queens Wharf ferry terminal and Newcastle Interchange.

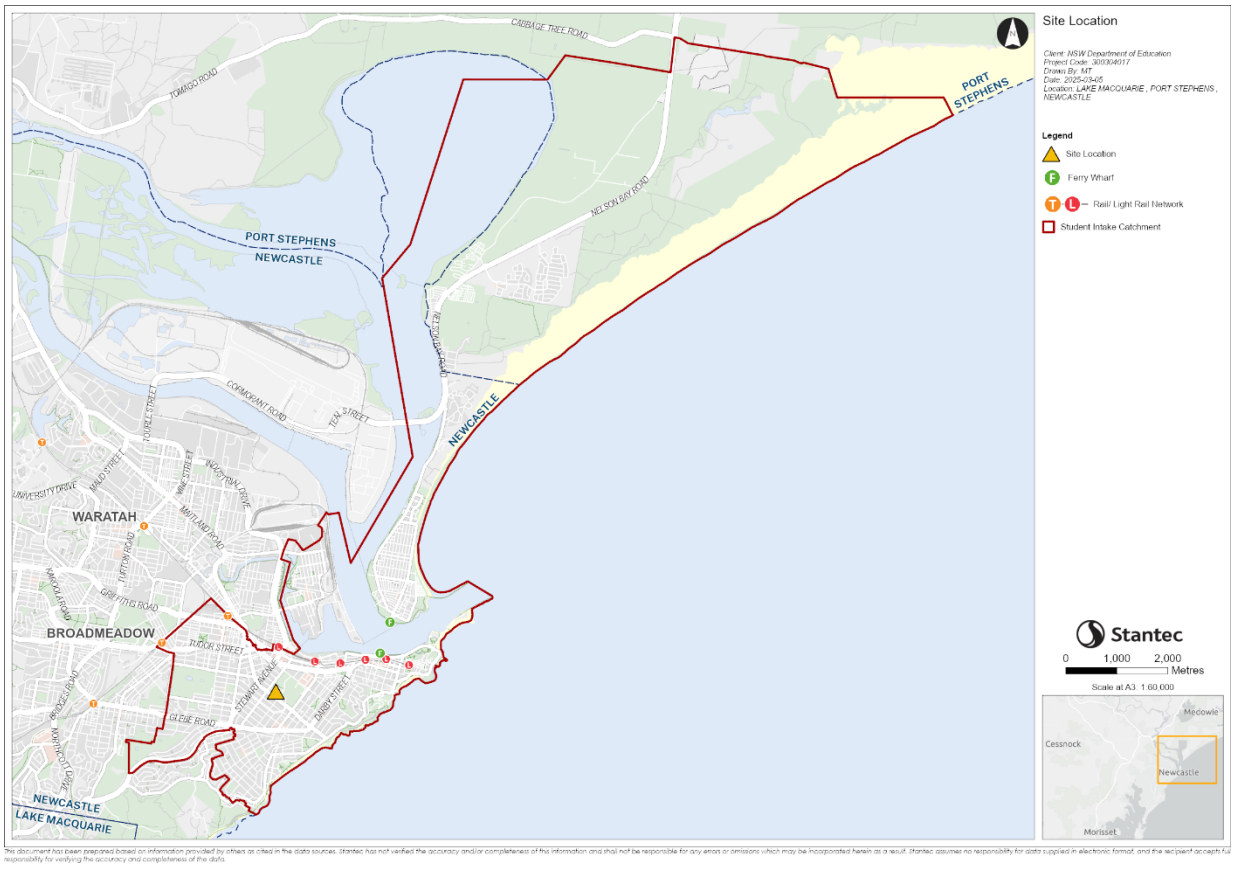

Figure 1-1: Newcastle High School – Student Intake Catchment

1.1 Internal Works

Figure 1-2 shows the final site plan for the Newcastle High School redevelopment. Dated 19 August 2024. The site plan shown is currently under construction and is forecast for completion Mid 2026. The proposed upgrades will support an increase in student enrolment to 1,400 students. The redevelopment will include the following scope:

- Demolition of eight (8) existing buildings and relocation of Block H approximately 50m South.
- Construction of a new three (3) storey learning hub located on the southwestern corner of the campus, including a new library, canteen, covered outdoor learning area (COLA), support learning unit, general learning spaces, hospitality teaching spaces, and science labs.
- Construction of a new multi-purpose facility located in the north-eastern corner of the campus including a gymnasium, stage, fitness lab, flexible learning spaces, outdoor courts, and end-of-trip (EOT) facilities (showers, toilets, changing areas and wash basins).
- Internal refurbishment works within the existing administration building on Parkway Ave to form a new student hub
- New student entry from Parkway Ave, Smith Street and National Park Street.

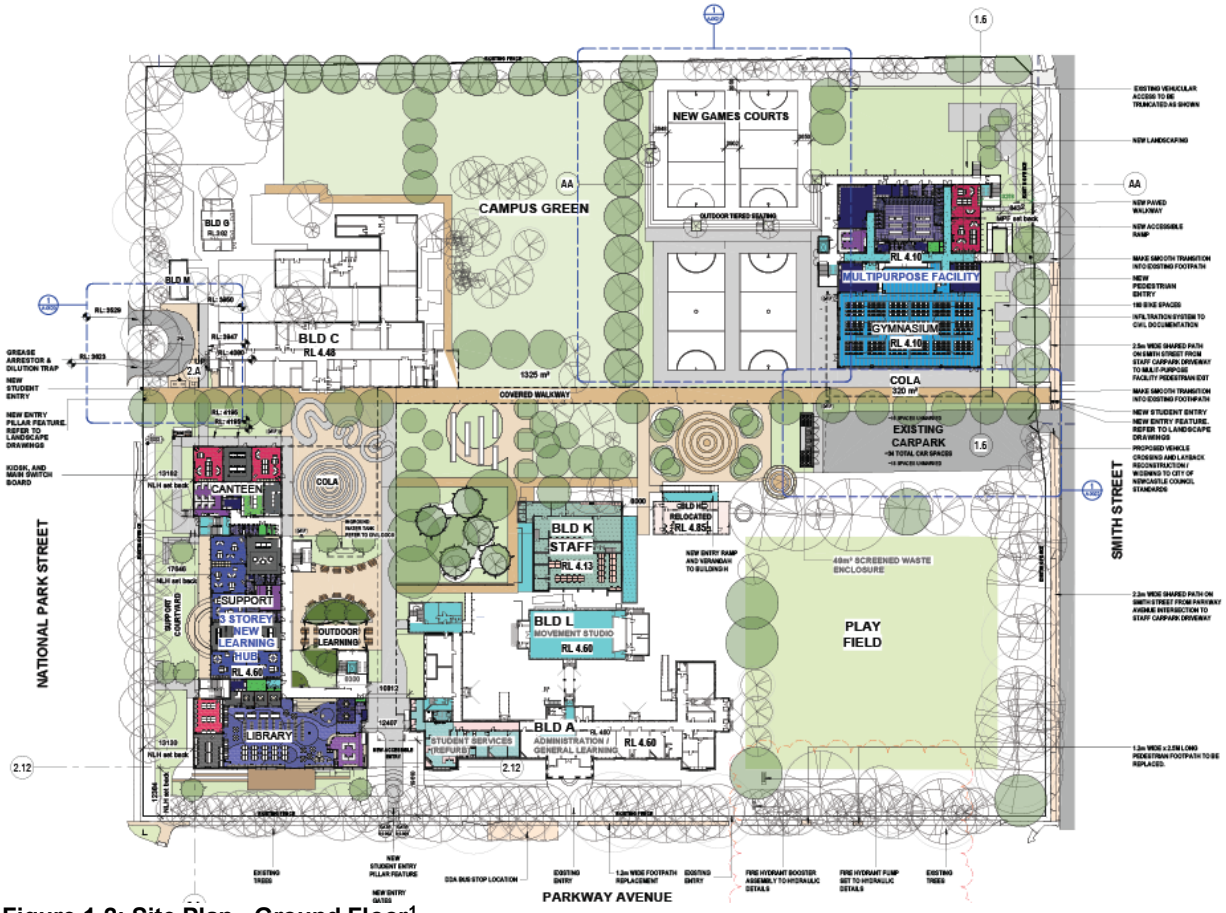

Figure 1-2: Site Plan - Ground Floor[1]

[1] Source: Site Plan Ground Floor (19/08/2024) – EJE Architecture

1.2 External Public Domain Works

As a result of the recommendations set out the delivery of the Traffic Impact Assessment a number of external public domain works are being undertaken. This includes

- Expansion (16m) of the bus zone along Parkway Avenue to provide capacity to accommodate additional services, including a new DDA bus stop.
- Upgrades to footpaths on Smith Street and Parkway Avenue
- Upgrades to on-site bicycle and micromobility parking
- Upgrades to the roundabouts on Parkway Avenue to support safe student crossing and increased demand from the future expansion of the intake area. Council are undertaking upgrades to the roundabouts on Parkway Avenue to improve active travel along Parkway Avenue. This includes two new pedestrian crossings on Parkway Ave which will support safe student crossing.

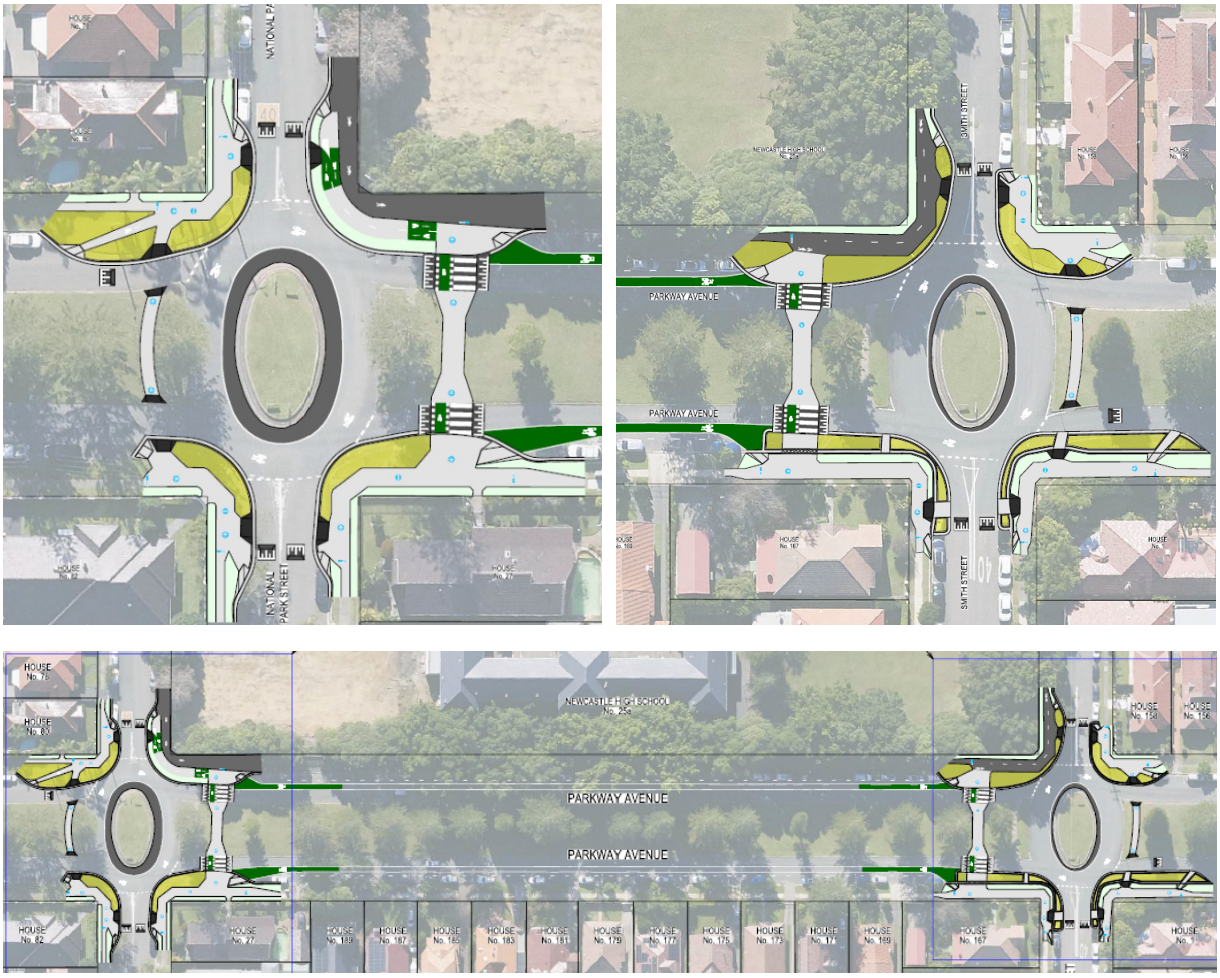

Figure 1-3: Parkway Avenue Roundabout Upgrades[2]

[2] Source: Parkway Ave from National Park St to Smith St Construction of Kerb Extensions, Pedestrian Crossings and Cycleway (26/09/2024/ & 17/10/2024) – City of Newcastle

2 Summary of Changes to Transport Conditions

An extensive review of the existing transport conditions for the Newcastle High School site was provided as part of the 2023 School Transport Plan (STP). This has been attached to the 2025 STP in Appendix A for reference. This chapter highlights any changes that have occurred within the two-year period of the reports which is of relevance to Newcastle High School.

2.1 Walking Infrastructure

The pedestrian infrastructure around Newcastle High School has remained unchanged between 2023 and 2025. No significant upgrades or modifications have been implemented to improve pedestrian safety or accessibility in the area.

The 2023 School Travel Plan (STP) highlighted the need for pedestrian crossings on Parkway Avenue at the approaches to roundabouts intersecting with Smith Street and National Park Street to enhance safety for students and the broader community. These crossings have now gone through the concept design phase as shown in Figure 1-3 however, construction has not yet begun. These recommendations remain a top priority to improve pedestrian flow, reduce unsafe crossings, and align with best practices for school zone safety.

2.2 Cycling Infrastructure

Cycling infrastructure around Newcastle High School remains limited, with minimal dedicated bike lanes or facilities to support safe and accessible cycling for students and staff. While some shared paths and on-road cycling routes exist north of the school, gaps in connectivity and a lack of protected bike lanes continue to pose challenges for cyclists.

As part of the public domain works a new shared path is being provided on Smith Street between Parkway Avenue and entry to the multipurpose facility. This aligns with the proposed actions in the City of Newcastle Bike Plan 2021-2030 and will improve cycling safety around the school. Bicycle lanes are also being constructed by the council within the proposed roundabout improvements on Parkway Avenue as shown in Figure 1-3. This is to protect the roundabouts from requiring further change when cycling infrastructure is provided along this route. Council are responsible for constructing these bicycle lanes.

End of Trip Facilities for riders are provided in the MPF including 50 lockers in the Staff EOT as shown in Figure 2-1.

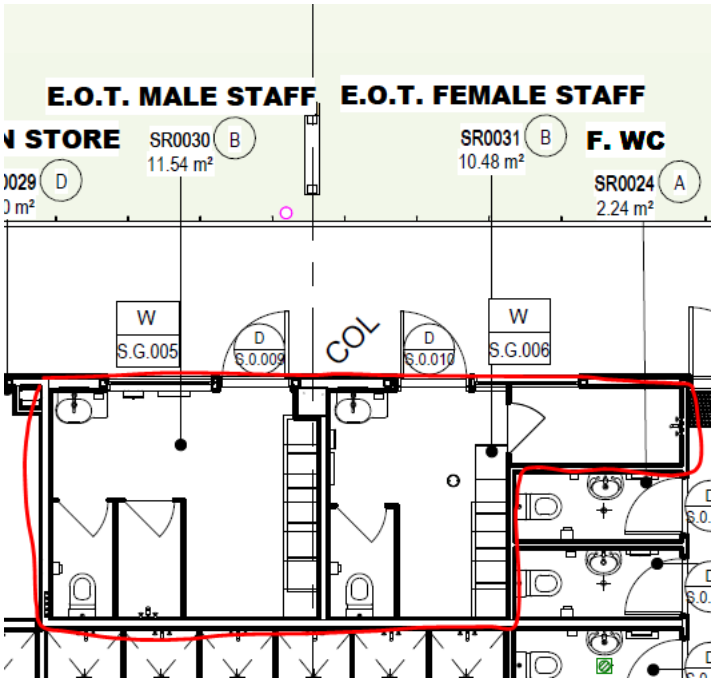

Figure 2-1: EOT facilities in MPF building

2.3 Public Transport

2.3.1 Train and Light Rail Services

Newcastle Interchange serves as a major hub, connecting various train lines, including the Central Coast and Hunter lines. Students can utilise these train services to reach Newcastle Interchange and then transfer to the light rail for a short ride to the Civic stop near the school.

The Newcastle Light Rail operates between Newcastle Interchange and Newcastle Beach, with key stops such as Civic, Crown Street, and Queens Wharf. Services run every 8 minutes between 7:00 AM and 7:00 PM on weekdays, and every 15 minutes during other times, including weekends and public holidays.

2.3.2 Ferry Services

Ferry services continue to provide as a connection for students who reside in the suburb of Stockton and remain unchanged.

2.3.3 Bus Services

Between 2023 and 2025, public bus network coverage to Newcastle High School experienced minor adjustments aimed at improving service reliability and connectivity. The 2023 STP attached in Appendix A outlines in detail each school and public bus service that caters the school. The additional public bus services introduced after 2023 are outlined in Table 2-1. No new school bus services have been introduced since 2023.

Table 2-1: Additional public bus services

Service Type	Route No	Route Name	Arrival Time (AM)	Departure Time (PM)
Hunter Bus Network	24	Marketown to Wallsend via Mayfield	-	3:16
	47	Marketown to Jesmond via Warabrook	-	3:06
	263	Charlestown to Cameron Park	8:39	3:09
	152	Hawks Nest to Newcastle	8:40	3:28

3 Operational Transport Access Management Arrangements

The chapter provides an overview of the operational and transport access management arrangements at the Newcastle High School (NHS) site. An overview of the site and its transport functions are shown in Figure 3-1.

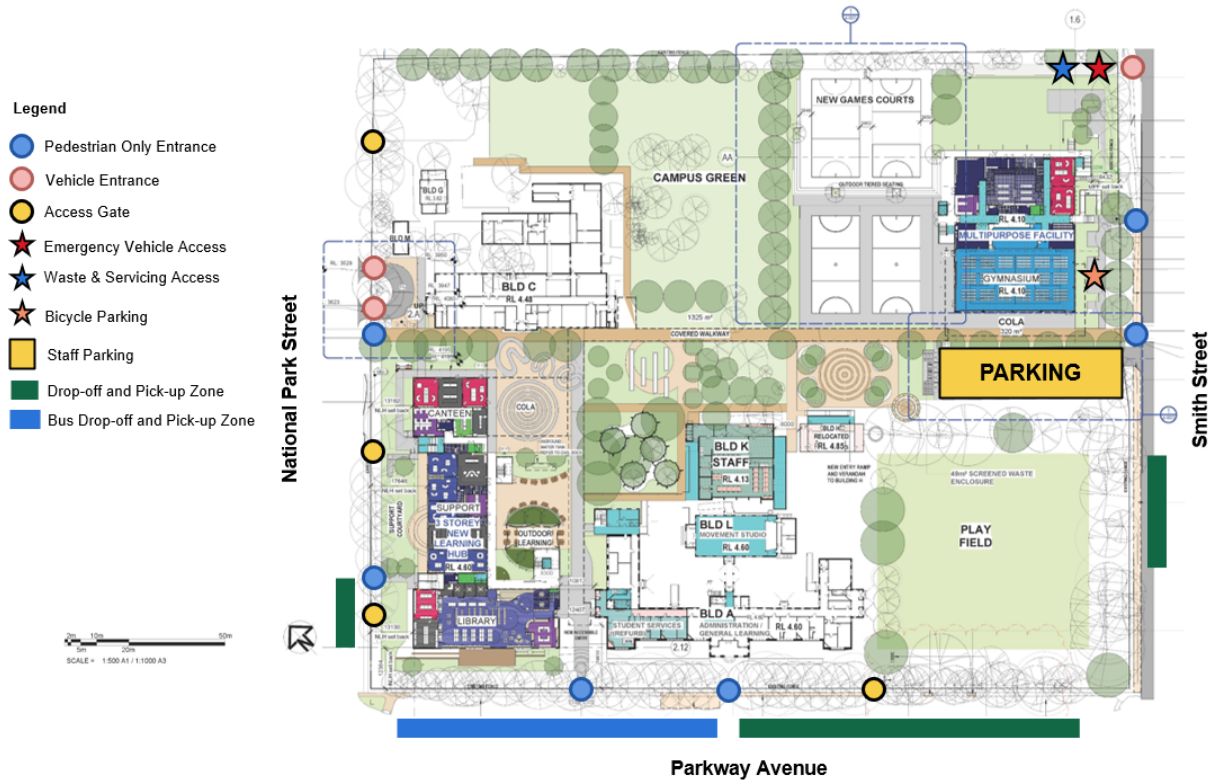

Figure 3-1: Site Access

3.1 Pedestrian Access

There are three main entry points to the school located on each extent of the school boundary. Access to the school from Parkway Avenue leads into Building A which is home to the school reception and office. The two main entry points on National Park Street and Smith Street and interlinked by a new covered pedestrian walkway which runs through the centre of the site in an east-west manner. Three additional pedestrian access points are also located on National Park Street, Parkway Avenue, and Smith Street.

3.1.1 Safe Routes to School

Children are encouraged to use existing infrastructure and designated crossings to access the NHS safely. Utilising pedestrian footpaths and crossings ensures that students can navigate busy roads and intersections with minimal risk. The pedestrian network surrounding the school is well serviced by adequate footpaths and crossings as documented in the 2023 STP report in Appendix A. By adhering to these designated routes, students can reduce the likelihood of accidents and contribute to a safer

school environment. It is essential for parents and guardians to educate their children on the importance of using these facilities and to model safe behaviour themselves.

3.2 Vehicle Access

3.2.1 Emergency Vehicle Access

The main emergency vehicle access point is via staff car park at Gate 2 on Smith Street. Additionally, emergency vehicles can access the site through Gate 3 and Gate 10. Emergency vehicles can access the school via all roads surrounding the boundary and may also use other entry points, such as the staff car park and the support unit drop-off and pick-up area, if necessary.

It is noted that Gate 1 on Smith Street can only be accessed by Emergency vehicles when deemed necessary and that no students can access the site from this gate.

3.2.2 Delivery and Service Vehicle Access

Servicing and unloading to occur for small rigid vehicles at the support drop-off and pick-up zone located on National Park Street. Servicing and unloading to occur outside of the drop-off and pick-up operational times. Any additional loading is to occur on-street in the unrestricted zones outside of bell time operational hours.

3.2.3 Waste Management Collection

Gate 2 provides access for waste management pick up outside of school operational hours when the car park is empty. Gate 2 is also known as the access point to the staff car park located off of Smith Street.

3.3 Car Parking Arrangements and Management

The NHS car park is accessible on the eastern extent of the school site via Smith Street. The car park provides space for up to 34 vehicles and is to be used by staff only. There is no on-site formal parking for students.

Unrestricted on-street parking spaces are available along the boundaries of the school and on local roads within the school's vicinity. The majority of on-street parking in the surrounding streets has repeatedly been observed to be mostly occupied before school peak hours and it is concluded that staff from Newcastle High School is having a negligible impact on on-street parking demand.

3.3.1 Parking Management

The following parking management operations are to be followed as part of NHS transport operations:

- NHS staff will use the school car park at all times.
- When the staff car park is full, staff may use the Council operated public car park at Wanderers Rugby Football Club or the National Park Sportsground Carpark adjacent to No.5 Sportsground.

- Parents will use the drop-off and pick-up zones during school bell times to minimise impact on the local network. Parents are encouraged not to use unrestricted parking unless they need to physically collect their child from the school.
- For major events (parents evening and carnivals etc), NHS will develop an Out of Hours Event Management Plan (OHEMP).

A Transport Access Guide (TAG) will be developed prior to opening to explain access, parking and kiss&drop operations.

3.4 Drop-off and Pick-up Operations

There are three separate Drop-off and Pick-up zones (DOPU) located around the school boundary. This includes:

- **National Park Street** – An existing drop-off and pick-up zone which operates as 5 min parking between the hours of 8:00 – 9:30 am and 2:30 – 4:00 pm.
- **Parkway Avenue** – Parkway Avenue is the largest of the three drop-off and pick-up zones and I located to the east of the bus drop-off and pick-up zone. The drop-off and pick-up zone operates as 5 min parking between the hours of 8:00 – 9:30 am and 2:30 – 4:00 pm.
- **Smith Street** – Newly proposed drop-off and pick-up zone that will operate with a 5 min parking between the hours of 8:00 – 9:30 am and 2:30 – 4:00 pm.

3.4.1 Driver Operation

When the DOPU zone is in operation, drivers picking up students should follow these guidelines:

- Only drop off and pick up children within the designated zones.
- Drivers are not permitted to park in the bus zone and are liable for fines from the police if observed to be doing so.
- Follow the school's drop-off and pick-up zone policy and listen to instructions from school staff and volunteers.
- Children will be informed to use the rear safety door of a car on the pavement side of the DOPU zone.
- Apply the vehicle handbrake at all times while the vehicle is stationary in the DOPU zone.
- Parents must avoid manoeuvres that risk child safety, such as U-turns and three-point turns.

3.4.2 Volunteer/ Staff Safety

When the parent and bus DOPU zones are in operation, staff and volunteers helping with this running will follow these guidelines:

- Wear a fluorescent vest at all times to be easily identifiable.
- Stay on the footpath at all times and avoid entering the road.
- Do not attempt to direct traffic.

- Staff are to monitor and advise students when their bus or vehicle is ready for them to be collected and manage the safe passage of students to the designated vehicle.

4 Mode Share

4.1 Mode Share Analysis

As part of the School Travel Plan (STP) prepared by Stantec in 2023, a "Show-of-hands" travel mode survey was conducted at Newcastle High School on 13th September 2023 to understand how students travel to the school and determine the overall mode share. To understand if any changes have occurred in the period between the 2023 STP and this 2025 STP update an additional "Show-of-hands" survey was on 5th March 2025. The response rate of the survey was 63%, with 716 students from 43 classes responding out of 1,144 enrolled students.

A summary of the mode share results for **Year 7-12 (2025 survey**) has been provided below and shown in **Figure 4-1** and **Figure 4-2**. The 2025 student travel survey showed:

- Walking accounted for approximately 20% and 22% of total mode share during AM and PM periods respectively.
- Usage of micromobility options (such as scooters and bikes) accounted for 12% of AM trips and 11% of PM trips. This mode of transport remained consistent throughout the day, unlike public transport and private vehicle usage.
- The school has demonstrated high dependency on public transport (including bus and rail) to and from the school both before and after school, at 33% and 41% respectively.
- Vehicle ridership accounted for 34% and 26% of total trips to and from the school respectively. This indicates that many students are dropped off at school by private vehicles in the morning and return home via public transport.

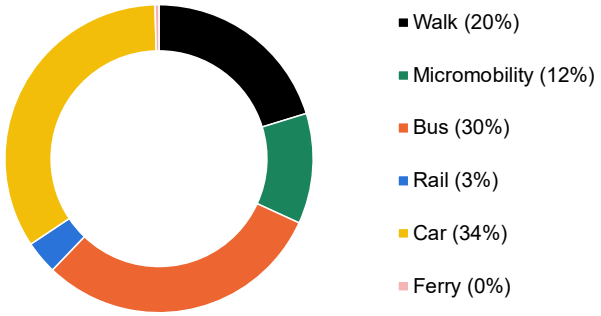

Figure 4-1: NHS AM Mode Share (2025)

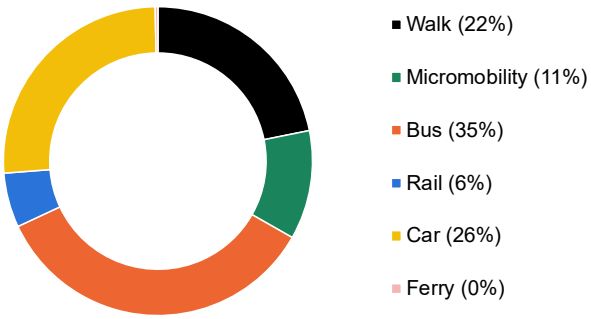

Figure 4-2: NHS PM Mode Share (2025)

A further breakdown summary of the mode share results for **Year 7-10 (2025 survey)** and **Year 11-12 (2025 survey)** has been provided below to understand the travel behaviour between different age groups, and shown from **Figure 4-3** to **Figure 4-6**. This is relevant due to older students having a greater level of independence and in some instances access to their own private vehicles.

Amongst all Year 7-10 students:

- Walking accounted for approximately 18% and 22% of total mode share during AM and PM periods respectively.
- Public transport (including bus, rail and ferry) accounted for 35% and 41% to and from the school respectively.
- Vehicle ridership accounted for 34% and 26% of total trips to and from the school respectively.

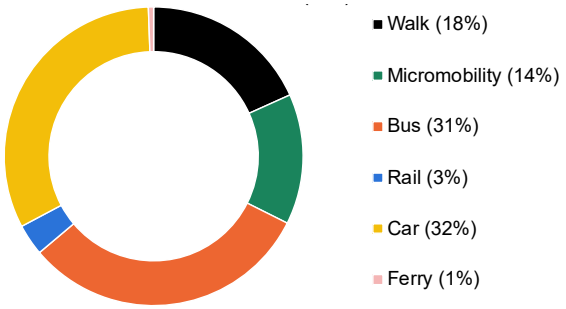

Figure 4-3: NHS Year 7-10 AM Mode Share (2025)

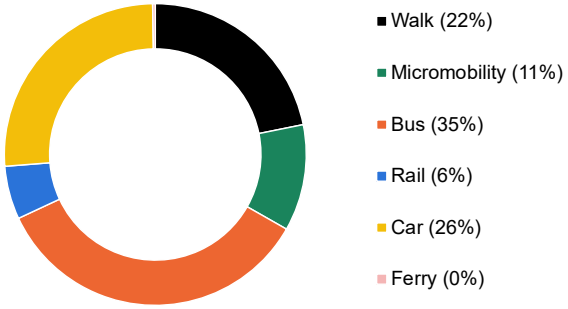

Figure 4-4: NHS Year 7-10 PM Mode Share (2025)

Amongst all Year 11-12 students:

- Walking accounted for approximately 26% and 28% of total mode share during AM and PM periods respectively.
- Public transport (including bus, rail and ferry) accounted for 31% and 36% to and from the school respectively.
- Vehicle ridership accounted for 39% and 32% of total trips to and from the school respectively, which shows an increased dependence of year 11-12 students on cars.

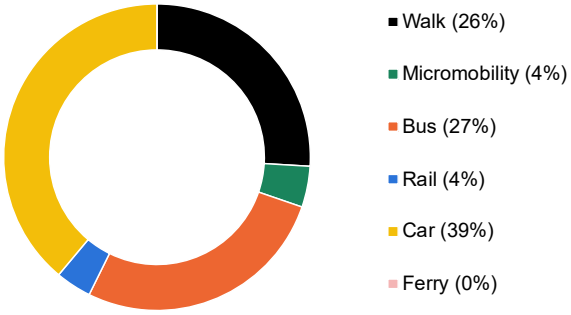

Figure 4-5: NHS Year 11-12 AM Mode Share (2025)

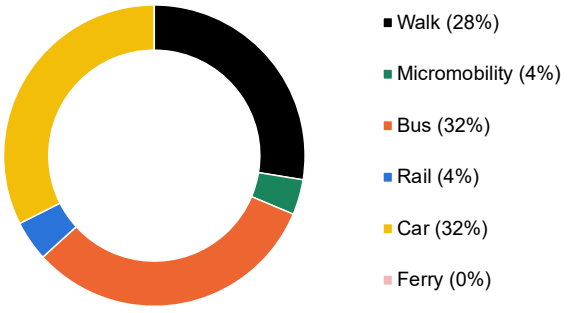

Figure 4-6: NHS Year 11-12 PM Mode Share (2025)

4.2 Mode Share Comparison

A comparative analysis has been undertaken between the 2023 and 2025 student travel survey results data to understand how travel patterns have changed over this period. A summary has been provided below and shown in **Table 4-1.** The data shows that:

- Walking mode share has reduced by 4% and 2% from the mode share recorded in the 2023 STP during both AM and PM period.
- Cycling mode share has increased by 4% and 3% during AM and PM period respectively from the 2023 survey.
- Public transport (including buses and trains) remains a highly preferred mode of transport during both morning and afternoon periods. Rail usage reduced by 1% in the AM but increased the same in the PM. Bus usage increased by 3% in the AM which correlates with the reduction in private vehicle usage. Bus patronage also increased by 1% in the PM.
- Car mode share decreased by 4% in AM and by 2% in PM period from 2023 to 2025.

Table 4-1: Mode Share Results Comparison

Mode	AM Peak			PM Peak		
	2023	2025	Change	2023	2025	Change
Car	38%	34%	**-4%**	28%	26%	**-2%**
Walk	23%	20%	**-3%**	25%	22%	**-3%**
Bicycle/Scooter	8%	12%	**+4%**	8%	11%	**+3%**
Bus	27%	30%	**+3%**	34%	35%	**+1%**
Rail	4%	3%	**-1%**	5%	6%	**+1%**

5 Catchment Analysis

5.1 Student Catchment Summary

The proximity of students' residences to Newcastle High School significantly influences their travel choices. As part of the 2023 Student Travel Plan (STP), a catchment analysis was conducted based on the NSW School Infrastructure STP guidelines. This analysis categorised student distances from the school into walking, cycling, and public transport catchment areas:

- **Walking:** Up to 1,200 metres as the crow flies is considered the maximum distance students may choose to walk to school.
- **Cycling:** Up to 1,600 metres as the crow flies or 2,300 metres on path is considered the maximum distance students may choose to cycle to school.
- **Public Transport:** Up to 1,200 metres as the crow flies or 2,900 metres on path is the limit for students to apply for subsidised public transport travel. Beyond this distance, students can apply for free public transport travel passes.

A comparative analysis of de-personalised data for student enrolments in the 2022 school year (2023 STP) and 2025 school year at Newcastle High School has been undertaken to determine any changes in student distribution patterns. Any significant changes identified may act as a justification for changes the mode share discussed previously.

Table 5-1: 2025 Enrolment Data Student Catchment Analysis

Catchment Analysis	Notional Distance (as crow flies)	
	2022 Enrolment	2025 Enrolment
1-400m crow flies (5-min walk)	39 (3.2%)	16 (1%)
1-800m crow flies (10-min walk)	131 (10.8%)	97 (8%)
1-1,200m crow flies (15-min walk)	275 (22.8%)	231 (20%)
1-1,600m crow flies / 2,300m on path	409 (33.9%)	368 (32%)
1-2,000m crow flies / 2,900m on path (excl from SSTS)	564 (46.7%)	527 (46%)
Within 400m of public transport stop / station / wharf that brings them closer to school	874 (72.4%)	914 (80%)
Within 800m of public transport stop / station / wharf that brings them closer to school	989 (81.9%)	83 (7%)
No. of students outside SSTS zone, with no PT access	172 (14.2%)	147 (13%)
No. of students outside SSTS zone, with PT access		468 (41%)

5.1.1 Walking Catchment Coverage

An analysis of de-personalised data provided by the Department of Education in August 2022 and March 2025 for student enrolments at Newcastle High School based on walkable catchments from the school is provided in Table 5-2.

Table 5-2: Number of Students Living in the Newcastle High School Walking Catchment Areas

Catchment	Distance – As Crow Flies (Cumulative %)		Cumulative Difference
	2023	2025	
0-400m	39 (3%)	16 (1%)	-2%
401-800m	92 (11%)	81 (8%)	-3%
801-1,200m	144 (23%)	134 (20%)	-3%
1,201-1,600m	134 (34%)	137 (32%)	-2%
1,601-2,900m	155 (47%)	161 (46%)	-1%
>2,900m	644 (53%)	615 (54%)	+1%
Total	1,208	1,144	-64

5.1.2 Cycling catchment Coverage

Analysis of de-personalised data provided by the Department of Education in August 2022 and March 2025 for student enrolments at Newcastle High School based on cyclable catchments from the school is provided in Table 5-3. The upper limit for cycling distance is considered to be around 3,600 metres.

Table 5-3: Number of Students Living in the Newcastle High School Cycling Catchment

Catchment	Notional (as crow flies)		Cumulative Difference
	2023	2025	
1-1,200m	275 (23%)	231 (20%)	-3%
1,201-2,400m	373 (31%)	366 (32%)	+1%
2,401-3,600m	192 (16%)	182 (16%)	0
>3,601m	368 (31%)	365 (32%)	+1%
Total	1,208	1,144	-64

5.1.3 Bus Network Coverage

Analysis of de-personalised data provided by the Department of Education in August 2022 and March 2025 for student enrolments at Newcastle High School based on proximity to bus stops utilised by bus routes that service the site is provided below. The catchment analysis was determined by selecting all bus routes that are accessible within a 400-metre walking distance of the school site entrance. A 400 and 800-metre buffer was then applied to each bus stop servicing these routes to determine the proportion of students with access to public transport.

Those eligible for SSTS are provided with free public transport travel on all modes between home and school. For those situated within the SSTS, subsidised PT Opal Cards can be applied for.

Table 5-4: Number of Students Living in the Walking Catchment Areas to Bus Stops

Bus Stop Proximity	2023	2025	Difference
Within 400m on-path walk to a bus stop	947 (78%)	914 (80%)	+2%
Within 400m on-path walk to a bus stop and within 2,900m on-path catchment from school (exclude from SSTS zone)	376 (31%)	270 (24%)	-8%
Within 400m on-path walk to a bus stop and beyond 2,900m on-path catchment from school (SSTS zone)	571 (47%)	644 (56%)	9%
Within 800m on-path walk to a bus stop	1,036 (86%)	1,010 (88%)	3%
Within 800m on-path walk to a bus stop and within 2,900m on-path catchment from school (exclude from SSTS zone)	457 (38%)	500 (44%)	6%
Within 800m on-path walk to a bus stop and beyond 2,900m on-path catchment from school (SSTS zone)	579 (48%)	510 (45%)	-3%

6 Mode Share Targets

6.1 Students

Mode share targets are goals to increase the proportion of trips made using sustainable modes of transportation, such as walking, cycling, and public transport, while reducing reliance on private vehicles. To determine a target, we have considered the proximity of students to the school, existing travel patterns and external factors such as service availability and topography.

A critical first step in developing mode share targets is addressing the discrepancy between the existing AM and PM mode share figures. This discrepancy exists because parents/ guardians may choose to drop students off at school in the morning because this aligns with an existing private vehicle trip that is made i.e. going to work, running errands etc. Travelling to school in the morning using the same mode as in the afternoon can be made more attractive by providing safe, efficient and reliable travel options. It is most desirable that students are able to use one mode in both periods and ultimately reduce reliance on private vehicles. Therefore, mode share targets are not differentiated by time of day.

Mode share targets are provided for Newcastle High School under the following scenarios:

- Moderate mode share target (to be achieved within 3 years) – Transport recommendations enable a shift towards walking, cycling and catching a bus. This represents an achievable outcome. The school travel coordinator will work with the school towards achieving this target by the conclusion of the third year assessment.
- Reach mode share target (aspirational long term target) – Sustainable mode share is maximised and students are further shifted from private vehicles. This represents what is considered the uppermost achievable outcome based on service availability, provision of infrastructure and proximity of students to the school.

Mode share targets for Newcastle High School were set as part of the STP process in 2023. These targets and the survey results from the 2022 and 2025 mode share survey results are shown in Table 6-1. If required, further information can be found on this data within the 2023 STP attached in Appendix A.

Table 6-1: Mode Share Target Comparison

Mode	2023 Survey Results		2023 STP Targets		2025 Survey Results	
	AM	PM	Moderate	Reach	AM	PM
Car	38%	28%	25%	23%	34%	26%
Walk	23%	25%	25%	27%	20%	22%
Micromobility (Bicycle/Scooter)	8%	8%	10%	11%	12%	11%
Public Transport (Bus, Rail and Ferry)	31%	39%	40%	39%	34%	41%

Based on the review of the 2023 and 2025 survey data and the previously set targets, it is recommended that the moderate and reach targets remain unchanged for the 2025 STP mode share

targets. It has been determined that these targets are still attainable due to the availability of suitable infrastructure and services that can accommodate children traveling to the school.

6.2 Staff

A total of 70 full time equivalent staff is forecasted to be employed at Newcastle High School, and around 85% of staff is currently traveling to school via private vehicle.

Mode share targets define the desired method of access to the school site in enabling a shift towards walking, cycling and public transport. Staff mode share targets and rationale for each mode are outlined below in Table 6-2.

Table 6-2: Staff Mode Share Targets Breakdown

Mode	Number of staff	Percent of staff	Rationale
Walk	3	5%	• It is expected that a small proportion of staff lives within a reasonable walking distance (up to 1.5km) from the school.
Cycling	4	5%	• Provision of end of trip facilities will encourage staff to ride to work from locations within a distance of 5km from the school.
Public transport	14	15%	• Existing public transport options are considered frequent and bus stops located in close proximity to the school. This should enable staff to choose bus and/or light rail travel.
Car, as driver	42	60%	• Majority of staff will choose private vehicle as their mode of travel due to convenience and variability in time of travel.
Car, as carpool passenger	13	15%	• Staff who live close together or on the way to the site will choose to carpool together.
Total	**70**	**100%**	

7 School Transport Plan

7.1 Introduction

This School Travel Plan has been prepared in conjunction with NSW Department of Education, City of Newcastle Council, Transport for NSW, and with reference to the NSW Department of Education Transport Assessment and School Transport Plan Report Guidelines.

This School Travel Plan has been informed by the preceding transport assessment and previous assessment completed in 2023, which comprised of a spatial analysis of student enrolments (2025 enrolment year) and the geographic distribution of students in relation to the school, site investigations, and the setting of base case, moderate and reach travel mode share targets.

While the targets for active and sustainable travel are aspirational, there is an opportunity to shift and shape active and sustainable travel behaviours through the redevelopment of Newcastle High School School. To this end, the plan has been developed with focused and specific actions to increase the rate of use in active travel and public transport options to travel to school.

The measures included in the School Transport Plan include:

- Sustainable transport encouragement programs to increase the rate of walking and cycling to school.
- Efforts to increase registration into the School Student Transport Scheme (SSTS), which is used by school bus operators and Transport for NSW to measure the demand for a dedicated school bus.
- Communications program to convey positive road safety messaging and expected standards of behaviour for a kiss and drop near the school.

7.2 Transport Goals

This section of the report utilises the understanding of external transport conditions for Newcastle High School identified through the preceding transport assessment and defines the vision and objectives for Newcastle High School to be achieved through the School Transport Plan. The vision and objectives provided support the adoption of the ideal transport scenario for which the school should aspire to achieve. This is to be supported through the implementation of measures proposed as part of the Transport Assessment, by following the communications plan to promote the use of active and public transport and through the continuous monitoring of performance in support of the travel coordinator role.

As identified in the report guidelines, the overall vision for the School Transport Plan is to deliver efficient, safe, and sustainable access to school during the planning, construction, and operation of school assets. To support this statement, the objectives that support the vision are:

- To proactively identify and meet school travel demand safely, efficiently and sustainably, and to deliver transport infrastructure to meet school travel demand.
- To maximise the use of active and public transport modes to reduce car traffic before and after school day start and end times.
- To decongest the road networks around schools.
- To increase active travel to and from school in a safe transport environment.

- To enhance connectedness to the neighbourhood and community through safe travel to and from school.
- To empower children and young people to be safe road users now and into the future.
- To meet the DoE's duty of care of students which extends beyond the school boundary, if there is a foreseeable risk of injury or harm to students as they travel to and from school.
- To "reduce the administrative burden" on a school principal (managing kiss-and-drop behaviour, parent and community complaints, calling bus companies etc.) by reducing the time and effort for schools/principals to coordinate and liaise with council, TfNSW to create a safe, connected transport environment around their school.

7.2.1 Active and Public Transport Mode Share Targets

A range of mode share targets were defined in the preceding Transport Assessment, which comprised of a base case, as well as moderate and reach mode share targets. Based on this assessment, the moderate target has been used for school travel in the short-term, for example, following the completion of the redevelopment construction, whilst the reach target is considered to be the upper limit of mode share that can be achieved once catchments and access through the provision of suitable infrastructure are taken into consideration. The resulting mode share targets for active transport and public transport are shown in Table 7-1 and Table 7-2 respectively.

Table 7-1: Active Transport Mode Share Target

Mode Share		
Base Case	**Moderate**	**Reach**
33%	35%	38%

Table 7-2: Public Transport Mode Share Target

Mode Share		
Base Case	**Moderate**	**Reach**
41%	40%	39%

7.2.2 Links to Other Application Documentation

No further application documents are required for consideration for this School Transport Plan. Other documentation would typically consider an ESD report for 4-star Green Star achievement, consultation plan, change management plan, and/ or a risk assessment.

7.3 Policies and Procedures

To enable the success of the School Transport Plan, specific communication expectations can be applied that consider increasing active and public transport use to school; reducing the rates of driving alone and kiss-and-drop to school, meeting ESD / 4-star Green Star requirements and managing risks. The following list indicates a range of transport-based policies that support the implementation of infrastructure improvements at a given school.

a. prioritise multi-modal transport access
b. staggered start/end times

c. multiple kiss-and-drop locations
d. remote kiss-and-drop
e. parking allocation and location
f. parking management system operations
g. school access policies for access via a pedestrian gate, bicycle cage, driveways and parking at arrival/end times, during OOSH, school day and outside hours
h. Share our Space

The policies that are to be considered at Newcastle High School, which support the infrastructure and service improvements agreed upon in the transport assessment are discussed in further detail below.

