Westmead Catholic Community Education Campus

Transport & Accessibility Impact Assessment and Green Travel Plan

Prepared for:

Catholic Education Diocese of Parramatta

19 March 2020

The Transport Planning Partnership

Westmead Catholic Community Education Campus

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APPENDICES

A. SIDRA RESULTS
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1 Introduction

This Transport and Accessibility Impact Assessment (TIA) report relates to a State Significant Development (SSD-10383) at 2 Darcy Road, Westmead. It is proposed to expand the existing education uses of the schools at the subject site. The Diocese of Parramatta's Sacred Heart Parish Church and Primary School are currently located at Ralph Street, Westmead which are proposed to be amalgamated with the subject site at Darcy Road.

The SSD application seeks approval for:

- A primary school with capacity for approximately 1,680 students, to provide expanded facilities for the existing Mother Teresa Primary School on the site and to replace the existing Sacred Heart Primary School at Ralph Street;
- A new Parish church;
- A Catholic early learning centre (CELC) (fit-out within an existing building); and
- New landscaping.

The Transport Planning Partnership (TTPP) has prepared this report on behalf of the Catholic Education Diocese Parramatta (CEDP) to accompany the Environmental Impact Statement (EIS) which will be submitted to the Department of Planning, Industry and Environment (DPI&E).

1.1 Strategic Context

The proposal responds to the growing Westmead Precinct and surrounding precincts. In particular, the Westmead Innovation Precinct is the largest health and education precinct in Greater Sydney, with hospitals, universities, research institutions and allied health services. The Westmead Catholic Community site is located within the Innovation Precinct, presenting a unique opportunity to collaborate with existing institutions as the precinct is developed. The Central City District Plan outlines that growth in the Westmead Innovation Precinct is a priority, noting that:

- Westmead is one of the largest integrated health, research, education and training precincts in Australia and provides health services to almost 10 per cent of Australia's population. By 2026, it will have over 2.8 million outpatient visits and over 160,000 emergency department presentations every year.
- Westmead is already a major contributor to the Australian Government's National Innovation and Science Agenda through its training of world-leading scientists, analysis and successful collaborations.
- The $900 million project and expansion of the University of Sydney and Western Sydney University Westmead campuses will increase Westmead's workforce from 18,000 to 32,000 by 2036. With additional investment, Westmead has the potential to

provide 50,000 jobs. The number of university students is expected to grow from 2,000 to 9,000 by 2036.

Further to the above anticipations, it is noted that overall the Parramatta Diocese is a relatively young population with around 27% of the population aged 0-19. Given the high proportion of children and teenagers, services and infrastructure should reflect this cohort.

To support this predicted growth, additional infrastructure, such as improved schools, will be required to service the growing worker and resident population. Specifically, demographic modelling undertaken by the Department of Planning, Industry and Environment shows that the number of school-aged children is projected to increase over the next 20 years. In the Central City District, an extra 89,360 students will need to be accommodated in both government and non-government schools by 2036. Of the predicted growth in school students, 32% is estimated to occur in Parramatta whilst 34% of the anticipated growth of children four years and younger in the Central City District will also occur in Parramatta. The Central City District Plan identifies that this will require planning early education and school facilities, which should encourage innovative approaches to the use of land and floor-space, including co-locating with compatible uses such as primary schools and office buildings, and close to transport facilities.

The Westmead Catholic Community project is ideally situated to assist in supporting this demand. The existing site benefits from a high level of accessibility, close to rail, bus and road connections, as well as the future Parramatta Light Rail. The WCC has already adopted an innovative approach to education facilities by co-locating multiple schools on the same site, and seeks to continue this innovative approach by enhancing the capacity of the school and fostering partnerships with the surrounding health and tertiary education uses. The WCC schools accept students from all backgrounds and denominations, ensuring that the diverse population can benefit from high quality schools in an accessible location.

1.2 Report Structure

This report will assess the traffic, transport, parking and pedestrian implications of the proposed development. The structure of the report is as follows:

- Chapter 2 discusses the existing conditions including a description of the subject site
- Chapter 3 provides an overview of the nearby Parramatta Light Rail project
- Chapter 4 gives a brief description of the proposed development
- Chapter 5 details journey to school/ work mode share data of the existing population
- Chapter 6 assesses the parking provisions associated with the proposal
- Chapter 7 examines the traffic generation and its impact
- Chapter 8 outlines strategies for managing future travel demand
- Chapter 9 gives a preliminary overview of the anticipated construction activities

- Chapter 10 contains the design measures to maintain road and pedestrian safety, and
- Chapter 11 presents the conclusions of the assessment.