7.4 School Transport Operations

As part of the NSW Department of Education's code of conduct, all personnel have a legal obligation to keep students safe and support their well-being. Student safety is most important around school bell times when the chances of physical harm resulting from accidents are increased. The appropriate management of school transport operations should be considered a high priority for the school, which falls under their duty of care. The school's duty of care is supported by a four-step process, as shown in Figure 7-1.

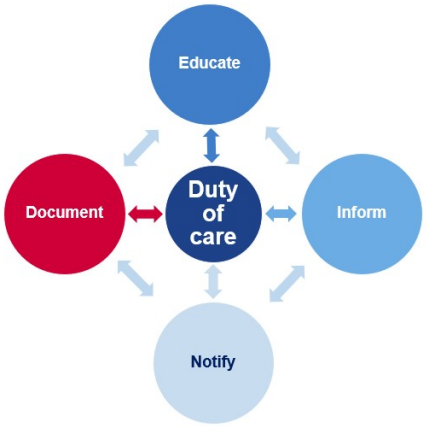

Figure 7-1: Managing a Schools Duty of Care and Road Safety Process

To support the Duty of Care Process shown, Table 7-3 details the aspects under the four headers that need to be considered by the school in managing risk and improving the overall safety and well-being of students. Further information in support of this can be found on the NSW Department of Education website.

Table 7-3: Managing a School's Duty of Care and Road Safety

Managing a School's Duty of Care and Road Safety
Educate
Which student groups need to be educated about road safety concerns? • Individual or small groups of students? • Year/stage group of students? • The whole school? How will road safety education be made relevant? This can be achieved through: • Localised, school-specific teaching and learning activities • Identified outcomes • A strengths-based approach?
Inform
Which parents/carers need informing about the road safety concern? The parents of: • Individual or small groups of students • A year/stage group of students

Managing a School's Duty of Care and Road Safety

- All students?

How will it be communicated?

- Social media (Facebook, school apps, Twitter, Instagram, TikTok)
- Newsletters
- School website
- Enrolment pack information,
- Orientation day
- School noticeboard sign, email
- Meetings
- Take-home activity/note

Notify

If emergency services assistance is required, call them before calling the WHS Incident Report and Support Hotline.

All WHS related incidents and injuries, including a near miss, must be reported in line with Incident Notification & Response Procedures. This includes any non-workplace incident that impacts students, staff, and the school community, e.g., travel to/from school

Situations that have the potential to cause injury to an employee, student, member of the community, volunteer, or contractor should also be reported to the Incident Report and Support Hotline. This includes non-workplace situations, e.g., travel to/from school

It is valuable to report all concerns to:

- Highlight that a risk exists
- Contribute to managing your duty of care
- Get the concern noted so appropriate support and corrective actions can be initiated to prevent further incidents
- Build a data profile that Health and Safety, and School Infrastructure NSW Directorates can use to bring about change for your school.

Who needs notifying if student/s are unsafe road users, or the infrastructure is unsupportive of a safe school site or school zone:

1. Parents/carers
2. Internally: school staff, P & C, school WHS Committee, WHS Advisor, WHS Incident Hotline, Assets Management Unit, local Director Educational Leadership, local Road Safety Education Officer
3. Externally: Council Road Safety Officer or general manager, Transport for NSW, police highway patrol/liaison officer, council parking rangers, bus operator

Notifications can either be made by phone call, face-to-face informal discussion/formal meeting, email, formal letters, Snap send solve app

Document

Who will document, record, and track the actions?

- Class teachers, SASS staff, and school executives will be responsible for reporting these actions.
- The school principal will be responsible for managing these actions

7.4.1 Site Transport Access

Numerous transport access points exist around the school site, with all being operational around school bell times. The following list covers all transport access points and modes

7.4.2 Day-to-Day School Operations

Table 7-4 details transport site access that is active during day-to-day school operations. For this, appropriate measures should be considered to support student safety.

Table 7-4: Day-to-Day School Operations

	***On-site*:**	***Adjacent-to-site***	***Management measures***
Site entries, pedestrian, and vehicle	Y	Y	Y
Kiss-and-drop including Assisted School Transport Program	N	Y	Y
Buses	N	Y	N
Parking including carpool, carshare pod	Y	Y	Y
Deliveries and service vehicles	Y	N	Y

The following measures have been taken from the NSW Government website for managing school road safety. These measures will need to be implemented to appropriately manage student safety regarding the day-to-day school operations site access:

- Regularly review the school site entry and exit risk management plan.
- Use various communication strategies to inform parents and carers about safe road user behaviours on site and in the school zone.
- Update casual teachers about student arrival and departure procedures.
- Assist students entering and exiting the school safely.
- Where applicable, liaising with the School Crossing Supervisor and/or the Assisted School Travel Program providers on effective management.
- Use various communication strategies to inform parents and carers about safe road user behaviours onsite and in school zones
- Update casual teachers about student arrival and departure procedures
- Assist vulnerable students to allow them to enter and exit the school safely
- Label, number or colour code access points for easier reference and recognition by students, families and staff, e.g. pedestrian entry and exits, kiss and drop area, bus travellers, cyclists, etc.
- Spread the arrival and departure of students and families across different pick-up and drop-off accesses to reduce congestion in any one spot, either on or off-site
- Use signage, social media, school website, note home or assemblies to inform students, families, staff and visitors of changes to entry and exit or pick up and drop off arrangements such as construction on site or in the school zone; hazards (fallen trees, power lines, floods); delays to public transport and school buses.

Running in parallel to these measures, parents should be encouraged to:

- Walk their children to school, where possible.

- If driving is unavoidable, park away from the school and walk with their children, or drop off their independent children to walk the rest of the way to increase physical and mental health and help reduce traffic congestion around the school site.
- Remind staff to maintain their own safety to reduce their risk of trips, slips and falls when supervising students at kiss and drop zones. For example:
    - Remain behind the school fence or well away from the edge of the footpath.
    - Do not stand on the road between vehicles (to avoid crush injury).
    - Wear a high-visibility jacket when in or near to the traffic environment
    - Ask drivers to wait until the child is properly buckled up, if the child can do it themselves, before driving off.

Remind teachers and other school staff they are not permitted to operate as a School Crossing Supervisor and control traffic. They can assist students cross the road when it is safe to cross.

7.4.3 Event Transport Operations for Share our Space, Hall Hire and Excursions

An Out-of-Hours Event Management Plan will be required to support the opening of facilities to the community should Newcastle High School wish to do so.

7.4.4 Sample Transport Encouragement Programs

There are a range of measures which can be implemented by the school, to encourage safe and sustainable transport access to and from the school. A summary of the measures which can be implemented a Newcastle High School is highlighted below. A Travel Coordinator (TC) will be appointed within the first 12 months of the operations, and the highlighted measures will be implemented by the TC with consultation from the school as and when necessary.

7.4.5 School Student Transport Scheme (SSTS)

The School Student Transport Scheme provides eligible school students with free or subsidised travel on public transport to and from school and is dependent on where students reside and the availability of public transport. If a student doesn't qualify for free school travel, they may be able to buy a School Term Bus Pass for discounted travel on buses between home and school. Further information on this scheme can be found on the TfNSW website.

7.4.6 Ride to School Day

National Ride2School Day is an annual event that encourages students to ride into school. It provides students with the opportunity to trial cycling into school, which can further increase uptake in the future. Further measures can be provided during Ride2School day such as free breakfasts and bike tuning to encourage a greater number of participants.

7.5 Communication Plan

The communications plan provides a range of initiatives and actions, including some to be completed and implemented before the opening of the new school buildings, that will help to achieve the mode share targets and reduce the overall car travel associated with the school. Unless explicitly stated as a 'reach' scenario intervention/initiative, all proposals included have been developed to achieve the 'moderate' scenario mode share targets.

These actions need to be reviewed regularly, at least annually, to review actions and refine them as the school community needs may change over time.

7.5.1 Channels

All communications should be promoted through the appropriate channels used by the school, to help target the widest audience possible. The recommended channels have been provided in Table 7-5 below.

7.5.2 Messages

The following communications plan has been co-designed and developed across a number of School Transport Plans. The communications plan provides a guide for some of the messages that the School Principal and current staff involved with sustainable transport initiatives may communicate to promote the uptake of walking, cycling and public transport to school.

Table 7-5: Sustainable Travel Communications Plan

What	When	Which Channel	To Whom
Share the vision and targets for the number of students targeted to walk, ride, or take public transport to school.	Before school opens and periodically throughout the year	Social Media School website Email newsletters	Staff, parents, and students
Share the walking, cycling, train and bus transport options to travel to the schools, drawing from the TAG. Note: Public school websites have standardised transport information available to parents and students.	On the school website at all times	Social Media School website Email newsletters	Staff, parents, and students
Promote and encourage students to use discounted or free travel by signing up to the SSTS to encourage use of public transport as a sustainable travel option.	Regular periodic updates, including at the start of each term	Social Media Newsletters	Students and parents
Promote and encourage participation in National Ride2School Day.	Prior to the annual event in March.	Social Media	Staff, parents, and students
Promote Walk Safely to School Day. Materials available at www.walk.com.au	Prior to the annual event in May	Social Media	Staff, students, and parents
Communicate the expected standards of behaviour for Kiss and Drop, and Road Safety. Materials are available through the TfNSW School Safety website. Link	Regularly/ as required	Social Media	Students and parents

What	When	Which Channel	To Whom
Conduct discussions with Road Safety officers and School Principals about the access and operations at the Kiss and Drop zone.	Before school opens and periodically throughout the year	School website School Noticeboards	Students and parents
Communicate links to NSW Department of Education Road Safety Website, which is typically included in all public-school websites.	Regularly, multiple times each term	School website Social Media	Students and parents
Communicate road safety education YouTube video links including: Keeping your child safe around buses - Link Riding safely with children – Link Walking safely with children – Link School zones – Link School crossings – Link	Regularly, multiple times each term	School website Social Media	Students and parents
Communicate external resources supplied by groups such as Bicycle NSW to help reduce barriers to cycling	Regularly, multiple times each term	School website Social Media	Students and parents
Communicate regarding the availability of vouchers which can be applied for through the NSW Government Active Kids Program. Which includes vouchers for sports and recreation purposes up to the value of $50 per child.	Before school opens and periodically throughout the year	Online school communication channels (e.g., Facebook page, newsletters)	Staff, parents, and students

7.5.3 Travel Access Guide

A Travel Access Guide (TAG) provides suggested safe and accessible options for travelling to school. The guide provides advice on safe access initiatives, site access, public transport use, bicycle parking and much more. A TAG will need to be produced as part of the school reopening to provide students with information relevant to:

- Ped scooter parking
- Bicycle parking
- Carpool parking
- Parking management
- End-of-trip facilities (staff)
- Flexible and reconfigurable spaces
- Provision of bubblers and taps to encourage water drinking and less waste
- Remote kiss-and-drop

The TAG should also provide supportive measures and messages that can be communicated to parents and carers which help encourage changes in attitude towards forms of transport mode choice. The following are examples of messages which can be used to achieve this:

- Get involved in using active and public transport to school with your student
- Help your student practice the active and public transport they are learning (try for part trip or whole trip)
- Speak to staff and government transport stakeholders about travel to school programs and infrastructure

- Use active and public transport from school drop-off to work
- Report transport issues as the concern arises (e.g. Send Snap Solve app, Council@ email, phone number)
- Improved quality of life (increased healthy lifestyles, well-being, physical activity)
- Life-long learning opportunities
    - Transport as a learning and resilience-building opportunity
    - Additional learning opportunities
    - Educational opportunities for parents and the community
    - Joint/community use for transport programs

The Travel Access Guide for Newcastle High School is attached in Appendix B.

7.6 Data Collections and Monitoring

For the School Travel Plan to be effective it must be reviewed on a regular basis. It is important to ensure that the School Travel Plan is meeting its objectives and having the intended impact on car use and transport choices for the school's staff and students. The implementation of the School Travel Plan will be reviewed periodically through staff and student travel surveys. The School Travel Plan is required to be updated and changed to reflect changing circumstances and local context/ facilities should they occur.

7.6.1 Data Collection

To monitor the success of the School Travel Plan, a show-of hand survey will be completed in the first four terms after school opening, and at least annually in the years after.

The surveys during the first year undertaken for this STP, organised by the Travel Coordinator, will be used as the baseline for travel planning programs. Subsequent survey results are to be reported at least annually by the school and used to inform funding allocation for successful programs/ removal of unsuccessful programs. Future travel surveys are to be collected using the same methodology documented in this STP for consistency. This will ensure that surveys are collected by the teachers responsible for each first-period class on either a Tuesday, Wednesday, or Thursday. This will be done during a period of time that is not situated close to public holidays or during a period of examinations.

Ideally, the survey will be conducted on a day that is not impacted by weather or other external circumstances which may influence the final outcome. Surveys will be collected in person and not online to ensure maximum participation is achieved. All surveys will be collected on the same day at the same time. Surveys are to be conducted annually or as deemed appropriate by the School Travel Coordinator to track mode share targets once the role is active.

7.6.2 Ongoing Feedback Framework and Evaluation

In the first year of operation, the Travel Coordinator will oversee the framework and evaluation. After Year 1, the School Principal or a designated member of staff (to be decided during Year 1) will manage the ongoing feedback framework to continuously improve the oversight of sustainable travel outcomes for Newcastle High School in consultation with relevant school stakeholders. This includes activities such as:

- Reviewing the adequacy of bicycle racks required periodically.
- Surveying the uptake of the Travel Access Guide
- Observing road safety activity outside the school grounds to identify any improvements required.
- Observing how pathways are being used, or whether pathway design is inadequate or in the wrong location (for example if 'goat tracks' are worn through particular areas, should a request to Council be put in to improve the pathway in future works programs.
- Observing the operation of any future school buses and the drop-off/pick-up facilities for any potential safety concerns. Make recommendations up to Transport for NSW, City of Newcastle Council and the bus operator accordingly.
- Liaising with the City of Newcastle Council Road Safety Officer concerning the management of parking behaviours around the school.
- Responding to any other feedback from Transport for NSW, Police, Residents, Teachers, Parents or Students that might arise from time to time.
- Determining whether the mode share targets set are too ambitious and if they should be more specific and targeted.

7.6.3 Reporting Findings

Findings are to be reported back to the working groups detailed in the following chapter. Findings are to be presented by linking back to the communications plan and governance arrangements discussed. The reporting process will provide the results of the monitoring process with SI, City of Newcastle Council and TfNSW to demonstrate the effectiveness of the School Travel Plan approach in order to expand, revise, strengthen or improve the use of this tool across the portfolio transport programs (report to SI, TfNSW). A working group is to be held at a point in the school calendar year to discuss assessment outcomes when required. Points of feedback can address issues such as:

- Adopting or revising programs to increase sustainable transport use (school)
- Installing additional infrastructure to accommodate sustainable transport demand (school, council and/ or state government)
- Web tools or apps that enable the school community to report transport issues / missing links (Send Snap Solve or Social Pinpoint).

7.7 Governance Framework

To capitalise on the potential of the School Transport Plan, ongoing engagement with transport stakeholders is required. On-going engagement with internal and external stakeholder groups will be required with the groups detailed in Table 7-6.

Table 7-6: Internal and External Stakeholders

<table>
<tr><th>Internal Working Group</th><th colspan="3">External Working Group</th></tr>
<tr><td rowspan="3">A working group with school leadership, Road Safety Education Officer, students, teachers,</td><td colspan="3">A working group with school leadership, state government agencies and local government</td></tr>
<tr><td>TfNSW</td><td>City of Newcastle Council</td><td>SI / DET/ Other</td></tr>
<tr><td>• Active Travel to Schools
• Bus Service Planning</td><td>• Manager, Transport Planning
• Active Travel</td><td>• Travel Coordinator
• Principal</td></tr>
</table>

parents/carers, and neighbours.	• Bus contract manager • Assisted School Transport Program • Subsidised School Transport Scheme	• Road Safety Officer • LGA Travel Coordinator • Sustainability	• Road Safety Education Officer • AMU representative • Private bus operator • Transport Planning Manager

7.7.1 Travel Coordinator

A Travel Coordinator is required within the first 12 months of occupancy, whilst transport programs must be implemented to achieve travel behaviour change. To achieve this, the Travel Coordinator will commence their role one term prior to completion of the school upgrades. The role will be managed by DET. This includes determining the role and procuring a contractor, or other to promote, coordinate and monitor the implementation of the sustainable travel initiatives.

The Travel Coordinator will be responsible for implementing the actions shown in Table 7-7. The actions provide the means to encourage sustainable transport options at Newcastle High School and will be reviewed regularly, at least annually, to review the actions and refine them as the school community needs may change over time.

It is recommended that the appointed Travel Coordinator reviews this STP prior to commencing their role and discuss the mode share targets as well as the individual programs and initiatives with the school. Any changes to the mode share targets and programs will be agreed with the school representatives prior to implementation. This includes an update and the introduction of more details to the programs in Table 7-7.

The Travel Coordinator will complete one student and staff mode share survey (usual as a ‘show-of-hand’ survey) per term. In addition, the Travel Coordinator will discuss the option of one annual wider survey on travel behaviour, feedback on provided programs and future travel needs and requirements. This survey can be published via the school website in form of a ‘Have your say’ survey.

Table 7-7: Transport Encouragement Programs

Strategy	Action	Target Audience	Timeframe	Coordinator
Enabling active travel through resourcing				
Walk Safely to School Day	Promote and take part in 'Walk Safely to School Day'. Further information: www.walk.com.au	Staff and students	Annually	Travel Coordinator
Ride-to-School day	School participates in Ride-To-School day. This provides an opportunity for students, parents, and teachers to try riding, walking, skating, or scooting to school as well as celebrating the regular walkers and riders. Further information: www.bicyclenetwork.com.au	Staff, parents and students	Annually	Travel Coordinator
School Student Transport Scheme (SSTS)	Promote this scheme among the school community. Applications to the SSTS, for subsidised school term bus pass (students living beyond 2.9 km walking distance from the school), are used as an indicator for demand for dedicated school buses by Transport for NSW. Therefore, an uplift in applications to the scheme is needed to support the continued provision of school buses to help achieve the school travel targets.	Parents and students (both schools)	Annually	Travel Coordinator
Reduce Car Travel				
Communication Plan	Discuss and refine the Communications Plans and key messages with the School Principals and TfNSW to encourage a higher usage of non-private vehicle modes from staff, parents, and students.	Staff, parents, and students	In 2025 and then annually	Travel Coordinator
Staff car-pooling	Establish and organise a car-pooling scheme that enables staff to share their car trip to the school with more than one person in the car, reducing cars travelling to the school.	Staff and students	In 2025 and ongoing	Travel Coordinator

Strategy	Action	Target Audience	Timeframe	Coordinator
Parking management plan	Liaise with the Principal and City of Newcastle Council to develop policies to manage the demand for staff parking using the on-site spaces and on-street parking in the surrounding streets if required.	Staff and students	In 2025 and ongoing	Travel Coordinator and City of Newcastle Council
Additional Actions				
Inspire the school community towards using active and public transport to travel to school	Communicate to Staff and Students key messages to promote sustainable travel including targets and actions outlined in the School Transport Plan in the Communications Plan.	Staff, students, and parents	Per communication plan	Travel Coordinator to prepare messaging for the School Principals to send out
Travel Access Guide (TAG)	Distribute a travel access guide and publish on the school website and other school communication mediums so that it is easy to understand the options to travel to school using active modes or public transport.	Staff, students, and parents	Per communication plan	Travel Coordinator to prepare for the School Principals to send out
Provide cycle training to staff and students	Utilise the following resources to train staff and students: AustCycle http://austcycle.com.au/ BikeWise http://www.bikewise.com.au/services-courses/cycle-courses/city-cycling/ Bicycle NSW http://bicyclensw.org.au/events/courses/skills/beginner/	Staff, parents, and students	Quarterly	Travel Coordinator and School Principal

Strategy	Action	Target Audience	Timeframe	Coordinator
Other incentives for staff to use active and public transport	Propose and discuss the following initiatives with the School Principal to consider and implement: • Pre-loaded Opal cards during orientation. • School-subsidised panniers or backpacks for staff committed to active travel. • Salary sacrifice options for purchases of bikes or other micro-mobility options. • Time in staff meetings to share tips and support for staff wanting to start cycling. • Wayfinding at the school with directions to the End of Trip facilities. • A role for a school sustainable travel champion that focuses on modelling the desired behaviours and positive communication around active and public transport.	Staff	In 2025 and ongoing	Travel Coordinator
Travel surveys for staff and students	• Use travel surveys to be issued to staff and students to obtain workforce data analysis (including staff residential postcodes) to identify changes to the actual staff/student travel origin and destination patterns, to inform strategies that help to reduce car parking demand for staff and students to get to and from the site. An example of a travel survey from NSW Gov is included in Appendix C. • Collaborate with the School Principal on the method and timing to circulate the travel surveys to staff and students as appropriate.	Staff, students, and parents		Travel Coordinator

7.7.2 External Transport Working Group

The external Transport Working Group is to follow on from the Transport Working Group formed in Consultation Stream 2 of this Plan, during the transport options development phase of the Transport Assessment. The Department of Education and the Travel Coordinator should identify and advance relationships with these stakeholders including Council, bus operators and TfNSW – to govern transport issues and opportunities during the implementation of the Travel Plan. If this group already exists due to a previous SI project, amend the Terms of Reference to include this school project. Feedback during the external working group should highlight:

- If students are spilling out onto the road, new footpaths or pedestrian crossings required
- If road safety issues are raised by parents or staff, a Road Safety audit may be required to address issues
- If buses are turning away students because the buses are full, i.e. new bus services are required.

Document arrangements for this group are to include:

- Meeting regularly i.e. monthly / quarterly.
- Confirm annual travel demand changes (Year 1 starting, and Year 6 graduating).
- Report transport usage.
- Inform updates to the School Transport Plan.
- Seek funding for reported missing links or operational issues.
- Collaborative response to key issues

8 Stakeholder Consultation

This report was shared with Newcastle City Council and Transport for NSW for review and feedback. Comments were addressed as required and have been incorporated into this report. The stakeholder consultation is documented in Appendix D.

Appendices

Appendix A School Transport Plan (2023)

Newcastle Education Campus

Traffic Impact Assessment

PREPARED FOR SCHOOL INFRASTRUCTURE NSW | DECEMBER 2023

We design with community in mind

Stantec

Revision schedule

Rev No	Date	Description	Signature of Typed Name (documentation on file)			
			Prepared by	**Checked by**	**Reviewed by**	**Approved by**
1	09/12/22	Draft Report Version 1	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
2	16/12/22	Draft Report Version 2	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
3	13/01/23	Draft Report Version 3	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
4	20/01/23	Draft Report Version 4	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
5	08/02/23	Draft Report Version 5	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
6	23/02/23	Draft Report Version 6	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
7	08/05/23	Draft Report Version 7	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
8	26/05/23	Draft Report Version 8	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
9	27/09/23	Draft Report Version 9	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
10	29/09/23	Draft Report Version 10	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
11	03/10/23	Draft Report Version 11	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
12	06/10/23	Final Report	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
13	29/11/23	Final Report (minor updates)	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl
14	05/12/23	Final Report (minor updates)	Matt Todd	Volker Buhl	Volker Buhl	Volker Buhl

This document was prepared by Stantec Australia ("Stantec") for the account of School Infrastructure NSW (the "Client"). The conclusions in the Report titled Newcastle Education Campus School Transport Plan are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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Quality statement

Project manager	Project technical lead
Matt Todd	**Volker Buhl**

PREPARED BY Matthew Todd		05/ 12/ 2023
CHECKED BY Volker Buhl		05/ 12/ 2023
REVIEWED BY Volker Buhl		05/ 12/ 2023
APPROVED FOR ISSUE BY Volker Buhl		05/ 12/ 2023

I Matthew Todd confirm this Newcastle Education Campus Traffic Impact Assessment addresses the requirement of SEAR No. SSD-41814831 and relevant State and local legislation, policies, and guidelines. I further confirm that none of the information contained in the Newcastle Education Campus Traffic Impact Assessment is false or misleading.

Level 9, 203 Pacific Highway, St Leonards, NSW 2065
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STATUS Final | Project No 300304017

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1 Introduction

1.1 School context

In June 2021, the NSW Government announced the delivery of the Newcastle Education Campus (NEC) development which will upgrade the main Newcastle High School campus to a stream nine school. The proposed upgrades to the site will include a new learning hub, library and multi-purpose hall. A future development stage for a new primary school at the site will be explored when the service needs demand is required.

NEC will cater for high school students from years seven to twelve and increase the total capacity from approximately 1,200 to 1,400 students. To meet this increase in demand, the current school intake zone will expand to include the Merewether Heights Primary School catchment as shown in Figure 1.

NEC is situated within the City of Newcastle local government area, within the suburb of Newcastle West. The site is bounded by Parkway Avenue, National Park Street and Smith Street. The site is located less than one-kilometre southwest of Honeysuckle Light Rail stop which provides access to Queens Wharf ferry terminal and Newcastle Interchange.

The Greater Newcastle Future Transport Plan identifies Newcastle as a strategic centre and a key global gateway city in NSW. The city is projected to grow from around 575,000 people to around 760,000 by 2056. The Plan identifies the potential for improved public and active transport infrastructure to provide easy access to education precincts and reduce the reliance on private vehicles.

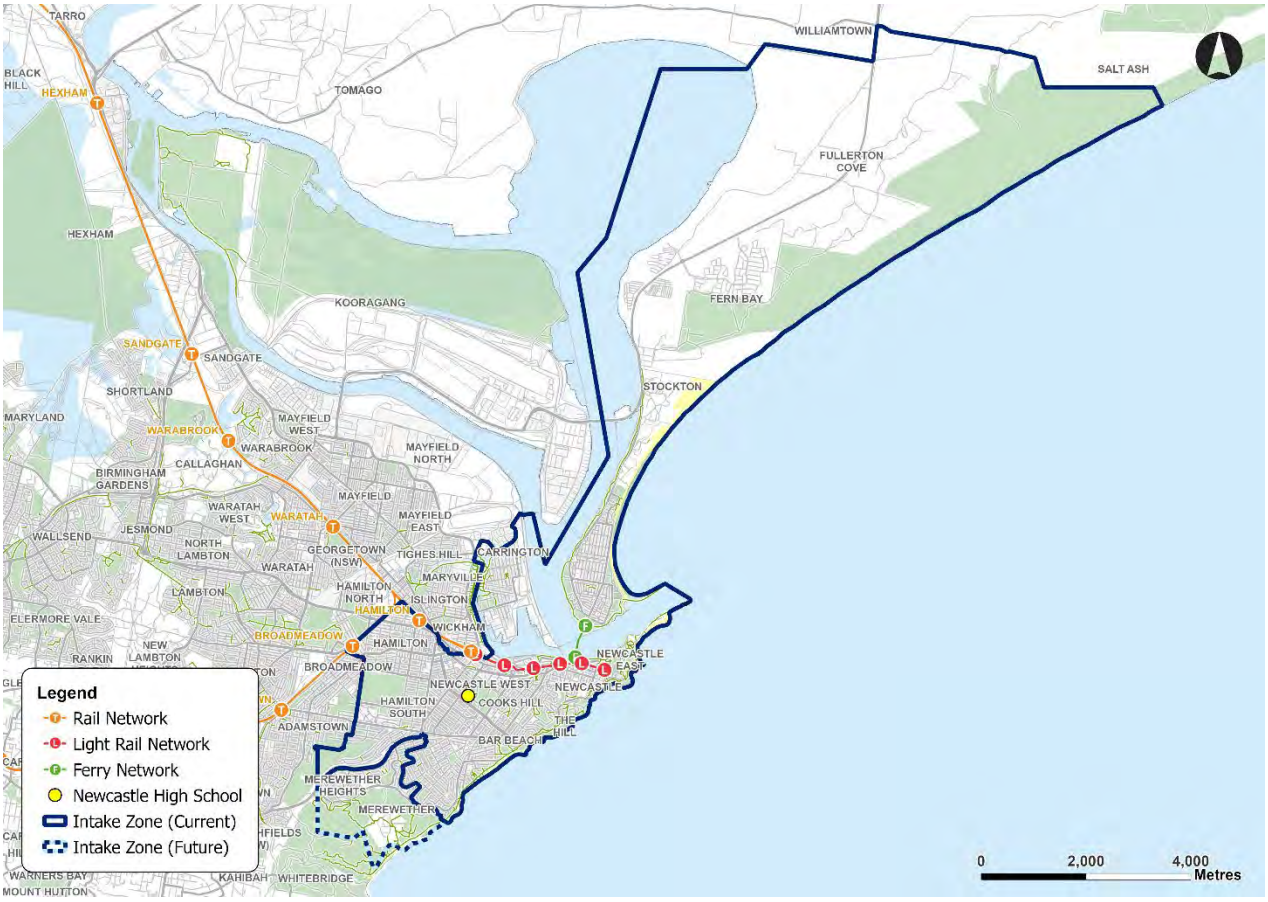


Figure 1: Newcastle Education Campus Intake Zone

1.2 Purpose of the Report

A Traffic, Transport and Accessibility assessment is required as part of the Planning Secretary's Environmental Assessment Requirements (SEARs) for SSD-41814831. Table 1-1 below details the requirements set out as part of the SEARs and the responses detailed in this report.

Table 1-1: SEAR Details

SEAR Detail	Report Reference
Undertake an analysis of the existing transport network, including the road hierarchy and any pedestrian, bicycle or public transport infrastructure, current daily and peak hour vehicle movements, and existing performance levels of nearby intersections.	Section 2
Provide details of the proposed development, including pedestrian and vehicular access arrangements (including swept path analysis of the largest vehicle and height clearances), parking arrangements and rates (including bicycle and end-of-trip facilities), drop-off/pick-up-zone(s) and bus bays (if applicable), and provisions for servicing and loading/unloading.	Section 3
Perform an analysis of the impacts of the proposed development (including a justification for the methodology used), including predicted modal split, a forecast of additional daily and peak hour multimodal network flows as a result of the development (using industry-standard modelling), potential queuing in drop-off/pick-up zones and bus bays during peak periods, identification of potential traffic impacts on road capacity, intersection performance and road safety (including pedestrian and cyclist conflict), and any cumulative impact from surrounding approved developments.	Section 4 and 6
Provide measures to mitigate any traffic impacts, including details of any new or upgraded infrastructure to achieve acceptable performance and safety, and the timing, viability and mechanisms (including proposed arrangements with local councils or government agencies) of delivery of any infrastructure improvements in accordance with relevant standards.	Section 6
Provide measures to promote sustainable travel choices for employees, students and visitors, such as connections into existing walking and cycling networks, minimising car parking provision¸ encouraging car share and public transport, providing adequate bicycle parking and high-quality end-of-trip facilities, and implementing a Green Travel Plan.	Sections 6 and 9
Provide a preliminary operational traffic and access management plan for the development, including drop-off/pick-up zones, bus bays and their operations.	Appendix A
Provide a Construction Traffic Management Plan detailing predicted construction vehicle movements, routes, access and parking arrangements, coordination with other construction occurring in the area, and how impacts on existing traffic, pedestrian and bicycle networks would be managed and mitigated.	Section 8

1.3 Site Expansion

The proposal seeks to upgrade the Newcastle Education Campus to provide improved facilities to meet the educational needs of staff and students. The upgrades will cater for a total student population of 1,420 and will include the following scope:

- Demolition of eight (8) existing buildings.
- Construction of a new three (3) storey learning hub located on the southwestern corner of the campus, including a new library, canteen, covered outdoor learning area (COLA), support learning unit, general learning spaces, hospitality teaching spaces, and science labs.
- Construction of a new multi-purpose facility located in the north-eastern corner of the campus including a gymnasium, stage, fitness lab, flexible learning spaces, outdoor courts, and end-of-trip (EOT) facilities. Each EOT facility is to include a shower, toiler, changing area and wash basin.
- Internal refurbishment works within the existing administration building on Parkway Ave to form a new student hub
- New student entry from Parkway Ave, Smith Street and National Park Street.
- Relocation of Block H approximately 50m South.

Ancillary works are also proposed to enable the proposed upgrades and include new civil infrastructure and a comprehensive landscaping strategy. The proposed works are shown below in Figure 2.

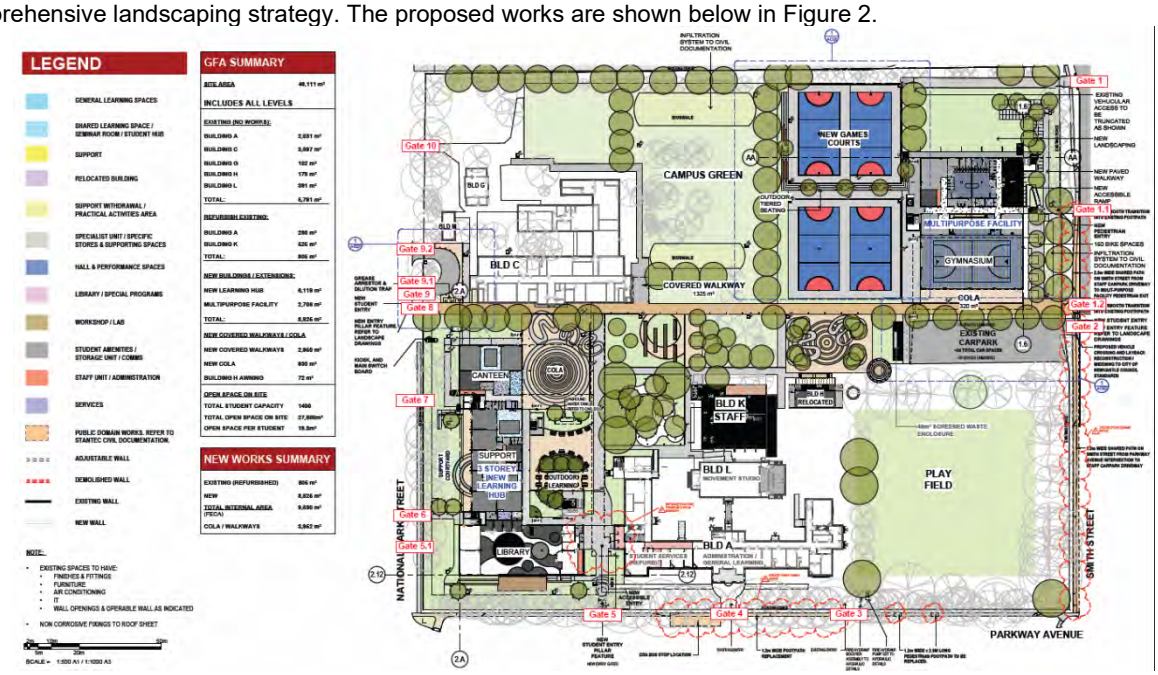


Figure 2: Site Plan – Ground Floor (10/2023)
Source: EJE Architecture – Drawing No. A-0010

The following transport operations will occur as a result of the changes to the site layout:

- On-site vehicle movements will increase with the inclusion of the new support unit kiss-and-drop facility. A swept path analysis has been undertaken to ensure that vehicle clearance is sufficient. There are no height restrictions proposed as part of the site design. The findings from the assessment are discussed in section 6.5.
- On-site parking arrangements will remain the same with no additional parking to be provided as part of the school expansion works. Parking rates and additional parking provisions are discussed in section 2.2.6.
- Additional bicycle and micromobility parking is to be provided as a result of the expansion works. The total number of parking units required was analysed as part of this assessment and discussed during the transport working groups with Council and other stakeholders. The number of proposed parking facilities supports the level of student growth at the school and helps meet mode share targets which are discussed in section 5.
- Waste management will operate via the access point at “Gate 2”, with bin storage to be located adjacent to the existing car park. A swept path analysis has been undertaken which identified that the “Gate 2” will require widening for sufficient access to be achieved, as shown in Appendix B.
- Servicing operations will be required to operate from loading zones on the street as a result of changes to the servicing access.
- Following an analysis of the current bus bay zones surrounding the school site, an expansion has been proposed and discussed in section 6.6.

- Changes to kiss-and-drop operations have been proposed as part of an analysis in to the existing operations. Further details have been provided in section 6.5.

In addition to the changes mentioned, amendments have been made to the number of access points at the site. The schedule of future access gates can be found in Table 1-2.

Table 1-2: Schedule of Access Gates

Access Gate No.	Street Location	Existing/ New Uses
Gate 1	Smith Street	Existing gate to remain unmodified. Emergency vehicle access only.
Gate 1.1	Smith Street	New pedestrian entry/exit gate.
Gate 1.2	Smith Street	New pedestrian/cyclist entry/exit gate including entry pillar feature.
Gate 2	Smith Street	Existing vehicular gate to remain unmodified. Staff vehicle access during operational school hours. Private Waste Contractor access to collect waste from the Main Waste Bay outside of operational school hours.
Gate 3	Parkway Avenue	Existing vehicular gate to remain unmodified.
Gate 4	Parkway Avenue	Existing pedestrian entry gate to remain unmodified.
Gate 5	Parkway Avenue	Modified pedestrian entry/exit gate to include entry pillar feature.
Gate 5.1	National Park Street	Existing pedestrian entry/exit gate to remain unmodified.
Gate 6	National Park Street	New pedestrian exit gate.
Gate 7	National Park Street	Existing electrical substation double gate to be removed and public domain made good in accordance with civil plans.
Gate 8/9	National Park Street	Existing double gates to be modified to include entry pillar feature. Gate to be used as pedestrian/cyclist gate post Stage 2 completion. Vehicle crossing and kerb to be demolished and made good in accordance with civil plans.
Gate 9.1	National Park Street	New vehicular Support Drop Off gate.
Gate 9.2	National Park Street	New vehicular Support Drop Off gate.
Gate 10	National Park Street	Existing vehicular/pedestrian gate to remain unmodified.

An operational layout of the future school site has been provided in Appendix A.

1.4 Student Distribution

Analysis has been undertaken using depersonalised student data provided by the Department of Education NSW, in August 2022. The distribution of students enrolled at Newcastle High School in 2022 by Statistical Area 1 (SA1) is shown in Figure 3.

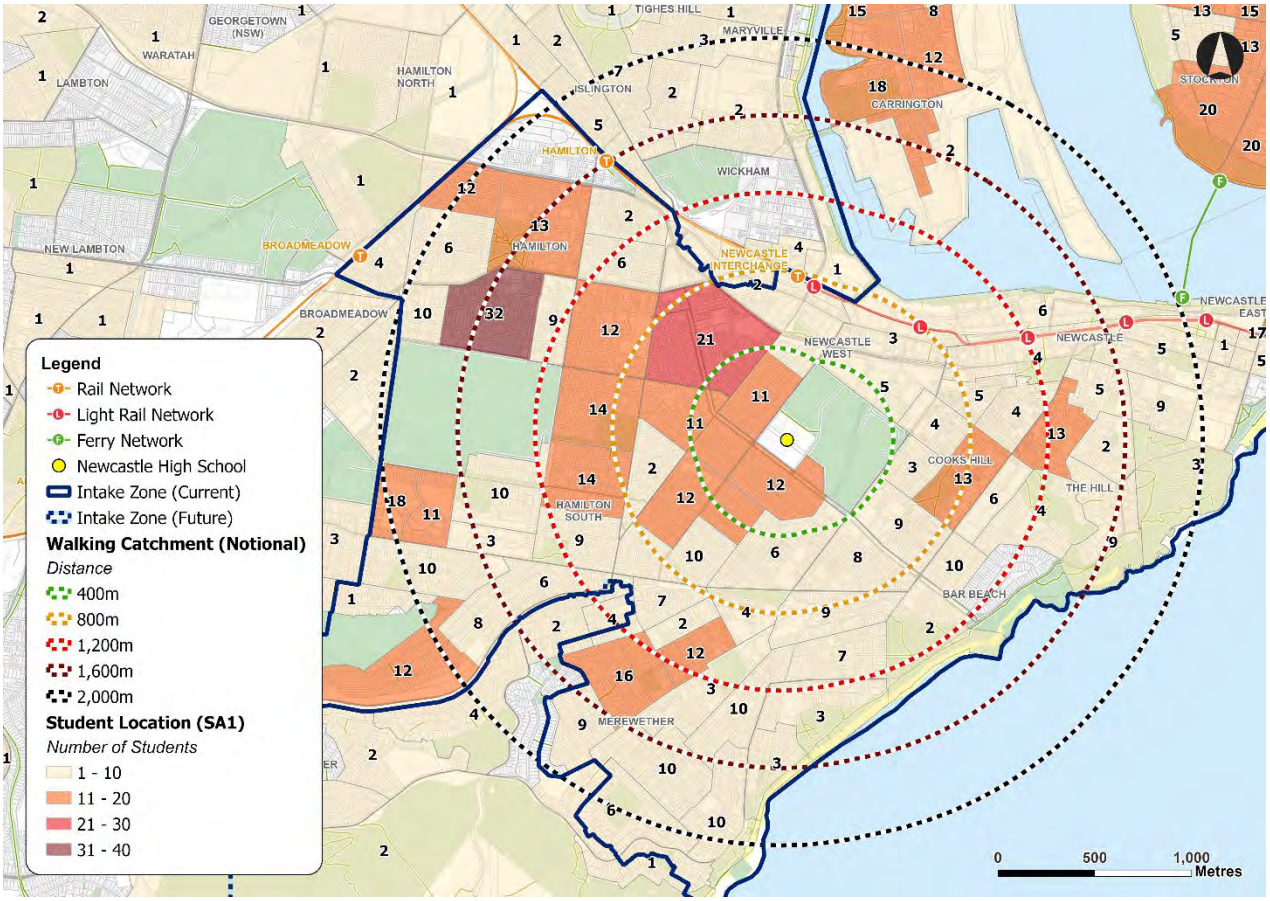


Figure 3: Newcastle High School 2022 Student Distribution

Using the depersonalised data provided, student accessibility was analysed according to the proximity of students to the school. The summary of student catchments is shown below in Table 1-3.

Table 1-3: Catchment Analysis of Enrolled Students

Catchment Analysis	Notional (as crow flies)	Actual (on path)
1-400m (5-min walk)	39 (3.2%)	32 (2.6%)
1-800m (10-min walk)	131 (10.8%)	100 (8.3%)
1-1,201m (15-min walk)	275 (22.8%)	206 (17.1%)
1-1,600m crow flies / 2,300m on path	409 (33.9%)	540 (44.7%)
1-2,000m crow flies / 2,900m on path (excl from SSTS)	564 (46.7%)	641 (53.1%)
Within 400m of public transport stop / station / wharf that brings them closer to school	874 (72.4%)	-
Within 800m of public transport stop / station / wharf that brings them closer to school	989 (81.9%)	-
# outside SSTS zone, with no PT access	172 (14.2%)	-

2 Transport Assessment

2.1 External Transport Network and Operations

2.1.1 Pedestrian Infrastructure

The proximity of Newcastle High School to Newcastle City Centre ensures that the school is serviced by high-quality pedestrian infrastructure that connects the school and the surrounding neighbourhoods. Footpaths are provided on each side of the road across the school catchment region as shown in Figure 4. Within the vicinity of the site, pedestrians are supported by the following infrastructure:

- Footpaths on either side of Parkway Avenue, National Park Street and Smith Street bounding the school site, as well as other surrounding local streets.
- Footpaths are provided across the road median along Parkway Avenue facilitating crossings at street intersections, this allows pedestrians to cross in stages when gaps in traffic allow.
- Signalised intersections along Parkway Avenue at the intersections with Stewart Avenue and Union Street have pedestrian crossings on all sides.
- Zebra crossings are provided over the eastern leg of the Parry Street/ National Park Street intersection and the western leg of the Parry Street/ Steel Street intersection.
- Raised platforms are provided along Smith Street and National Park Street to reduce vehicle speeds.

Figure 4: Footpath network surrounding the site and pedestrian access points

2.1.2 Cycling Infrastructure

There is an extensive cycling network surrounding the site which connects Newcastle High School to the wider Newcastle region. The wider network coverage is shown in Figure 5, and is categorised by the difficulty of on-road cycling and off-road cycleways. The classification of on-road cycling is defined by the TfNSW cycleway finder website and Council's cycleway mapping. The defined TfNSW cycleway finder takes into consideration the volume of traffic that

users share the roadway with. Following consultation, it was noted that City of Newcastle Council is due to review its cycleway finder definitions sometime in the near future. Off-road cycleways are a mixture of shared paths and dedicated separated cycleways. The construction of the new light rail network in Newcastle saw the introduction of new dedicated cycleways north of the school site.

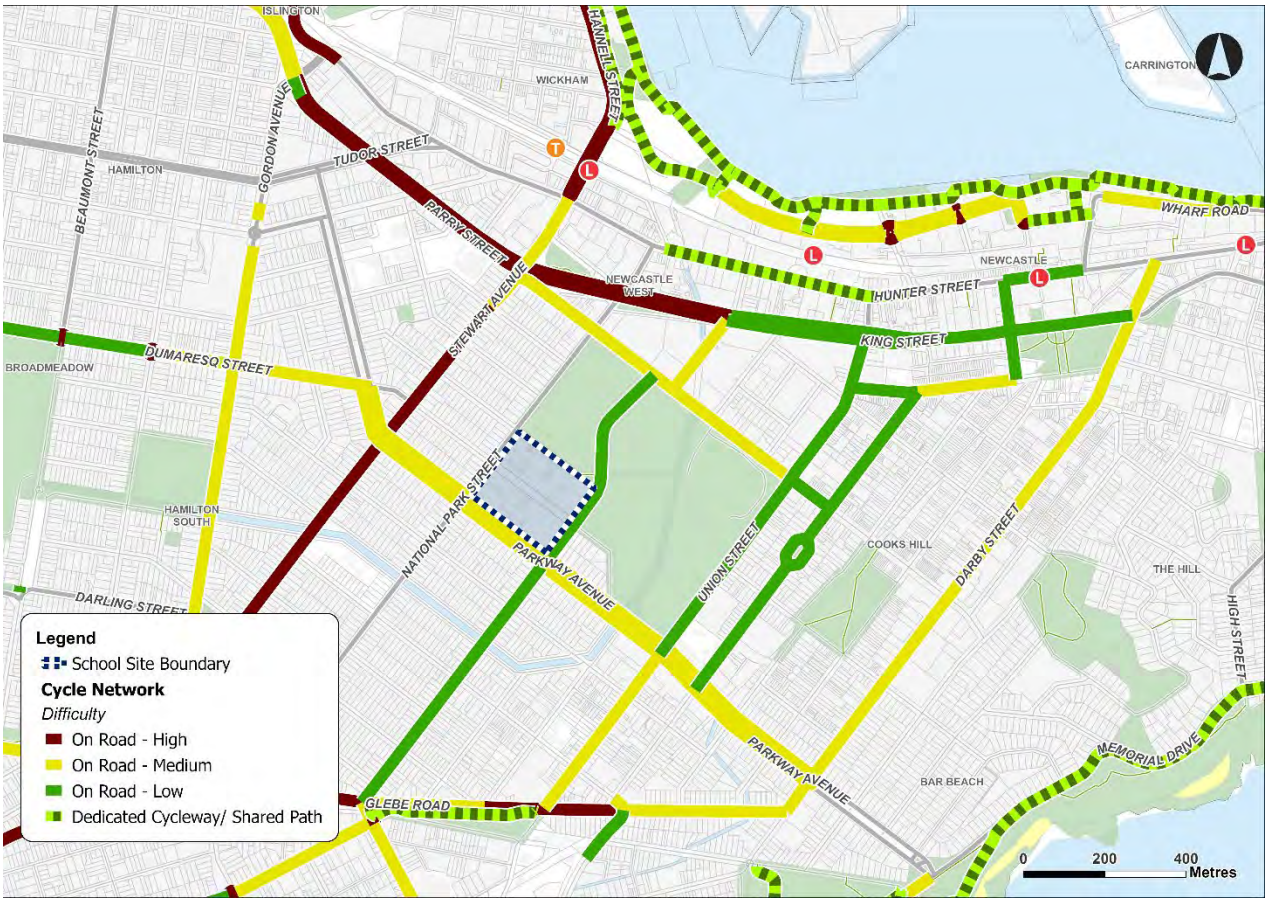


Figure 5: Cycling Infrastructure Surrounding Newcastle Education High School

Figure 6 exhibits the network of cycleways surrounding the site directly. Whilst there is no dedicated infrastructure providing access to the school, the classification is graded as having low difficulty along Smith Street due to lower traffic volumes and reduced vehicle speeds through the local streets. It should be noted that students cycling to school can utilise footpaths where available as children up to the age of 16 are allowed to cycle on footpaths in NSW.

Figure 6: Local Cycle Network

2.1.3 Train Services

Newcastle High School has good access to a number of rail stations. Newcastle Interchange is located 1.1 kilometres away from the site, which equates to a 15-minute walk. Broadmeadow Station is located further away but is accessible via the on-road cycleway along Parkway Avenue and Dumaresq Street.

Newcastle Interchange provides services via the Central Coast & Newcastle Line (CCN) and Hunter Line (HUN). Services via the Central Coast and Newcastle line terminate at Central Station, Sydney running at a maximum of two services per hour. Services via the Hunter Line run through to Maitland, where the line separates and terminates at either Dungog or Scone stations. Services on the Hunter line are more frequent than the Central Coast and Newcastle line with up to four services running during the peak.

2.1.4 Light Rail Services

Newcastle High School is situated a one-kilometre walk from the Honeysuckle Light Rail Station. Light Rail services are predominantly utilised by students from the east of Newcastle centre due to Newcastle Interchange being the only stop west of Honeysuckle. Services run from the station every seven to eight minutes and provide access to the CBD, and Queens Wharf ferry terminal, with services terminating at Newcastle Beach.

2.1.5 Ferry Services

The existing ferry network serves as a connection for students who reside in the suburb of Stockton. The ferry trip between Stockton and Newcastle is approximately six minutes and connects to the light rail network at Queens Wharf light rail station. Additionally, Route 719 school bus service provides connections from the ferry terminal. A total of 121 students currently reside in the suburb of Stockton.

The train, light rail, and ferry networks are shown in proximity to Newcastle Education Campus in Figure 7.

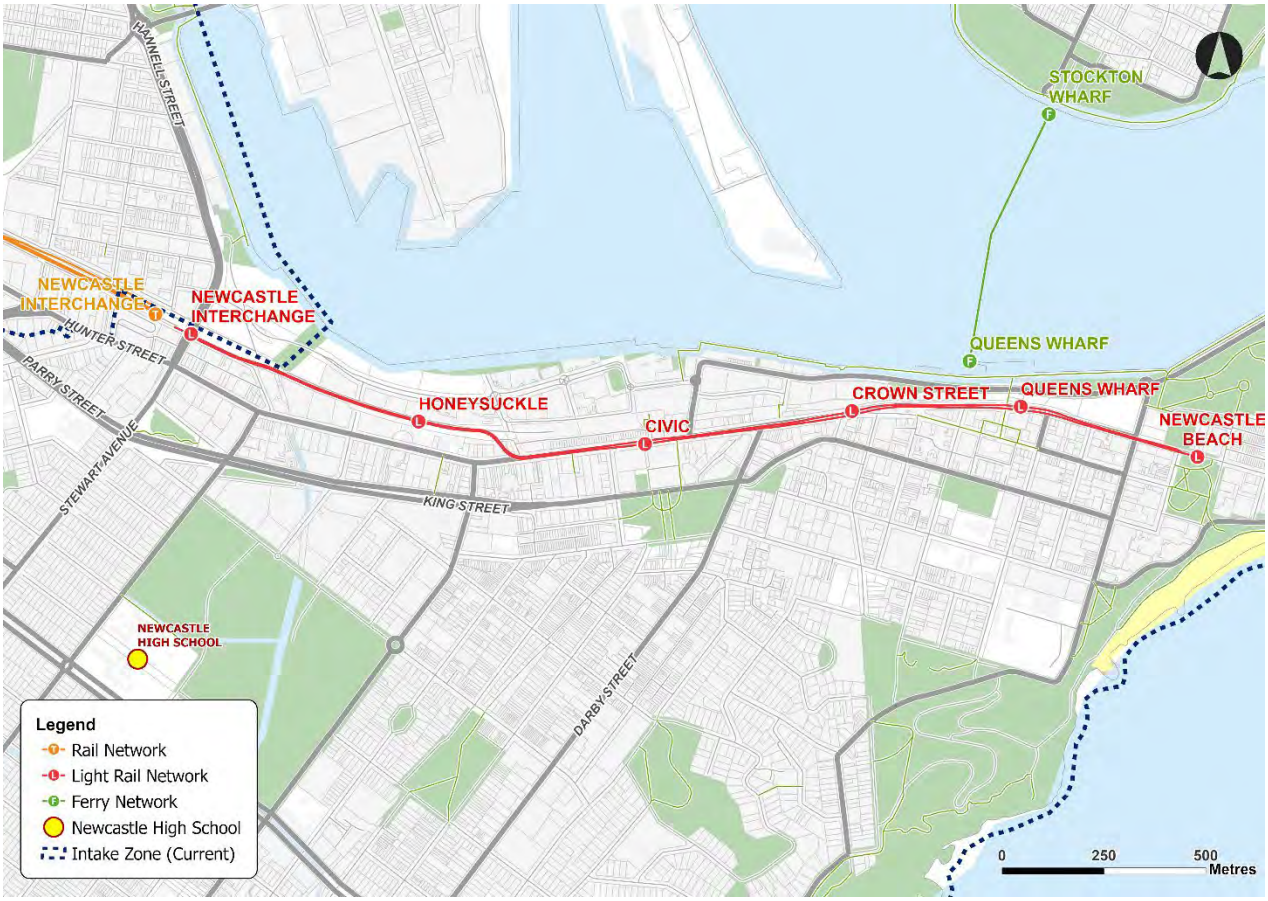


Figure 7: Rail, Light Rail and Ferry Networks in proximity to Newcastle Education Campus

2.1.6 Public Bus Services

The local bus routes that service Newcastle East in which the site resides are operated by Keolis Downer as part of the Newcastle Transport contract. A total of seven public bus routes currently operate near the site. Routes 12, 22 and 138 provide connections to Newcastle Interchange, while connections to Honeysuckle Light Rail Stations are provided by Routes 12, 22 and 24.

It is understood that the bus zone along Parkway Avenue was used in its entirety during the afternoon peak with numerous buses arriving simultaneously to board and alight students. The bus zone currently has space for up to three buses at one time. Due to the proximity of the bus zone to the roundabout, efficient management of bus operations is required to not disrupt Parkway Avenue traffic.

Table 2-1: Public Transport Services Summary

Route No.	Number of Schools Serviced	Route Name	Board/ Alight Location	AM Service	PM Service	Bus Stop Catchment	
						Within 400m	Within 800m
12	-	Maryland to Merewether Beach via Wallsend and Newcastle Interchange	Union Street	Y	Y	181 (15%)	399 (33%)
21	-	Broadmeadow to Newcastle via Merewether	Parkway Avenue	Y	Y	441 (37%)	605 (50%)
22	-	Newcastle West to Charlestown via Merewether	Stewart Avenue	Y	Y	167 (14%)	319 (26%)
24	-	Wallsend to Marketown via Mayfield	National Park Street	Y	Y	141 (12%)	270 (22%)

Route No.	Number of Schools Serviced	Route Name	Board/ Alight Location	AM Service	PM Service	Bus Stop Catchment	
						Within 400m	Within 800m
47	-	Marketown to Jesmond via Warabrook	National Park Street	Y	Y	103 (9%)	266 (22%)
138	-	Newcastle to Lemon Tree Passage via Newcastle Airport	Parkway Ave (School)	Y	Y	286 (24%)	466 (39%)
10X	-	Charlestown to Newcastle Interchange (Express Service)	King Street	Y	N	15 (1%)	99 (8%)

2.1.7 School Bus Services

A total of 11 and 14 school bus services are operating during the AM and PM school peak periods respectively. School bus services that support Newcastle High School are operated by Keolis Downer, Hunter Valley Buses and Transdev. The bus services detailed either board or alight a 400-metre walk away from the school site entrance. The majority of school bus services board and alight directly outside of the school along Parkway Avenue, whilst the remainder of services board and alight on Stewart Avenue, Union Street and further along Parkway Avenue. Service information on the school bus routes including the student catchment from route bus stops, service frequency and the number of schools serviced are summarised in Table 2-2. It must be noted that not all services directly support the school, which are largely the services that function away from the bell times.

Table 2-2: School Bus Services Summary

Route No.	Number of Schools Serviced	Route Name	Board/ Alight Location	Arr. Time	Dept. Time	Bus Stop Catchment	
						Within 400m	Within 800m
549	4	City West, Stewart Avenue to Swansea North	Stewart Avenue	-	15:41	105 (9%)	283 (23%)
718	5	Carrington to Hunter School of Performing Arts	Stewart Avenue	08:30	15:30	291 (24%)	477 (39%)
719	1	Newcastle Station to Newcastle High School	Parkway Ave (School)	08:40	15:06, 15:08	80 (7%)	218 (18%)
731	5	Merewether Heights to St Philips College	Parkway Avenue	07:34	15:28	283 (23%)	392 (32%)
732	4	St Philips College to Newcastle Station	Union Street	07:56, 08:30, 08:42	15:38	256 (21%)	445 (37%)
743	9	Hunter School of Performing Arts to The Junction	Parkway Avenue (School)	08:31	15:35	289 (24%)	487 (40%)
816	7	Hamilton East to St Pius X School	Union Street	-	15:42	188 (16%)	354 (29%)
867	2	Newcastle High School to St Pius X College	Parkway Avenue (School)	-	15:10	158 (13%)	297 (25%)
1221	9	Seaham and Brandy Hill to Raymond Terrace	Parkway Avenue (School)	08:40	-	103 (9%)	291 (24%)
1411	1	Medowie to Newcastle High School	Parkway Avenue (School)	08:15	-	95 (8%)	239 (20%)
1652	1	Newcastle HS to Medowie	Parkway Avenue (School)	-	15:07	72 (6%)	199 (16%)
1671	4	Medowie to Newcastle High School	Parkway Avenue (School)	08:26	-	105 (9%)	220 (18%)

Route No.	Number of Schools Serviced	Route Name	Board/ Alight Location	Arr. Time	Dept. Time	Bus Stop Catchment	
						Within 400m	Within 800m
2204	3	Newcastle High School to Medowie	Parkway Avenue (School)	-	15:07	167 (14%)	282 (23%)
6246	5	Maryland to Newcastle HS	Parkway Avenue (School)	08:35	-	157 (13%)	287 (24%)
6273	6	Newcastle Schools to Maryland	Parkway Avenue (School)	-	15:10	156 (13%)	316 (26%)
6405	4	Newcastle Grammar to Toronto	Parkway Avenue	-	15:26	219 (18%)	406 (34%)
6434	5	Toronto to Newcastle Grammar	Parkway Avenue (School)	08:17	-	235 (19%)	409 (34%)
S553	5	Soldiers Point to Newcastle HS	Parkway Avenue (School)	08:23	-	91 (8%)	225 (19%)
S562	2	Newcastle Grammar School to Fingal Bay Shops	Parkway Avenue	-	15:25	67 (6%)	219 (18%)
S566	5	Merewether High School to Soldiers Point	Parkway Avenue	-	15:22	62 (5%)	253 (21%)

Figure 8 below shows the wider extent of the public and school bus networks that service the school in proximity to Newcastle High School as detailed in Table 2-1 and Table 2-2.

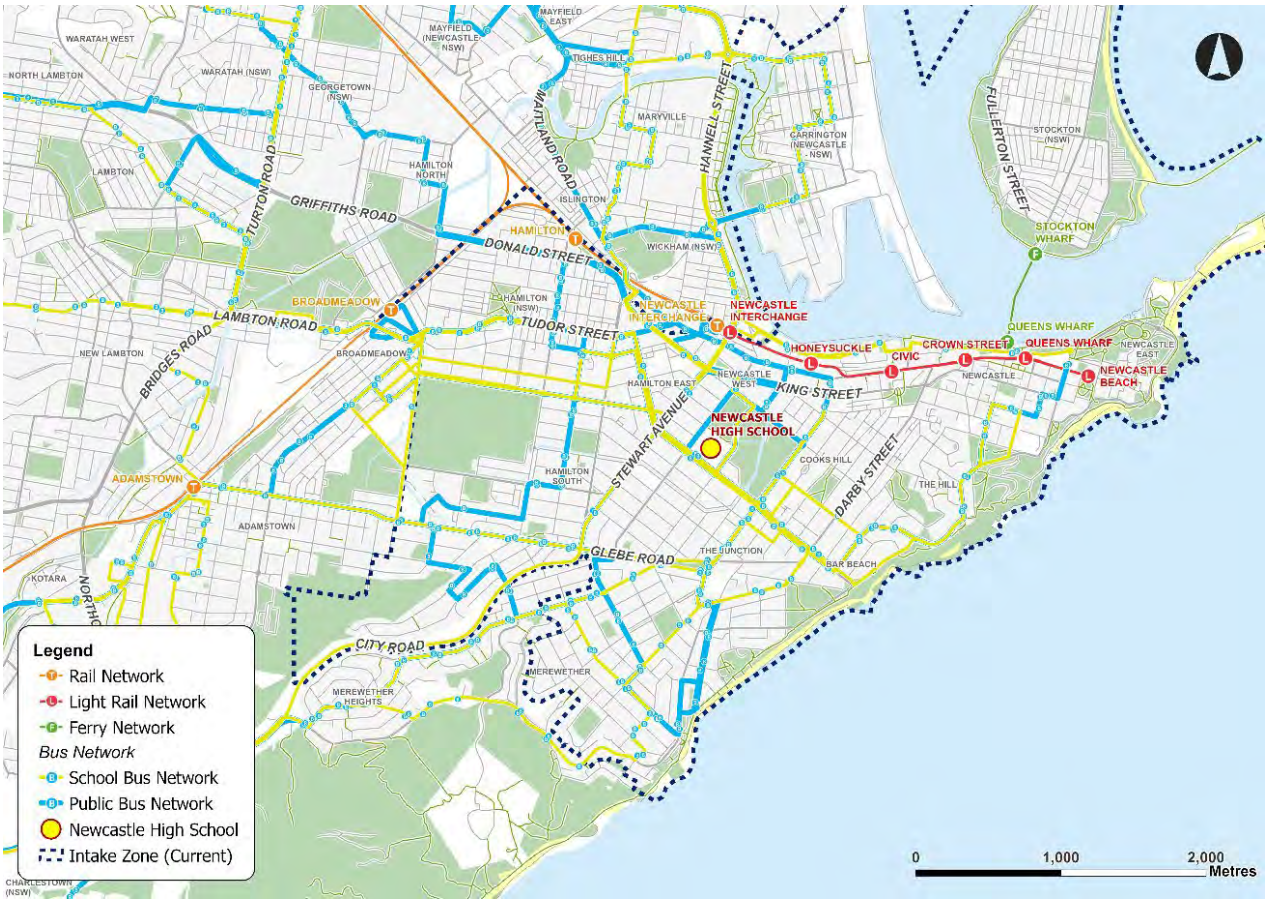


Figure 8: Public and School Bus Network – Wider Extent

2.1.8 Road Network

Newcastle Education Campus is bounded by National Park Street, Parkway Avenue and Smith Street. Parkway Avenue is the main east-west connection, connecting to Darby Street in the east and Stewart Avenue (A43) in the west. National Park Street and Smith Street provide north-south connections from Newcastle CBD in the north to Glebe Road in the south. The surrounding road network is described in further detail in Table 2-3. Additional context is provided for the road network bounding the school site, which was taken from tube count data conducted over a week-long period from Sunday 21 August to Saturday 27 August.

Table 2-3 Summary of key roads

Road Name	Details
Parkway Avenue	Parkway Avenue is a distributor road with a speed limit of 40 km/h. Parkway Avenue is aligned in an east-west direction, connecting Darby Street in the east to Stewart Avenue (A43) in the west. • The average weekday traffic travelling on Parkway Avenue is 4,697 for eastbound traffic and 5,660 for westbound traffic. • The AM peak hour is from 8 am to 9 am in both directions. • The PM peak hour is from 5 pm to 6 pm in both directions. • The average weekday speed is 46 km/h in both directions. • For eastbound traffic, the average speed is 38km/h from 8 am to 9 am and 37 km/h from 3 pm to 4 pm. • For westbound traffic, the average speed is 35km/h from 8 am to 9 am and 37 km/h from 3 pm to 4 pm.
National Park Street	National Park Street is a primary road with a speed limit of 40 km/h. National Park Street is aligned in a north-south direction connecting Newcastle CBD to Glebe Road. • The average weekday traffic travelling on National Park Street is 1,245 for northbound traffic and 1,773 for southbound traffic. • The AM peak hour is from 8 am to 9 am in both directions. • The PM peak hour is from 3 pm to 4 pm in both directions. • The average weekday speed on National Park Street is 36 km/h for northbound traffic and 40 km/h for southbound traffic. • For northbound traffic, the average speed is 34km/h from 8 am to 9 am and 35 km/h from 3 pm to 4 pm. • For southbound traffic, the average speed is 37km/h from 8 am to 9 am and 37 km/h from 3 pm to 4 pm.
Smith Street	Smith Street is a local road with a speed limit of 40 km/h. Smith Street is aligned in a north-south direction connecting Parry Street to Parkway Avenue. Smith Street is the main access point for Fearnley Dawes Athletic Centre and National Park Sportsground which surrounds the Newcastle Education Campus. • The average weekday traffic travelling on National Park Street is 1,243 for northbound traffic and 1,328 for southbound traffic. • The AM peak hour is from 8 am to 9 am for northbound traffic and 11 am to 12 pm for southbound traffic. • The PM peak hour is from 3 pm to 4 pm for northbound traffic and 5 pm to 6 pm for southbound traffic. • The average weekday speed on National Park Street is 43 km/h for northbound traffic and 39 km/h for southbound traffic. • For northbound traffic, the average speed is 41km/h from 8 am to 9 am and 40 km/h from 3 pm to 4 pm. • For southbound traffic, the average speed is 36km/h from 8 am to 9 am and 36 km/h from 3 pm to 4 pm.

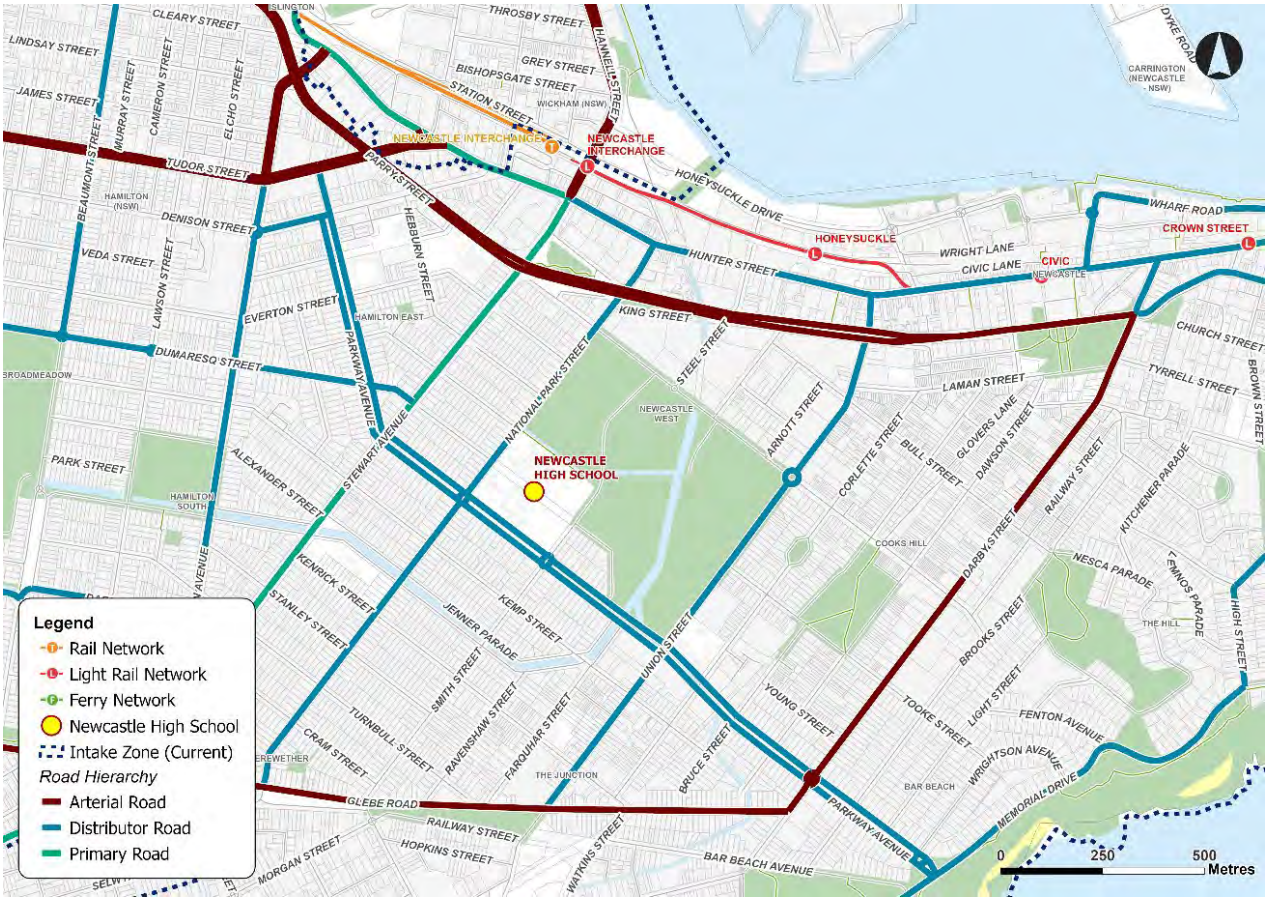


Figure 9: Road Network

The two intersections of Parkway Avenue/ National Park Street and Parkway Avenue/ Smith Street were not counted individually. The overall count data along the surrounding roads shows short peak periods in the morning (8:00 – 9:00 am) and late afternoon (5:00 – 6:00 pm). The afternoon peak does not coincide with the school bell time. The morning peak shows a demand of around 435 (eastbound) and 716 (westbound) vehicles along Parkway Avenue (Figure 10). Whilst observations around the morning bell time show an increase in traffic demand and slower speeds across the two intersections, the overall traffic flow is still deemed operating at a satisfactory level of service and free-flowing conditions are achieved within minutes after the school bell. Therefore, it is concluded that no further investigation of the intersections is required, and the upgrade of the school will have a negligible impact on traffic conditions.

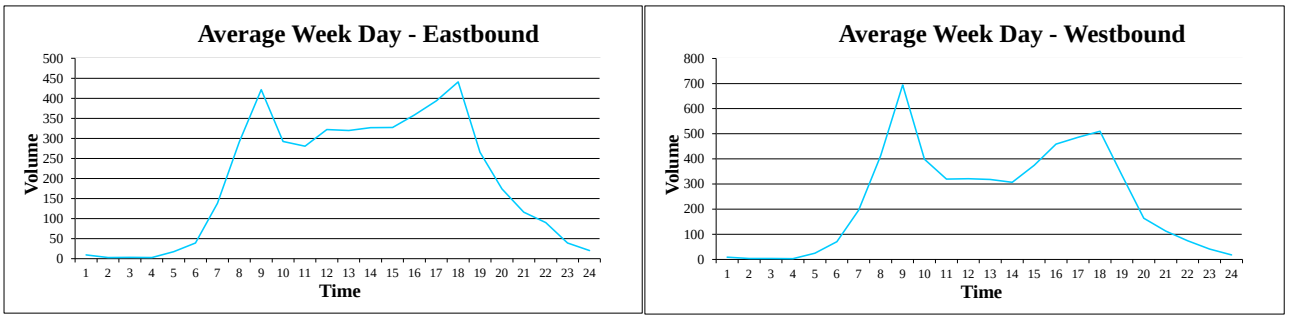


Figure 10: Traffic volumes along Parkway Avenue

As discussed, the result of the surveys determined that at any point during the day, the three roads bounding the school site did not experience any significant traffic volumes during the count period that would position them close to being at full capacity. The level of mean speed also showed that no significant congestion was occurring as a result of the school's operation. It was determined from this analysis that intersection modelling would not be required as there is sufficient road capacity around the school site to support the proposed increase in staff and students.

2.2 School Site Access

2.2.1 Pedestrian Access

The main entry point of the school is located on Parkway Avenue, providing access to the school reception and office. Secondary entry points are available along National Park Street and Smith Street. During the site visit, it was noted that the exit at the northern extent of Smith Street and the main exit on Parkway Avenue were the most popular for students. Whilst the car park entry point is not a formal pedestrian access point, it is used by a large number of students walking and cycling. As staff are discouraged from exiting the site via private vehicle during bell times, this helps minimise the risk of an incident at this point. Pedestrian access points are shown in Figure 13.

2.2.2 Bicycle parking

There is no formal bicycle parking on site, however, children are encouraged to use the cricket nets located in the centre of the site. The cricket nets are easily accessible from most entry points, with the Smith Street entrances being the most popular. Temporary bicycle parking has been provided in front of the cricket nets to try and discourage students from leaving bicycles within the nets as shown in Figure 11 and Figure 12. There are currently no end-of-trip facilities available for current staff.

Figure 11: On-site Bicycle Storage

Figure 12: On-site Bicycle Storage

2.2.3 End of Trip Facilities

There are currently no end-of-trip facilities provided for student or staff use.

2.2.4 Vehicle access

Vehicular access to the school is provided via Gates 1 and 2 from Smith Street, Gate 3 on Parkway Avenue. Gate 2 provides access to the staff-only car park, whilst the remaining gates provide waste and service vehicle access, and emergency vehicle access. All gates which provide access to the school are shown in Figure 13.

2.2.5 Kiss-and-Drop

Short-stay drop-off/pick-up zones are provided along the side of Parkway Avenue and National Park Street fronting the school. The main zone on Parkway Avenue can accommodate up to 11 vehicles, whereas the secondary zone on National Park Street has a capacity of 6 vehicles. The current parking restrictions of 5 minutes for the drop-off zones apply to school days only and vary between school peak periods from 8:00 am to 9:30 am and 2:30 pm

Figure 13: School Gates

to 4:00 pm and school hours from 8:00 am to 4:00 pm. The parking restrictions discussed are shown in Figure 14.

As per the RTA, the observed drop-off and pick-up activities surrounding the site are documented as follows:

- It was observed that the morning peak drop-off time was between 8:30 am and 8:50 am, with the longest queue occurring during the 5-minute interval of 8:40 am to 8:45 am. This period of time saw a maximum of 15 vehicles in the drop-off zone along with a school bus. The vehicles would spill over into the bus zone during this peak interval.
- Afternoon peak pick-up times were from 2:50 pm to 3:10 pm with the longest queue occurring during the 5-minute interval of 3:00 pm to 3:05 pm. It should be noted that the school bell times were at 8:55 pm and 3:00 pm.
- The drop-off zone along National Park Street was mostly unused as parents chose to informally park to drop students off closer to the school entrances. There were vehicles observed to double park along Smith Street for a few minutes while waiting for school to finish.
- Car occupancy levels appeared to be high with approximately 2 to 3 students per vehicle.
- It is noted that during the operation of the kiss-and-drop located on Parkway Avenue, vehicles are often interfering with bus operations due to the overflow of the kiss-and-drop zone itself. Due to the limited capacity of the kiss-and-drop zone on Parkway Avenue and the reluctance of parents to use the separate kiss-and-drop zone located on National Park Street, vehicles are encroaching into the bus zone. This causes a knock-on effect, with buses unable to board and alight appropriately within the designated space. This causes minor congestion along Parkway Avenue and towards the intersection of Parkway Avenue/ National Park Street.

2.2.6 Car parking

The school currently provides 40 staff-only off-street parking spaces within the school boundary which are accessible via Smith Street. There is no on-site formal parking for students. As noted in the RTA, the on-site staff car park has been observed to reach capacity by 8.50 am. Onsite parking spaces, surrounding on-street parking spaces and associated parking controls are depicted in Figure 14.

On-street parking spaces are available along the boundaries of the school and on local roads within the school's vicinity. The majority of on-street parking in the surrounding streets has repeatedly been observed to be mostly occupied before school peak hours and it is concluded that staff from Newcastle High School is having a negligible impact on on-street parking demand.

The City of Newcastle Development Control Plan (DCP) states that off-street parking needs to be provided for educational developments within the Newcastle City Centre:

- one parking space for every two staff
- one space for every eight senior students.

There are currently 114 full-time employed (FTE) staff at Newcastle High School as well as 152 senior students. This requires 57 spaces to be provided to meet the requirements of staff and 20 spaces to meet the requirements of senior students. The current parking provision of 40 staff-only parking spaces appears to be sufficient. A recent staff survey (see Section 4.1.2) showed that around 15% of staff arrive by active and public transport already and the school transport plan aims to improve this proportion in the future.

2.2.7 Emergency Vehicle Access

Emergency vehicles are able to access the school on all roads traversing the school boundary. Vehicle access into the school site is available via the staff car park on Smith Street via Gate 2.

2.2.8 Waste Management

The Schools Main Waste is currently collected by a private contractor from the Main Waste Collection Bay via Gate 2, outside of operational school hours when the car park is empty. City of Newcastle recycling bins are currently collected outside the school from National Park Street.

There will be no changes to the waste management operations.

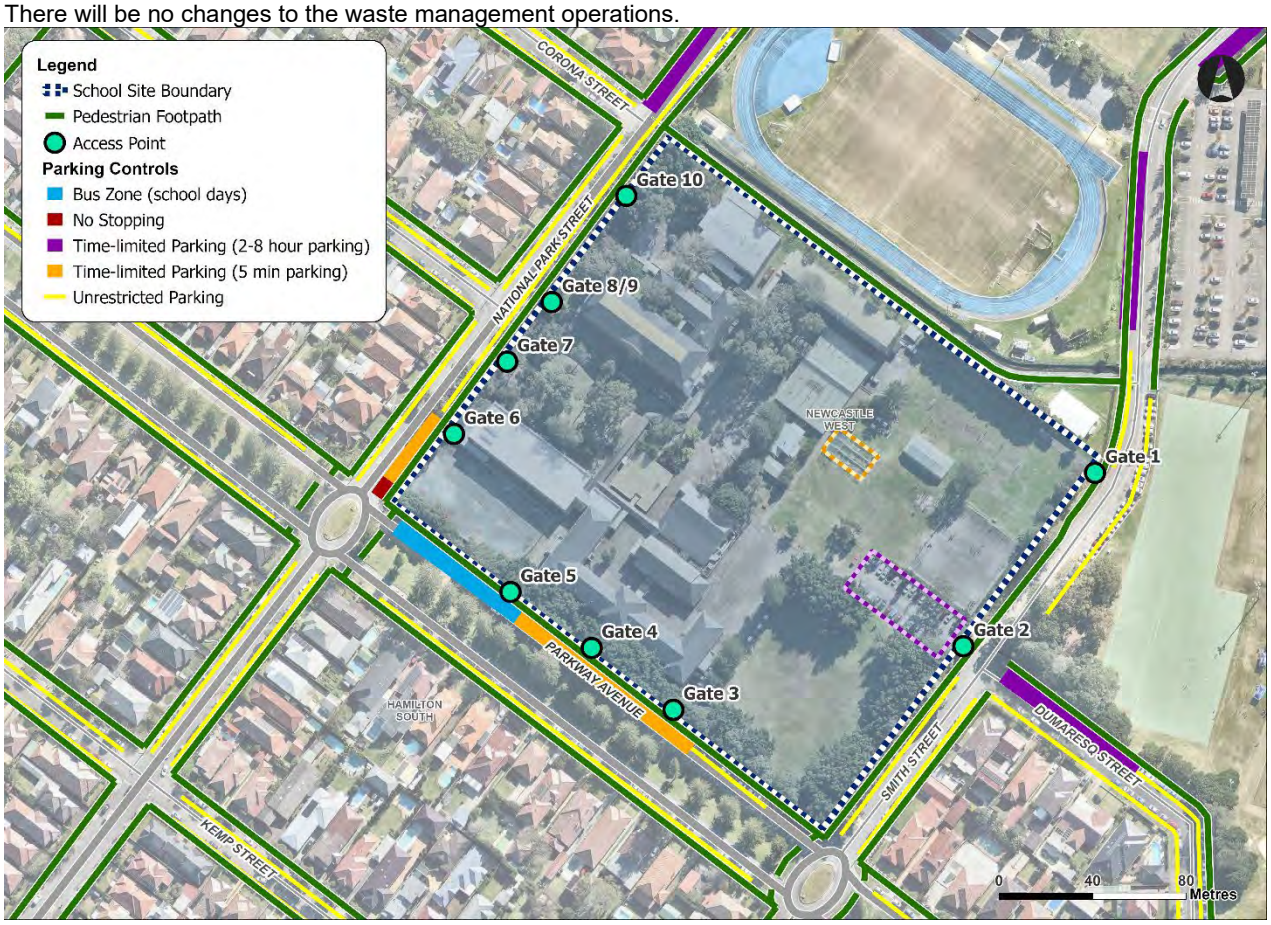


Figure 14: Parking controls around the site

School bus services are exclusively using the bus zone on the northern side of Parkway Avenue. No bus services associated with Newcastle High School are using additional kerb site space for parking.

3 Proposed Development

As detailed in the first chapter, the proposal seeks to upgrade the proposed Newcastle Education Campus to provide improved facilities that support an increase in student population as a result of the changes to the school intake catchment. The proposed works cover the upgrades to the high school and do not cover the inclusion of the primary school which has been highlighted for further growth in the future.

The current proposed changes to the school site include:

- Demolition of eight (8) existing buildings.
- Construction of a new three (3) storey learning hub located on the southwestern corner of the campus, including a new library, canteen, covered outdoor learning area (COLA), support learning unit, general learning spaces, hospitality teaching spaces, and science labs.
- Construction of a new multi-purpose facility located in the north-eastern corner of the campus including a gymnasium, stage, fitness lab, flexible learning spaces, outdoor courts, and end-of-trip (EOT) facilities.
- Internal refurbishment works within the existing administration building on Parkway Ave to form a new student hub
- New student entry from Parkway Ave
- Relocation of Block H approximately 50m South.

The proposed works are shown below in Figure 15.

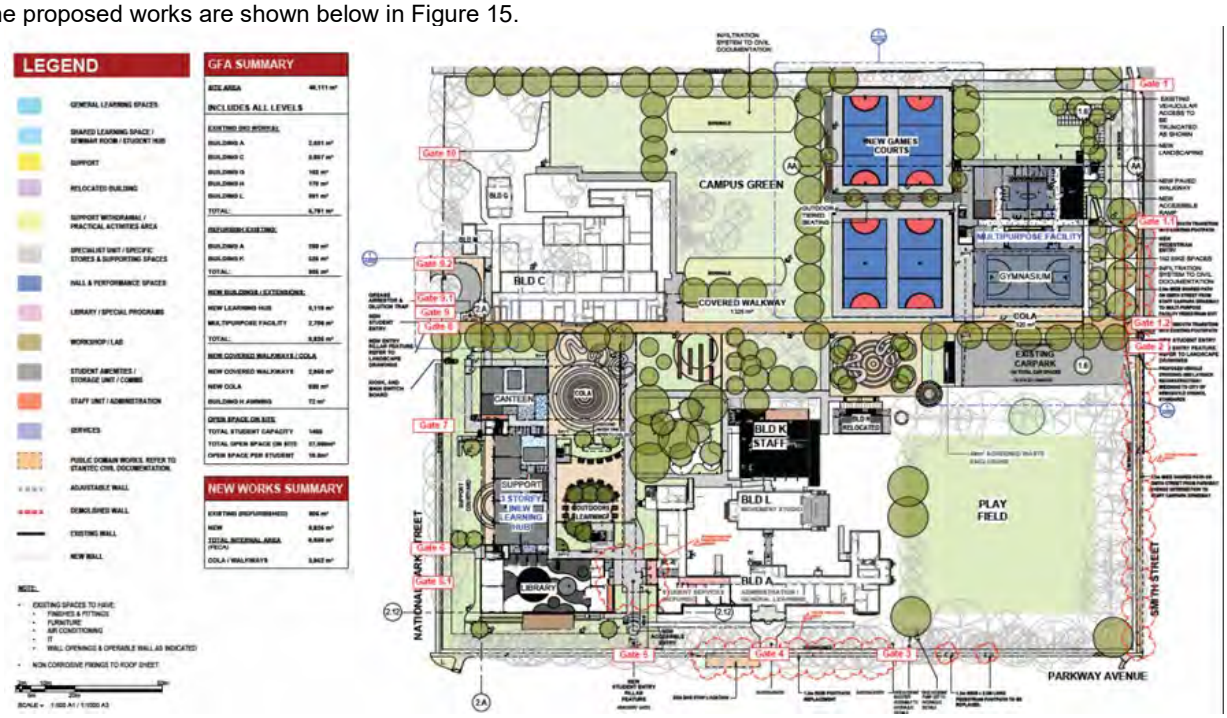


Figure 15: Site Plan – Ground Floor (10/2023)

Source: EJE Architecture – Drawing No. A-0010

The following chapter details changes to the site regarding access, pick up and drop offs and servicing. An operational layout of the future school site has been provided in Appendix A which details future access arrangements.

3.1 Pedestrian Access Arrangements

The proposed site design details that the existing pedestrian gate on Parkway Avenue adjacent to the Bus Zone will be formalised into the new student entrance. A new pedestrian gate is to be provided on Smith Street close to Gate 2. This will connect with the new east-west walkway which runs through the school. All remaining gates and school site entrance operations are expected to remain the same as detailed in section 2.2.

3.2 Vehicle Access Arrangements

Gate 1 will be for emergency vehicles. Gate 2 provides entry to staff parking. Gate 2 provides waste management pick up outside of school operational hours when the car park is empty. Additional vehicle access will be provided along National Park Street with a formalised, off-street Support Unit Drop-off and Pick-up zone for Support Unit students only. The Support Unit Drop-off and Pick-up zone will also operate as servicing and unloading access outside of drop-off and pick-up operational times. A swept path analysis was undertaken for the Support Unit Drop-off and Pick-up zone to ensure that service vehicles are able to manoeuvre the zone effectively. The swept path analysis showed that small rigid vehicles can operate within the Support Unit Drop-off and Pick-up zone. There are expected to be no new height restrictions as a result of the proposed development. Further details on this analysis are discussed in section 6.5.
The full schedule of pedestrian and vehicle access points is detailed below in Table 3-1.

Table 3-1: Schedule of Access Gates

Access Gate No.	Street Location	Existing/ New Uses
Gate 1	Smith Street	Existing gate to remain unmodified. Emergency vehicle access only.
Gate 1.1	Smith Street	New pedestrian entry/exit gate.
Gate 1.2	Smith Street	New pedestrian/cyclist entry/exit gate including entry pillar feature.
Gate 2	Smith Street	Existing vehicular gate to remain unmodified. Staff vehicle access during operational school hours. Private Waste Contractor access to collect waste from the Main Waste Bay outside of operational school hours.
Gate 3	Parkway Avenue	Existing vehicular gate to remain unmodified.
Gate 4	Parkway Avenue	Existing pedestrian entry gate to remain unmodified.
Gate 5	Parkway Avenue	Modified pedestrian entry/exit gate to include entry pillar feature.
Gate 5.1	National Park Street	Existing pedestrian entry/exit gate to remain unmodified.
Gate 6	National Park Street	New pedestrian exit gate.
Gate 7	National Park Street	Existing electrical substation double gate to be removed and public domain made good in accordance with civil plans.
Gate 8/9	National Park Street	Existing double gates to be modified to include entry pillar feature. Gate to be used as pedestrian/cyclist gate post Stage 2 completion. Vehicle crossing and kerb to be demolished and made good in accordance with civil plans.
Gate 9.1	National Park Street	New vehicular Support Drop Off gate.
Gate 9.2	National Park Street	New vehicular Support Drop Off gate.
Gate 10	National Park Street	Existing vehicular/pedestrian gate to remain unmodified.

3.3 Parking Arrangements

On-site vehicle parking arrangements will remain the same as they are currently. The current car park layout will remain the same and will not see any change to the number of available spaces for staff. No on-site parking is to be provided for senior students as part of the proposed development.

Formalised bicycle parking will be provided as part of the sites development. 160 bicycle and micromobility parking spaces are being provided in the north-eastern area of the school boundary. An assessment into the parking

arrangements was discussed and agreed upon with Council as part of the transport working groups for this project. Parking is available for both students and staff, with end-of-trip facilities to be provided for staff only.

3.4 Bus Pick Up and Drop Off

Bus pick up and drop off arrangements will remain the same. All bus boarding and alighting is currently conducted on Parkway Avenue and will remain here to ensure staff presence is consolidated and improve the overall safety of students within this area. As part of this study, an expansion to the bus zone has been proposed to support the expansion of the school and mitigate current operational issues. Students catching school buses on Parkway Avenue will be loaded on one bus at a time. Students that are waiting for their buses will wait inside the school boundary until their bus arrives and will be coordinated by School Staff. This is the current procedure and will continue with the upgrade of the school. Further information on this can be found in section 6.6.

3.5 Kiss-and-Drop

As discussed, a formalised kiss-and-drop facility is to be provided on National Park Street for support students only. Changes to the overall kiss-and-drop operations along National Park Street and Parkway Avenue have been proposed as part of our recommendations for this study. These recommendations have not yet been included in the overall proposed site design. Information on the recommendations provided can be found in section 6.7.

3.6 Servicing and Unloading

Servicing and unloading to occur for small rigid vehicles at the Support Drop-off Pick-up zone off National Park Street. Servicing and unloading to occur outside of the drop-off and pick-up operational times.

This chapter formalises the proposed transport and access changes made as part of the Newcastle Education Campus development. This study provides further recommendations that have been discussed at transport working groups with City of Newcastle Council and Transport for NSW. Recommendations for the school and evidence to support these are provided in section 6.

4 Travel Patterns and Demand

4.1 Existing Mode Share

4.1.1 Student Mode Share

To determine mode share for students at Newcastle High School, a "Show-of-hands" travel mode survey was conducted at Newcastle High School on Tuesday 23rd August 2022. The survey was recorded during the first class of the day. Any absent students were omitted from the results of the survey. Whilst there were absences, the results provide a representation of the general trends throughout the school.

Table 4-1: Existing Newcastle High School Student Mode Share (2022)

Period	Car	Walk	Bus	Train/Tram	Bicycle	Scooter
AM	37.9%	22.6%	27.0%	4.2%	6.7%	1.6%
PM	27.8%	25.3%	34.3%	4.8%	6.3%	1.5%

4.1.2 Revised Student Mode Share

At the request of the NSW Department of Planning and Education a subsequent show-of-hands survey was undertaken on Wednesday 13th September 2023 to determine whether any changes had occurred in travel patterns since the previous survey. The results show that there has been a reduction in the use of private vehicles and an increase in children riding a bicycle or scooter. The results show that these mode shares are trending in support of the mode share targets discussed later in section 5 of this report.

Table 4-2: Existing Newcastle High School Student Mode Share (2023)

Period	Car	Walk	Bus	Train/Tram	Bicycle	Scooter
AM	33.3%	19.8%	25.2%	7.4%	10.1%	4.3%
PM	21.1%	24.2%	33.1%	7.0%	10.3%	4.3%

4.1.3 Staff Mode Share

In addition to the "Show-of-hands" survey that was completed, a more detailed online travel survey was issued to staff, visitors, parents and students. The online survey was distributed using social media and internal communication channels and was open to anybody with a vested interest in the school. A total of 71 staff (permanent, temporary, casual and volunteers) responded to the survey, allowing us to understand how they access the school site. The resulting mode share for staff who responded to the survey is shown in Table 4-3.