1.3 Planning Secretary's Environmental Assessment Requirements

This report has been prepared as part of a State Significant Development Application (SSDA) for which approval is sought under Section 4.12(8) of the Environmental Planning and Assessment (EP&A) Act 1979.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) for the proposal state significant development, issued by NSW Department of Planning and Environment (DP&E) on 9 January 2020.

Table 1.1 lists the SEAR's requirements and the corresponding sections of the report where these are addressed.

Table 1.1: SEARs Requirements and Report Section References

Transport and Accessibility	Section Reference
Include a transport and accessibility impact assessment, which details, but not limited to the following: • Accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network adjacent to the proposed development.	Section 2.3 Section 2.5 Section 2.6
• Details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips.	Section 5.1.2 Section 5.1.3 Section 0
• The adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development.	Section 2.5 Section 2.6 Section 3
• Measures to integrate the development with the existing/future public transport network.	Section 8
• The impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years). The key intersections to be modelled / examined should include: o Darcy Road / Mons Road / Institute Road	Section 0
• The identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, additional school bus routes along bus capable roads (i.e. minimum 3.5m wide travel lanes), additional bus stops or bus bays.	Section 8
• Details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan) and the provision of facilities to increase the non-car mode share for travel to and from the site.	Section 8

• The proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones.	Section 4.3
• Proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site.	Section 6
• An assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development.	Section 4.2
• An assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED.	Section 10
• Emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).	Section 4.3
• The preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following: o Assessment of cumulative impacts associated with other construction activities, including but not limited to the impacts of the Parramatta Light Rail Construction. o An assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity. o Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process. o Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process. o Details of anticipated peak hour and daily construction vehicle movements to and from the site. o Details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle. o Details of temporary cycling and pedestrian access during construction. o Demonstrate how pedestrian and cycle rider movements along footways and cycleways are maintained at all times during construction activities. Should the development require closure to either facility, detail the adequate safety and diversion measures out in place to limit time delay and detour distances. o Details of any crane locations and road closures, and o Details of any potential impact to the bus network and bus services.	Section 9
• Identify the potential impacts of existing and future rail infrastructure near to the site (Main Western Line and future Parramatta Light Rail) and any possible impacts of the construction and operation of the proposal on this infrastructure associated mitigation measures.	Section 3 Section 9

1.4 Consultation

TTPP has sought further information / comments regarding the Parramatta Light Rail project and the changes and impacts on the Westmead region surrounding the subject site. Consultation with Transport for NSW (TfNSW) and City of Parramatta Council (Council) is ongoing.

This document will be updated as required to address any comments raised during this consultation process.

2 Existing Conditions

2.1 Site Description

The subject site is located at 2 Darcy Road, Westmead (referred to as the subject site) and falls within the local government area of City of Parramatta. The subject site comprises a primary school and two high schools, namely, Mother Teresa Primary School, Catherine McCauley Westmead and Parramatta Marist High School. The Diocese of Parramatta's Sacred Heart Parish Church and primary school are located at 14 Ralph Street, Westmead. Collectively, there are 2,840 students enrolled at these schools.

The subject site is surrounded by key health, research and education infrastructure. This includes Westmead Hospital, The Children's Hospital at Westmead, Cumberland Hospital and Westmead Private Hospital. Campuses for The University of Sydney and Western Sydney University are also located within the vicinity as shown in Figure 2.1.

Westmead Railway Station is located approximately 700m walking distance east of the subject site. Further east of Westmead Railway Station is Parramatta Park. Other nearby land uses include low, medium and high-density residential developments

The location and surrounding environs of the subject site is shown in Figure 2.1.

Figure 2.1: Site Locality

Basemap Source: Nearmap, viewed online 10/01/2020

2.2 Surrounding Road Network

Darcy Road is a two-way road that extends along the north boundary of the subject site. Along the north-east boundary of the site, Darcy Road is classified as a State Road (RMS road). West of Mons Road, Darcy Road is classified as a local road. The road is configured as two-lanes in both directions with no on-street parking. A bus transitway (T-way) separated from general traffic is provided on Darcy Road between Mons Road/Institute Road and Hawkesbury Road. Darcy Road is posted as a 40 km/h high pedestrian activity zone. Existing site access is provided off Darcy Road.

Hawkesbury Road is a two-way local road that runs north-south to the east of the subject site. The road is generally configured as two-lanes in both directions with no on-street parking in the vicinity of the subject site. Bus lanes are provided for bus connections to the T-way on Darcy Road. It intersects with Darcy Road at a signalised T-junction. The speed limit is posted as 50 km/h.