Table 4-3: Existing Travel Mode Share for Staff (Permanent, Temporary, Casual and Volunteers)

	Car (Parked Nearby)	Car (Parked On-site)	Walk	Bicycle or Other Rideable	Bus	Train/Tram
Mode Split	53.5%	32.5%	5.6%	1.4%	5.6%	1.4%
Cumulative	Car – 86.0%		Active Transport - 7.0%		Public Transport – 7.0%	

4.2 Transport Catchment Analysis

4.2.1 Student Catchment Summary

Table 4-4 provides a summary of the student catchments, for which the catchment bands shown are discussed further throughout this chapter.

Table 4-4: Student Proximity to the School Site

Catchment Analysis	Notional (as crow flies)	Actual (on path)
1-400m (5-min walk)	39 (3.2%)	32 (2.6%)
1-800m (10-min walk)	131 (10.8%)	100 (8.3%)
1-1,201m (15-min walk)	275 (22.8%)	206 (17.1%)
1-1,600m crow flies / 2,300m on path	409 (33.9%)	540 (44.7%)
1-2,000m crow flies / 2,900m on path (excl from SSTS)	564 (46.7%)	641 (53.1%)
Within 400m of public transport stop / station / wharf that brings them closer to school	874 (72.4%)	-
Within 800m of public transport stop / station / wharf that brings them closer to school	989 (81.9%)	-
No. of students outside SSTS zone, with no PT access	172 (14.2%)	-

4.2.1.1 Walking Catchments Coverage

An analysis of de-personalised data provided by the Department of Education in August 2022 for student enrolments at Newcastle High School based on walkable catchments from the school is provided in Table 4-5.

Table 4-5: Number of Students Living in the Newcastle High School Walking Catchment Areas

On-path Distance				Notional (Crow Flies) Distance			
Catchment	Students	Percentage	Cumulative Percentage	Catchment	Students	Percentage	Cumulative Percentage
0-400m	32	2.6%	-	0-400m	39	3.2%	-
401-800m	68	5.6%	8.3%	401-800m	92	7.6%	10.8%
801-1,200m	106	8.8%	17.1%	801-1,200m	144	11.9%	22.8%
1,201-1,600m	112	9.3%	26.3%	1,201-1,600m	134	11.1%	33.9%
1,600m-2,900m	323	26.7%	53.1%	1,600m-2,000m	155	12.8%	46.7%
>2,900m	567	46.9%	100%	>2,000m	644	53.3%	100%
Total	1,208	-	-	**Total**	1,208	-	-

The walking catchment distribution for Newcastle High School as discussed is shown below in Figure 16.

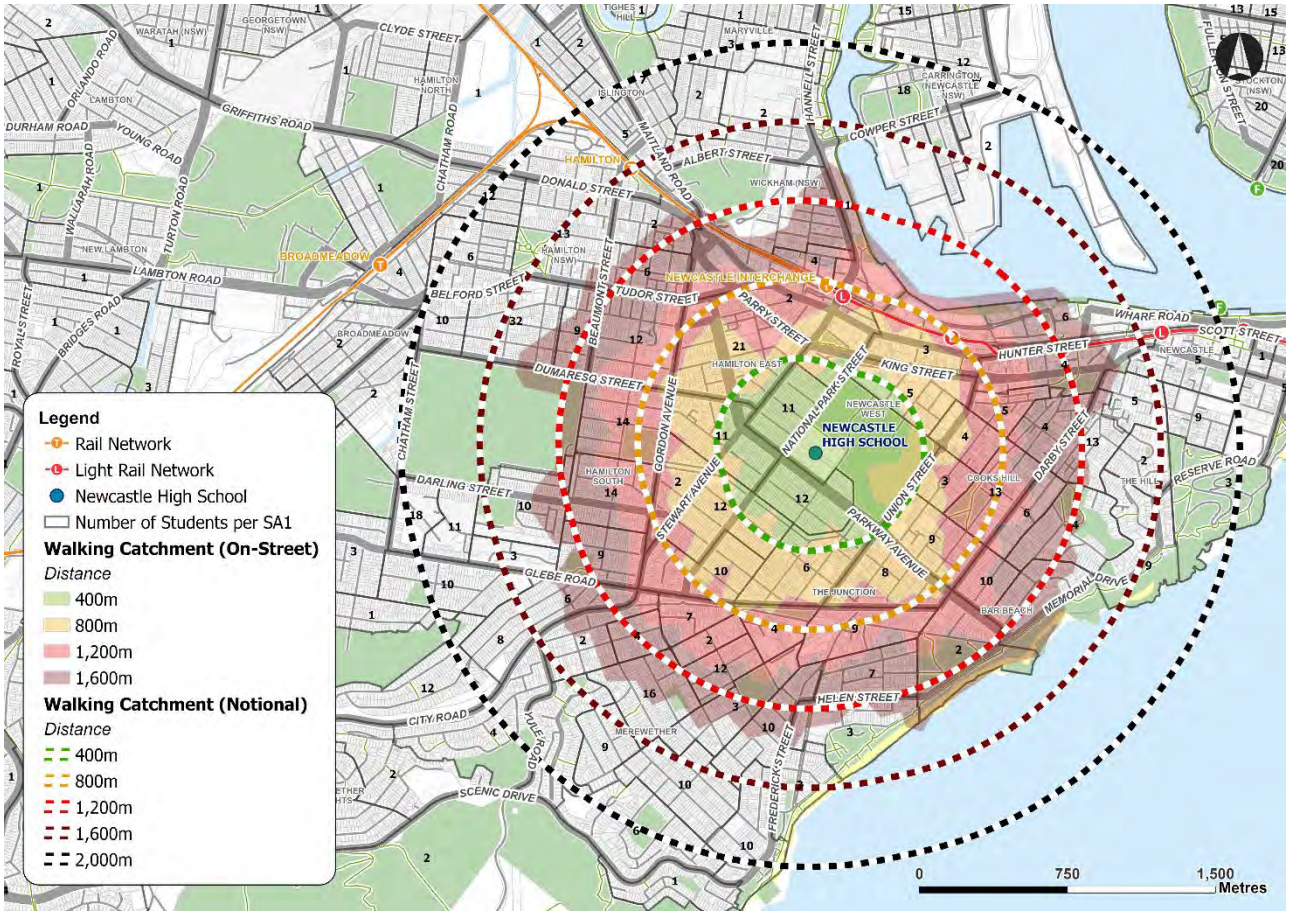


Figure 16: Newcastle High School Walking Catchment

4.2.1.2 Cycling Catchments Coverage

Analysis of de-personalised data provided by the Department of Education in August 2022 for student enrolments at Newcastle High School based on cyclable catchments from the school is provided in Table 4-6. The upper limit for cycling distance is considered to be around 3,600 metres. The analysis shows that just under 60 and 70 per cent of students live within this catchment respectively for notional and on-path catchments.

Table 4-6: Number of Students Living in the Newcastle High School Cycling Catchment

Catchment	On-path Distance			Notional (Crow Flies) Distance		
	Students	Percentage	Cumulative Percentage	Students	Percentage	Cumulative Percentage
1-1,200m	206	17.1%	-	275	22.8%	-
1,201-2,400m	347	28.7%	45.8%	373	30.9%	53.6%
2,401-3,600m	164	13.6%	59.4%	192	15.9%	69.5%
3,601m+	491	40.6%	100%	368	30.5%	100%
Total	1,208	-	-	1,208	-	-

The 1,200/ 2,400m /3,600m notional cycling catchments and 1,200/ 2,400m/ 3,600m on-path cycling catchments, along with student residence locations, are shown in Figure 17.

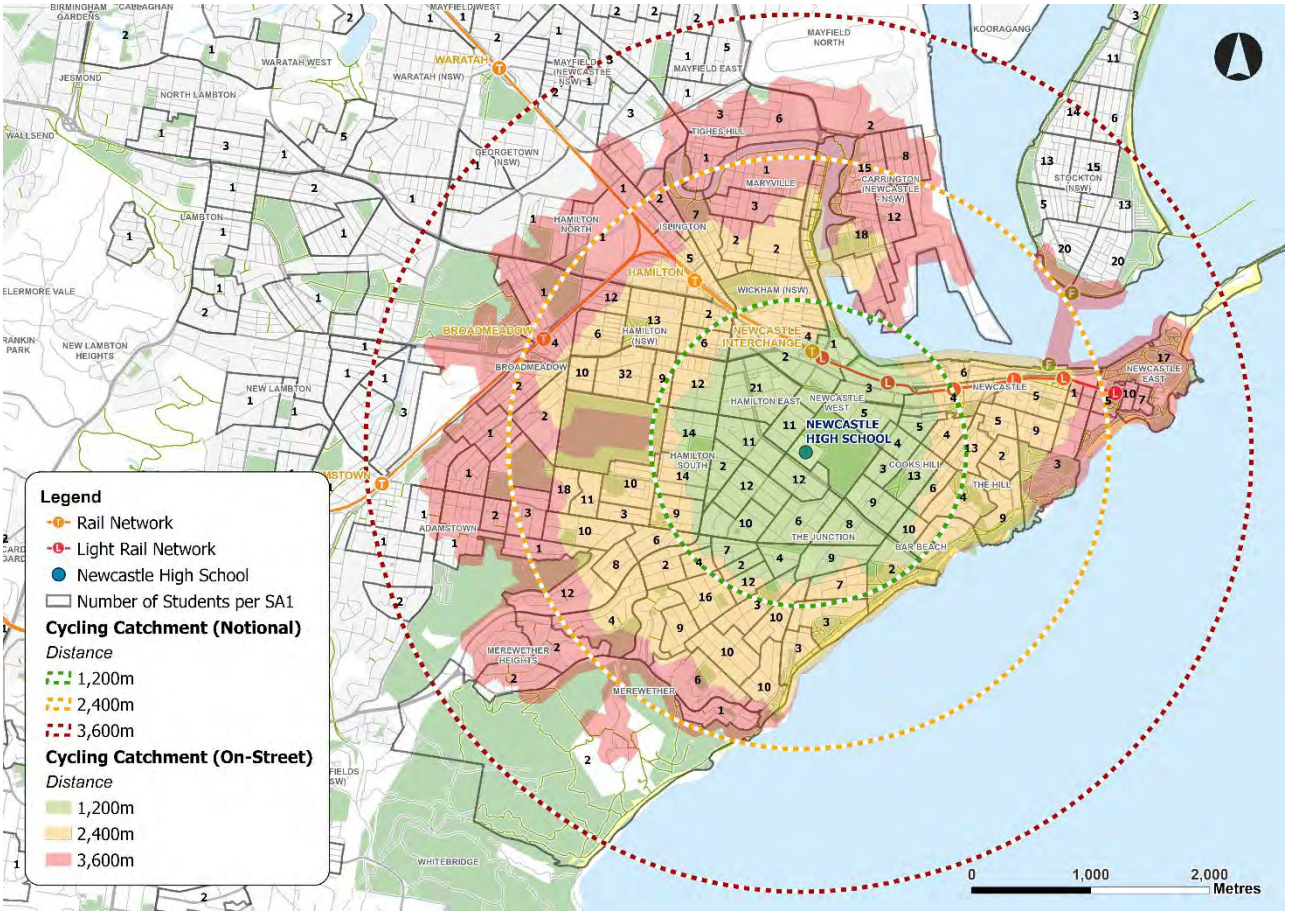


Figure 17: Newcastle High School Cycling Catchment

4.2.1.3 Bus Networks Coverage

Analysis of de-personalised data provided by the Department of Education in August 2022 for student enrolments at Newcastle High School based on proximity to bus stops utilised by bus routes that service the site is provided in Table 8. The catchment analysis was determined by selecting all bus routes that are accessible within a 400-metre walking distance of the school site entrance. A 400 and 800-metre buffer was then applied to each bus stop servicing these routes to determine the proportion of students with access to public transport.

The summary of the catchment analysis is shown below in Table 4-7. It shows that in the AM and PM peaks, 48 per cent of students live within 800 metres of a bus stop and are eligible for the School Student Transport Scheme (SSTS). Those eligible for SSTS are provided with free public transport travel on all modes between home and school. For those situated within the SSTS, subsidised PT Opal Cards can be applied for.

Table 4-7: Number of Students Living in the Walking Catchment Areas to Bus Stops

Bus Stop Proximity	AM Period		PM Period	
	Number	Percentage of Total Students	Number	Percentage of Total Students
Within 400 Metre Walk				
Within 400m on-path walk to a bus stop	874	72.4%	947	78.4%
Within 400m on-path walk to a bus stop and within 2,900m on-path catchment from school (exclude from SSTS zone)	303	25.1%	376	31.1%

Bus Stop Proximity	AM Period		PM Period	
	Number	Percentage of Total Students	Number	Percentage of Total Students
Within 400m on-path walk to a bus stop and beyond 2,900m on-path catchment from school (SSTS zone)	571	47.3%	571	47.3%
Within 800 Metre Walk				
Within 800m on-path walk to a bus stop	989	81.9%	1,036	85.8%
Within 800m on-path walk to a bus stop and within 2,900m on-path catchment from school (exclude from SSTS zone)	410	33.9%	457	37.8%
Within 800m on-path walk to a bus stop and beyond 2,900m on-path catchment from school (SSTS zone)	579	47.9%	579	47.9%

The 400 and 800-metre on-path walking catchments to bus stops, serviced by routes boarding and alighting at the school, during AM and PM periods are shown in Figure 18 and Figure 19 respectively.

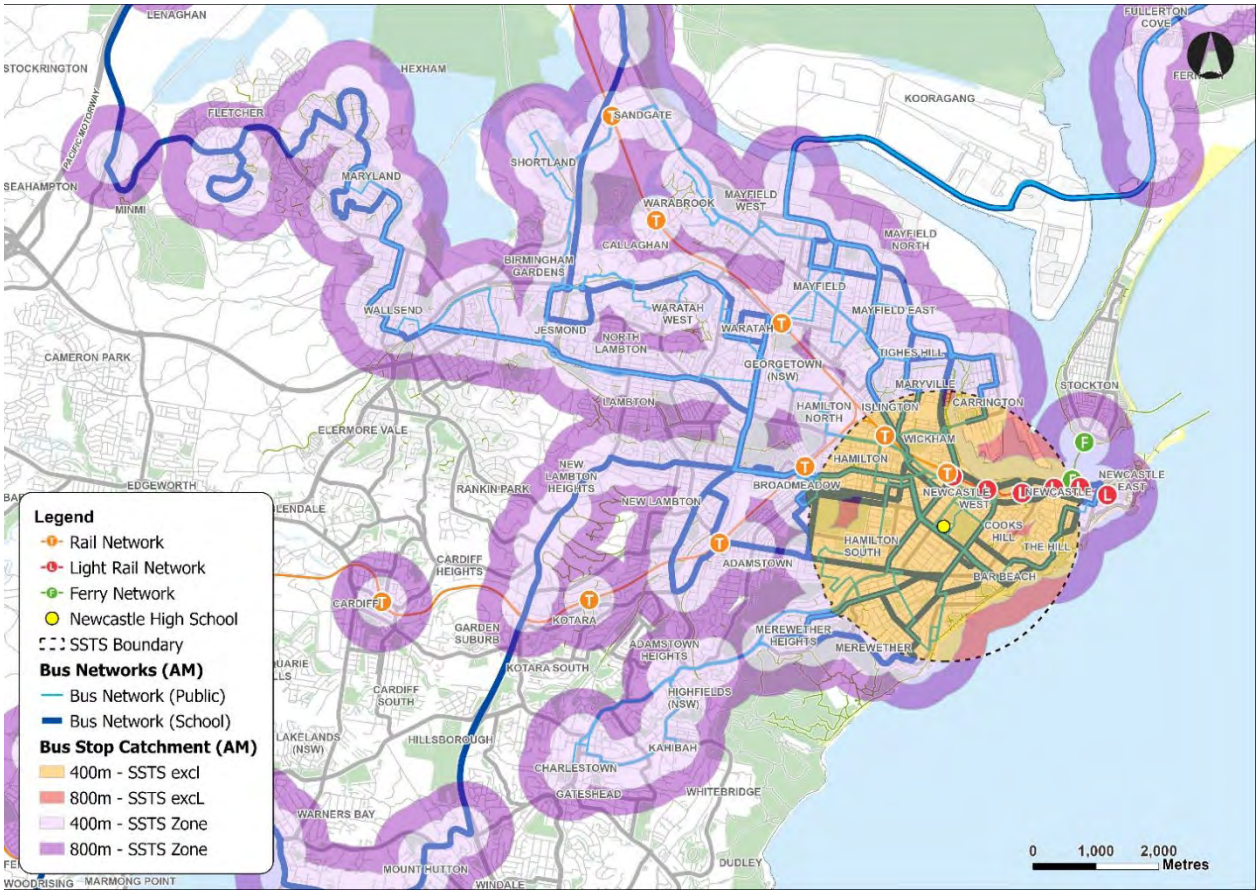


Figure 18: Bus Stop Walking Catchments – AM Services

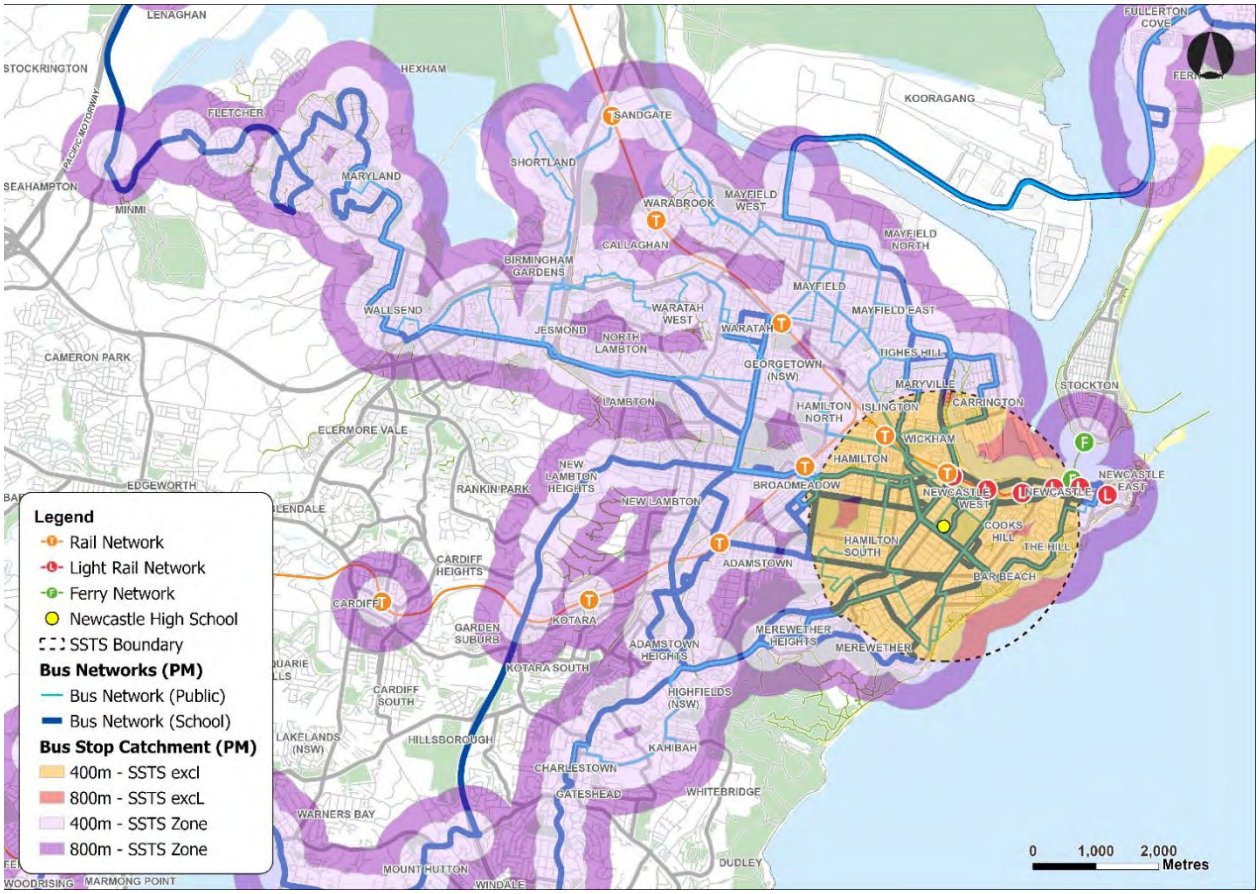


Figure 19: Bus Stop Walking Catchments – PM Services

5 Objectives and mode share targets

5.1 Students

Mode share targets define the desired method of access to the school site given a number of transport infrastructure and service recommendations whilst considering the physical constraints that place limitations on capacity. Transport related recommendations that are required to achieve the target mode shares are provided in Section 0. For reference, the existing mode share for Newcastle High School captured during the hands-up survey (described in Section 4.1.1) is provided in Table 5-1.

Table 5-1: Existing mode share

Mode	AM period (#)	AM period (%)	PM period (#)	PM period (%)
Walking	114	22.6%	132	25.3%
Bicycle and other micromobility	42	8.3%	41	7.9%
Public transport	157	31.2%	204	39.1%
Private vehicle	191	37.9%	145	27.8%
TOTAL	**504**	**100%**	**522**	**100%**

A critical first step in developing mode share targets is addressing the discrepancy between the existing AM and PM mode share figures. This discrepancy exists because parents/ guardians may choose to drop students off at school in the morning because this aligns with an existing private vehicle trip that is made i.e. going to work, running errands etc. Travelling to school in the morning using the same mode as in the afternoon can be made more attractive by providing safe, efficient and reliable travel options. It is most desirable that students are able to use one mode in both periods and ultimately reduce reliance on private vehicles. Therefore, mode share targets are not differentiated by time of day.

Mode share targets are provided for Newcastle High School under the following scenarios:

- Moderate mode share target – transport recommendations enable a shift towards walking, cycling and catching a bus. This represents an achievable outcome.
- Reach mode share target – Sustainable mode share is maximised and students are further shifted from private vehicles to buses. This represents the maximum achievable outcome.

Mode share targets are provided in Table 5-3 and Table 5-4. The assumptions and considerations adopted to develop these mode share targets are outlined in Table 5-2.

Table 5-2: Mode share targets assumptions

Mode Share Scenario	Assumptions/ considerations
Current situation	• Walking mode share is currently high, at 25%. This means that people living outside of the 1,200m catchment are already walking to school. • Driving mode share is higher in the morning because parents/ guardians tend to drop off their children on the way to work or for other trip purposes. • Assisted school transport is required for some students. Therefore, active transport mode share is unlikely to include all of those within the walking catchments. • Students who do not have access to the SSTS are less likely to use the bus.
Moderate target	• The expansion of the school intake area to the southwest of the school (Merewether Heights Primary School). • New students reside in bands further away from the school, with the majority of new students living more than 2,900m away. This reduces the potential to increase active transport mode shares, particularly walking. • The total number of students using walking or cycling will increase but mode share for walking remains at 25% • The number of students using public transport will increase as bus services are already available for students in the intake growth area • Overall, the use of private vehicles will drop due to students shifting to cycling (mainly residing within 1,200 to 1,600m distance from school) and bus (mainly residing >2,900m distance from school).
Reach target	• Higher proportions of students choosing to use sustainable modes to access school (within physical capacity and constraints of network).

Table 5-3: Moderate mode share targets

		0 to 400m	400 to 800m	800 to 1,200m	1,200 to 2,300m	2,300m to 2,900m	Over 2,900m	Total	Mode Share
Walking	%	98%	95%	90%	35%	0%	0%		24.9%
	no. of students	30	66	95	120	0	0	311	
Bicycle and other micromobility	%	1%	3%	6%	20%	20%	5%		10.2%
	no. of students	1	2	6	68	21	30	128	
Public transport	%	0%	0%	2%	5%	25%	75%		39.4%
	no. of students	0	0	2	17	26	447	492	

Private vehicle	%	1%	2%	2%	40%	55%	20%		25.5%
	no. of students	1	2	2	136	58	119	318	

Table 5-4: Reach mode share targets

		0 to 400m	400 to 800m	800 to 1,200m	1,200 to 2,300m	2,300m to 2,900m	Over 2,900m	Total	Mode Share
Walking	%	99%	97%	92%	40%	0%	0%		26.6%
	no. of students	32	66	98	137	0	0	332	
Bicycle and other micromobility	%	0%	2%	6%	25%	15%	5%		11.1%
	no. of students	0	1	6	86	16	30	139	
Public transport	%	0%	0%	1%	5%	30%	73%		38.8%
	no. of students	0	0	1	17	32	435	485	
Private vehicle	%	1%	1%	1%	30%	55%	22%		23.5%
	no. of students	1	1	1	103	58	130	294	

5.2 Staff

The community survey conducted for Newcastle High School revealed that currently, around 85% of staff members drive to and from the site. This is likely due to the items that they must carry with them and for efficiency and safety reasons. However, the proximity of the school to public transport services and high-quality active transport infrastructure make the use of sustainable transport modes easier and more achievable.

At this stage, mode share targets for staff are not set. Depersonalised data for FTE staff was not provided for this assessment, which makes it difficult to determine potential travel options to produce mode share recommendations. This document intends to provide recommendations that ensures students have the greatest opportunity to travel via sustainable means. Following this School Transport Plan, a designated School Travel Coordinator can provide support to encourage teachers to switch to modes of transport other than private vehicles.

When considering their mode choice to get to and from school, staff should consider and be encouraged to use sustainable transport modes. No additional car parking will be provided as part of the proposed design. Instead, a large number of high-quality and safe bicycle parking spaces will be provided close to the Smith Street entrance. These will be equally available for students and staff. Staff should be made aware of all transport options and additional information about how to reach the school by active and public transport be provided.

6 Issues, Opportunities and Recommendations

As a result of the transport assessment undertaken for this study and the rapid transport assessment completed in 2021, a number of issues have been highlighted. This chapter determines the extent of these issues and provides recommendations to mitigate them through measures that promote sustainable transport growth and provide safe access to the school for students, staff and visitors.

6.1 Parkway Avenue Crossing

It was noted during the site visit and previous RTA study that students wishing to navigate the roads bounding the school have issues with crossing safely. Whilst there have been no recorded accidents involving school children, there is an apparent safety risk. Students were observed hesitating at points along Parkway Avenue whilst waiting for traffic and sprinting across the road to cross safely when the opportunity presented itself. To mitigate this issue, it is recommended that safe crossing opportunities are to be provided along Parkway Avenue.

As part of our analysis, different crossing scenarios were assessed. The purpose of the assessment was to identify which scenario benefitted the greatest number of students and also provided the greatest improvement to well-being and safety for both students and the general public. The recommended option from this analysis was to provide pedestrian crossings on Parkway Avenue at the approaches to roundabouts intersecting with Smith Street and National Park Street. The proposed crossings would provide the following advantages:

- None of the proposed crossings interfere with the designated bus bay and kiss-and-drop zone.
- The crossing points serve as a speed control along Parkway Avenue.
- The increased number of crossing points benefits a higher number of students, improving overall safety.
- Provides a higher benefit to the local community.
- Can be built on public land and does not require private land acquisition.

The recommended option has been discussed as part of the Transport Working Group (TWG) and is supported by the City of Newcastle Council. The City of Newcastle has sent a letter indicating the proposed pedestrian crossing upgrades have approved funding in their 2023/24 and 2024/25 financial year capital works program. This is to allow for the City of Newcastle to carry out planning, approvals, design and construction. To comply with the schedule of works, all transport-related improvements are to be installed by the completion of Stage 2.

6.2 Traffic Speeds

As discussed previously, count data and average speeds were collected as part of this study to understand the level of demand on the local network and whether there are any safety implications resulting from this. The data collected found that for northbound traffic on Smith Street, the average speed did not fall below 40 km/h for average weekday traffic as shown in Figure 20. The data for Smith Street was collected outside of the scout hut located to the northeast of the school site, which is also the location for one of the busier school entry/exit points.

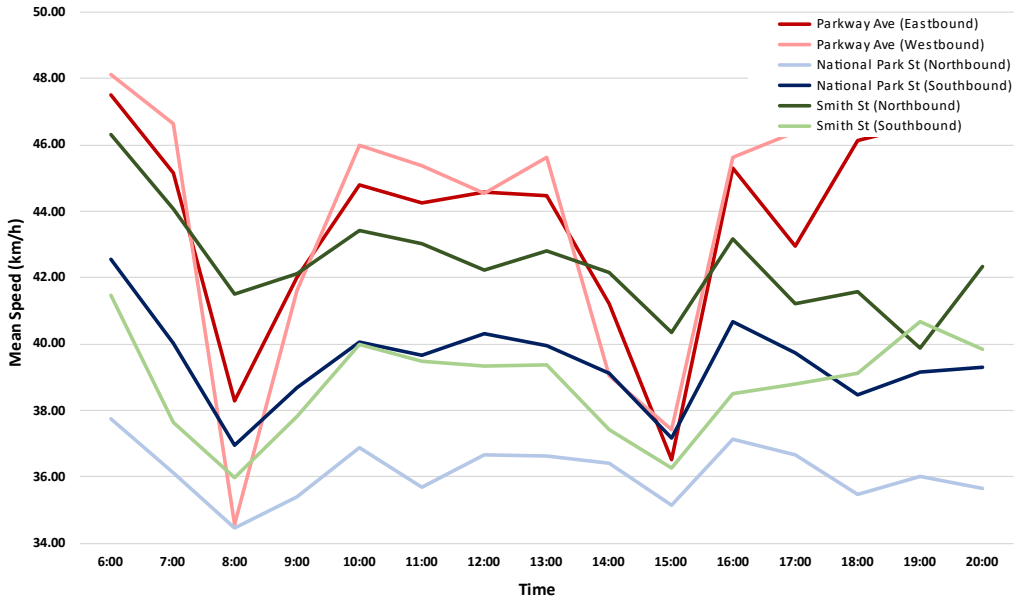


Figure 20: Average vehicle speeds

Whilst there are several traffic calming measures in place along Smith Street, it is recommended that additional measures be introduced where there are gaps to discourage vehicle speeds in this location.

During discussions at the Transport Working Groups, it was agreed that Council will take ownership in implementing further traffic calming measures. Additionally, it was stated that a speed reduction trial could be implemented in the future in partnership with Transport for NSW should some amendments to policy be made.

6.3 Intersection Analysis

6.3.1 Data Collection

15-minute classified intersection turning movement surveys and a queue length survey were carried out on Tuesday, 19th June 2023, for the following intersections:

- National Park Street / Parkway Avenue
- Smith Street / Parkway Avenue

The counts included cars, heavy vehicles and pedestrians and covered the typical morning peak (8:30 am to 9:30 am) and afternoon peak (2:30 pm to 3:30 pm) of the school pick-up and drop-off periods. The full survey results are provided in Appendix F.

6.3.2 Existing operations

Intersection analysis was undertaken using SIDRA 9.0 which modelled the weekday peaks (AM and PM) for the surveyed intersections. presents a summary of the existing operation of the intersections, with full results presented in Appendix F of this report.

Table 6-1: SIDRA queue length survey analysis

Intersections		Level of Service	Average Delay (sec)	95% Queue (Worst approach)
National Park St / Parkway Ave	AM	A	9.3	31.1m (North-west: Parkway Ave)
	PM	A	8.7	21.3m (North-west: Parkway Ave)
Smith St / Parkway Ave	AM	A	8.7	24.0m (North-west: Parkway Ave)
	PM	A	8.5	18.0m (North-west: Parkway Ave)

Based on the SIDRA results, the intersection operates at an excellent Level of Service A, with minimum queues and delays at each intersection as shown in Table 6-1.

Based on the queue length surveys undertaken, there are short periods (no more than four minutes over the surveyed periods) where the queue lengths along both the Parkway Avenue approaches are significantly longer than average. Overall, the 95% queue length generated from the SIDRA model is generally similar to the average queue length from the surveyed results.

6.4 Stockton Students

There are currently 121 students who reside in the suburb of Stockton, for which the only accessible form of transport to school is via the ferry departing from Stockton Wharf. There are several issues associated with Newcastle High School students residing in Stockton, they are:

- There are limited bus services on the Stockton peninsula that integrate with the ferry wharf.
- The 136 bus service, which provides access around the peninsula has been described as being infrequent and unreliable during the school travel surveys.
- Bus service operators are currently experiencing staff shortages which result in the delay or cancellation of services without notice.
- For students returning home, the 719 bus provides a direct service from Newcastle High School to Queens Wharf. Two buses depart the High School at 15:06 and 15:08 which reduces the capacity of the bus zone fronting the school.
- The 15:08 bus does not depart the school at a time that integrates with ferry's departing Queens Wharf. This causes students to rush to catch the 15:06 which causes safety issues.
- There is limited bicycle parking available at Stockton Wharf.

Figure 21 shows the distribution of students and the extent of walking and cycling catchments departing from Stockton Wharf.

Figure 21: Stockton Peninsula

It is recommended that the following actions be considered to improve issues relating to the Stockton Peninsula:

- Improve the number of bicycle parking spaces at the ferry wharf;
- Liaise with the bus services operator to determine how bus reliability can be improved;
- Review the bus service timetable for the 719 services departing the school to improve transport integration and alleviate pressure on the school bus zone.

It was agreed at the Transport Working Group that Transport for NSW is to hold discussions with the travel operator Keolis Downer to determine how routes on the peninsula are being serviced.

6.5 Kiss-and-Drop Zones

As discussed in section 2.2.4 there is an over-dependence on the kiss-and-drop zone on Parkway Avenue. This causes further issues, such as vehicles blocking back into the dedicated bus zone, which has an additional knock-on effect on road traffic. An assessment of the provision of the current kiss-and-drop zone was undertaken to determine the suitability of current infrastructure. When assessing the kiss-and-drop zone the following assumptions were made:

- School capacity (total number of students)
- Existing baseline car mode share
- Dwell time per car (two minutes on average)
- Pick up/ drop off operational time (assumed to be around 30 mins)
- Existing number of spaces (number of vehicles)
- Existing pick up/ drop off capacity (number of vehicles)
- Assumption for the number of children per vehicle (average 1.5, based on the observations made during the RTA and site visits)

The outputs from the resulting analysis are provided below in Table 6-2.

Table 6-2: Kiss-and-drop off analysis

Description	Option 1 Current (Baseline)	Option 2 Future (Moderate)	Option 3 Future (Reach)
School capacity (Total Students)	1,208	1,249	1,249
Existing baseline car mode share (%)	28.1%	25.4%	23.5%
Baseline car mode share applied to student capacity	339	317	294
Dwell time per pick-up/drop-off car (mins)	2	2	2
Pick-up/drop-off period length of time (mins)	30	30	30
30-minute capacity per pick-up/drop-off car space (vehicles)	15	15	15
Existing number of pick-up/drop-off spaces (vehicles)	21	21	21
Existing pick-up/drop-off capacity (vehicles)	315	315	315
Assumption of children per vehicle	1.5	1.5	1.5
Pick-up/drop-off spaces required for baseline car mode share (spaces)	226	211	196
Promote a further reduction in spaces through carpooling			
Assumption of children per vehicle	1.6	1.7	1.8
Pick-up/ drop-off spaces required for baseline car mode share (spaces)	212	187	163
Reduction in pick-up/ drop-off spaces required	14	25	33

The analysis found that the current provision of kiss-and-drop zone is adequate for supporting the number of students however, due to the over dependence of Parkway Avenue with vehicles blocking back into the dedicated bus zone, PUDO operations are having an additional knock-on effect on road traffic. To mitigate this issue, it is recommended that the kiss-and-drop zone on Parkway Avenue is extended towards the intersection of Parkway Avenue and Smith Street, with changes made to current parking restrictions to accommodate this. In addition, a further kiss-and-drop zone is to be provided along Smith Street to help alleviate pressure on Parkway Avenue. In turn, this will help distribute students more efficiently around the school site, reducing the potential congregation of students in one area which will improve the overall safety of the area.

The additional kiss-and-drop areas will have no impact on the road capacity as it utilises the kerbside lane that is currently a dedicated parking zone. It is not expected that the additional kiss-and-drop zone in Smith Street will result in queueing into the roundabout Smith Street/ Parkview Avenue as it is located around 40m upstream of the roundabout. It is anticipated that up to 20 parking spaces will be changed from unlimited parking to 5P time-restricted parking as a result of these recommendations.

As part of the proposed upgrades to the school, a formalised kiss-and-drop unit has been proposed, which will be accessed via National Park Street. Swept path analysis was undertaken to determine whether the access point is fit for purpose. The swept path analysis showed that there is adequate space for Small Rigid Vehicles (6.4m in length) to utilise this facility for servicing and loading as shown below in Figure 22. It is intended that these vehicle types will operate outside of school pick-up and drop-off times, allowing them to use the entire facility to manoeuvre.

Figure 22: Accessibility of new Kiss-and-Drop area for Small Rigid Vehicles

Council have confirmed they will review the parking restrictions bounding the school site boundary to support the recommendations provided.

6.6 Bus Zone outside NEC

As detailed in sections 2.1.6 and 2.1.7, there are several issues related to the operation of buses boarding and alighting around the school site. This includes:

- The number of buses boarding in the afternoon peak close to bell time outweighs the provision of available bus zone.
- Vehicles utilising the kiss-and-drop zone on Parkway Avenue are backing up into the bus zone, further reducing the capacity of the zone.

To help mitigate these issues, it is recommended that the following measures are introduced:

- Extension of the bus zone to include space that accommodates one additional bus
- Installation of no-stopping signage between the bus zone and kiss-and-drop to discourage illegal stopping.

The extension of the bus zone will have no impact on the road capacity as it utilises the kerbside lane which is currently a dedicated parking zone. It is not expected that the extension of the bus zone will result in queueing into the roundabout National Park Street/ Parkview Avenue as it is extending away from the roundabout. As the bus zone is

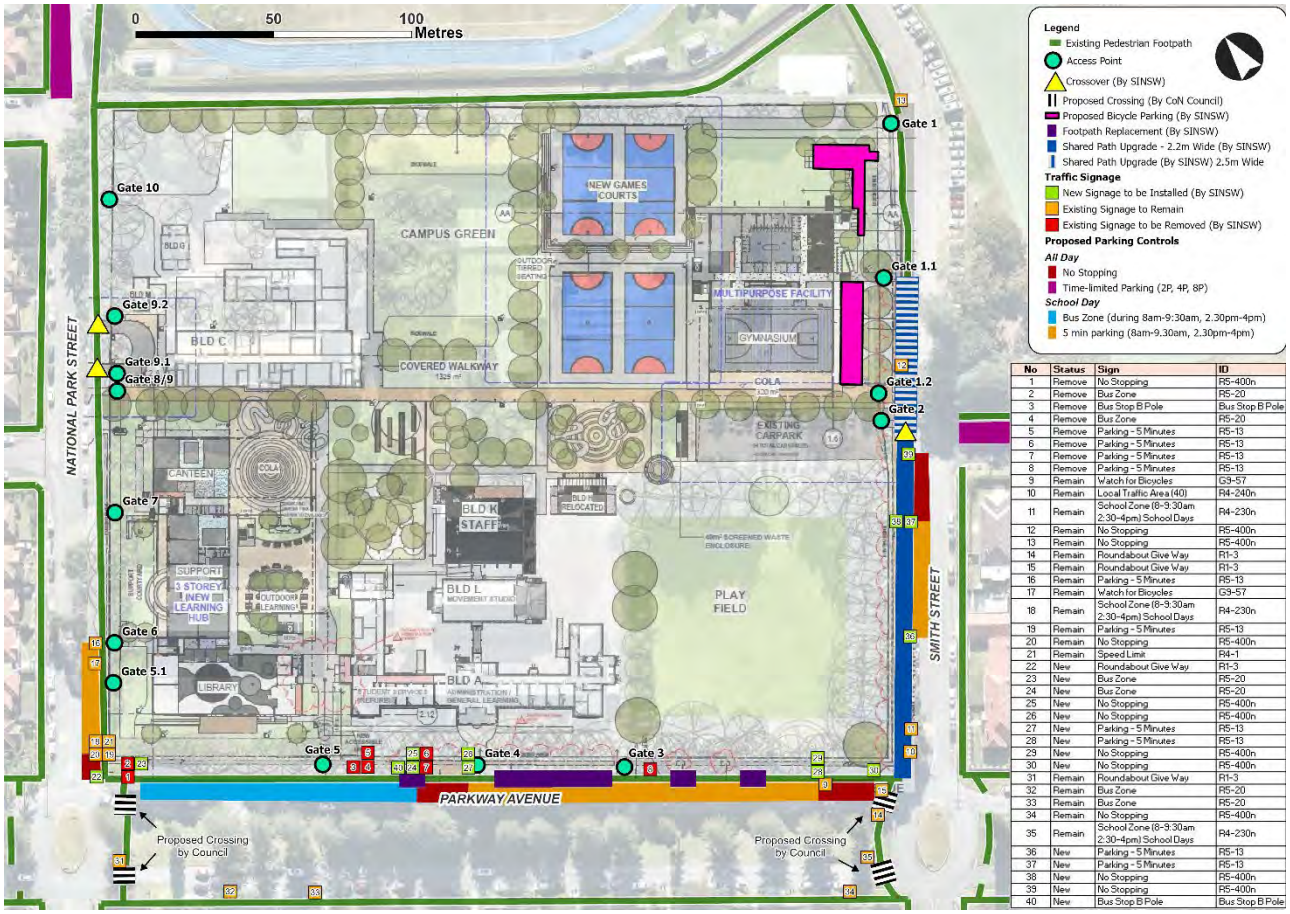
currently only operational during school pick-up and drop-off (8:00 – 9:30 am and 2:30 – 4:00 pm school days only), the extension of the bus zone will not result in the loss of any on-street parking outside of school pick-up and drop-off periods.

Council have confirmed they will review the bus zone restrictions bounding the school site boundary to support the recommendations provided.

6.7 Transport Recommendations Public Domain Plan

Figure 23 details Stantec's transport recommendations discussed, and other future transport-related proposals. The transport-related items proposed as part of the site design and TIA recommendations include:

- Extension of the bus zone by 18 metres to accommodate additional capacity for one extra bus;
- Extension of the kiss-and-drop zone along Parkway Avenue;
- New kiss-and-drop zone in Smith Street;
- New site entrances into the school;
- Sections of footpath replacements on Parkway Avenue;
- Upgrade footpath to shared path on Smith Street from Parkway Avenue to MPF entrance;
- Crossover installation at existing Smith St Staff Carpark; and,
- Secure on-site bicycle and micromobility parking.



No	Status	Sign	ID
1	Remove	No Stopping	R5-400n
2	Remove	Bus Zone	R5-20
3	Remove	Bus Stop B Pole	Bus Stop B Pole
4	Remove	Bus Zone	R5-20
5	Remove	Parking - 5 Minutes	R5-13
6	Remove	Parking - 5 Minutes	R5-13
7	Remove	Parking - 5 Minutes	R5-13
8	Remove	Parking - 5 Minutes	R5-13
9	Remain	Watch for Bicycles	G9-57
10	Remain	Local Traffic Area (40)	R4-240n
11	Remain	School Zone (8-9.30am 2.30-4pm) School Days	R4-230n
12	Remain	No Stopping	R5-400n
13	Remain	No Stopping	R5-400n
14	Remain	Roundabout Give Way	R1-3
15	Remain	Roundabout Give Way	R1-3
16	Remain	Parking - 5 Minutes	R5-13
17	Remain	Watch for Bicycles	G9-57
18	Remain	School Zone (8-9.30am 2.30-4pm) School Days	R4-230n
19	Remain	Parking - 5 Minutes	R5-13
20	Remain	No Stopping	R5-400n
21	Remain	Speed Limit	R4-1
22	New	Roundabout Give Way	R1-3
23	New	Bus Zone	R5-20
24	New	Bus Zone	R5-20
25	New	No Stopping	R5-400n
26	New	No Stopping	R5-400n
27	New	Parking - 5 Minutes	R5-13
28	New	Parking - 5 Minutes	R5-13
29	New	No Stopping	R5-400n
30	New	No Stopping	R5-400n
31	Remain	Roundabout Give Way	R1-3
32	Remain	Bus Zone	R5-20
33	Remain	Bus Zone	R5-20
34	Remain	No Stopping	R5-400n
35	Remain	School Zone (8-9.30am 2.30-4pm) School Days	R4-230n
36	New	Parking - 5 Minutes	R5-13
37	New	Parking - 5 Minutes	R5-13
38	New	No Stopping	R5-400n
39	New	No Stopping	R5-400n
40	New	Bus Stop B Pole	Bus Stop B Pole

Figure 23: Transport Recommendations Public Domain Plan

6.7.1 Parkview Avenue Pedestrian Crossing – Temporary Mitigation Measure

City of Newcastle Council will hold ownership for providing the proposed pedestrian crossing upgrades. City of Newcastle has sent a letter indicating the proposed pedestrian crossing upgrades have approved funding in their 2023/24 and 2024/25 financial year capital works program. This is to allow for City of Newcastle to carry out planning, approvals, design and construction. To comply with the schedule of works, all transport related improvements are to be installed by the completion of Stage 2. Should City of Newcastle not carry out the works in time for the occupation of the new buildings, concept design drawings of the line marking required to install temporary crossings are shown in Appendix E as a mitigation measure.

7 Consultation

7.1 Transport Working Group (TWG)

The purpose of forming a Transport Working Group (TWG) is to create a forum for key stakeholders to discuss the impacts of a new school or school upgrade on the existing transport network. The TWG provides an opportunity for stakeholders to collaboratively review transport impacts, develop and discuss mode share targets, future upgrades and initiatives to minimise and mitigate the impacts and agree on a way forward for the school design.

The TWG for the Newcastle Education Campus included representatives from:

- City of Newcastle Council
- Transport for NSW
- Department of Education/ Schools Infrastructure

Two online meetings were held on 15 and 29 November 2022. Key topics discussed during the TWG meetings and the agreed outcomes are shown in Table 7-1. The minutes of the meetings are attached as Appendix A.

A key aspect of the TWG was to discuss matters concerning student safety for pedestrian/ cycling movements made around the school. Key issues that were highlighted included, a lack of suitable crossing opportunities, vehicles speeding above the reduced speed limit during school zone operations as well as any potential conflicts between road vehicles and vulnerable persons. The extent to which these points were discussed and captured and detailed in Table 7-1 below.

Table 7-1: Key Discussions TWG

Discussion	Outcome
• Are the proposed mode share targets realistic and can they be achieved?	• TfNSW/ City of Newcastle agree the reach mode share is a realistic target • SINSW confirmed that the targets look achievable, and the school location has a lot of potential to further improve the active transport numbers. • TfNSW shared contacts to discuss the opportunity to encourage active transport through the provision of bike storage at the Stockton ferry wharf.
• Vehicles speeding above the reduced limit on Smith Street during student arrival and departure times • Recommendation: Review traffic calming measures.	• Agreed to target design speed through traffic calming measures and trial speed reduction to be explored with TfNSW if available.
• Students have issues crossing along Parkway Avenue and the adjoining roads • Recommendation: Pedestrian treatments at roundabouts intersecting with Smith Street and National Park Street	• The City of Newcastle (CoN) agreed with this recommendation noting CoN initial concept for the National Park Street/ Parkway Avenue includes speed control at each approach to the roundabout and shared prioritised crossing. CoN has applied for black spot funding for this work. If funding is provided, this would be completed by 2024/25. • CN propose an additional crossing on the Smith Street side to align with the school development and feed pedestrians/cyclists accessing from the sporting fields.
• Extension of Kiss & Drop on Parkway (approx. 7-8 spaces) and additional Kiss & Drop zone located on Smith Street	• The City of Newcastle support the proposed changes to Parkway Ave/Smith St and recommends a further extension of the bus bay / K&D, moving the Smith Street K&D towards the existing car park driveway and the addition of 'No Stopping' zones on either side of driveways.
• DCP parking controls and how SSDA/ TIA will respond	• The City of Newcastle provided an overview of updated DCP Parking Controls: PROPOSED FORMAT FOR DCP (nsw.gov.au)

Discussion	Outcome
	• Current onsite parking does not meet the DCP requirements, however, it is considered that the free parking surrounding the site is sufficient to supplement the discrepancy. • CN noted the traffic assessment will need to address how staff parking will be managed throughout the development (see Section 2.2.6). • SINSW noted the SSDA will provide comments on the DCP parking controls and how the project is responding. • TfNSW acknowledged that there is a consideration needed for balancing the provision of parking while not compromising the active transport targets.
• Road safety around the school	• TfNSW/ City of Newcastle agree that road safety is of highest importance for all proposed infrastructure upgrades around the NEC.

8 Overview Construction Traffic Management Plan

8.1 Overview

This overview of construction traffic impacts aims to ensure the safety of workers and road users in the vicinity of the construction site. The primary objectives of the Construction Traffic Management Plan (CTMP) include the following:

- To identify the need for adequate and compliant traffic management requirements within the vicinity of the school.
- To ensure continuous, safe and efficient movement of traffic for both the general public and construction vehicles.
- Establishment of a safe pedestrian environment around the site.
- To inform the Contractor and set the ground rules for managing construction traffic associated with the site.

8.2 Key Objectives

The overall principles of traffic management during the construction activity include:

- Provide an appropriate and convenient environment for pedestrians.
- Minimise the impact on pedestrian movements.
- Maintain appropriate capacity for pedestrians at all times on footpaths around the site.
- Maintain appropriate public transport access.
- Maintain current levels of parking within the precinct.
- Maintain permanent access to/ from the hospital accesses for emergency services.
- Restrict construction vehicle movements to designated routes to/ from the site.
- Manage and control construction vehicle activity around the site.
- Minimise impacts to general traffic in the vicinity of the site.

8.3 Description of Construction Activities

The proposed works includes the upgrade of a public school to cater for 1,400 students. The proposed upgrades to the site will include a new learning hub, library and multi-purpose hall. The indicative programme for the works is summarised in Table 8-1.

Table 8-1: Construction stages of the NEC

Stage	Description	Start Date	Duration
SSD	Upgrade of NEC	TBC	TBC

8.4 Work Hours

It is anticipated that work associated with the development will generally be carried out between the following hours of construction:

- Monday to Friday 7:00 am and 6:00 pm
- Saturday 8:00 am and 1:00 pm
- Sunday/ public holiday no work.

In addition to regular work hours, there will be occasions where specific out-of-hours work is required. The contractor will be responsible for instructing and controlling all subcontractors regarding the hours of work. Any work outside conducted outside of the approved construction hours would be subject to specific prior approval from Council.

8.5 Construction Worker Parking and Traffic

The number of construction workers is expected to be up to 40 workers during peak construction.

Due to the size of the site, no construction worker vehicles can be accommodated on site. Construction workers will not be permitted to park on local streets. Public parking is available on Smith Street along the netball courts and in the paid car park at No 2 Sportsground.

Given the site's proximity to the Newcastle Interchange (providing train, light rail and bus services), workers would be encouraged to use public transport to access the site where practical. During site induction, workers would be informed of the existing bus, light rail and train networks servicing the site. Appropriate arrangements should be made for any equipment/ tool storage and drop-off requirements.

Any construction worker arrivals and departures by vehicle would typically be outside of road network peak hours and as such, are unlikely to impact the surrounding road network. The Principal Contractor would be required to outline a schedule of worker start and finish times and demonstrate that this does not have any significant impact on the high school and local traffic activity. It is also expected that the Principal Contractor would be required to implement measures to reduce worker car travel, such as shuttle buses from key transport nodes or designated remote pick-up points as necessary.

8.6 Construction Traffic Volumes

The site will have various types of construction vehicles accessing the site. The largest standard construction vehicles regularly accessing the site would include 12.5-metre heavy rigid vehicles. It is likely that a limited number of larger special-purpose vehicles (e.g. floats for plant and equipment, large mobile cranes) will be required, however, these would be subject to a separate oversize and over-mass application process, with an analysis of the specific vehicle access and manoeuvring requirements.

It is expected that for most of the project, no more than 10 heavy vehicles (20 heavy vehicle movements) are expected per day. This is expected to peak at 20 heavy vehicles (40 heavy vehicle movements) during a peak period of two weeks during the delivery of the modular buildings.

8.7 Site Access

Access to the school site during construction will be made at an entry point along National Park Street which is yet to be determined, and through Gate 1 on Smith Street. The proposed access route will go via Parkway Avenue from the south as shown in Figure 24.

To determine the suitability of movement around the vicinity of the site, a swept path assessment has been conducted. For the purpose of this assessment, it is assumed that vehicles accessing the site will entre via Gate 8. The assessment was used to determine a suitable route for a Heavy Rigid Vehicle (HRV), 12.5 metres in length, and access into the site itself. The outputs from the swept path analysis have been provided in Appendix B. The analysis found that:

- A HRV does not have any issue manoeuvring through and around the roundabouts on Parkway Avenue.
- The site access on National Park Street would require widening to accommodate the turning movements of an HRV.
- The site access on Smith Street would require widening to accommodate the turning movements of an HRV.

Figure 24: Proposed site access

As part of the detailed CTMP, a traffic guidance scheme (formerly a traffic control plan) will be prepared in accordance with the principles of the Transport for NSW Traffic Control at Work Sites manual. The traffic guidance scheme (TGS)

would primarily show where “Trucks” signs would be located at specific locations (such as uncontrolled intersections) along the approved truck routes to warn other road users of the increase in construction vehicle movements.

8.8 On-Street Work Zones

No works zones are proposed at this stage, however, may change subject to the proposed methodology of the appointed contractor.

8.9 Construction Vehicle Routes

Generally, construction vehicles will have origins and destinations from a wide variety of locations throughout Newcastle. However, all construction vehicles will be restricted to the State and Regional Road network where practicable. It is expected that vehicles would approach the site from the Pacific Highway (Stewart Avenue) and require the use of local roads to reach the relevant access point on National Park Street.

The construction vehicle routes are detailed in Figure 25. No queuing or marshalling of construction vehicles will be permitted on public roads.

Approach Route

- Stewart Avenue; Parkway Avenue; National Park Street/ Smith Street

Departure **Route**

- National Park Street/ Smith Street; Parkway Avenue; Stewart Avenue

Figure 25: Construction vehicle access route

8.10 Traffic Guidance Scheme

Detailed information for work site operations is contained in the Traffic Control at Work Sites manual version 6.0 (Transport for NSW, 2020). The control of traffic at work sites must be undertaken with reference to WorkCover requirements and any other Workplace Health and Safety manuals.

The Principal Contractor will be required to provide TGSs for the proposed works which will generally consider the following:

- Construction vehicle activity, including the loading/ unloading of trucks to be conducted within the work site.
- Pedestrians and all passing vehicles will maintain priority.
- A clear definition of the work site boundary is to be provided by the erection of site fencing and/ or A and B Class hoardings around the site boundaries.
- All construction vehicle activity will be minimised during peak periods, where possible.

8.11 Pedestrian and Cyclist Management

During the construction period, pedestrian and cyclist movements are to be maintained as much as possible. Where works require the closure of an existing pedestrian route, a suitable alternative is to be provided. Class A hoarding/ ATF fencing would be provided between pedestrian paths and any work site. Where overhead works are occurring, B-Class hoarding will be provided where pedestrian movement is being maintained. It is not expected that cyclist routes will be impacted by the proposed construction works.

8.12 Public Transport

Given the infrequent heavy vehicle movements associated with the construction works, the overall impact on existing public transport services is expected to be negligible. This includes the impact on the identified local area bus services.

8.13 Traffic Movements in Adjoining Areas

No adverse effects are expected from the movement of heavy vehicles through adjacent council areas.

9 Conclusion

Based on the analysis and discussion presented within this report, the following conclusions are made:

- The current road network copes well with traffic associated with Newcastle High School. Short periods of higher demand levels were observed but the overall impact on the level of service is insignificant and short queues and delays are usually quickly dissolved.
- The existing student mode share shows a high proportion of active and public transport (just over 70%). The aim of the School Transport Plan (STP) is to maintain and increase this mode share. The future intake area extends beyond the distance that makes school access easy by active transport modes, therefore, public transport needs to become the main choice of transport for students from the new intake area.
- The increase in student numbers following the upgrade of Newcastle High School and changes to the intake area will have no significant impact on the road network. Car trips are expected to stay at current levels in the short term and slightly reduce due to mode shift in the medium to long term.
- The bus zone on Parkway Avenue will be extended to accommodate space for one additional bus. This will help with simultaneous bus arrivals and departures and make the boarding and alighting of buses safer.
- The kiss-and-drop zone on Parkway Avenue will be extended and a new kiss-and-drop zone will be installed on Smith Street. This will spread students and cars along the kerbsides, reduce congestion and improve the pick-up and drop-off process.
- The addition of 160 bicycle and micromobility parking spaces will support the targets for increasing the mode share of cycling and micromobility.
- City of Newcastle to install pedestrian crossings on Parkway Avenue at the roundabouts. City of Newcastle have agreed to these works.
- Existing staff mode shares are showing a high proportion of private vehicle us (approximately 85%). Given the proximity of excellent public transport links and the provision of additional end-of-trip facilities for riders, a higher proportion of sustainable transport mode share for staff will be targeted through the STP. This should offset no additional staff parking being delivered as part of the proposed design.
- A recent traffic survey identified that traffic speeds on Smith Street along the school are above 40km/h during school zone periods. It is agreed that the City of Newcastle Council and TfNSW review options for additional interventions to reduce speeds in this area.

10 School Transport Plan

10.1 Introduction

This School Transport Plan has been prepared in conjunction with the NSW Department of Education, The APP Group, City of Newcastle Council, Transport for NSW, and with reference to the NSW Department of Education Transport Assessment and School Transport Plan Report Guidelines.

This School Transport Plan has been informed by the preceding transport assessment, which comprised of a spatial analysis of student enrolments (2023 enrolment year) and the geographic distribution of students in relation to the school, site investigations, and the setting of base case, moderate and reach travel mode share targets.

While the targets for active and sustainable travel are aspirational, there is an opportunity to shift and shape active and sustainable travel behaviours through the redevelopment of Newcastle High School. To this end, the plan has been developed with focused and specific actions to increase the rate of use in active travel and public transport options to travel to school. The measures included in the School Transport Plan include:

- Sustainable transport encouragement programs to increase the rate of walking and cycling to school.
- Efforts to increase registration into the School Student Transport Scheme (SSTS), which is used by school bus operators and Transport for NSW to measure the demand for a dedicated school bus.
- Communications program to convey positive road safety messaging and expected standards of behaviour for a kiss and drop near the school.

10.2 Transport Goals

This section of the report utilises the understanding of external transport conditions for Newcastle High School identified through the preceding transport assessment and defines the vision and objectives for Newcastle High School to be achieved through the School Transport Plan. The vision and objectives provided support the adoption of the ideal transport scenario for which the school should aspire to achieve. This is to be supported through the implementation of measures proposed as part of the Transport Assessment, by following the communications plan to promote the use of active and public transport and through the continuous monitoring of performance in support of the travel coordinator role.

As identified in the report guidelines, the overall vision for the School Transport Plan is to deliver efficient, safe, and sustainable access to school during the planning, construction and operation of school assets. To support this statement, the objectives that support the vision are:

- To proactively identify and meet school travel demand safely, efficiently and sustainably, and to deliver transport infrastructure to meet school travel demand.
- To maximise the use of active and public transport modes to reduce car traffic before and after school day start and end times.
- To decongest the road networks around schools.
- To increase active travel to and from school in a safe transport environment.
- To enhance connectedness to the neighbourhood and community through safe travel to and from school.
- To empower children and young people to be safe road users now and into the future.
- To meet the DoE’s duty of care of students which extends beyond the school boundary, if there is a foreseeable risk of injury or harm to students as they travel to and from school.
- To “reduce the administrative burden” on a school principal (managing kiss-and-drop behaviour, parent and community complaints, calling bus companies etc) by reducing the time and effort for schools/principals to coordinate and liaise with council, TfNSW to create a safe, connected transport environment around their school.

10.2.1 Active and Public Transport Mode Share Targets

A range of mode share targets were defined in the preceding Transport Assessment, which comprised of a base case, as well as moderate and reach mode share targets. Based on this assessment, the moderate target has been used for school travel in the short-term, for example, following the completion of the redevelopment construction, whilst the reach target is considered to be the upper limit of mode share that can be achieved once catchments and access through the provision of suitable infrastructure are taken into consideration. The resulting mode share targets for active transport and public transport are shown in Table 10-1 and Table 10-2 respectively.

Table 10-1: Active Transport Mode Share Target

Mode Share		
Base Case	**Moderate**	**Reach**
33.1%	35.1%	37.7%

Table 10-2: Public Transport Mode Share Target

Mode Share		
Base Case	**Moderate**	**Reach**
39.1%	39.4%	38.8%

10.3 Policies and Procedures

To enable the success of the School Transport Plan, specific communication expectations can be applied that consider increasing active and public transport use to school; reducing the rates of driving alone and kiss-and-drop to school, meeting SEAR No. SSD-41814831 requirements and managing risks. The following list indicates a range of transport-based policies that support the implementation of infrastructure improvements at a given school.

a. prioritise multi-modal transport access
b. staggered start/end times
c. multiple kiss-and-drop locations
d. remote kiss-and-drop
e. parking allocation and location
f. parking management system operations
g. school access policies for access via a pedestrian gate, bicycle cage, driveways and parking at arrival/end times, during OOSH, school day and outside hours
h. Share our Space

The transport-related items proposed as part of the site design and TIA recommendations include:

- Proposed intersection treatments at the intersections of Parkway Avenue/ National Park Street and Parkway Avenue/ Smith Street;
- Extension of the bus zone by 18 metres to accommodate additional capacity for one extra bus;
- Extension of the kiss-and-drop zone along Parkway Avenue;
- New kiss-and-drop zone on Smith Street;
- New site entrances into the school; and,
- New secure on-site bicycle and micromobility parking

The policies that are to be considered at Newcastle High School, which support the infrastructure and service improvements agreed upon in the transport assessment are discussed in further detail below.

10.4 School Transport Operations

As part of the NSW Department of Education's code of conduct, all personnel have a legal obligation to keep students safe and support their well-being. Student safety is most important around school bell times when the chances of physical harm resulting from accidents are increased. The appropriate management of school transport operations should be considered a high priority for the school, which falls under their duty of care. The schools duty of care is supported by a four-step process, as shown in Figure 26.

To support the Duty of Care Process shown in Figure 26, Table 10-3 details the aspects under the four headers that need to be considered by the school in managing risk and improving the overall safety and well-being of students. Further information in support of this can be found on the NSW Department of Education website.

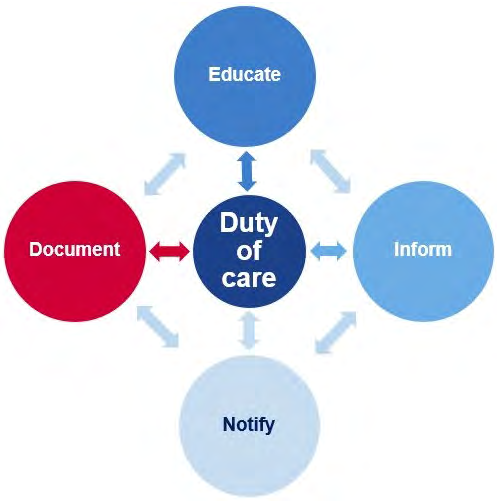


Figure 26: Managing a Schools Duty of Care and Road Safety Process

Table 10-3: Managing a School's Duty of Care and Road Safety

Managing a School's Duty of Care and Road Safety
Educate
Which student groups need to be educated about road safety concerns? • Individual or small groups of students? • Year/stage group of students? • The whole school? How will road safety education be made relevant? This can be achieved through: • Localised, school-specific teaching and learning activities • Identified outcomes • A strengths' based approach?
Inform
Which parents/carers need informing about the road safety concern? The parents of: • Individual or small groups of students • A year/stage group of students • All students? How will it be communicated? • Social media (Facebook, school apps, Twitter, Instagram, TikTok) • Newsletters • School website • Enrolment pack information, • Orientation day • School noticeboard sign, email • Meetings • Take-home activity/note
Notify

Managing a School's Duty of Care and Road Safety

If emergency services assistance is required, call them before calling the WHS Incident Report and Support Hotline.

All WHS related incidents and injuries, including a near miss, must be reported in line with Incident Notification & Response Procedures. This includes any non-workplace incident that impacts students, staff and the school community, e.g. travel to/from school

Situations that have the potential to cause injury to an employee, student, member of the community, volunteer, or contractor should also be reported to the Incident Report and Support Hotline. This includes non-workplace situations, e.g. travel to/from school

It is valuable to report all concerns to:

- Highlight that a risk exists
- Contribute to managing your duty of care
- Get the concern noted so appropriate support and corrective actions can be initiated to prevent further incidents
- Build a data profile that Health and Safety, and School Infrastructure NSW Directorates can use to bring about change for your school.

Who needs notifying if student/s are unsafe road users or the infrastructure is unsupportive of a safe school site or school zone:

1. Parents/carers
2. Internally: school staff, P & C, school WHS Committee, WHS Advisor, WHS Incident Hotline, Assets Management Unit, local Director Educational Leadership, local Road Safety Education Officer
3. Externally: Council Road Safety Officer or general manager, Transport for NSW, police highway patrol/liaison officer, council parking rangers, bus operator

Notifications can either be made by phone call, face-to-face informal discussion/formal meeting, email, formal letters, Snap send solve app

Document

Who will document, record and track the actions?

- Class teachers, SASS staff, and school executives will be responsible for reporting these actions.
- The school principal will be responsible for managing these actions

10.4.1 Day-to-Day School Operations

Table 10-4 details transport site access that is active during day-to-day school operations. For this, appropriate measures should be considered to support student safety.

Table 10-4: Day-to-Day School Operations

	***On-site*:**	***Adjacent-to-site***	***Management measures***
Site entries, pedestrian and vehicle	Y	Y	Y
Kiss-and-drop including Assisted School Transport Program	N	Y	Y
Buses	N	Y	N
Parking incl carpool, carshare pod	Y	Y	Y
Deliveries and service vehicles	Y	N	Y

The following measures have been taken from the NSW Government website for managing school road safety. These measures will need to be implemented to appropriately manage student safety regarding the day-to-day school operations site access:

- Regularly review the school site entry and exit risk management plan.
- Use various communication strategies to inform parents and carers about safe road user behaviours on site and in the school zone.
- Update casual teachers about student arrival and departure procedures.
- Assist students entering and exiting the school safely.

- Where applicable, liaising with the School Crossing Supervisor and/or the Assisted School Travel Program providers on effective management.
- Use various communication strategies to inform parents and carers about safe road user behaviours onsite and in school zones
- Update casual teachers about student arrival and departure procedures
- Assist vulnerable students to allow them to enter and exit the school safely
- Label, number or colour code access points for easier reference and recognition by students, families and staff, eg. pedestrian entry and exits, kiss and drop area, bus travellers, cyclists, etc.
- Spread the arrival and departure of students and families across different pick-up and drop-off accesses to reduce congestion in any one spot, either on or off-site
- Use signage, social media, school website, note home or assemblies to inform students, families, staff and visitors of changes to entry and exit or pick up and drop off arrangements such as construction on site or in the school zone; hazards (fallen trees, power lines, floods); delays to public transport and school buses.

Running in parallel to these measures, parents should be encouraged to:

- Walk their children to school, where possible.
- If driving is unavoidable, park away from the school and walk with their children, or drop off their independent children to walk the rest of the way to increase physical and mental health and help reduce traffic congestion around the school site.
- Remind staff to maintain their own safety to reduce their risk of trips, slips and falls when supervising students at kiss and drop zones. For example:
    - Remain behind the school fence or well away from the edge of the footpath.
    - Do not stand on the road between vehicles (to avoid crush injury).
    - Wear a high-visibility jacket when in or near to the traffic environment
    - Ask drivers to wait until the child is properly buckled up, if the child can do it themselves, before driving off.
    - Remind teachers and other school staff they are not permitted to operate as a School Crossing Supervisor and control traffic. They can assist students cross the road when it is safe to cross.

10.4.2 Event Transport Operations for Share our Space, Hall Hire and Excursions

An Out-of-Hours Event Management Plan will be required to support the opening of facilities to the community should Newcastle High School wish to do so.

10.4.3 Sample Transport Encouragement Programs

There are a range of measures which can be implemented by the school, to encourage safe and sustainable transport access to and from the school. A summary of the measures which can be implemented at Newcastle High School is highlighted below.

10.4.4 School Student Transport Scheme (SSTS)

The School Student Transport Scheme provides eligible school students with free or subsidised travel on public transport to and from school and is dependent on where students reside and the availability of public transport. If a student doesn't qualify for free school travel, they may be able to buy a School Term Bus Pass for discounted travel on buses between home and school. Further information on this scheme can be found on the TfNSW website.

10.4.5 Ride to School Day

National Ride2School Day is an annual event that encourages students to ride into school. It provides students with the opportunity to trial cycling into school, which can further increase uptake in the future. Further measures can be provided during Ride2School day such as free breakfasts and bike tuning to encourage a greater number of participants.

10.5 Communication Plan

The communications plan provides a range of initiatives and actions, including some to be completed and implemented before the opening of the new school buildings, that will help to achieve the mode share targets and reduce the overall car travel associated with the school. Unless explicitly stated as a 'reach' scenario intervention/initiative, all proposals included have been developed to achieve the 'moderate' scenario mode share targets.

These actions need to be reviewed regularly, at least annually, to review actions and refine them as the school community needs may change over time.

10.5.1 Channels

All communications should be promoted through the appropriate channels used by the school, to help target the widest audience possible. The recommended channels have been provided in Table 10-5 below.

10.5.2 Messages

The following communications plan has been co-designed and developed across a number of School Transport Plans. The communications plan provides a guide for some of the messages that the School Principal and current staff involved with sustainable transport initiatives may communicate to promote the uptake of walking, cycling and public transport to school.

Table 10-5: Sustainable Travel Communications Plan

What	When	Which Channel	To Whom
Share the vision and targets for the number of students targeted to walk, ride or take public transport to school.	Before school opens and periodically throughout the year	Social Media School website Email newsletters	Staff, parents, and students
Share the walking, cycling, train and bus transport options to travel to the schools, drawing from the TAG. Note: Public school websites have standardised transport information available to parents and students.	On the school website at all times	Social Media School website Email newsletters	Staff, parents, and students
Promote and encourage students to use discounted or free travel by signing up to the SSTS to encourage use of public transport as a sustainable travel option.	Regular periodic updates, including at the start of each term	Social Media Newsletters	Students and parents
Promote and encourage participation in National Ride2School Day.	Prior to the annual event in March.	Social Media	Staff, parents, and students
Promote Walk Safely to School Day. Materials available at www.walk.com.au	Prior to the annual event in May	Social Media	Staff, students and parents (targeted at primary school)
Communicate the expected standards of behaviour for Kiss n Drop and Road Safety	Regularly, multiple times each term	Social Media	Students and parents
Conduct discussions with Road Safety officers and School Principals about the access and operations at the Kiss and Drop zone.	Before school opens and periodically throughout the year	School website School Noticeboards	Students and parents
Communicate links to NSW Department of Education Road Safety Website, which is typically included in all public-school websites.	Regularly, multiple times each term	School website Social Media	Students and parents
Communicate road safety education YouTube video links including: Safety – Link School Zone – Link School Crossings – Link	Regularly, multiple times each term	School website Social Media	Students and parents
Communicate external resources supplied by groups such as Bicycle NSW to help reduce barriers to cycling	Regularly, multiple times each term	School website Social Media	Students and parents
Communicate regarding the availability of vouchers which can be applied for through the NSW Government Active Kids Program. Which includes vouchers for sports and recreation purposes up to the value of $50 per child.	Before school opens and periodically throughout the year	Online school communication channels (e.g. Facebook page, newsletters)	Staff, parents, and students

10.5.3 Travel Access Guide

A Travel Access Guide (TAG) provides suggested safe and accessible options for travelling to school. The guide provides advice on safe access initiatives, site access, public transport use, bicycle parking and much more. A TAG will need to be produced as part of the school reopening to provide students with information relevant to:

- Ped scooter parking
- Bicycle parking
- Carpool parking
- Parking management
- End-of-trip facilities (staff)
- Flexible and reconfigurable spaces
- Provision of bubblers and taps to encourage water drinking and less waste
- Remote kiss-and-drop

The TAG should also provide supportive measures and messages that can be communicated to parents and carers which help encourage changes in attitude towards forms of transport mode choice. The following are examples of messages which can be used to achieve this:

- Get involved in using active and public transport to school with your student
- Help your student practice the active and public transport they are learning (try for part trip or whole trip)
- Speak to staff and government transport stakeholders about travel to school programs and infrastructure
- Use active and public transport from school drop-off to work
- Report transport issues as the concern arises (eg Send Snap Solve app, Council@ email, phone number)
- Improved quality of life (increased healthy lifestyles, well-being, physical activity)
- Life-long learning opportunities
    - Transport as a learning and resilience-building opportunity
    - Additional learning opportunities
    - Educational opportunities for parents and the community
    - Joint/community use for transport programs

10.6 Data Collections and Monitoring

For the School Transport Plan to be effective it must be reviewed on a regular basis. It is important to ensure that the School Transport Plan is meeting its objectives and having the intended impact on car use and transport choices for the school's staff and students. The School Transport Plan should be reviewed on an annual basis with staff and student travel surveys. The School Transport Plan should be updated and changed to reflect changing circumstances and local context/ facilities.

10.6.1 Data Collection

To monitor the School Transport Plan, a travel questionnaire should be conducted for all staff and students. An initial survey should be used to provide the baseline for travel planning programs. Subsequent survey results should be reported annually by the schools and used to inform funding allocation for successful programs/ removal of unsuccessful programs. Based on the review, the School Transport Plan should then be updated as noted previously.

10.6.2 Ongoing Feedback Framework

The School Principal or staff will manage the ongoing feedback framework to continuously improve the oversight of sustainable travel outcomes for Newcastle High School in concert with relevant school stakeholders. This may include activities such as:

- Reviewing the adequacy of bicycle racks required periodically.
- Observing road safety activity outside the school grounds to identify any improvements required.
- Observing how pathways are being used, or whether pathway design is inadequate or in the wrong location (for example if 'goat tracks' are worn through particular areas, should a request to Council be put in to improve the pathway in future works programs.
- Observing the operation of any future school buses and the drop-off/pick-up facilities for any potential safety concerns. Make recommendations up to Transport for NSW, City of Newcastle Council, and the bus operator accordingly.
- Liaising with the City of Newcastle Council Road Safety Officer concerning the management of parking behaviours around the school.

- Responding to any other feedback from Transport for NSW, City of Newcastle, Police, Residents, Teachers, Parents or Students that might arise from time to time.

10.6.3 Program Evaluation

The School Principal or staff will manage the ongoing feedback framework to continuously improve the oversight of sustainable travel outcomes for Newcastle High School in concert with relevant school stakeholders. This may include activities such as:

- Reviewing the adequacy of bicycle racks required periodically.
- Surveying the uptake of the Travel Access Guide
- Observing road safety activity outside the school grounds to identify any improvements required.
- Observing how pathways are being used, or whether pathway design is inadequate or in the wrong location (for example if 'goat tracks' are worn through particular areas, should a request to Council be put in to improve the pathway in future works programs.
- Observing the operation of any future school buses and the drop-off/pick-up facilities for any potential safety concerns. Make recommendations up to Transport for NSW, City of Newcastle Council, and the bus operator accordingly.
- What gaps are present in sharing the knowledge and schemes for encouraging the uptake of sustainable transport.
- Liaising with the City of Newcastle Council Road Safety Officer concerning the management of parking behaviour around the school.
- Responding to any other feedback from Transport for NSW, City of Newcastle Council, Police, Residents, Teachers, Parents or Students that might arise from time to time.
- Determining whether the mode share targets set are too ambitious and if they should be more specific and targeted.

10.6.4 Reporting Findings

Findings are to be reported back to the working groups detailed in the following chapter. Findings are to be presented by linking back to the communications plan and governance arrangements discussed. The reporting process will provide the results of the monitoring process with SINSW, City of Newcastle Council, and TfNSW to demonstrate the effectiveness of the School Transport Plan approach in order to expand, revise, strengthen or improve the use of this tool across the portfolio transport programs (report to SINSW, TfNSW). Points of feedback can address issues such as:

- Adopting or revising programs to increase sustainable transport use (school)
- Installing additional infrastructure to accommodate sustainable transport demand (school, council and/ or state government)
- Web tools or apps that enable the school community to report transport issues / missing links (Send Snap Solve or Social PinPoint)

10.7 Governance Framework

To capitalise on the potential of the School Transport Plan, ongoing engagement with transport stakeholders is required. On-going engagement with internal and external stakeholder groups will be required with the groups detailed in Table 10-6.

Table 10-6: Internal and External Stakeholders

Internal Working Group	External Working Group		
A working group with school leadership, Road Safety Education Officer, students, teachers, parents/carers and neighbours.	A working group with school leadership, state government agencies and local government		
	TfNSW	**City of Newcastle Council**	**SINSW / DET/ Other**
	• Active Travel to Schools • Bus Service Planning • Bus contract manager • Assisted School Transport Program • Subsidised School Transport Scheme	• Manager, Transport Planning • Active Travel • Road Safety Officer • LGA Travel Coordinator • Sustainability	• Travel Coordinator • Principal • Road Safety Education Officer • AMU representative • Private bus operator

10.7.1 Travel Coordinator

A Travel Coordinator is required for the duration of construction and the first year of post-occupancy, whilst transport programs must be implemented to achieve travel behaviour change. The role will initially be funded by the project during delivery. After year 1, subsequent arrangements for the carriage of this role will need to be arranged between SINSW, DET and TfNSW.

The Department of Education and the School Principal will progress the appointment of a Travel Coordinator for Newcastle High School. This includes determining the role and procuring a contractor, or other to promote, coordinate and monitor the implementation of the sustainable travel initiatives. The role of the Travel Coordinator will be enforced until one year after the completion of the upgrade works.

The Travel Coordinator will be responsible for implementing the actions shown in Table 10-7. The actions provide the means to encourage sustainable transport options at Newcastle High School and will need to be reviewed regularly, at least annually, to review the actions and refine them as the school community needs may change over time.

Table 10-7: Transport Encouragement Programs

Strategy	Action	Target Audience	Timeframe	Responsibility
Enabling Active Travel Through Resourcing				
Walk Safely to School Day	Promote and take part in 'Walk Safely to School Day'. Further information: www.walk.com.au	Staff and primary school students	Annually	Travel Coordinator
School Student Transport Scheme (SSTS)	Promote this scheme among the school community. Applications to the SSTS, for subsidised school term bus pass (students living beyond 2.9 km walking distance from the school), are used as an indicator for demand for dedicated school buses by Transport for NSW. Therefore, an uplift in applications to the scheme is needed to support the continued provision of school buses to help achieve the school travel targets.	Parents and students (both schools)	Annually	Travel Coordinator
Year 6 transport options promotion	Promote and communicate the range of transport options available to Year 6 students as they progress to Newcastle High School in the following year	Parents and high school students	Term 4 annually	Travel Coordinator

Strategy	Action	Target Audience	Timeframe	Responsibility
Reduce Car Travel				
Communications Plan	Discuss and refine the Communications Plans and key messages with the School Principals and TfNSW to encourage a higher usage of non-private vehicle modes from staff, parents and students.	Staff, parents and students (both schools)	In 2024 and then annually	Travel Coordinator
Staff car-pooling	Establish and organise a car-pooling scheme that enables staff to share their car trip to the school with more than one person in the car, reducing cars travelling to the school.	All staff (both schools)	In 2024 and ongoing	Travel Coordinator
Parking management plan	Liaise with the Principal and City of Newcastle Council to develop policies to manage the demand for staff parking using the on-site spaces and on-street parking in the surrounding streets if required.	All staff (both schools)	In 2024 and ongoing	Travel Coordinator and Camden Council
Additional Actions				
Inspire the school community towards using active and public transport to travel to school	Communicate to Staff and Students key messages to promote sustainable travel including targets and actions outlined in the School Transport Plan in the Communications Plan.	Staff, students and parents (both schools)	Per communication plan	Travel Coordinator to prepare messaging for the School Principals to send out
Travel Access Guide (TAG)	Distribute a travel access guide and publish on the school website and other school communication mediums so that it is easy to understand the options to travel to school using active modes or public transport.	Staff, students and parents (both schools)	Per communication plan	Travel Coordinator to prepare for the School Principals to send out
Other incentives for staff to use active and public transport	Propose and discuss the following initiatives with the School Principal to consider and implement: • Pre-loaded Opal cards during orientation. • School-subsidised panniers or backpacks for staff committed to active travel. • Salary sacrifice options for purchases of bikes or other micro-mobility options. • Time in staff meetings to share tips and support for staff wanting to start cycling. • Wayfinding at the school with directions to the End of Trip facilities. • A role for a school sustainable travel champion that focuses on modelling the desired behaviours and positive communication around active and public transport.	Staff at both schools	Start in Term1 following occupancy and continue throughout the school year	Travel Coordinator
Travel Surveys for staff and students	• Use travel surveys to be issued to staff and students to obtain workforce data analysis (including staff residential postcodes) to identify changes to the actual staff/student travel origin and destination patterns, to inform strategies that help to reduce car parking demand for staff and students to get to and from the site. An example of a travel survey from NSW Gov is included in Appendix A. • Collaborate with the School Principal on the method and timing to circulate the travel surveys to staff and students as appropriate.	Staff, students and parents (both schools)	Start in Term1 following occupancy and continue throughout the school year	Travel Coordinator

10.7.2 Internal School Working Group

The Internal School Working Group is to be formed with the school community before construction commencement. This group is to be a sounding board for the Travel Coordinator and school leadership. The Road Safety Education Officer, AMU and WHS are to make up the core participants of this group.

10.7.3 External Transport Working Group

The external Transport Working Group is to follow on from the Transport Working Group formed in Consultation Stream 2 of this Plan, during the transport options development phase of the Transport Assessment. The Department of Education and the Travel Coordinator should identify and advance relationships with these stakeholders including Council, bus operators and TfNSW – to govern transport issues and opportunities during the implementation of the Travel Plan. If this group already exists due to a previous SINSW project, amend the Terms of Reference to include this school project. Feedback during the external working group should highlight:

- If students are spilling out onto the road, new footpaths or pedestrian crossings required
- If road safety issues are raised by parents or staff, a Road Safety audit may be required to address issues
- If buses are turning away students because the buses are full, ie new bus services are required

Document arrangements for this group are to include:

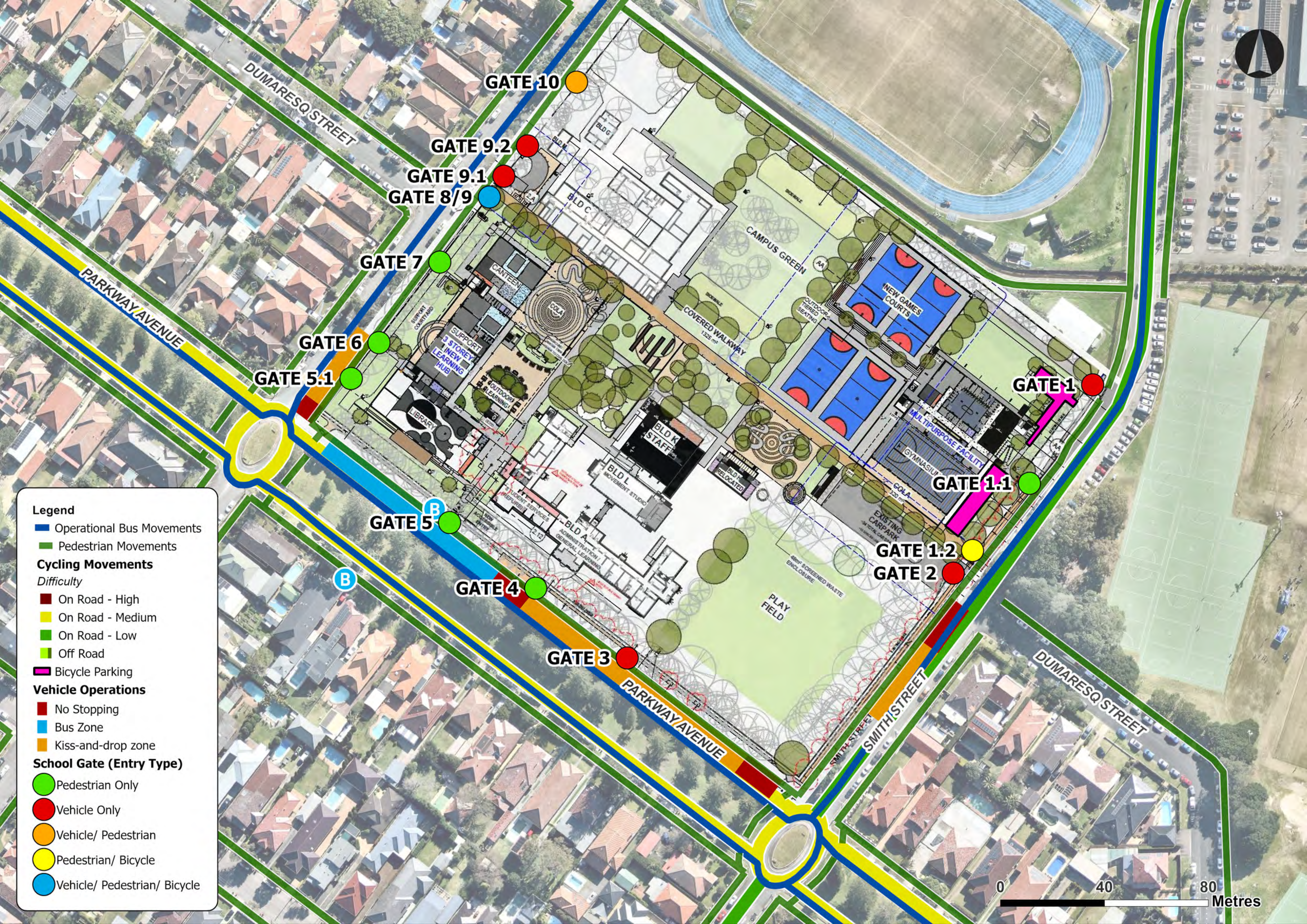
- Meeting regularly ie monthly / quarterly.
- Confirm annual travel demand changes (year 7 starting, and year 12 graduating).
- Report transport usage.
- Inform updates to the School Transport Plan.
- Seek funding for reported missing links or operational issues.

Collaborative response to key issues.

Appendices

We design with community in mind

Appendix A Vehicle Access Management Plan


DUMARESQ STREET
GATE 10
GATE 9.2
GATE 9.1
GATE 8/9
GATE 7
GATE 6
GATE 5.1
GATE 5
GATE 4
GATE 3
GATE 2
GATE 1.2
GATE 1.1
GATE 1
PARKWAY AVENUE
SMITH STREET
CAMPUS GREEN
NEW GAMES COURTS
COVERED WALKWAY
MULTIPURPOSE FACILITY
GYMNASIUM
PLAY FIELD
EXISTING CARPARK
LIBRARY
CANTEEN
COLA
BLD K STAFF
BLD L MOVEMENT STUDIO
BLD A ADMINISTRATION / GENERAL LEARNING
BLD C
SUPPORT 2 STOREY NEW LEARNING HUB
OUTDOOR LEARNING
Legend
Operational Bus Movements
Pedestrian Movements
Cycling Movements
Difficulty
On Road - High
On Road - Medium
On Road - Low
Off Road
Bicycle Parking
Vehicle Operations
No Stopping
Bus Zone
Kiss-and-drop zone
School Gate (Entry Type)
Pedestrian Only
Vehicle Only
Vehicle/ Pedestrian
Pedestrian/ Bicycle
Vehicle/ Pedestrian/ Bicycle
0
40
80
Metres

Appendix B Indicative CTMP Swept Path Analysis

Driveway to be widened to accommodate swept paths. To be designed in accordance to the relevant standards.

Garbage Truck

	mm
Width	: 2500
Track	: 2500
Lock to Lock Time	: 4.0
Steering Angle	: 35.8

Wednesday, November 29, 2023 09:45:34

REV	DATE	DRN	CHK	DESCRIPTION
01	25/05/23	DA	MT	Aerial Only
02	22/08/23	DA	EM	Updated with architectural plans
03	29/11/23	DA	VB	Updated with architectural plans
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Newcastle Education Campus - Site Access B

Swept path Assessment - 9.8m Waste Truck

DRAWN: DA	---	---
DATE: 29-11-23	STATUS: ---	
SCALE: 1:400 @ A3		
DWG NO:300304017_HRV_SWEPTPATHS_V3		

3

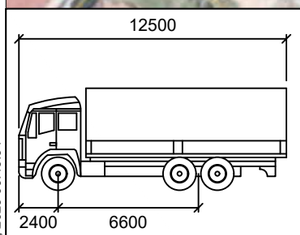
\\Au2019-ppfss01\shared_projects\300304017\technical\drawings\model\300304017_hrv_sweptpaths_v3.dwg

Driveway to be widened to accommodate swept paths.

PARKWAY AVE

NATIONAL PARK STREET

12500



2400 6600

HRV

	mm
Width	: 2500
Track	: 2500
Lock to Lock Time	: 6.0
Steering Angle	: 35.2

Wednesday, November 29, 2023 09:45:34

REV	DATE	DRN	CHK	DESCRIPTION
01	05/05/23	DA	MT	----
02	29/11/23	DA	VB	Updated with architectural plans
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----	----	----	----	----
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Newcastle Education Campus - Site Access A

Swept path Assessment - 12.5m Heavy Rigid Vehicle (HRV)

DRAWN: DA	---	---
DATE: 29-11-23	STATUS: ---	
SCALE: 1:600 @ A3		
DWG NO:300304017_HRV_SWEPTPATHS_V3		

1

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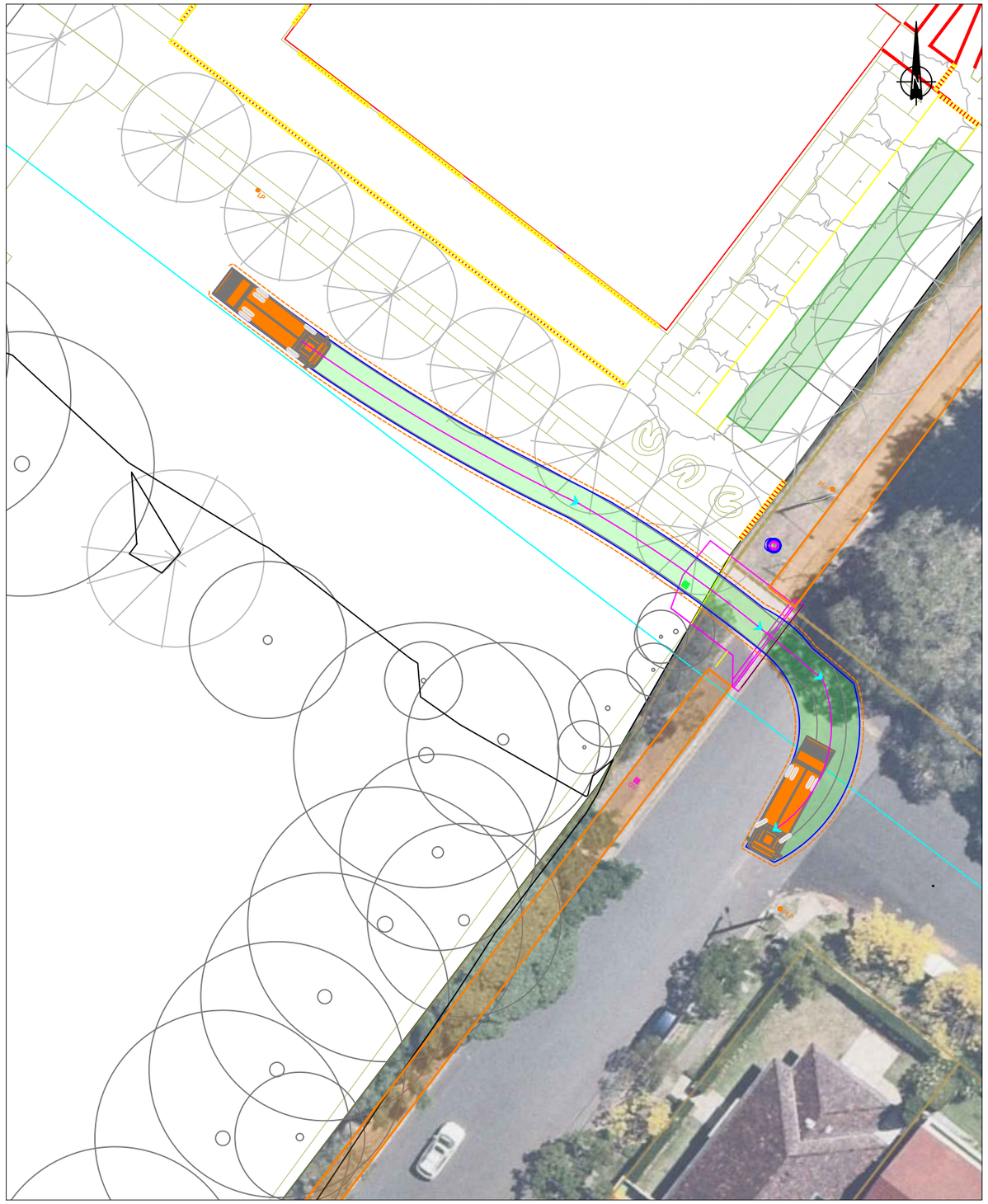
Garbage Truck

	mm
Width	: 2500
Track	: 2500
Lock to Lock Time	: 4.0
Steering Angle	: 35.8



Wednesday, 29 November 2023 8:27:59

REV	DATE	DRN	CHK	DESCRIPTION
01	25/05/23	DA	MT	Aerial Only
02	22/08/23	DA	EM	Updated with architectural plans
03	29/11/23	DA	VB	Updated with architectural plans
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Newcastle Education Campus - Site Access B

Swept path Assessment - 9.8m Waste Truck

DRAWN: DA	---	---
DATE: 29-11-23	STATUS: ---	
SCALE: 1:400 @ A3		
DWG NO:300304017_HRV_SWEPTPATHS_V3		

2

\\Au2019-ppfss01\shared_projects\300304017\technical\drawings\model\300304017_hrv_sweptpaths_v3.dwg

Appendix C School Travel Survey

Active Travel Survey

(suggested questions)

To help get an idea of what young people at your school or your community group think about active travel, it is a good idea to ask them. You can do this by raising some questions at a meeting, or conducting some kind of small or informal survey. You need to choose the method that works best for you.