Bridge Road is a two-lane two-way local road with a north-south alignment. It is located west of the subject site and intersects with Darcy Road at a signalised T-junction. Unrestricted on-street parking is permitted on both sides of the road. The speed limit is posted as 50 km/h.

Alexandra Avenue is two-way local road that extends from east to west between Park Parade and Bridge Road. One vehicular lane is provided in both directions with unrestricted kerbside parallel parking provided on both sides of the road, west of its intersection with Hawkesbury Road. The speed limit is posted as 50 km/h and 40 km/h in short sections during school zones.

2.3 Traffic Volumes

TTPP commissioned traffic surveys at the key intersections in the vicinity of the site during the following peak periods:

- Wednesday (17 October 2018) between 7:30am and 9:00am
- Wednesday (17 October 2018) between 2:30pm and 5:00pm.

The intersection turning movement counts were collected at the following intersections:

1. Hawkesbury Road – Alexandra Avenue
2. Hawkesbury Road – Railway Parade
3. Hawkesbury Road – Darcy Road
4. Darcy Road – University of Western Sydney (UWS) Car Park Access – Westmead Hospital Access
5. Darcy Road – Site Access (between both Westmead Hospital Access)
6. Darcy Road – Site Access – Westmead Hospital Access

7. Darcy Road – Site Staff Car Park Access (between Institute Road and Westmead Hospital Access)
8. Darcy Road – Mons Road – Institute Road
9. Darcy Road – Site Access (west of Mons Road)
10. Darcy Road – Bridge Road.

The network peak periods have been calculated as being 7:45am - 8:45am and 3:00pm - 4:00pm.

The turning movement volumes for the AM and PM peak periods are shown in Figure 2.2.

Figure 2.2: Existing Traffic Volumes

Basemap Source: Google Maps Australia

2.4 On-site Parking

There are three main car parks for staff provided on-site plus a small car park for executive staff. Collectively, there are 286 car parking spaces provided at the subject site. The location and provision of parking spaces across these areas is illustrated in Figure 2.3.

Figure 2.3: On-site Parking Provision

Basemap Source: Nearmap, viewed online 10/01/2020

2.5 Public Transport

Train

Westmead Railway Station is served by the T1 Western Line and T5 Cumberland Line which provide access to key destinations across Sydney including Parramatta, Sydney CBD and Liverpool. West of Sydney metropolitan, these lines provide connections to Emu Plains, Richmond and Blacktown. Train services for the T1 Western Line run approximately every 5-10 minutes during peak and off-peak periods.

A summary of train services at Westmead Railway Station is given in Table 2.1.

Table 2.1: Train Services

Service	Route Description	Frequency (Peak / off-peak)
T1 Western Line	Emu Plains or Richmond to City	5-15 mins / 5-15 mins
T5 Cumberland Line	Leppington to Richmond	20-30 mins / 20-30 mins

Train load data obtained from Transport for NSW indicate that there are approximately 44 train services that run on weekdays at Westmead Railway Station in both directions.

Bus

Several bus services operate through Westmead which run between Parramatta and the Hills District. Bus stops are located on Darcy Road in general traffic lanes as well as within the T-way. Bus Only lanes are provided along the route between the Darcy Road T-way and Parramatta. A summary of bus services operating in the vicinity is provided in Table 2.2.

A map showing nearby public transport provision is provided in Figure 2.4.

Table 2.2: Bus Services

Service No.	Route Description	Frequency (Peak / Off-Peak)
705	Blacktown to Parramatta via Seven Hills	30 mins / 60 mins
708	Constitution Hill to Parramatta via Pendle Hill	No service / Single service
711	Blacktown to Parramatta via Wentworthville	20 mins / 30 mins
818	Westmead to Merrylands	60 mins / 60 mins
T60	Castle Hill to Parramatta	30 mins / 60 mins
T61	Blacktown to Parramatta	20 mins / 60 mins
T62	Castle Hill to Parramatta	20 mins / 60 mins
T63	Rouse Hill to Parramatta via Kellyville Ridge	15 mins / 60 mins
T64	Rouse Hill to Parramatta via Kellyville	15 mins / 30 mins
T65	Parramatta to Rouse Hill Town Centre	15 mins / 15 mins
T66	Rouse Hill to Parramatta	20 mins / 60 mins

Figure 2.4: Surrounding Public Transport Infrastructure

Basemap source: Nearmap

2.6 Pedestrian and Cyclist Infrastructure

The site is surrounded by a well-established footpath network with marked foot crossings provided at most signalised intersections. Pedestrians are provided with refuge on the median islands of Darcy Road at the signalised crossing between the site and Westmead Private Hospital.