Here is a list of possible questions you could ask of young people.

NSW GOVERNMENT

Active Travel Survey

1. How do you travel ***to this venue?*** *(Please select at least one main mode)*

Main mode *(most of the week)*	Other mode *(occasionally)*
Walk	Walk
Bicycle	Bicycle
Scooter	Scooter
Skateboard	Skateboard
Car	Car
Bus	Bus
Train	Train
Car (alone)	Car (alone)
Car (with a sibling/s)	Car (with a sibling/s)
Taxi	Taxi
Other	Other

Please provide additional details *(if required)*

2. How do you usually travel ***from this venue?*** *(Please select at least one main mode)*

Main mode *(most of the week)*	Other mode *(occasionally)*
Walk	Walk
Bicycle	Bicycle
Scooter	Scooter
Skateboard	Skateboard
Car	Car
Bus	Bus
Train	Train
Car (alone)	Car (alone)
Car (with a sibling/s)	Car (with a sibling/s)
Taxi	Taxi
Other	Other

Please provide additional details *(if required)*

Active Travel Survey

3. How far away do you live from ***this venue?*** *(Please state in kilometres)*

4. Do you regularly walk or cycle to places?

- Yes
- No
- Sometimes
- Not sure

5. To what extent do you agree with participating in walking and riding to this venue?

	Strongly Agree	Agree	Undecided	Strongly Disagree
Walking				
Cycling				
Skateboarding				
Scooters				

Please provide additional details *(if required)*

6. Which of the following reasons explain your answer to the previous question?

(Please select at least one)

	Strongly Agree	Agree	Undecided	Strongly Disagree
It's better for my health		○	○	○
It's quicker		○	○	○
It's a good opportunity to socialise		○	○	○
It's fun		○	○	○
It cuts down pollution and traffic		○	○	○
I arrive more awake		○	○	○
It's safer		○	○	○
Other *(Please provide details)*		○	○	○

Please provide additional details *(if required)*

7. Which of the following reasons explain your answer to question 4?

(Please select at least one option)

	Strongly Agree	Agree	Undecided	Strongly Disagree
Poor provision of safe routes	○	○	○	○
No one to walk/ride with	○	○	○	○
Too many cars outside/inside venue	○	○	○	○
Poor/no lighting	○	○	○	○
There are no/limited safe crossings		○	○	○
Too much traffic	○	○	○	○
Distance	○	○	○	○
Stranger danger	○	○	○	○
Poor provision of bicycle lanes		○	○	○
I do not have the skills to ride safely		○	○	○
I do not have a bicycle		○	○	○
Nowhere safe to leave bicycle at venue		○	○	○
The venue doesn't allow cycling / skateboarding / scooters		○	○	○
Behaviour of others		○	○	○
Other *(Please provide details in the comments box)*		○	○	○

Please provide additional details *(if required)*

8. How would you like to participate in active travel activities? *(Select as many choices as you like)*

- [ ] Take part in walking/riding to a destination once a week
- [ ] Ask my school or organisation to take part in Walk Safely To School Day
- [ ] Ask my school or organisation to take part in Ride2School Day
- [ ] Other *(Please provide details in the comments box)*

Please provide additional details *(if required)*

9. How do you rate the importance of the following active travel initiatives?

(5 being the most important)

	1	2	3	4	5
Road safety education		○	○	○	○
Bicycle and riding skills training		○	○	○	○
Safer conditions for walking/riding at the venue		○	○	○	○
Appropriate facilities to store bicycles / skateboards / scooters / gear		○	○	○	○
Other *(Please provide details in the comments box)*		○	○	○	○

Please provide additional details *(if required)*

Appendix D Travel Access Guide

Newcastle High School

Travel Access Guide

Effective: September 2023

Project overview

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

Active ways to get to school

Walking is an active and healthy way to get to school

- Always use crossing facilities such as traffic lights, pedestrian crossings, or a school crossing, remember to *Stop, Look, Listen and Think* when crossing the road.
- Hold an adult's hand when crossing the road.
- Share the footpath and walk on the left.
- Look out for cars entering or leaving driveways.

Ride your bike

- Always wear a correctly fitted Australian standards approved helmet when riding your bike.
- Ride to the left on footpaths.
- Take extra care near busy roads such as Parkway Avenue, National Park Street and Smith Street.
- Watch out for cars entering or leaving driveways.
- Give 1 metre space when riding past other people.

Ride your scooter

- Always wear a correctly fitted Australian standards approved helmet when riding your scooter.
- Wear a bright-coloured bag, clothing or reflectors such as a vest to be highly visible.
- Give pedestrians right of way on footpaths.
- Check your wheels, handlebars, brakes and frame are in good condition before riding.

Kiss and drop expectations

- The drop off / pick up zones on Parkway Avenue and National Park Street allow a maximum 5 minutes of stopping time.
- Make sure children use the Safety Door (rear footpath side) when getting in and out of a car.
- Drivers are to display their child's full name on the dashboard and stay within 3 metres of their parked car.
- These facilties are left-in left-out with capacity for 11 cars on Parkway Avenua and 6 cars on National Park Street.
- When the facility is full and you aren't able to enter, safely drive around the block and keep

School Bell Times

- Start time: 8:55 am
- Finish time: 3:00 pm

For more information contact:

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

NSW GOVERNMENT

Active Travel Map: Newcastle High School

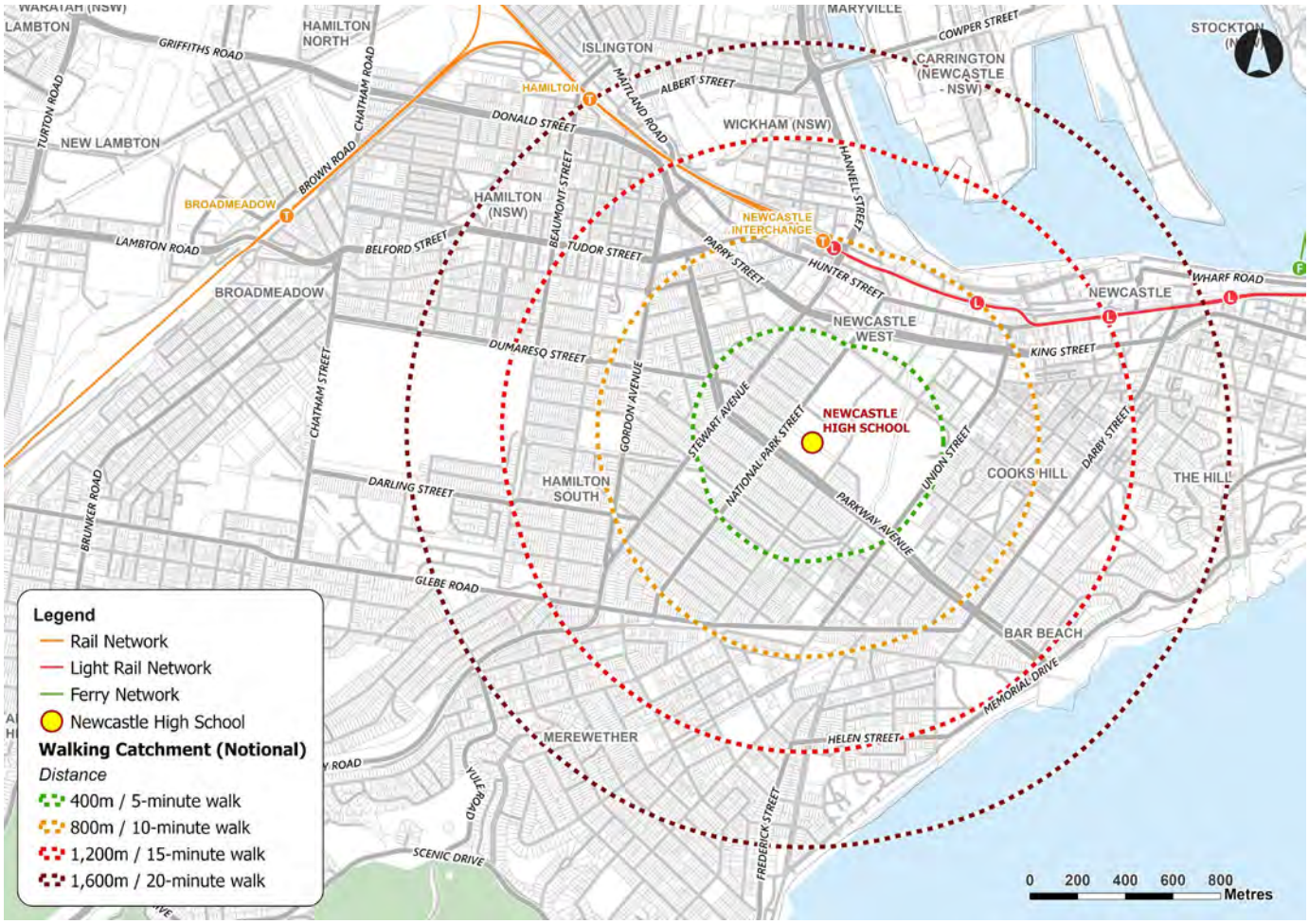
- Students can walk or cycle on footpaths on both sides of the roads near the school.

  Reminder: children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.

- On-site bike parking spaces are currently located around the cricket nets area at the centre of the school, and are easily accessible from pedestrian entry points on Smith Street and Parkway Avenue.

Car parking and road safety

- Park safely and turn legally, even if it means walking further to the school entrance.
- Give way to people walking or cycling particularly when entering and leaving driveways.
- Always look around carefully, check mirrors and blind spots for children and other cars before:
  - opening your door
  - slowly reversing
  - pulling out from the side of the road or a parking area.



For more information contact:

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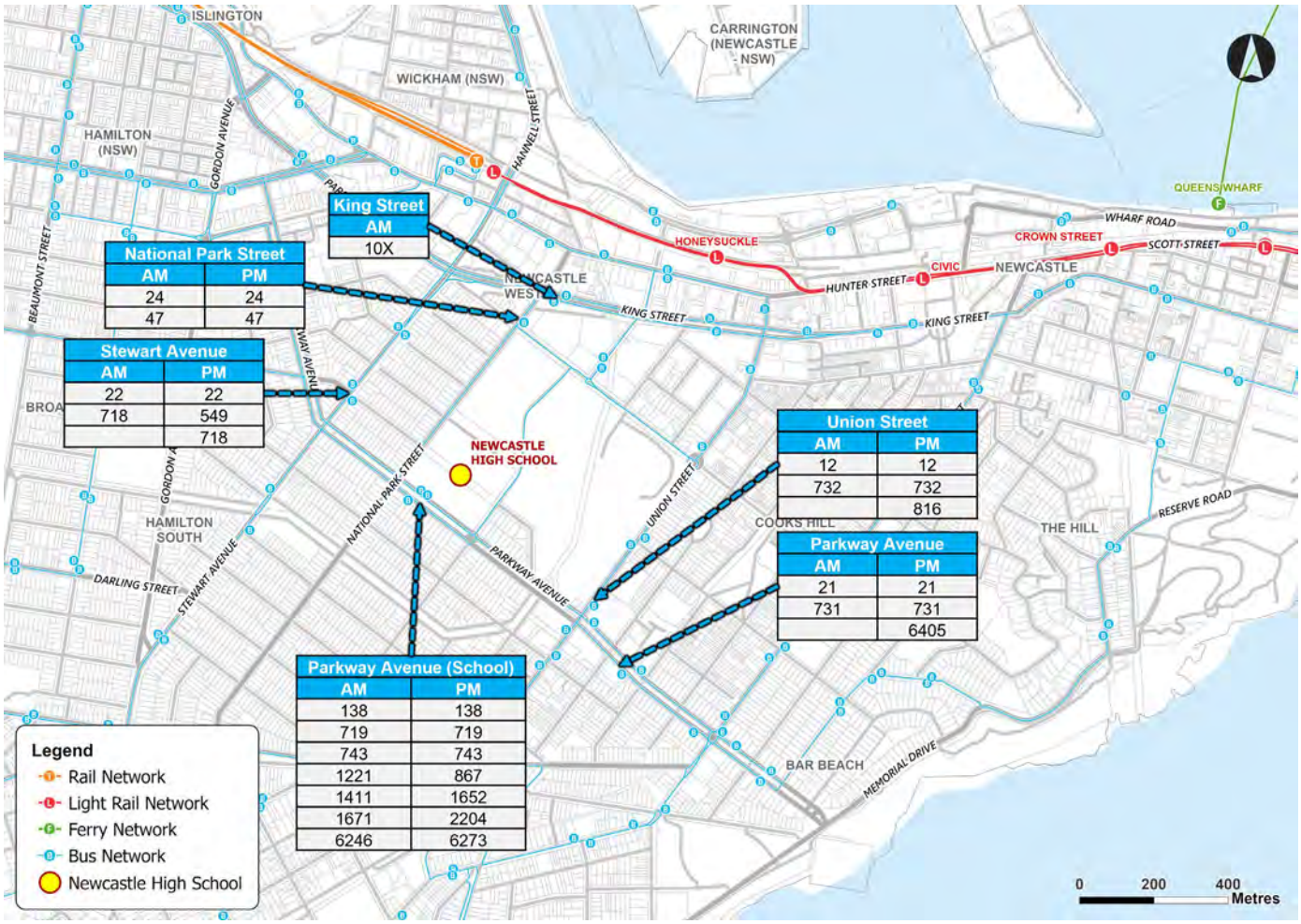
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

NSW GOVERNMENT

Using Public Transport to get to School



- Multiple school bus services are available for Newcastle High School students that stop within a 400-metre walk away from the school site entrances.
- A total of seven public bus routes currently operate near the school.

Other public transport alternatives:

- Train: Newcastle Interchange is located 1.1 kilometres away from the school, which equates to a 15-minute walk. Broadmeadow Station is located further away but is accessible via the on-road cycleway along Parkway Avenue and Dumaresq Street.
- Light Rail: Honeysuckle Light Rail Staiton is situated a one-kilometre walk from the school.
- Ferrry: Ferry trip between Stockton and Newcastle is approximately six minutes and connects to the light rail network at Queens Wharf light rail station. Additionally, Route 719 school bus service provides connections from the ferry terminal.

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School Infrastructure NSW
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Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

NSW GOVERNMENT

Using Public Transport to get to School

Regular bus routes to Newcastle High School

Route	Route Description	Board / Alight Location	AM Service	PM Service
12	Maryland to Merewether Beach via Wallsend and Newcastle Interchange	Union Street	Y	Y
21	Broadmeadow to Newcastle via Merewether	Parkway Avenue	Y	Y
22	Newcastle West to Charlestown via Merewether	Stewart Avenue	Y	Y
24	Wallsend to Marketown via Mayfield	National Park Street	Y	Y
47	Marketown to Jesmond via Warabrook	National Park Street	Y	Y
138	Newcastle to Lemon Tree Passage via Newcastle Airport	Parkway Ave (School)	Y	Y
10X	Charlestown to Newcastle Interchange (Express Service)	King Street	Y	N

School bus routes to Newcastle High School

Route	Route Description	Board / Alight Location	AM Service	PM Service
549	City West, Stewart Avenue to Swansea North	Stewart Avenue	-	15:41
718	Carrington to Hunter School of Performing Arts	Stewart Avenue	8:30	15:30
719	Newcastle Station to Newcastle High School	Parkway Ave (School)	8:40	15:06, 15:08
731	Merewether Heights to St Philips College	Parkway Avenue	7:34	15:28
732	St Philips College to Newcastle Station	Union Street	7:56, 8:30, 8:42	15:38
743	Hunter School of Performing Arts to The Junction	Parkway Avenue (School)	8:31	15:35
816	Hamilton East to St Pius X School	Union Street	-	15:42
867	Newcastle High School to St Pius X College	Parkway Avenue (School)	-	15:10
1221	Seaham and Brandy Hill to Raymond Terrace	Parkway Avenue (School)	8:40	-
1411	Medowie to Newcastle High School	Parkway Avenue (School)	8:15	-
1652	Newcastle HS to Medowie	Parkway Avenue (School)	-	15:07
1671	Medowie to Newcastle High School	Parkway Avenue (School)	8:26	-
2204	Newcastle High School to Medowie	Parkway Avenue (School)	-	15:07
6246	Maryland to Newcastle HS	Parkway Avenue (School)	8:35	-
6273	Newcastle Schools to Maryland	Parkway Avenue (School)	-	15:10
6405	Newcastle Grammar to Toronto	Parkway Avenue	-	15:26

For more information contact:

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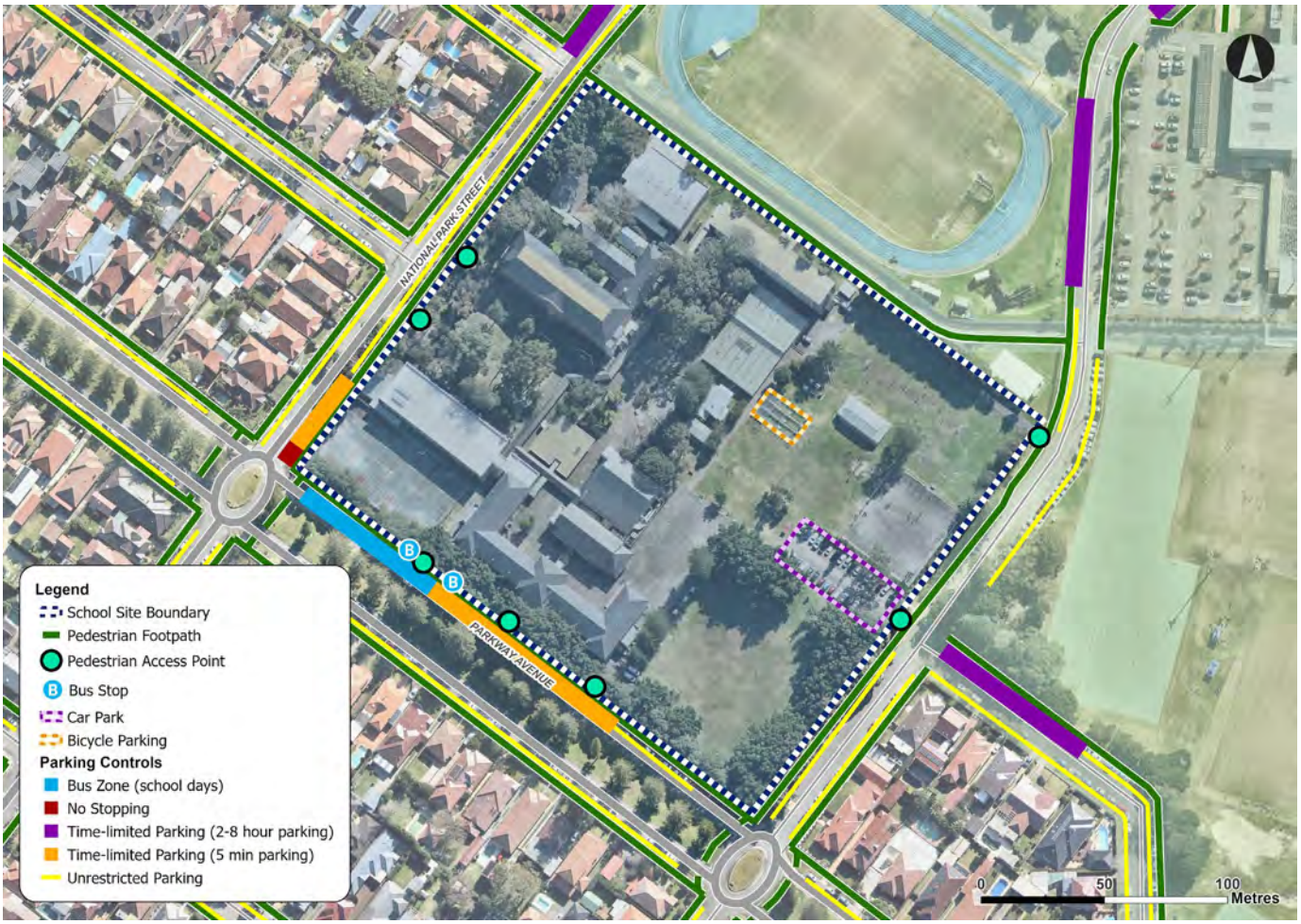
www.schoolinfrastructure.nsw.gov.au

NSW GOVERNMENT

School Access



- Pedestrian access to the school is available via multiple access points on Parkway Avenue, National Park Street and Smith Street.
- Majority of school bus routes stop at the existing school bus services board and alight directly outside of the school along Parkway Avenue, whilst the remainder of services board and alight on Stewart Avenue, Union Street and further along Parkway Avenue. Refer to the previous page or click here for bus route and timetable information.
- Short-stay drop-off/pick-up zones are provided along the side of Parkway Avenue and National Park Street fronting the school.

For more information contact:

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

NSW GOVERNMENT

Where do you ride?

Footpath/shared path/cycleway:

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

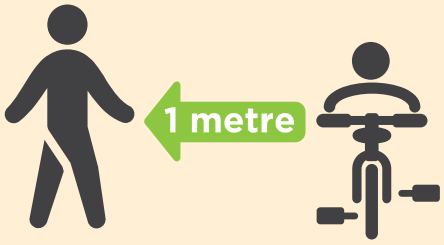
Look out for pedestrians on shared paths.

Crossing the road:

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

Give a metre:

Give pedestrians 1 metre of space when riding past.



3 steps to follow when riding a bike:

Clip, check, chime.

Clip your helmet

1

You must always wear a helmet when riding your bike.

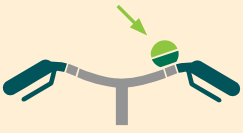
Check your brakes

2

Make sure your brakes are working.

Chime your bell

3



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

Things to remember

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

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

Always remember to watch out for hazards

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

For more information contact:

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Email: schoolinfrastructure@det.nsw.edu.au
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NSW GOVERNMENT

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NSW GOVERNMENT

Additional information

Something broken on the way to school?

Use the Snap Send Solve app or website to report issues to the people who can fix them.

Things like abandoned trolleys, broken footpaths or water leaks can all be reported in the app.

Download it today from the App Store or Google Play. Or visit **www.snapsendsolve.com**

Get a discount on your Bicycle NSW membership

Bicycle NSW is offering a 15% discount on membership for families at our school. This includes insurance and discounts for recreational bike rides.

Take up the offer today:

- Visit bicyclensw.org.au
- Sign up for a membership
- Use this discount code for 15% off your membership:

nswtag

The code expires on 31 May 2023.
Don't miss out!

bicycle NSW

Benefits of not using a car to travel to and from school

Did you know children who live within 2 kilometres of school are often driven to school?

That means many NSW children could be missing out on the physical, social and mental benefits of active travel - walking, riding or using public transport.

Additionally, even active travel part way for one day per week can make a difference to our local traffic congestion.

We can help bring these positive changes to our local community by choosing active ways to get to school.

Apply for a school travel pass

Depending on where you're travelling, you may receive a free school travel pass, a School Opal card, or both or travel between home and school on NSW public transport. As a general guide:

- Students who live 2km away from the school or further are eligible for free bus travel to school.
- Students who live within 2km radius of the school for a fee of approximately $55 per year can receive subsidised school travel.

Check your eligibility for a school travel pass here: https://www.service.nsw.gov.au/transaction/apply-school-travel-pass#eligibility

Safe travel

Parents and carers are responsible for their child's safety on the way to and from school.

Parents and carers can reinforce what their children learn at school by planning and using safe school travel routes, model safe considerate behaviour and always follow the road rules. Young children, in particular, require active supervision by an adult whenever they are in a traffic environment.

Remember — road safety is everyone's responsibility.

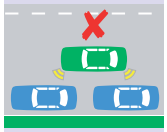
For more information contact:
School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

NSW GOVERNMENT

Parking and traffic rules in school zones

You need to take extra care when driving and parking in school zones. Make sure that you and your child understand the road rules. If you break the traffic rules in a school zone you are putting not only your child but other children at risk. The parking and traffic rules around our schools are there to protect your children. If you break the rules you will be fined. **Please choose safety over convenience.**

QUICK REFERENCE GUIDE TO IMPORTANT SAFETY TRAFFIC RULES

ZONE	WHAT DOES IT MEAN?	WHY IS IT THERE?	PENALTY	DEMERIT POINTS*
	You cannot stop in a **NO STOPPING** zone for any reason (including queuing or waiting for a space). 	Keeps clear sight lines between drivers and children / pedestrians.	EXCEEDS **$349**	(School Zone) **2**
	You can stop in a **NO PARKING** zone for a max. of two minutes to drop off and pick up passengers. If no spaces are available you cannot queue on the road way or in any other zones while waiting for a space. You will need to drive away and park elsewhere, only returning when there is space to pull up. You must stay within 3 metres of your vehicle at all times and cannot leave your vehicle unattended.	Provides a safe place for children / pedestrian set down and pick up.	EXCEEDS **$194**	(School Zone) **2**
	You must not stop or park in a **BUS ZONE** for any reason (including queuing or waiting for a space) unless you are driving a bus. If times are shown on the sign, you are not allowed to stop during those times.	Provides a safe place for large buses to set down and pick up school children.	EXCEEDS **$349**	(School Zone) **2**
	You must not stop on or within 20 metres before a **PEDESTRIAN CROSSING** or 10 metres after a crossing unless there is a control sign permitting parking.	So drivers can clearly see pedestrians on the crossing.	EXCEEDS **$464**	(School Zone) **2**
	**DOUBLE PARKING** You must not stop on the road adjacent to another vehicle at any time even to drop off or pick up passengers.	Double parking blocks visibility and forces other cars to go around you.	EXCEEDS **$349**	(School Zone) **2**
	You must not stop on any **FOOTPATH** or **NATURE STRIP**, or even a **DRIVEWAY** crossing a footpath or nature strip for any reason.	You could easily run over a child or force pedestrians onto the road to get around you.	EXCEEDS **$194**	(School Zone) **2**

Please note: The above information is current as of 1 January 2020.
Penalties set by NSW State Government and reviewed on 1 July each year.

NSW Police Force

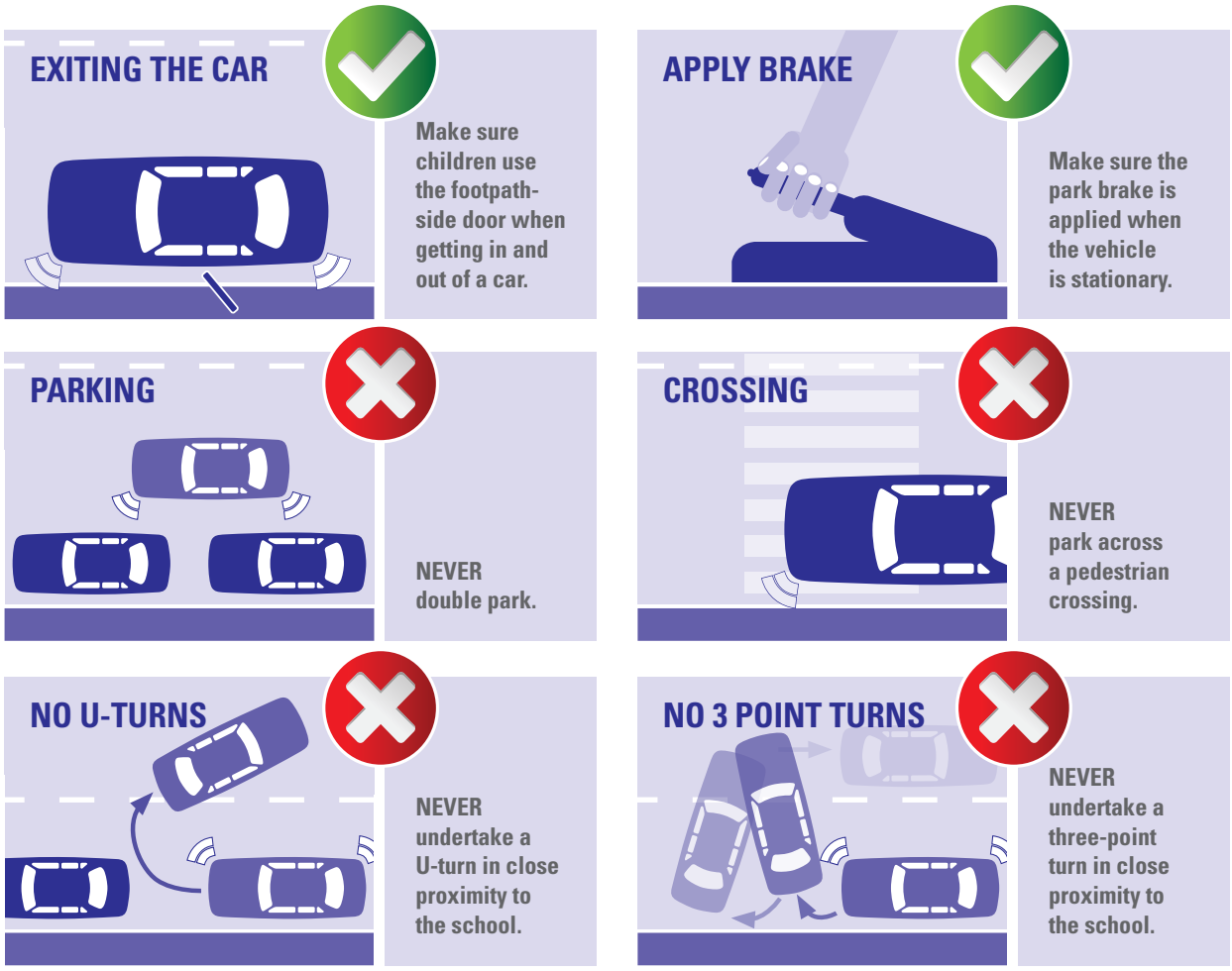
City of Newcastle

For more information contact:

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

NSW GOVERNMENT

Safety tips for school zones:



Safety tips for students:

Demerit Points:

* The **Demerit Points** Scheme is a national program that allocates penalty points (demerits) for a range of driving offences. A driver who has not committed any offences has '**zero**' points. If you commit an offence that carries demerit points, the points are added to your driving record.
If you incur the threshold number of demerit points within a three-year period, a licence suspension or refusal is applied. The three-year period is calculated between the dates the offences were committed. It ends on the day your most recent offence was committed.

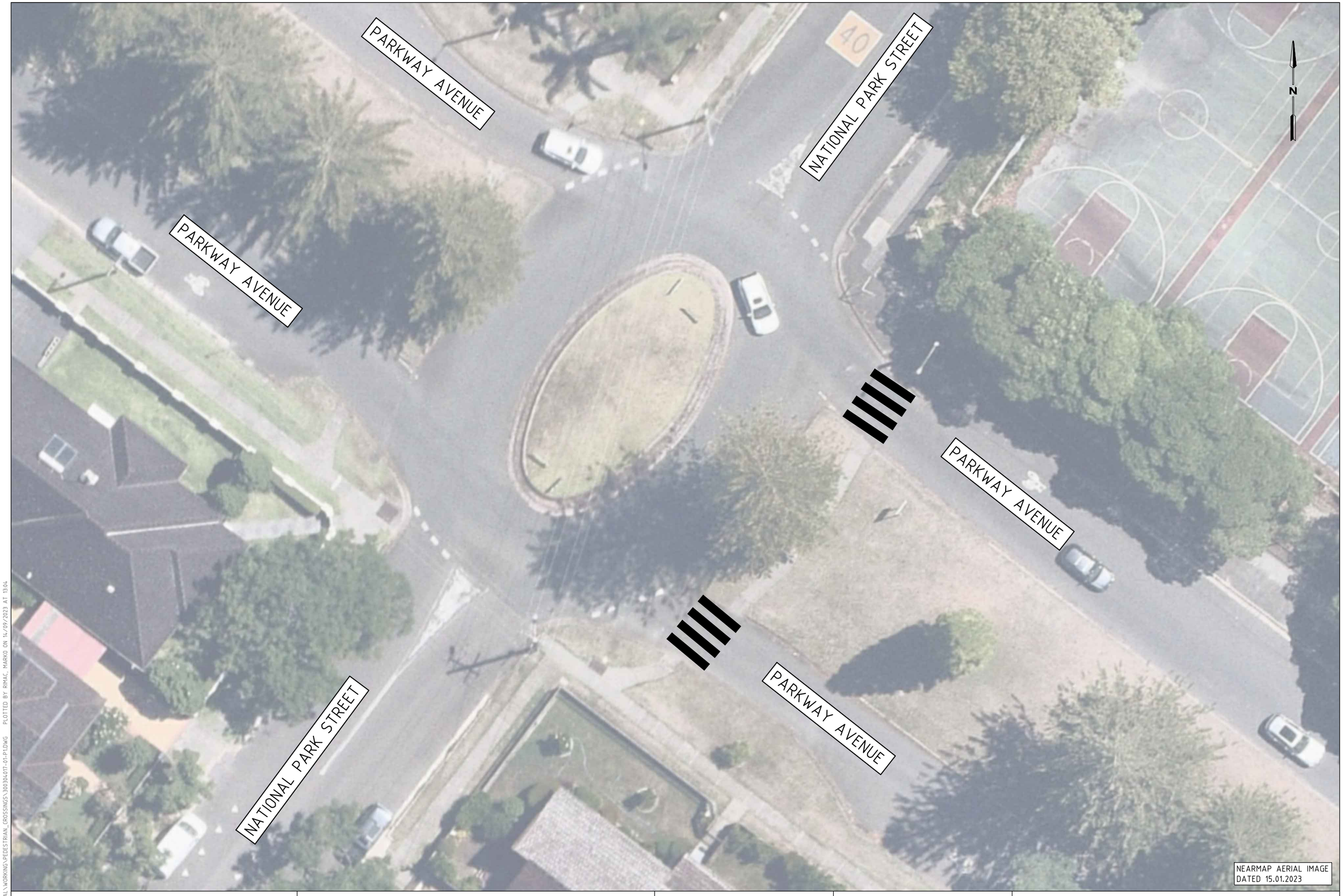
For further information regarding demerit points please visit: **rms.nsw.gov.au/roads/safety-rules/demerits/**

For more information contact:

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

NSW GOVERNMENT

Appendix E　Mitigaion Measures



Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED M.RIMAC	DESIGN CHECK M.TODD
APPROVED BY M.TODD	DATE ISSUED 14 SEPTEMBER 2023

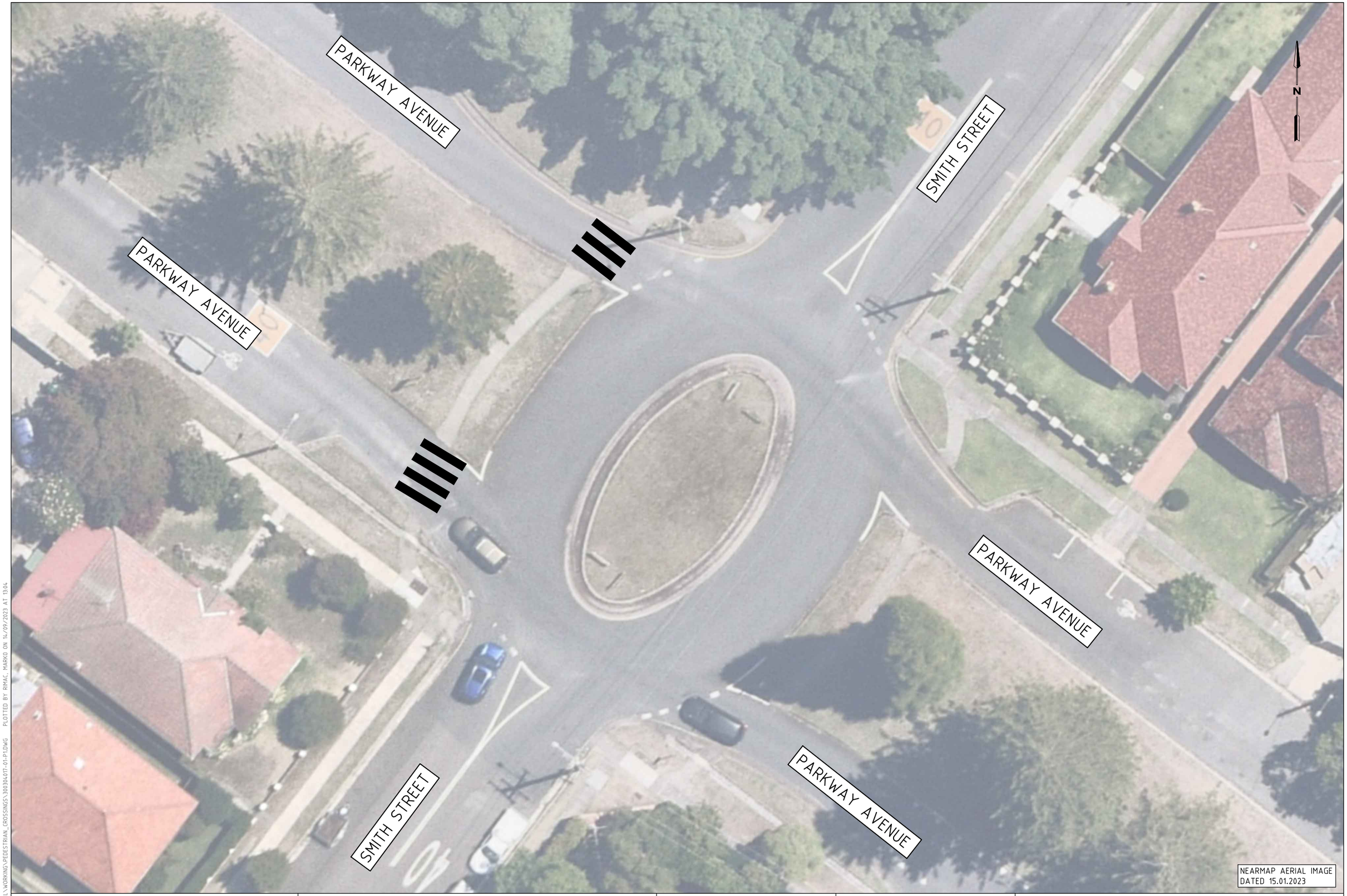
SCALE A3 0 1.25 2.5 5 1:250

CAD FILE NO. 300304017-01-P1.DWG

NEWCASTLE HIGH SCHOOL
INTERSECTION PARKWAY AVE - NATIONAL PARK ST

PROPOSED TEMPORARY PEDESTRIAN CROSSINGS

DRAWING NO. 300304017-01-01 SHEET 01 OF 02 ISSUE P1



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Stantec

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PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED M.RIMAC	DESIGN CHECK M.TODD
APPROVED BY M.TODD	DATE ISSUED 14 SEPTEMBER 2023

SCALE A3 0 1.25 2.5 5 1:250

CAD FILE NO. 300304017-01-P1.DWG

NEWCASTLE HIGH SCHOOL
INTERSECTION PARKWAY AVE - SMITH ST

PROPOSED TEMPORARY PEDESTRIAN CROSSINGS

DRAWING NO. 300304017-01-02 SHEET 02 OF 02 ISSUE P1

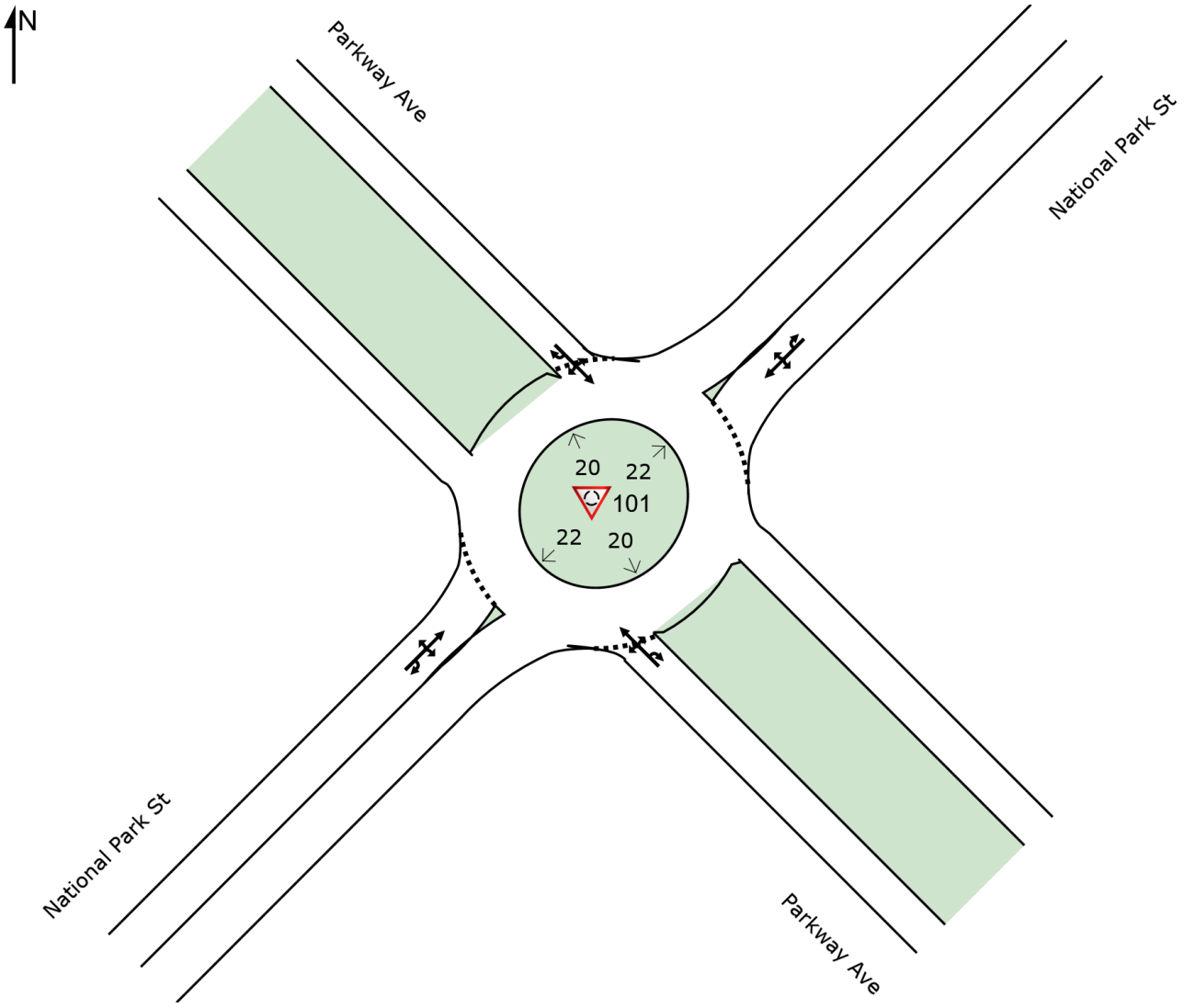
Appendix F SIDRA Survey Results and Data

SITE LAYOUT

Site: 101 [101 - Existing - National Park St / Parkway Ave - AM (Site Folder: Existing)]

Existing
AM Peak (8:30 to 9:30)
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [101 - Existing - National Park St / Parkway Ave - AM (Site Folder: Existing)]

Existing
AM Peak (8:30 to 9:30)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Parkway Ave														
21	L2	22	0	23	0.0	0.370	2.3	LOS A	2.1	15.3	0.34	0.29	0.34	37.1
22	T1	390	12	411	3.1	0.370	1.7	LOS A	2.1	15.3	0.34	0.29	0.34	39.5
23	R2	43	0	45	0.0	0.370	6.1	LOS A	2.1	15.3	0.34	0.29	0.34	40.2
23u	U	3	0	3	0.0	0.370	7.5	LOS A	2.1	15.3	0.34	0.29	0.34	42.2
Approach		458	12	482	2.6	0.370	2.2	LOS A	2.1	15.3	0.34	0.29	0.34	39.5
NorthEast: National Park St														
24	L2	27	0	28	0.0	0.143	4.0	LOS A	0.7	5.1	0.59	0.63	0.59	37.3
25	T1	44	1	46	2.3	0.143	3.5	LOS A	0.7	5.1	0.59	0.63	0.59	38.0
26	R2	50	0	53	0.0	0.143	7.8	LOS A	0.7	5.1	0.59	0.63	0.59	38.8
26u	U	3	0	3	0.0	0.143	9.3	LOS A	0.7	5.1	0.59	0.63	0.59	39.9
Approach		124	1	131	0.8	0.143	5.5	LOS A	0.7	5.1	0.59	0.63	0.59	38.2
NorthWest: Parkway Ave														
27	L2	81	1	85	1.2	0.573	3.2	LOS A	4.3	31.1	0.57	0.41	0.57	37.9
28	T1	533	16	561	3.0	0.573	2.6	LOS A	4.3	31.1	0.57	0.41	0.57	38.5
29	R2	28	1	29	3.6	0.573	7.0	LOS A	4.3	31.1	0.57	0.41	0.57	38.8
29u	U	9	0	9	0.0	0.573	8.4	LOS A	4.3	31.1	0.57	0.41	0.57	41.2
Approach		651	18	685	2.8	0.573	3.0	LOS A	4.3	31.1	0.57	0.41	0.57	38.4
SouthWest: National Park St														
30	L2	52	2	55	3.8	0.229	3.5	LOS A	1.1	7.6	0.50	0.56	0.50	35.4
31	T1	94	1	99	1.1	0.229	2.9	LOS A	1.1	7.6	0.50	0.56	0.50	38.5
32	R2	81	0	85	0.0	0.229	7.3	LOS A	1.1	7.6	0.50	0.56	0.50	38.6
32u	U	1	0	1	0.0	0.229	8.7	LOS A	1.1	7.6	0.50	0.56	0.50	41.0
Approach		228	3	240	1.3	0.229	4.6	LOS A	1.1	7.6	0.50	0.56	0.50	37.9
All Vehicles		1461	34	1538	2.3	0.573	3.2	LOS A	4.3	31.1	0.49	0.42	0.49	38.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [102 - Existing - National Park St / Parkway Ave - PM (Site Folder: Existing)]

Existing
PM Peak (14:30 to 15:30)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Parkway Ave														
21	L2	32	0	34	0.0	0.347	2.3	LOS A	1.9	13.5	0.32	0.30	0.32	37.1
22	T1	351	12	369	3.4	0.347	1.7	LOS A	1.9	13.5	0.32	0.30	0.32	39.5
23	R2	25	0	26	0.0	0.347	6.1	LOS A	1.9	13.5	0.32	0.30	0.32	40.2
23u	U	20	0	21	0.0	0.347	7.5	LOS A	1.9	13.5	0.32	0.30	0.32	42.2
Approach		428	12	451	2.8	0.347	2.3	LOS A	1.9	13.5	0.32	0.30	0.32	39.5
NorthEast: National Park St														
24	L2	30	3	32	10.0	0.122	3.6	LOS A	0.5	3.8	0.49	0.55	0.49	37.7
25	T1	47	0	49	0.0	0.122	2.9	LOS A	0.5	3.8	0.49	0.55	0.49	38.5
26	R2	40	0	42	0.0	0.122	7.2	LOS A	0.5	3.8	0.49	0.55	0.49	39.3
26u	U	1	0	1	0.0	0.122	8.7	LOS A	0.5	3.8	0.49	0.55	0.49	40.3
Approach		118	3	124	2.5	0.122	4.6	LOS A	0.5	3.8	0.49	0.55	0.49	38.6
NorthWest: Parkway Ave														
27	L2	60	0	63	0.0	0.454	2.5	LOS A	3.0	21.3	0.39	0.32	0.39	38.4
28	T1	454	15	478	3.3	0.454	1.9	LOS A	3.0	21.3	0.39	0.32	0.39	39.3
29	R2	43	0	45	0.0	0.454	6.2	LOS A	3.0	21.3	0.39	0.32	0.39	40.1
29u	U	7	0	7	0.0	0.454	7.7	LOS A	3.0	21.3	0.39	0.32	0.39	42.1
Approach		564	15	594	2.7	0.454	2.4	LOS A	3.0	21.3	0.39	0.32	0.39	39.2
SouthWest: National Park St														
30	L2	42	0	44	0.0	0.131	3.0	LOS A	0.6	3.9	0.43	0.49	0.43	36.0
31	T1	58	0	61	0.0	0.131	2.5	LOS A	0.6	3.9	0.43	0.49	0.43	38.9
32	R2	35	0	37	0.0	0.131	6.8	LOS A	0.6	3.9	0.43	0.49	0.43	39.4
32u	U	1	0	1	0.0	0.131	8.3	LOS A	0.6	3.9	0.43	0.49	0.43	42.4
Approach		136	0	143	0.0	0.131	3.8	LOS A	0.6	3.9	0.43	0.49	0.43	38.3
All Vehicles		1246	30	1312	2.4	0.454	2.7	LOS A	3.0	21.3	0.38	0.35	0.38	39.1

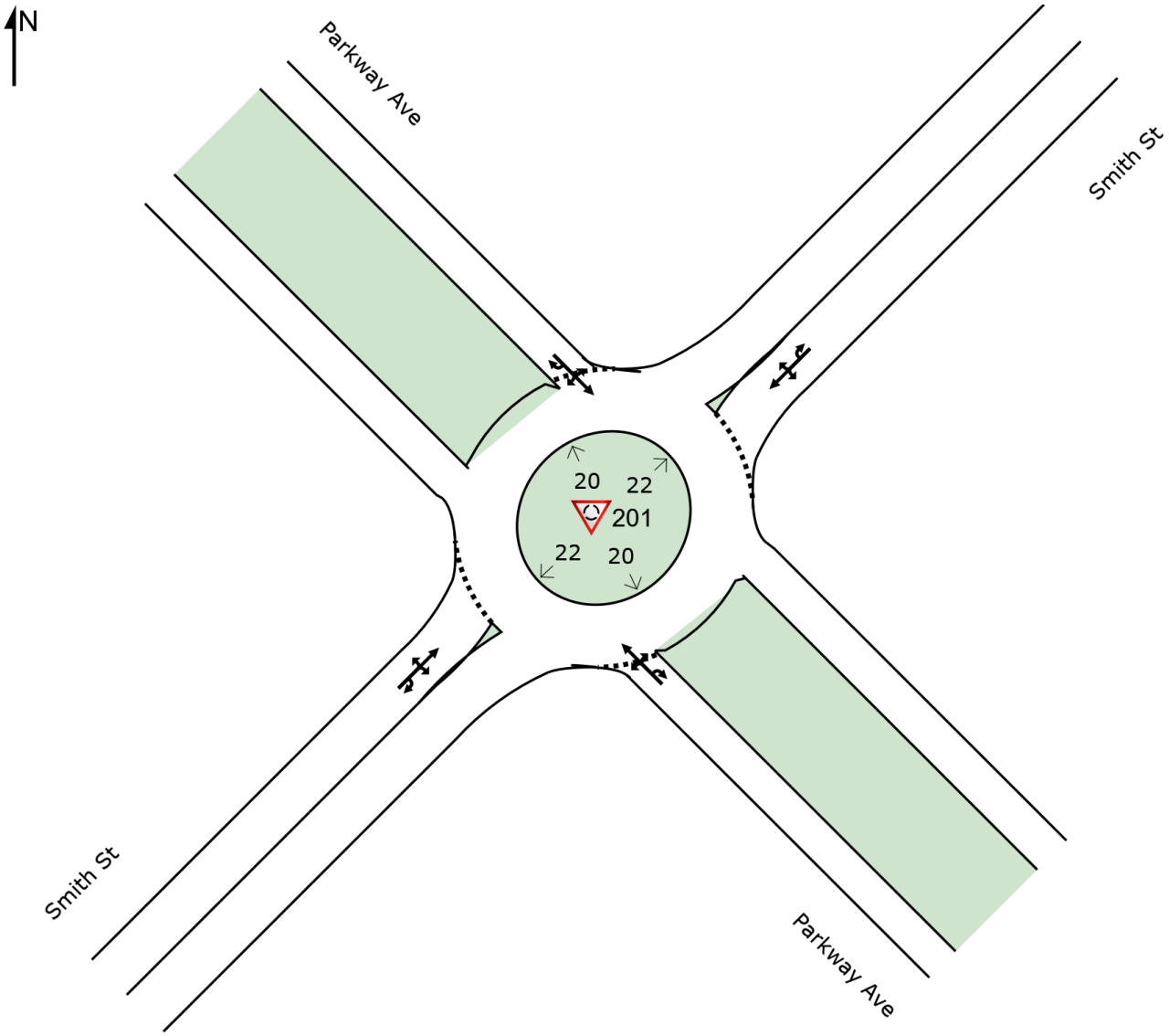
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 201 [201 - Existing - Smith St / Parkway Ave - AM (Site Folder: Existing)]

Existing
AM Peak (8:30 to 9:30)
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 201 [201 - Existing - Smith St / Parkway Ave - AM (Site Folder: Existing)]

Existing
AM Peak (8:30 to 9:30)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Parkway Ave														
21	L2	12	1	13	8.3	0.295	2.6	LOS A	1.6	11.7	0.36	0.30	0.36	37.7
22	T1	314	6	331	1.9	0.295	1.9	LOS A	1.6	11.7	0.36	0.30	0.36	39.6
23	R2	16	1	17	6.3	0.295	6.3	LOS A	1.6	11.7	0.36	0.30	0.36	40.2
23u	U	6	0	6	0.0	0.295	7.7	LOS A	1.6	11.7	0.36	0.30	0.36	41.5
Approach		348	8	366	2.3	0.295	2.2	LOS A	1.6	11.7	0.36	0.30	0.36	39.6
NorthEast: Smith St														
24	L2	12	0	13	0.0	0.078	3.5	LOS A	0.3	2.4	0.49	0.54	0.49	37.9
25	T1	33	0	35	0.0	0.078	2.9	LOS A	0.3	2.4	0.49	0.54	0.49	38.4
26	R2	29	0	31	0.0	0.078	7.2	LOS A	0.3	2.4	0.49	0.54	0.49	39.2
26u	U	1	0	1	0.0	0.078	8.7	LOS A	0.3	2.4	0.49	0.54	0.49	40.2
Approach		75	0	79	0.0	0.078	4.7	LOS A	0.3	2.4	0.49	0.54	0.49	38.7
NorthWest: Parkway Ave														
27	L2	81	1	85	1.2	0.486	2.4	LOS A	3.4	24.2	0.36	0.33	0.36	38.3
28	T1	450	12	474	2.7	0.486	1.8	LOS A	3.4	24.2	0.36	0.33	0.36	39.3
29	R2	57	2	60	3.5	0.486	6.1	LOS A	3.4	24.2	0.36	0.33	0.36	40.0
29u	U	37	3	39	8.1	0.486	7.7	LOS A	3.4	24.2	0.36	0.33	0.36	41.8
Approach		625	18	658	2.9	0.486	2.6	LOS A	3.4	24.2	0.36	0.33	0.36	39.3
SouthWest: Smith St														
30	L2	63	0	66	0.0	0.141	2.8	LOS A	0.5	3.8	0.39	0.44	0.39	36.7
31	T1	61	1	64	1.6	0.141	2.2	LOS A	0.5	3.8	0.39	0.44	0.39	39.3
32	R2	28	0	29	0.0	0.141	6.6	LOS A	0.5	3.8	0.39	0.44	0.39	40.0
32u	U	1	0	1	0.0	0.141	8.0	LOS A	0.5	3.8	0.39	0.44	0.39	43.3
Approach		153	1	161	0.7	0.141	3.3	LOS A	0.5	3.8	0.39	0.44	0.39	38.6
All Vehicles		1201	27	1264	2.2	0.486	2.7	LOS A	3.4	24.2	0.37	0.35	0.37	39.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 202 [202 - Existing - Smith St / Parkway Ave - PM (Site Folder: Existing)]

Existing
PM Peak (14:30 to 15:30)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Parkway Ave														
21	L2	25	0	26	0.0	0.311	2.8	LOS A	1.8	12.5	0.43	0.37	0.43	37.3
22	T1	289	4	304	1.4	0.311	2.3	LOS A	1.8	12.5	0.43	0.37	0.43	39.2
23	R2	27	0	28	0.0	0.311	6.6	LOS A	1.8	12.5	0.43	0.37	0.43	39.9
23u	U	6	0	6	0.0	0.311	8.1	LOS A	1.8	12.5	0.43	0.37	0.43	41.2
Approach		347	4	365	1.2	0.311	2.7	LOS A	1.8	12.5	0.43	0.37	0.43	39.2
NorthEast: Smith St														
24	L2	13	0	14	0.0	0.141	3.2	LOS A	0.6	4.1	0.45	0.52	0.45	38.0
25	T1	76	0	80	0.0	0.141	2.6	LOS A	0.6	4.1	0.45	0.52	0.45	38.6
26	R2	55	0	58	0.0	0.141	7.0	LOS A	0.6	4.1	0.45	0.52	0.45	39.4
26u	U	1	0	1	0.0	0.141	8.5	LOS A	0.6	4.1	0.45	0.52	0.45	40.3
Approach		145	0	153	0.0	0.141	4.4	LOS A	0.6	4.1	0.45	0.52	0.45	38.9
NorthWest: Parkway Ave														
27	L2	50	2	53	4.0	0.406	2.2	LOS A	2.5	18.0	0.30	0.30	0.30	38.5
28	T1	398	9	419	2.3	0.406	1.6	LOS A	2.5	18.0	0.30	0.30	0.30	39.6
29	R2	46	0	48	0.0	0.406	5.9	LOS A	2.5	18.0	0.30	0.30	0.30	40.5
29u	U	35	7	37	20.0	0.406	7.6	LOS A	2.5	18.0	0.30	0.30	0.30	42.1
Approach		529	18	557	3.4	0.406	2.4	LOS A	2.5	18.0	0.30	0.30	0.30	39.6
SouthWest: Smith St														
30	L2	47	1	49	2.1	0.100	2.8	LOS A	0.4	2.7	0.39	0.45	0.39	36.6
31	T1	39	0	41	0.0	0.100	2.2	LOS A	0.4	2.7	0.39	0.45	0.39	39.2
32	R2	20	0	21	0.0	0.100	6.5	LOS A	0.4	2.7	0.39	0.45	0.39	39.9
32u	U	2	0	2	0.0	0.100	8.0	LOS A	0.4	2.7	0.39	0.45	0.39	43.2
Approach		108	1	114	0.9	0.100	3.4	LOS A	0.4	2.7	0.39	0.45	0.39	38.5
All Vehicles		1129	23	1188	2.0	0.406	2.9	LOS A	2.5	18.0	0.37	0.36	0.37	39.3

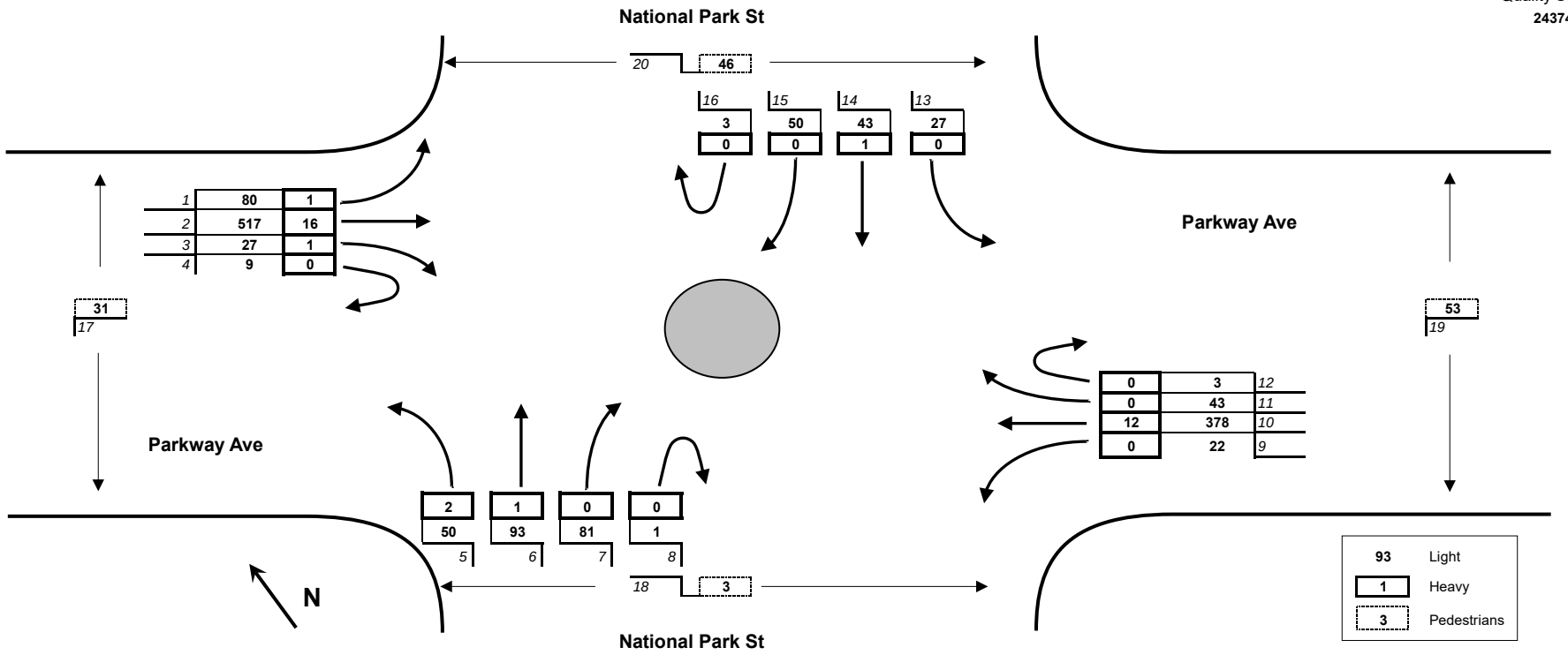
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

19/9/2023 - National Park St / Parkway Ave, NEWCASTLE

9:30 <<< HOUR ENDING **Tuesday**

National Park St / Parkway Ave	
1427	Total Light Vehicles
34	Total Heavy Vehicles
133	Total Pedestrians

Quality Surveys
243746



19/9/2023 - National Park St / Parkway Ave, NEWCASTLE

Light Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR	Pedestrians 17	18	19	20
08:45	27	152	11	1	24	38	29	0	7	115	20	0	12	14	10	1	461		12	1	21	20
09:00	15	146	12	2	11	28	33	1	4	107	13	1	8	12	12	0	405		11	0	25	16
09:15	19	116	1	4	9	17	13	0	6	94	5	2	5	10	13	0	314		7	2	5	7
09:30	19 <	103 <	3 <	2 <	6 <	10 <	6 <	0 <	5 <	62 <	5 <	0 <	2 <	7 <	15 <	2 <	247	1427 <	1 <	0 <	2 <	3 <

Heavy Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
08:45	0	6	0	0	0	1	0	0	0	5	0	0	0	0	0	0	12	
09:00	0	6	1	0	1	0	0	0	0	3	0	0	0	1	0	0	12	
09:15	1	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	5	
09:30	0 <	2 <	0 <	0	0 <	0 <	0	0	0	3 <	0	0	0	0 <	0	0	5	34 <

All Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
08:45	27	158	11	1	24	39	29	0	7	120	20	0	12	14	10	1	473	
09:00	15	152	13	2	12	28	33	1	4	110	13	1	8	13	12	0	417	
09:15	20	118	1	4	10	17	13	0	6	95	5	2	5	10	13	0	319	
09:30	19 <	105 <	3 <	2 <	6 <	10 <	6 <	0 <	5 <	65 <	5 <	0 <	2 <	7 <	15 <	2 <	252	1461 <

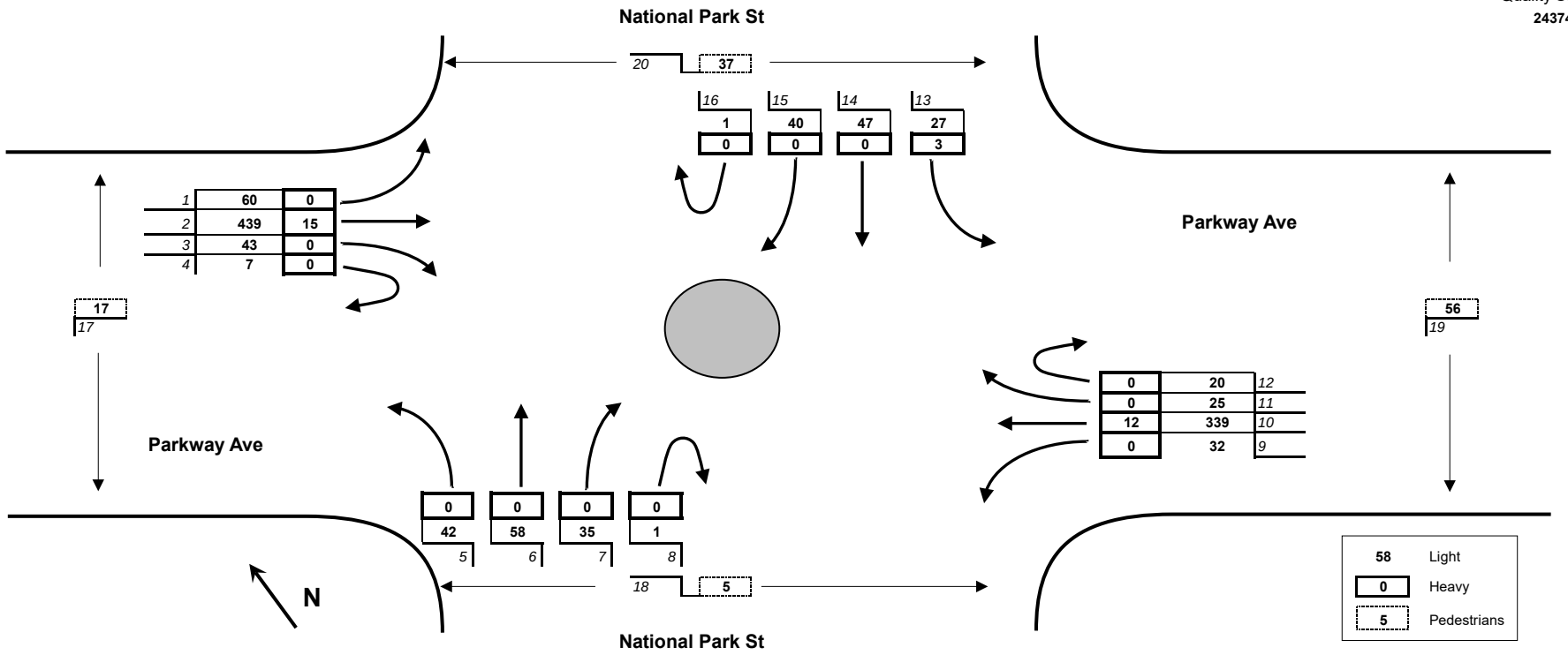
Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

19/9/2023 - National Park St / Parkway Ave, NEWCASTLE

15:30 <<< HOUR ENDING **Tuesday**

National Park St / Parkway Ave	
1216	Total Light Vehicles
30	Total Heavy Vehicles
115	Total Pedestrians

Quality Surveys
243746



19/9/2023 - National Park St / Parkway Ave, NEWCASTLE

Light Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR	Pedestrians 17	18	19	20
14:45	11	116	10	1	9	10	10	0	6	81	4	4	5	6	9	1	283		2	0	1	5
15:00	13	91	12	2	15	13	7	1	3	77	8	5	7	16	15	0	285		2	1	2	0
15:15	21	101	9	1	7	21	12	0	17	106	9	10	12	18	9	0	353		13	1	50	26
15:30	15 <	131 <	12 <	3 <	11 <	14 <	6 <	0 <	6 <	75 <	4 <	1 <	3 <	7 <	7 <	0 <	295	1216 <	0 <	3 <	3 <	6 <

Heavy Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
14:45	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	
15:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
15:15	0	5	0	0	0	0	0	0	0	6	0	0	2	0	0	0	13	
15:30	0	2 <	0	0	0	0	0	0	0	5 <	0	0	1 <	0	0	0	8	30 <

All Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
14:45	11	118	10	1	9	10	10	0	6	82	4	4	5	6	9	1	286	
15:00	13	97	12	2	15	13	7	1	3	77	8	5	7	16	15	0	291	
15:15	21	106	9	1	7	21	12	0	17	112	9	10	14	18	9	0	366	
15:30	15 <	133 <	12 <	3 <	11 <	14 <	6 <	0 <	6 <	80 <	4 <	1 <	4 <	7 <	7 <	0 <	303	1246 <

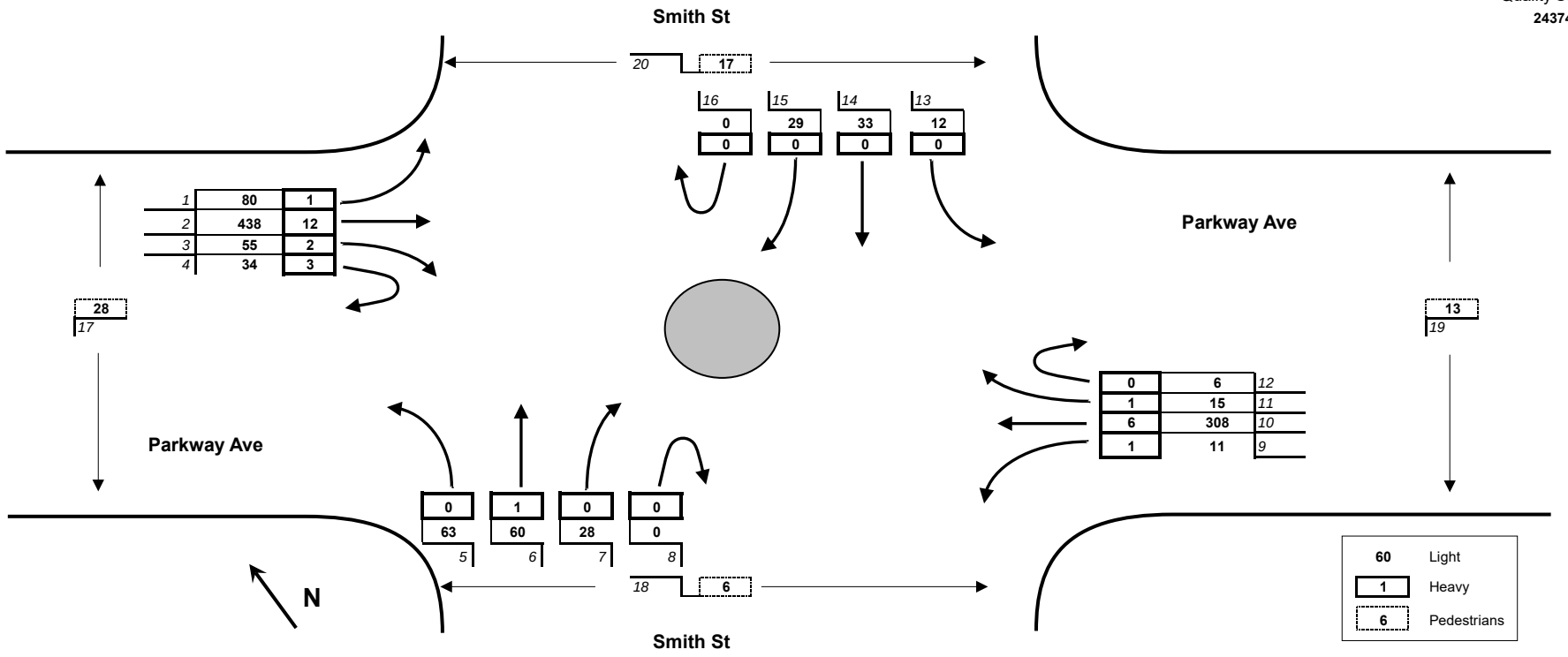
Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

19/9/2023 - Smith St / Parkway Ave, NEWCASTLE

9:30 <<< HOUR ENDING **Tuesday**

Smith St / Parkway Ave	
1172	Total Light Vehicles
27	Total Heavy Vehicles
64	Total Pedestrians

Quality Surveys
243746



19/9/2023 - Smith St / Parkway Ave, NEWCASTLE

Light Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR	Pedestrians 17	18	19	20
08:45	28	129	19	17	22	20	8	0	1	105	3	2	1	9	7	0	371		4	1	3	8
09:00	26	116	24	11	18	21	11	0	5	74	6	2	4	5	10	0	333		11	2	1	5
09:15	16	104	9	5	11	13	4	0	4	73	2	2	5	8	7	0	263		2	1	1	2
09:30	10 <	89 <	3 <	1 <	12 <	6 <	5 <	0	1 <	56 <	4 <	0 <	2 <	11 <	5 <	0	205	1172 <	11 <	2 <	8 <	2 <

Heavy Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
08:45	1	3	0	1	0	0	0	0	0	2	0	0	0	0	0	0	7	
09:00	0	8	1	1	0	1	0	0	0	1	0	0	0	0	0	0	12	
09:15	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	3	
09:30	0 <	1 <	0 <	1 <	0	0 <	0	0	1 <	2 <	0 <	0	0	0	0	0	5	27 <

All Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
08:45	29	132	19	18	22	20	8	0	1	107	3	2	1	9	7	0	378	
09:00	26	124	25	12	18	22	11	0	5	75	6	2	4	5	10	0	345	
09:15	16	104	10	5	11	13	4	0	4	74	3	2	5	8	7	0	266	
09:30	10 <	90 <	3 <	2 <	12 <	6 <	5 <	0	2 <	58 <	4 <	0 <	2 <	11 <	5 <	0	210	1199 <

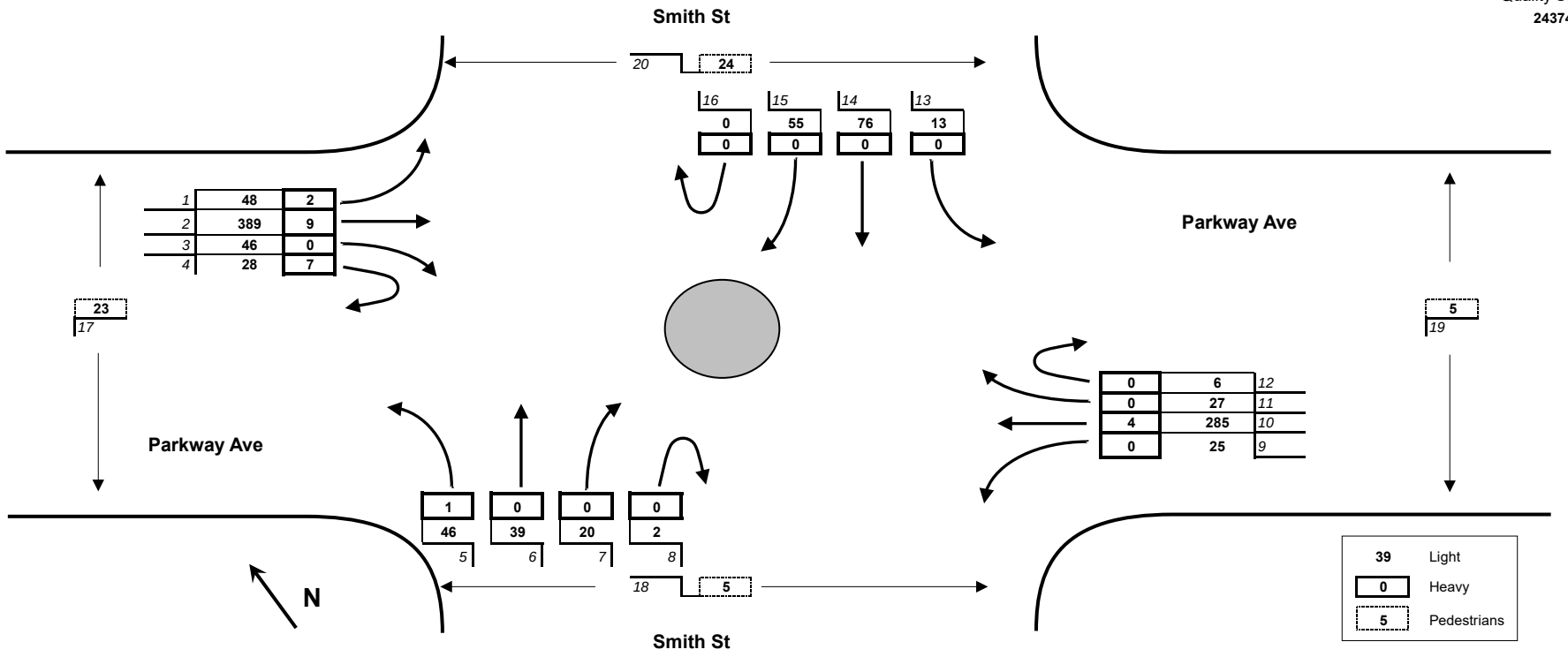
Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

19/9/2023 - Smith St / Parkway Ave, NEWCASTLE

15:30 <<< HOUR ENDING **Tuesday**

Smith St / Parkway Ave	
1105	Total Light Vehicles
23	Total Heavy Vehicles
57	Total Pedestrians

Quality Surveys
243746



19/9/2023 - Smith St / Parkway Ave, NEWCASTLE

Light Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR	Pedestrians 17	18	19	20
14:45	10	98	11	7	6	8	3	1	3	69	1	1	2	15	14	0	249		2	2	0	2
15:00	6	91	9	11	9	9	8	0	3	63	4	2	1	14	16	0	246		0	1	0	0
15:15	18	96	17	7	18	9	7	1	11	84	12	2	5	23	10	0	320		16	2	5	19
15:30	14 <	104 <	9 <	3 <	13 <	13 <	2 <	0 <	8 <	69 <	10 <	1 <	5 <	24 <	15 <	0	290	1105 <	5 <	0 <	0 <	3 <

Heavy Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
14:45	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	
15:00	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
15:15	0	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9	
15:30	1 <	1 <	0	1 <	1 <	0	0	0	0	3 <	0	0	0	0	0	0	7	23 <

All Vehicles

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total Vehicles 15 MIN	Total Vehicles HOUR
14:45	10	99	11	7	6	8	3	1	3	70	1	1	2	15	14	0	251	
15:00	7	95	9	11	9	9	8	0	3	63	4	2	1	14	16	0	251	
15:15	18	99	17	13	18	9	7	1	11	84	12	2	5	23	10	0	329	
15:30	15 <	105 <	9 <	4 <	14 <	13 <	2 <	0 <	8 <	72 <	10 <	1 <	5 <	24 <	15 <	0	297	1128 <

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

Location: PARKWAY AVE/NATIONAL PARK ST NEWCASTLE

Date: 19-September-2023 **7 m Light Vehicles**

13 m Heavy Vehicles

Quality Surveys
243746

Start Time: 8:30 14:30

End Time: 9:30 15:30

Peak Hour Ending: 9:30 15:30

Approach 4: NATIONAL PARK ST SOUTHBOUND

Peak Hour							
	95% Queue Length						25
	95% Queue Vehicles						4
	Avg Length (m)						10

4

Queues reported graphically relate to peak hour only

Approach 3: PARKWAY AVE WESTBOUND

Peak Hour		
95% Queue Length	95% Queue Vehicles	Avg Length (m)
63	9	29

3

1

190	27	45
95% Queue Length	95% Queue Vehicles	Avg Length (m)
Peak Hour		

Approach 1: PARKWAY AVE EASTBOUND

2

28					95% Queue Length	Peak Hour
4					95% Queue Vehicles	
18					Avg Length (m)	

Approach 2: NATIONAL PARK ST NORTHBOUND

LEGEND	
(Metres)	95% Queue Length
(Number of Vehicles)	95% Queue Vehicles
(Metres)	Avg Length (m)

Location: PARKWAY AVE/NATIONAL PARK ST NEWCASTLE

Date: 19-September-2023 **7 m Light Vehicles**

13 m Heavy Vehicles

Quality Surveys
243746

Start Time: 14:30

End Time: 15:30

Peak Hour Ending: 15:30

Approach 4: NATIONAL PARK ST SOUTHBOUND

Peak Hour							
	95% Queue Length						25
	95% Queue Vehicles						4
	Avg Length (m)						12

4

Queues reported graphically relate to peak hour only

Approach 3: PARKWAY AVE WESTBOUND

Peak Hour		
95% Queue Length	95% Queue Vehicles	Avg Length (m)
221	32	51

3

1

55	8	23
95% Queue Length	95% Queue Vehicles	Avg Length (m)
Peak Hour		

Approach 1: PARKWAY AVE EASTBOUND

2

28					95% Queue Length	Peak Hour
4					95% Queue Vehicles	
15					Avg Length (m)	

Approach 2: NATIONAL PARK ST NORTHBOUND

LEGEND	
(Metres)	95% Queue Length
(Number of Vehicles)	95% Queue Vehicles
(Metres)	Avg Length (m)

AM	1			2			3			4		
	Light	Heavy	Length	Light	Heavy	Length	Light	Heavy	Length	Light	Heavy	Length
8:30	5	0	35	2	0	14	4	0	28	1	0	7
8:32	32	0	224	3	0	21	5	0	35	1	0	7
8:34	6	0	42	3	0	21	0	0	0	2	0	14
8:36	2	0	14	4	0	28	9	0	63	2	0	14
8:38	4	0	28	3	0	21	1	0	7	1	0	7
8:40	7	0	49	2	0	14	4	0	28	1	0	7
8:42	6	0	42	3	0	21	3	0	21	1	0	7
8:44	8	0	56	15	0	105	0	0	0	1	0	7
8:46	6	0	42	1	0	7	5	0	35	2	0	14
8:48	5	0	35	2	0	14	6	0	42	1	0	7
8:50	4	0	28	2	0	14	2	0	14	2	1	27
8:52	1	1	20	3	0	21	8	0	56	4	0	28
8:54	2	0	14	2	1	27	3	0	21	2	0	14
8:56	6	0	42	1	0	7	9	0	63	0	0	0
8:58	3	1	34	1	0	7	3	0	21	1	0	7
9:00	3	1	34	0	0	0	0	0	0	1	0	7
9:02	0	0	0	0	1	13	0	0	0	1	0	7
9:04	3	0	21	1	0	7	1	0	7	0	0	0
9:06	32	0	224	0	0	0	0	0	0	0	0	0
9:08	2	0	14	3	0	21	3	0	21	1	0	7
9:10	2	0	14	1	0	7	0	0	0	1	0	7
9:12	3	0	21	1	0	7	3	0	21	1	0	7
9:14	0	0	0	0	0	0	0	0	0	1	0	7
9:16	3	0	21	1	0	7	6	0	42	1	0	7
9:18	3	0	21	0	0	0	2	0	14	0	0	0
9:20	2	0	14	0	0	0	4	0	28	2	0	14
9:22	0	0	0	1	0	7	0	0	0	0	0	0
9:24	5	0	35	1	0	7	3	0	21	0	0	0
9:26	0	0	0	0	0	0	0	0	0	2	0	14
9:28	0	0	0	0	0	0	0	0	0	1	0	7
PM												
14:30	2	0	14	0	0	0	0	0	0	0	0	0
14:32	0	0	0	1	0	7	3	0	21	1	0	7
14:34	0	0	0	1	0	7	3	0	21	2	0	14
14:36	0	0	0	0	0	0	0	0	0	0	0	0
14:38	2	0	14	0	0	0	2	0	14	0	0	0
14:40	0	0	0	0	0	0	2	0	14	0	0	0
14:42	4	0	28	2	0	14	0	0	0	0	0	0
14:44	4	1	41	1	0	7	5	0	35	2	0	14
14:46	4	0	28	0	0	0	2	0	14	1	0	7
14:48	6	1	55	1	0	7	2	0	14	0	0	0
14:50	2	0	14	0	0	0	0	0	0	0	0	0
14:52	4	0	28	1	0	7	1	0	7	1	0	7
14:54	2	0	14	0	0	0	1	0	7	0	0	0
14:56	0	0	0	3	0	21	1	0	7	0	0	0
14:58	3	0	21	2	0	14	4	0	28	3	0	21
15:00	8	0	56	2	0	14	0	0	0	1	0	7
15:02	3	0	21	4	0	28	9	0	63	0	0	0
15:04	1	0	7	2	0	14	2	0	14	5	0	35
15:06	4	0	28	1	0	7	31	1	230	0	1	13
15:08	3	0	21	1	0	7	32	0	224	2	0	14
15:10	1	0	7	4	0	28	15	1	118	1	0	7
15:12	2	0	14	2	0	14	21	2	173	0	0	0
15:14	0	0	0	1	0	7	3	1	34	1	0	7
15:16	2	0	14	2	0	14	2	0	14	1	0	7
15:18	0	0	0	2	0	14	0	0	0	0	0	0
15:20	0	0	0	8	1	69	2	0	14	0	0	0
15:22	0	0	0	1	0	7	2	0	14	0	0	0
15:24	4	0	28	1	0	7	0	0	0	1	0	7
15:26	0	0	0	1	0	7	0	0	0	0	0	0
15:28	1	0	7	3	0	21	6	0	42	1	0	7

Location: PARKWAY AVE/SMITH ST NEWCASTLE

Date: 19-September-2023 **7 m Light Vehicles**

13 m Heavy Vehicles

Quality Surveys
243746

Start Time: 8:30 14:30

End Time: 9:30 15:30

Peak Hour Ending: 9:30 15:30

Queues reported graphically relate to peak hour only

Approach 4: SMITH ST SOUTHBOUND

Peak Hour							
	95% Queue Length						*14*
	95% Queue Vehicles						*2*
	Avg Length (m)						*8*

Approach 3: PARKWAY AVE WESTBOUND

Peak Hour		
95% Queue Length	95% Queue Vehicles	Avg Length (m)
49	*7*	*23*

Approach 1: PARKWAY AVE EASTBOUND

95% Queue Length	95% Queue Vehicles	Avg Length (m)	Peak Hour
57	*8*	*28*	

Approach 2: SMITH ST NORTHBOUND

					95% Queue Length	Peak Hour
36					95% Queue Vehicles	
5					Avg Length (m)	
17						

LEGEND	
(Metres)	95% Queue Length
(Number of Vehicles)	95% Queue Vehicles
(Metres)	Avg Length (m)

Location: PARKWAY AVE/SMITH ST NEWCASTLE

Date: 19-September-2023 **7 m Light Vehicles**

13 m Heavy Vehicles

Quality Surveys
243746

Start Time: 14:30

End Time: 15:30

Peak Hour Ending: 15:30

Queues reported graphically relate to peak hour only

Approach 4: SMITH ST SOUTHBOUND

Peak Hour							
	95% Queue Length						*28*
	95% Queue Vehicles						*4*
	Avg Length (m)						*14*

Approach 3: PARKWAY AVE WESTBOUND

Peak Hour		
95% Queue Length	95% Queue Vehicles	Avg Length (m)
42	*6*	*20*

Approach 1: PARKWAY AVE EASTBOUND

95% Queue Length	95% Queue Vehicles	Avg Length (m)	Peak Hour
71	*10*	*28*	

Approach 2: SMITH ST NORTHBOUND

					95% Queue Length	Peak Hour
28					95% Queue Vehicles	
4					Avg Length (m)	
13						

LEGEND	
(Metres)	95% Queue Length
(Number of Vehicles)	95% Queue Vehicles
(Metres)	Avg Length (m)

AM	1			2			3			4		
	Light	Heavy	Length	Light	Heavy	Length	Light	Heavy	Length	Light	Heavy	Length
8:30	3	1	34	0	0	0	6	0	0	1	0	7
8:32	2	1	27	2	0	14	2	0	14	0	0	0
8:34	8	0	56	5	0	35	7	0	49	2	0	14
8:36	2	1	27	2	0	14	3	0	21	1	0	7
8:38	0	0	0	0	0	0	2	0	14	1	0	7
8:40	7	1	62	6	0	42	6	0	42	2	0	14
8:42	2	0	14	2	0	14	1	0	7	1	0	7
8:44	3	0	21	2	0	14	3	0	21	1	0	7
8:46	4	0	28	0	0	0	1	0	7	1	0	7
8:48	3	0	21	2	0	14	4	0	28	2	0	14
8:50	2	0	14	2	0	14	3	0	21	1	0	7
8:52	4	0	28	1	0	7	7	1	62	1	0	7
8:54	4	1	41	4	0	28	4	0	28	0	0	0
8:56	3	0	21	0	0	0	2	0	14	0	0	0
8:58	0	0	0	0	0	0	2	0	14	1	0	7
9:00	0	0	0	3	0	21	0	0	0	0	0	0
9:02	5	0	35	2	0	14	0	0	0	1	0	7
9:04	0	0	0	1	0	7	4	0	28	1	0	7
9:06	3	0	21	0	0	0	0	0	0	0	0	0
9:08	0	0	0	1	0	7	3	0	21	1	0	7
9:10	2	0	14	3	0	21	3	0	21	0	0	0
9:12	0	0	0	0	0	0	0	0	0	1	0	7
9:14	0	0	0	0	0	0	1	0	7	2	0	14
9:16	0	0	0	2	0	14	0	0	0	1	0	7
9:18	0	0	0	0	0	0	0	0	0	1	0	7
9:20	2	0	14	0	0	0	5	0	35	0	0	0
9:22	0	0	0	0	0	0	1	0	7	1	0	7
9:24	0	0	0	0	0	0	0	0	0	0	0	0
9:26	0	0	0	1	0	7	0	0	0	0	0	0
9:28	3	0	21	0	0	0	4	0	28	0	0	0
PM												
14:30	0	0	0	2	0	14	0	0	0	0	0	0
14:32	4	0	28	0	0	0	2	0	14	1	0	7
14:34	0	0	0	0	0	0	0	0	0	1	0	7
14:36	3	0	21	1	0	7	2	0	14	2	0	14
14:38	0	0	0	2	0	14	0	0	0	0	0	0
14:40	3	0	21	0	0	0	1	0	7	3	0	21
14:42	0	0	0	0	0	0	2	0	14	0	0	0
14:44	0	0	0	0	0	0	4	0	28	2	0	14
14:46	2	0	14	1	0	7	2	0	14	2	0	14
14:48	1	1	20	1	0	7	3	0	21	1	0	7
14:50	4	0	28	0	0	0	0	0	0	0	0	0
14:52	2	0	14	4	0	28	0	0	0	1	0	7
14:54	1	1	20	0	0	0	0	0	0	0	0	0
14:56	3	0	21	0	0	0	0	0	0	0	0	0
14:58	0	0	0	1	0	7	5	0	35	3	0	21
15:00	0	0	0	3	0	21	2	0	14	0	0	0
15:02	5	0	35	2	0	14	5	0	35	3	0	21
15:04	14	0	98	3	0	21	4	0	28	2	0	14
15:06	2	0	14	1	0	7	8	0	56	0	0	0
15:08	0	0	0	0	0	0	3	0	21	3	0	21
15:10	0	0	0	1	0	7	1	0	7	2	0	14
15:12	3	0	21	0	0	0	4	0	28	1	0	7
15:14	7	0	49	3	0	21	1	0	7	2	0	14
15:16	10	0	70	0	0	0	1	0	7	1	0	7
15:18	2	0	14	1	0	7	0	0	0	0	0	0
15:20	3	0	21	2	0	14	2	0	14	1	0	7
15:22	4	0	28	1	0	7	0	0	0	4	0	28
15:24	1	0	7	1	0	7	6	0	42	1	0	7
15:26	0	0	0	1	0	7	1	0	7	4	0	28
15:28	3	0	21	4	0	28	1	0	7	2	0	14

DESIGN WITH COMMUNITY IN MIND

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. This allows us to assess what's needed and connect our expertise, to appreciate nuances and envision what's never been considered, to bring together diverse perspectives so we can collaborate toward a shared success.

We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

Stantec trades on the TSX and the NYSE under the symbol STN.
Visit us at stantec.com or find us on social media.

Level 16, 207 Kent Street, Sydney, NSW 2000
Tel +61 2 9493 9700 | www.stantec.com

Appendix B Travel Access Guide

Newcastle High School

Travel Access Guide

Effective: **DATE TBC**

Project overview

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

Active ways to get to school

Walking is an active and healthy way to get to school

- Always use crossing facilities such as traffic lights, pedestrian crossings, or a school crossing, remember to Stop, Look, Listen and Think when crossing the road.
- Hold an adult's hand when crossing the road.
- Share the footpath and walk on the left.
- Look out for cars entering or leaving driveways.

Ride your bike

- Always wear a correctly fitted Australian standards approved helmet when riding your bike.
- Ride to the left on footpaths.
- Take extra care near busy roads such as Parkway Avenue, National Park Street and Smith Street.
- Watch out for cars entering or leaving driveways.
- Give 1 metre space when riding past other people.

Ride your scooter

- Always wear a correctly fitted Australian standards approved helmet when riding your scooter.
- Wear a bright-coloured bag, clothing or reflectors such as a vest to be highly visible.
- Give pedestrians right of way on footpaths.
- Check your wheels, handlebars, brakes and frame are in good condition before riding.

Kiss and drop expectations

- The drop off / pick up zones on Parkway Avenue and National Park Street allow a maximum 5 minutes of stopping time.
- Make sure children use the Safety Door (rear footpath side) when getting in and out of a car.
- Drivers are to display their child's full name on the dashboard and stay within 3 metres of their parked car.
- These facilties are left-in left-out with capacity for 11 cars on Parkway Avenua and 6 cars on National Park Street.
- When the facility is full and you aren't able to enter, safely drive around the block and keep

School Bell Times

- Start time: 8:55 am
- Finish time: 3:00 pm

For more information contact:

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

NSW GOVERNMENT

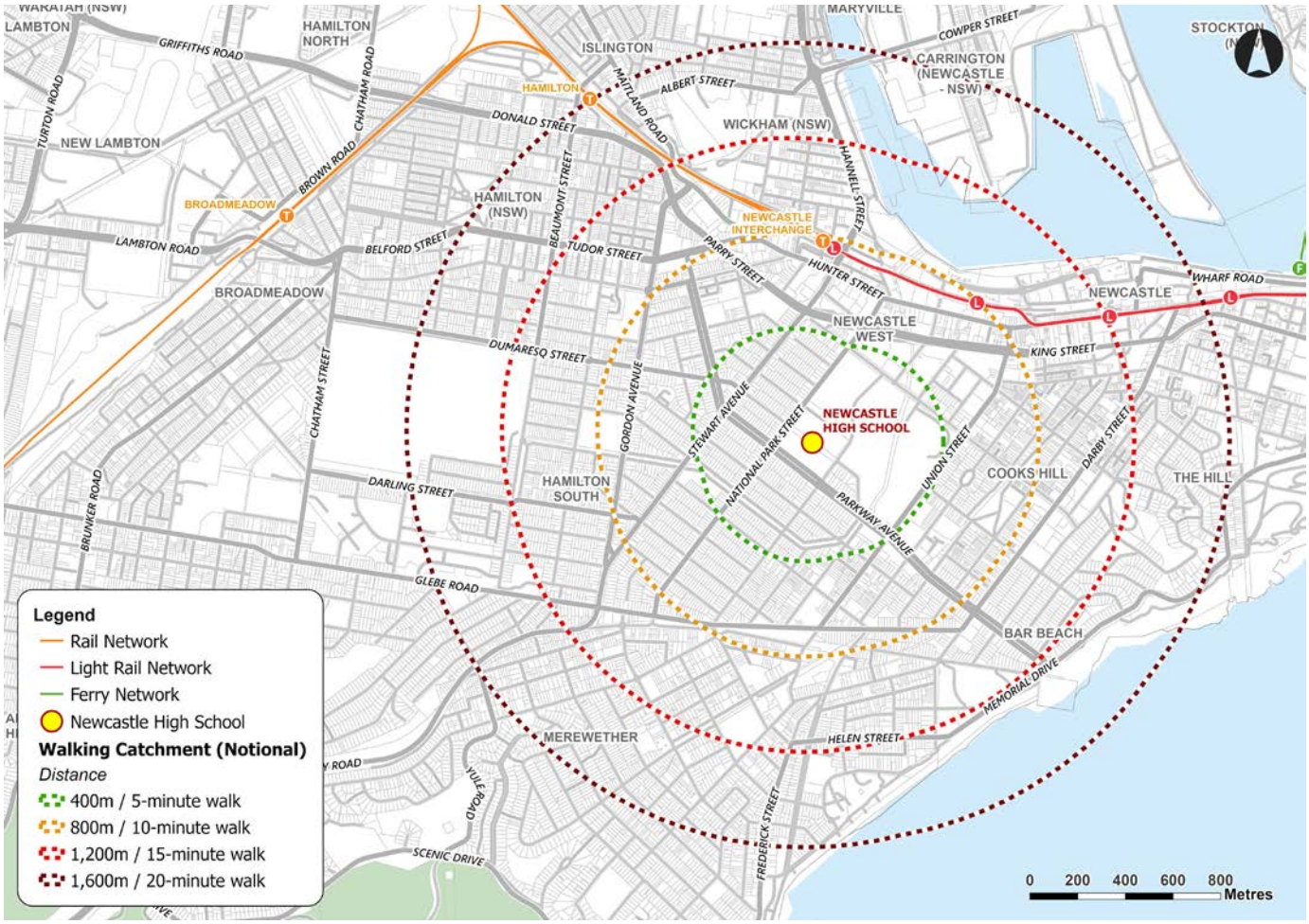
Active Travel Map: Newcastle High School

- Students can walk or cycle on footpaths on both sides of the roads near the school.

  Reminder: children under the age of 16 are allowed to cycle on the footpath, keeping them safer and more protected from road traffic.
- On-site bike parking spaces are currently located around the cricket nets area at the centre of the school, and are easily accessible from pedestrian entry points on Smith Street and Parkway Avenue.

Car parking and road safety

- Park safely and turn legally, even if it means walking further to the school entrance.
- Give way to people walking or cycling particularly when entering and leaving driveways.
- Always look around carefully, check mirrors and blind spots for children and other cars before:
  - opening your door
  - slowly reversing
  - pulling out from the side of the road or a parking area.

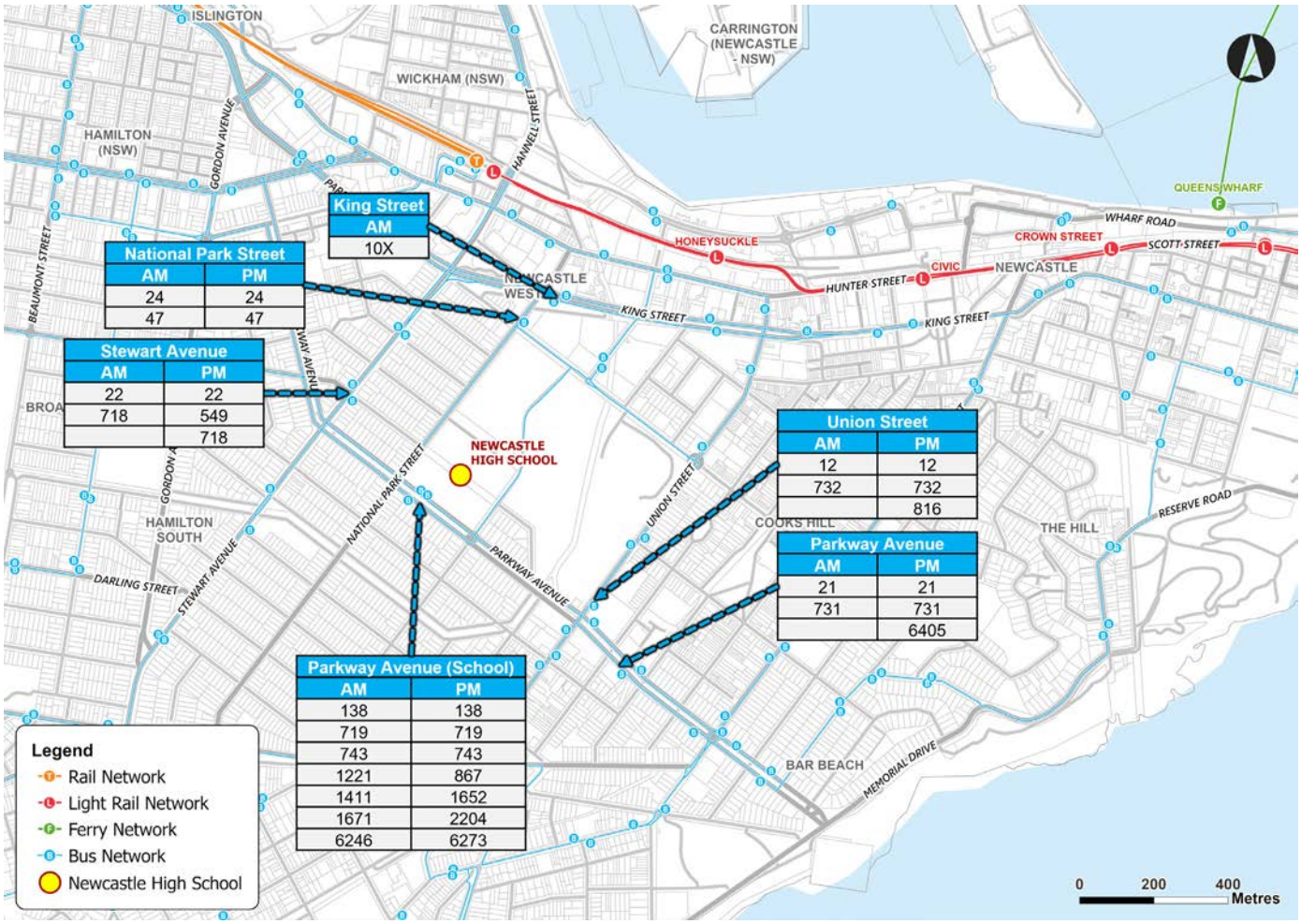


For more information contact:

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

NSW GOVERNMENT

Using Public Transport to get to School



- Multiple school bus services are available for Newcastle High School students that stop within a 400-metre walk away from the school site entrances.
- A total of seven public bus routes currently operate near the school.

Other public transport alternatives:

- Train: Newcastle Interchange is located 1.1 kilometres away from the school, which equates to a 15-minute walk. Broadmeadow Station is located further away but is accessible via the on-road cycleway along Parkway Avenue and Dumaresq Street.
- Light Rail: Honeysuckle Light Rail Staiton is situated a one-kilometre walk from the school.
- Ferrry: Ferry trip between Stockton and Newcastle is approximately six minutes and connects to the light rail network at Queens Wharf light rail station. Additionally, Route 719 school bus service provides connections from the ferry terminal.

For more information contact:

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

NSW GOVERNMENT

Using Public Transport to get to School

Regular bus routes to Newcastle High School

Route	Route Description	Board / Alight Location	AM Service	PM Service
12	Maryland to Merewether Beach via Wallsend and Newcastle Interchange	Union Street	Y	Y
21	Broadmeadow to Newcastle via Merewether	Parkway Avenue	Y	Y
22	Newcastle West to Charlestown via Merewether	Stewart Avenue	Y	Y
24	Wallsend to Marketown via Mayfield	National Park Street	Y	Y
47	Marketown to Jesmond via Warabrook	National Park Street	Y	Y
138	Newcastle to Lemon Tree Passage via Newcastle Airport	Parkway Ave (School)	Y	Y
152	Hawks Nest to Newcastle	Parkway Ave (School)	Y	Y
263	Charlestown to Cameron Park	Parkway Ave (School)	Y	Y
10X	Charlestown to Newcastle Interchange (Express Service)	King Street	Y	N

School bus routes to Newcastle High School

Route	Route Description	Board / Alight Location	AM Service	PM Service
549	City West, Stewart Avenue to Swansea North	Stewart Avenue	-	15:41
718	Carrington to Hunter School of Performing Arts	Stewart Avenue	8:30	15:30
719	Newcastle Station to Newcastle High School	Parkway Ave (School)	8:40	15:06, 15:08
731	Merewether Heights to St Philips College	Parkway Avenue	7:34	15:28
732	St Philips College to Newcastle Station	Union Street	7:56, 8:30, 8:42	15:38
743	Hunter School of Performing Arts to The Junction	Parkway Avenue (School)	8:31	15:35
816	Hamilton East to St Pius X School	Union Street	-	15:42
867	Newcastle High School to St Pius X College	Parkway Avenue (School)	-	15:10
1221	Seaham and Brandy Hill to Raymond Terrace	Parkway Avenue (School)	8:40	-
1411	Medowie to Newcastle High School	Parkway Avenue (School)	8:15	-
1652	Newcastle HS to Medowie	Parkway Avenue (School)	-	15:07
1671	Medowie to Newcastle High School	Parkway Avenue (School)	8:26	-
2204	Newcastle High School to Medowie	Parkway Avenue (School)	-	15:07
6246	Maryland to Newcastle HS	Parkway Avenue (School)	8:35	-
6273	Newcastle Schools to Maryland	Parkway Avenue (School)	-	15:10
6405	Newcastle Grammar to Toronto	Parkway Avenue	-	15:26

For more information contact:

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

NSW GOVERNMENT

School Access

- Pedestrian access to the school is available via multiple access points on Parkway Avenue, National Park Street and Smith Street.
- Majority of school bus routes stop at the existing school bus services board and alight directly outside of the school along Parkway Avenue, whilst the remainder of services board and alight on Stewart Avenue, Union Street and further along Parkway Avenue. Refer to the previous page or click here for bus route and timetable information.
- Short-stay drop-off/pick-up zones are provided along the side of Parkway Avenue and National Park Street fronting the school.

For more information contact:

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

NSW GOVERNMENT

Where do you ride?

Footpath/shared path/cycleway:

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

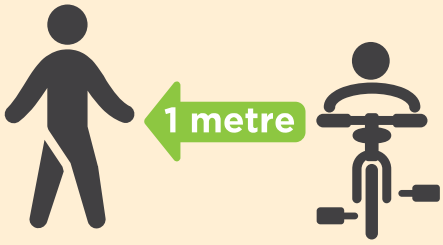
Look out for pedestrians on shared paths.

Crossing the road:

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

Give a metre:

Give pedestrians 1 metre of space when riding past.



3 steps to follow when riding a bike:

Clip, check, chime.

Clip your helmet

1

You must always wear a helmet when riding your bike.

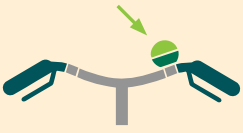
Check your brakes

2

Make sure your brakes are working.

Chime your bell

3



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

Things to remember

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

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

Always remember to watch out for hazards

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

For more information contact:

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

NSW GOVERNMENT

For more information contact:

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

NSW GOVERNMENT

Additional information

Something broken on the way to school?

Use the Snap Send Solve app or website to report issues to the people who can fix them.

Things like abandoned trolleys, broken footpaths or water leaks can all be reported in the app.

Download it today from the App Store or Google Play. Or visit **www.snapsendsolve.com**

Get a discount on your Bicycle NSW membership

Bicycle NSW is offering a 15% discount on membership for families at our school. This includes insurance and discounts for recreational bike rides.

Take up the offer today:

- Visit bicyclensw.org.au
- Sign up for a membership
- Use this discount code for 15% off your membership:

nswtag

The code expires on 31 May 2023.
Don't miss out!

bicycle NSW

Benefits of not using a car to travel to and from school

Did you know children who live within 2 kilometres of school are often driven to school?

That means many NSW children could be missing out on the physical, social and mental benefits of active travel - walking, riding or using public transport.

Additionally, even active travel part way for one day per week can make a difference to our local traffic congestion.

We can help bring these positive changes to our local community by choosing active ways to get to school.

Apply for a school travel pass

Depending on where you're travelling, you may receive a free school travel pass, a School Opal card, or both or travel between home and school on NSW public transport. As a general guide:

- Students who live 2km away from the school or further are eligible for free bus travel to school.
- Students who live within 2km radius of the school for a fee of approximately $55 per year can receive subsidised school travel.

Check your eligibility for a school travel pass here: https://www.service.nsw.gov.au/transaction/apply-school-travel-pass#eligibility

Safe travel

Parents and carers are responsible for their child's safety on the way to and from school.

Parents and carers can reinforce what their children learn at school by planning and using safe school travel routes, model safe considerate behaviour and always follow the road rules. Young children, in particular, require active supervision by an adult whenever they are in a traffic environment.

Remember — road safety is everyone's responsibility.

For more information contact:

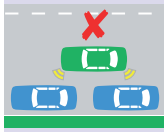
School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

NSW GOVERNMENT

Parking and traffic rules in school zones

You need to take extra care when driving and parking in school zones. Make sure that you and your child understand the road rules. If you break the traffic rules in a school zone you are putting not only your child but other children at risk. The parking and traffic rules around our schools are there to protect your children. If you break the rules you will be fined. **Please choose safety over convenience.**

QUICK REFERENCE GUIDE TO IMPORTANT SAFETY TRAFFIC RULES

ZONE	WHAT DOES IT MEAN?	WHY IS IT THERE?	PENALTY	DEMERIT POINTS*
	You cannot stop in a **NO STOPPING** zone for any reason (including queuing or waiting for a space). 	Keeps clear sight lines between drivers and children / pedestrians.	EXCEEDS **$349**	(School Zone) **2**
	You can stop in a **NO PARKING** zone for a max. of two minutes to drop off and pick up passengers. If no spaces are available you cannot queue on the road way or in any other zones while waiting for a space. You will need to drive away and park elsewhere, only returning when there is space to pull up. You must stay within 3 metres of your vehicle at all times and cannot leave your vehicle unattended.	Provides a safe place for children / pedestrian set down and pick up.	EXCEEDS **$194**	(School Zone) **2**
	You must not stop or park in a **BUS ZONE** for any reason (including queuing or waiting for a space) unless you are driving a bus. If times are shown on the sign, you are not allowed to stop during those times.	Provides a safe place for large buses to set down and pick up school children.	EXCEEDS **$349**	(School Zone) **2**
	You must not stop on or within 20 metres before a **PEDESTRIAN CROSSING** or 10 metres after a crossing unless there is a control sign permitting parking.	So drivers can clearly see pedestrians on the crossing.	EXCEEDS **$464**	(School Zone) **2**
	**DOUBLE PARKING** You must not stop on the road adjacent to another vehicle at any time even to drop off or pick up passengers.	Double parking blocks visibility and forces other cars to go around you.	EXCEEDS **$349**	(School Zone) **2**
	You must not stop on any **FOOTPATH** or **NATURE STRIP**, or even a **DRIVEWAY** crossing a footpath or nature strip for any reason.	You could easily run over a child or force pedestrians onto the road to get around you.	EXCEEDS **$194**	(School Zone) **2**

Please note: The above information is current as of 1 January 2020.
Penalties set by NSW State Government and reviewed on 1 July each year.

NSW Police Force

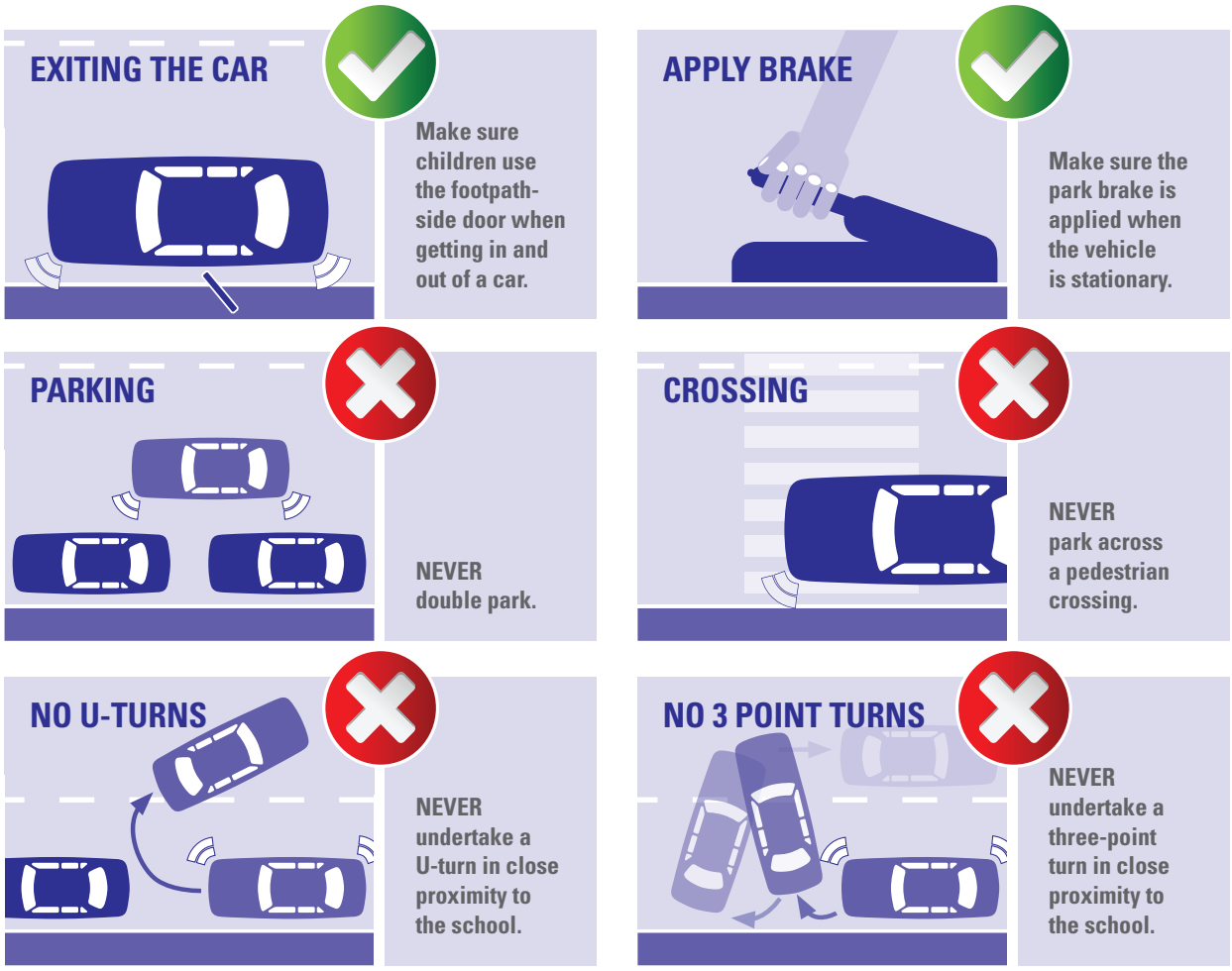
City of Newcastle

For more information contact:

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

NSW GOVERNMENT

Safety tips for school zones:



Safety tips for students:

Demerit Points:

* The **Demerit Points** Scheme is a national program that allocates penalty points (demerits) for a range of driving offences. A driver who has not committed any offences has '**zero**' points. If you commit an offence that carries demerit points, the points are added to your driving record.
If you incur the threshold number of demerit points within a three-year period, a licence suspension or refusal is applied. The three-year period is calculated between the dates the offences were committed. It ends on the day your most recent offence was committed.

For further information regarding demerit points please visit: **rms.nsw.gov.au/roads/safety-rules/demerits/**

For more information contact:

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

NSW GOVERNMENT

Appendix C Show-of-Hands Survey

‘Hands up‘ survey form

This tool is designed to help establish how children currently travel i.e. the modes they travel by, and to allow tracking of changes in children’s travel as the various initiatives in the action plan are delivered.

Venue or Group Name

Date of Survey | Number Present | Number Absent

When the group is together, ask them to put their hands up to respond to a series of questions you ask – “Who got here by walking?” Then “Who got here by bicycle?” and so on. Write the answers in the spaces below.

How many children usually get to the venue by the following modes?

(Please enter a number against each mode)

Walk | Bus | Train | Cycle | Car | Other

If desired, or likely to be different from travelling to a venue, you could repeat this process asking about the children will get home from the venue.

How many children usually get home from the venue by the following modes?

(Please enter a number against each mode)

Walk | Bus | Train | Cycle | Car | Other

Appendix D Stakeholder Consultation

From:	Buhl, Volker
To:	Todd, Matt (Sydney); "rtranter@ncc.nsw.gov.au"
Subject:	RE: Review Request: School Transport Plan - Newcastle High School
Date:	Wednesday, May 28, 2025 1:21:00 PM
Attachments:	image001.png

Hi Ryan

Following comments and feedback from key stakeholders, please find attached the updated Newcastle High School Transport Plan.

Regards,
Volker

Volker Buhl
Senior Principal - Transport, Team Leader (NSW)

Stantec

From: Buhl, Volker
Sent: Friday, May 2, 2025 11:38 AM
To: Todd, Matt (Sydney) <Matt.Todd3@stantec.com>; rtranter@ncc.nsw.gov.au
Cc: Soane.Puliuvea@app.com.au; Meaghan.Bennett3@det.nsw.edu.au; Anthony Harrigan <Anthony.Harrigan@app.com.au>; Jessica Ng <Jessica.Ng11@det.nsw.edu.au>; Desai, Preet <Preet.Desai@stantec.com>
Subject: RE: Review Request: School Transport Plan - Newcastle High School

Hi Ryan

We have received comments from TfNSW on our School Transport Plan for Newcastle HS which we incorporated into the document. Please find attached the latest version.

If Council has any comments or feedback, could we please receive these by Friday, 9 May, noting we sent the initial report to Council on 16 April. The report will then be submitted for final approval.

Regards,
Volker

Volker Buhl
Senior Principal – Transport Planning
Monday - Thursday

Direct: +61 2 8448 1839
Mobile: 0435 266 099
volker.buhl@stantec.com

Stantec
Level 9, 203 Pacific Highway
St Leonards NSW 2065

From: Todd, Matt (Sydney) <Matt.Todd3@stantec.com>
Sent: Wednesday, April 16, 2025 3:25 PM
To: rtranter@ncc.nsw.gov.au
Cc: Buhl, Volker <volker.buhl@stantec.com>; Soane.Puliuvea@app.com.au; Meaghan.Bennett3@det.nsw.edu.au; Anthony Harrigan <Anthony.Harrigan@app.com.au>; Jessica Ng <Jessica.Ng11@det.nsw.edu.au>; Desai, Preet <Preet.Desai@stantec.com>
Subject: Review Request: School Transport Plan - Newcastle High School

Hi Ryan,

We've recently updated the School Transport Plan for Newcastle High School and are seeking a review from Council before finalising. If possible, could you please take the time to review the attached document and provide your comments? If you're unable to do so, could I ask that you please forward it to the appropriate individual within your organisation?

Feel free to reach out to myself or any of the contacts listed above if you have any questions.

Regards,
Matt

Matthew Todd
MSc, BSc
Senior Transportation Planner

Direct: +61 2 9493 9769
Mobile: +61 438 528 985
matt.todd3@stantec.com

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From: Sophia Grieve
To: Buhl, Volker; Rosie Selby
Subject: FW: Urgent: Review Request: School Transport Plan - Newcastle High School - SSD-41814831
Date: Friday, June 13, 2025 3:27:33 PM
Attachments: image002.png

Hi Volker
My apologies for the delay on this one.
Please find our below comments.
This is closed out now from our side.
Many thanks
Cheers Sophia

OFFICIAL

From: Buhl, Volker <volker.buhl@stantec.com>
Sent: Wednesday, 28 May 2025 1:21 PM
To: Sophia Grieve <Sophia.Grieve@transport.nsw.gov.au>; Todd, Matt (Sydney) <Matt.Todd3@stantec.com>
Cc: Rosie Selby <Rosie.Selby@transport.nsw.gov.au>
Subject: RE: Review Request: School Transport Plan - Newcastle High School - SSD-41814831

Hi Sophia

Thank you for your feedback and comments on the Newcastle High School Transport Plan. We have reviewed your comments and updated our STP as necessary to address these. Please find attached the final STP attached.

Regards,
Volker

Volker Buhl
Senior Principal - Transport, Team Leader (NSW)

OFFICIAL

From: Sophia Grieve <Sophia.Grieve@transport.nsw.gov.au>
Sent: Tuesday, April 29, 2025 10:34 AM
To: Todd, Matt (Sydney) <Matt.Todd3@stantec.com>; Buhl, Volker <volker.buhl@stantec.com>
Cc: Rosie Selby <Rosie.Selby@transport.nsw.gov.au>

Subject: FW: Review Request: School Transport Plan - Newcastle High School - SSD-41814831

Hi Matt and Volker

Thank you for your below email.

@volker.buhl@stantec.com nice to talk to you again. I am just forwarding you this email as Matt is on leave.

The TfNSW Travel Demand Management (TDM) Team have reviewed the Newcastle High School Transport Plan prepared by Stantec 16 April 2025 (SSD-41814831) and provide the following recommendations.

Operational parts of the plan: The TfNSW TDM has not provided comment on the operational components of the STP but have forwarded to the development email for any comments.

TfNSW (operational team) 13 June 2025 - supports the proposed plan and has the following comments for noting:

- Any changes to on street parking restriction would be dealt with by Newcastle City Council through the Local Traffic Committee process.
- The Construction Traffic Management Plan for the site would also be dealt with by Newcastle City Council.

Mode shares: TfNSW TDM Team appreciate Table 5-3 Moderate Mode Share Targets and Table 5-4 Reach Mode Share Targets provided for students, but also ask that mode share targets are also provided in the STP for staff to reduce car use and increase public transport and active transport. This is especially important, given both the high percentage of staff driving into work and the broad coverage of both public and active transport within proximity to the site. These mode shares need to be tied in with specific tools and actions within the STP Table 7-7: Transport Encouragement Programs to help achieve the objectives and mode share targets. Additional mode shares for visitors travelling to the school on event days/evenings should be included as separate mode share tables, encouraging sustainable transport to and from the site, as well as car-pooling.

TfNSW TDM Team 29/05/25 – Closed.

Car parking management strategy: TfNSW TDM Team appreciate no further parking spaces will be developed for this site. The team ask, however, that a car parking management strategy for the existing staff car park is considered e.g. priority parking for teachers car-pooling. It is also recommended that the school does not promote off-street parking (40 staff) to staff.

TfNSW TDM Team 29/05/25 – Closed.

Bicycle Parking and End of Trip (EoT): TfNSW TDM Team appreciate there are 160 bike and micro mobility spaces proposed for the site. While this is welcomed by the team, the bicycle and micro mobility parking should be located at the development site at convenient locations, be safe, secured and under cover. TfNSW asks for more detail on, and number of EoT facilities that are planned for staff, as this is unclear. TfNSW recommend that this bicycle parking and any EoT should be monitored over time to ensure sufficient supply to encourage active transport for staff and students. Some further guidance on bicycle parking and end of trip facilities can be found in the cycleway design toolkit.

TfNSW TDM Team 29/05/25 – Closed. Our team have closed this noting the applicant has no EoT for staff. This should be monitored over time to ensure sufficient supply to encourage active transport for staff and students. Some further guidance on bicycle parking and end of trip facilities can be found in the cycleway design toolkit.

Transport Encouragement Programs - TfNSW TDM Team advise the STP Table 7-7: Transport Encouragement Programs should have actions ready to be implemented from Day 1 of occupancy, and should include initiatives, clear dates, timing and who has responsibility prior to occupancy so the STP is ready to implement post-occupancy by the Travel Plan Coordinator.

TfNSW TDM Team 29/05/25 - Closed

Travel Access Guide: TfNSW appreciate the Transport Access Guide or TAG (to be distributed 3 months post occupancy) has been included as a separate appendix in the STP targeting students but would ask that staff, visitors to the school are also included so they have their travel choices promoted to them.. TfNSW ask the TAG to include (but not be limited to) the following:

- Please add in one overall map with all the active and public transport routes for students, staff, and visitors.
- Provide information on the TAG about active and public transport initiatives to encourage the use of sustainable transport journeys by staff, students, and visitors.
- Provide promotion of end of trip (EoT) facilities for staff and students, including any new cycling infrastructure available, and update number and location of bicycle parking and EoT facilities..
- Provide information on car-pooling and priority parking for those who carpool.

TfNSW TDM Team – 29/05/2025 - Closed

Travel Survey: TfNSW appreciates the travel survey included in the appendices of the STP. The surveys should include questions to ask obtain staff and student residential postcodes to identify travel origins to help inform strategies for travel to and from the site. The Travel Survey should also be promoting any questions regarding which initiatives or strategies are popular with survey respondents, that encourage sustainable transport routes.

TfNSW TDM Team -29/05/2025 - Closed

Governance: TfNSW TDM team would ask that the Travel Plan Coordinator is ready to implement the STP as soon as occupancy takes place.

TfNSW TDM Team -29/05/2025 - Closed

Submission: The STP will require be submitted to TfNSW TDM team prior to occupancy, with enough time to review.

I hope these comments are of assistance.

Best regards,

Sophia

OFFICIAL

From: Todd, Matt (Sydney) <Matt.Todd3@stantec.com>
Sent: Tuesday, 29 April 2025 10:20 AM
To: Sophia Grieve <Sophia.Grieve@transport.nsw.gov.au>
Subject: Automatic reply: Review Request: School Transport Plan - Newcastle High School -

SSD-41814831

Hi,

I am currently on annual leave and will respond to emails upon my return on May 12 2025. For anything urgent please email volker.buhl@stantec.com.

Regards,
Matt

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Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

Appendix E Transport Consultant CV

Volker Buhl

Senior Principal Transportation Planner
22 years of experience · St Leonards NSW, Australia

Volker is an experienced transport planner and project manager with over 20 years' experience, having worked across a wide range of transport disciplines. His experience includes active transport studies, traffic management, traffic engineering, rail and public transport operation and planning, transport modelling and pedestrian modelling.

Volker's career in the consulting industry includes six years spent in London and over 15 years in Sydney. During his time in Australia, Volker has worked across both the public and private sector, having previously worked for the local government. He has a holistic traffic and transport background and strong project management skills. He has gained national and international experience in a wide range of transport projects, having worked with both public and private sector clients and multiple stakeholders.

MEMBERSHIPS

Member, Australian Institute of Traffic Planning and Management Incorporated

PROJECT EXPERIENCE

ACTIVE TRANSPORT PLANNING

Volker has actively managed and worked on a large number of active transport based projects during his career. The following list provides an overview of active transport based projects that Volker has been involved in recently:

Willoughby Cycling Strategy and Action Plan | Willoughby City Council | 2024

Burwood Active Transport Action Plan | Burwood City Council | 2024

Wollongong Cycling Network Plan and Program | Wollongong City Council | 2023- 2024

Singleton Walking and Cycling Plan | Singleton Shire Council | 2023 – 2024

Parramatta Bike Plan 2023 | Parramatta City Council | 2022 – 2023

Darling Harbour Cycling Strategy | Transport for NSW | 2023 – 2024

Hawkesbury Active Transport Action Plan | Hawkesbury City Council | 2023 – 2024

Paramatta Civic Link | Parramatta City Council | 2022

Cooks River Shared User Path Improvement Study | City of Canterbury-Bankstown Council | 2021 – 2022

Richmond Bridge Cycling Study | Transport for NSW | 2022

City of Sydney Walking Safety and Place Improvements | City of Sydney Council | 2022

King Street Cycleway Stage 2 | City of Sydney | 2021

Chatswood to St Leonards Principal Bike Network Study | Willoughby City Council | 2020

Georges River Cycleway Feasibility Study | Transport for NSW | 2020

Hunters Hill Bike Plan | Hunters Hill Council | 2020

Warringah Freeway Upgrade Active Transport Infrastructure Assessment | Transport for NSW | 2020

Sydenham to Bankstown Walking and Cycling Strategy | Sydney | 2019 - 2020

Canterbury Cycle Route Options Assessment | City of Canterbury-Bankstown | 2018

Inner West Greenway Masterplan | Inner West Council | 2017

Matthew Todd MSc, BSc, MAITPM, MCIHT

Senior Transportation Planner

9 years of experience · St Leonards NSW, Australia

With nine years of industry experience, Matt has developed a deep understanding and expertise in both the UK and Australian markets. He possesses strong knowledge in active transport, demonstrated by his successful leadership in delivering innovative walking and cycling strategies. Matt’s strategic vision and hands-on approach have consistently resulted in effective and sustainable transport solutions.

Matt has extensive knowledge of school-based transport work, including rapid transport assessments, school transport plans, and serving as a school travel coordinator. His focus on working with schools to encourage more children to walk and cycle has made him a trusted advisor in this field and ensures that they benefit from safe, efficient, and sustainable transport options.

In addition to his specialisation in active and school-based transport, Matt has broad experience in a wide range of transport studies. This includes place-based transport studies, Traffic Impact Assessments, Green Travel Plans, Local Area Traffic Management, and precinct studies. His comprehensive approach and attention to detail ensure that all aspects of transport planning are meticulously addressed, leading to well-rounded and impactful outcomes.

Matt is also highly proficient in the use of GIS. His expertise in this area enables him to deliver highly informative mapping outputs, conduct precise data field collection, and create engaging online mapping and story maps. Matt’s strong knowledge of data interpretation and analysis allows him to transform complex data into clear, actionable insights, providing clients with valuable information to support their decision-making processes.

EDUCATION

MSc Transport Planning & Management, Sheffield Hallam University, Sheffield, United Kingdom, 2014

BSc Geography, University of Derby , Derby, United Kingdom, 2012

MEMBERSHIPS

Member, Australian Institute of Traffic Planning and Management Incorporated, 2018 - Present

Member, Chartered Institution of Highways & Transportation

PROJECT EXPERIENCE

ACTIVE TRANSPORTATION

Port Macquarie Walking and Cycling Review | Port Macquarie Council | Port Macquarie NSW, Australia | 2023-2024 | Project Manager

Port Macquarie Hastings Council commissioned Stantec to undertake a review and update the previous iterations of Council's Pedestrian Access and Mobility Plan (PAMP) and Bike Plan in the form of a walking and cycling review. The review involved extensive internal and external stakeholder engagement, across a range of focus groups, drop-in sessions, and online engagement. The project involved an extensive week-long site investigation, to assess and review walking and cycling infrastructure in the region. The project is currently ongoing.

Willoughby Cycling Strategy and Action Plan 2034 | Willoughby City Council | Willoughby NSW, Australia | 2024 | Senior Transport Planner

Willoughby City Council commissioned Stantec to deliver their 10-year Cycling Strategy and Action Plan. The purpose of the strategy was to provide an overarching framework and strategic direction in the delivery of cycling infrastructure, services, and facilities. The Plan was delivered to align with Council's Community Strategic Plan vision for the LGA of being a green, connected, and liveable city. The Plan delivered a series of priorities and actions that enable Council to seek opportunities for the delivery of cycling associated infrastructure and facilities. Matt's responsibilities on the project included providing advice to the project team on active transport delivery and producing the final output through InDesign.

Hawkesbury Active Transport Action Plan | Hawkesbury City Council | Hawkesbury, NSW, Australia | 2022-2023 | Senior Transport Planner

Stantec was commissioned by Hawkesbury City Council to undertake its 2023 Active Transport Action Plan (ATAP). The Active Transport Action Plan was delivered in two phases through a Background Report and Infrastructure Action Plan. The ATAP provided a 10-year implementation plan to deliver improved walking and cycling connectivity across the Hawkesbury region. Matt was responsible for leading the delivery of the report and any supporting mapping and graphics.

Burwood Active Transport Plan | Burwood City Council | burwood | 2023-2024 | Senior Transport Planner

Burwood City Council commissioned Stantec to assist in preparing and delivering their Active Transport Plan (ATP). The purpose of the ATP is to provide a long-term strategy and action plan for pedestrian and cycling infrastructure in the Burwood LGA that prioritises and provides the greatest benefit to the community. The ATP provides direction for Council in the planning and delivery of active transport infrastructure. Matt's involvement in the project extends to working on auditing the network, the development of future networks, and assisting in the delivery of the Plan and associated outputs.

Wollongong Cycling Network Plan and Program | Wollongong NSW, Australia | 2023-2024 | Project Manager, Senior Transport Planner

Wollongong City Council commissioned Stantec to assist in the delivery of their Cycling Network Plan and Program following the Wollongong Cycling Strategy 2030. The purpose of the Plan was to investigate and identify the potential and benefits of high-quality cycling infrastructure in the LGA, drawing on best practices for the delivery of cycling infrastructure. Several investigational areas were identified by Council through the process of community consultation which Stantec took forward for investigation. A bespoke infrastructure assessment tool was created to support infrastructure developments built on the cycleway design toolbox guidelines. As project manager for this study, Matt was responsible for all outputs, reporting, presentation, and the development of the cycleway toolbox tool.

Singleton Walking and Cycling Plan | Singleton Council | Singleton NSW, Australia | 2023-2024 | Project Manager, Senior Transport Planner

Singleton Council commissioned Stantec to deliver its five-year Walking and Cycling Plan for 2024. Stantec undertook an LGA-wide audit of existing infrastructure and current conditions which impact maneuverability for residents and visitors. This included undertaking a needs assessment and extensive community engagement to determine issues and gaps. A network planning exercise was then undertaken to prioritise the delivery of walking and cycling infrastructure improvements to facilitate safe and continuous connectivity. As the project manager, Matt was responsible for the delivery of the plan, all reporting, and graphical outputs. The plan was delivered through InDesign to provide a glossy and highly visual output for publishing.

Parramatta Bike Plan 2023 | Parramatta NSW, Australia | 2023 | Senior Transport Planner

Mount Victoria and Basin Reserve Active Transport Analysis | Let's Get Wellington Moving | Wellington, New Zealand | 2020 | Transport Planner

Let’s Get Wellington Moving is a joint initiative between Wellington City Council, Greater Wellington Regional Council, and Waka Kotahi NZ Transport Agency to develop a transport system that supports the city’s aspirations for how the city looks, feels and functions. Matt’s role on the project was to scope and evaluate opportunities for improvements to active transport infrastructure, that could provide alternative methods of travel to the car. The focus aims to reduce the impact of congestion travelling in and out of Wellington CBD.

TRANSPORTATION PLANNING

King Street and Enmore Road Masterplan | Inner West Council | Newtown, NSW | 2022 | Project Manager; Senior Transport Planner

Inner West Council commissioned Stantec in conjunction with Environmental Partnerships to transport guidance for the design of the King Street and Enmore Road Master Plan. The Master Plan seeks to prioritise pedestrian and cycling activity throughout one of Sydney's most vibrant areas. As part of the investigation, transport advice was provided for potential shared zones, road closures to improve pedestrian dwelling opportunities, and intersection treatments. Matt was project manager for the Master Plan and was responsible for all elements of the project.

School Transport Plans | School Infrastructure NSW | NSW, Australia | 2022-Present | Project Manager; Senior Transport Planner

School Infrastructure NSW commissioned Stantec to undertake School Transport Plans at a variety of schools to help promote the use of more sustainable transport modes for students and staff. The intent of a School Transport Plan is to undertake a review of all transport networks which provide students with access to school, highlight the issues and barriers to achieving greater uptake in sustainable travel and provide opportunities and recommendations to meet mode share targets set during the process. Matt has project managed a number of the School Transport Plans whilst being responsible for report documentation, GIS mapping, stakeholder engagement, and client management. Projects involved: - Cecil Hills High School - Newcastle Education Campus - Kingscliff Primary School - Kingscliff High School

Midland Walkability Study | City of Swan | Midland, WA | 2022 | GIS

Stantec

Stantec is a global leader in sustainable engineering, architecture, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

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