A shared path is provided on the north side of Darcy Road which extends between Mons Road and Hawkesbury Road. Cycling routes available in the vicinity are depicted in Council's Bike Plan as shown in Figure 2.5.

Figure 2.5: Cycling Routes

Source: City of Parramatta Bike Plan 2017

3 Parramatta Light Rail

The Parramatta Light Rail is one of the NSW Government's latest major infrastructure projects being delivered to serve a growing Sydney. The new light rail service will provide an alternative public transport link between Westmead, Parramatta and Carlingford.

It is proposed that the Parramatta Light Rail Stage 1 will have 16 light rail stops from Westmead Railway Station to Carlingford as shown in Figure 3.1.

Figure 3.1: Parramatta Light Rail Route Map (Stage 1)

Source: NSW Government, accessed 14/01/2020

The subject site is within 500m walking distance of the Westmead Station and Westmead Hospital light rail stops. Students and staff travelling via the future Parramatta Light Rail service would be expected to board/ alight at either of these stops and walk to/ from the subject site.

The Parramatta Light Rail (Stage 1) Submissions Report states that the project would create a modal shift from private vehicles to the light rail service. For the proposed development, it is considered that a modal shift away from vehicles would occur in the future as light rail would provide an alternative mode for short car trips to nearby catchment areas. Furthermore, shifts between public transport modes are considered to occur as the light rail may provide a more convenient option to rail or bus.

Parramatta Light Rail is expected to open in 2023, therefore, modal shift has been considered for the proposed development between the Opening Year (2023) and Stabilisation Year (2033).

It has been announced that major construction for the Parramatta Light Rail Stage 1 project commenced in January 2020.

4 Proposed Development

4.1 Proposal Description

At present, there is a demand to expand the current schools to accommodate for additional students. The Westmead Catholic Community is proposing to amalgamate education core uses onto the subject site in the future along with the Parish Church (Sacred Heart).

Collectively, the schools currently have 2,767 enrolled students. The proposal seeks to progressively increase the student population by an additional 1,680 primary school schools and 200 children at the CELC. Sustainable increases would occur gradually year-by-year between 2023 and 2033.

The project will be staged such that infrastructure upgrades would be provided over the course of the student population growth plan. The traffic and parking analysis have been carried out for two key scenarios, namely:

- 2023 – Opening year for the proposed development
- 2033 – Stabilisation year where growth of the student population would be complete.

Table 4.1 provides a summary of current student and staff population at the subject site, and forecast populations in Opening Year and Stabilisation Year.

The proposal development pertains to the primary school and CELC. However, it is noted that a marginal increase in the high school student population is anticipated. By 2023, there would be an additional 51 high school students expected as part of the "natural growth" of the high schools. Such growth is unrelated to the proposal.

The impact on the surrounding transport network due to natural growth of the high school population would be minimal. Notwithstanding this, any marginal changes to traffic movements caused by natural growth have also been considered as part of this TIA to provide a holistic analysis of the future conditions.

Table 4.1: Subject Site Population

Group	Current – 2019	Proposed Development Opening Year – 2023	Proposed Development Stabilisation Year - 2033
Student Population			
CELC Children	0	100	200
Primary School Students	420	660	1,680
High School Students	2,186	2,237 [(a)]	2,237
FTE Staff Population [(b)]			
CELC Staff	0	15	25
Primary School Staff	24	40	100
High School Staff	166	166	166

Notes:
(a) Marginal increase in high school student population between 2019 and 2023 is related to "natural growth" of students, and is unrelated to proposal.
(b) Full-time equivalent staff.

4.2 On-site Parking

A new on-site car park is to be provided off Darcy Road at the north-east corner of the site. The car park would accommodate approximately 260 car parking spaces for staff across two above-ground levels and one basement level. It is proposed to close the staff car parks at Catherine McAuley (54 spaces) and front office (20 spaces). The net on-site parking would be approximately 472 spaces as shown in Figure 4.1.

Adequacy of the proposed parking provision has been assessed in Chapter 6.

It is noted that a separate development application (DA) for the new on-site car park is to be lodged with City of Parramatta Council. It is the intention that all school parking will be met on site.

Figure 4.1: On-Site Parking

Basemap Source: Nearmap, viewed online 12/03/2019

Around the perimeter of the new car park building would be a new drop-off/ pick-up zone to accommodate high school students. The new drop-off/ pick-up would be accessed via the same driveway as the multi-level car park that is off Darcy Road. The adequacy of the new drop-off/ pick-up zone has been assessed in Section 6.8.

The proposed car park would replace an existing two-storey monastery. The building would be demolished to provide for the new car park and drop-off/ pick-up zone.

A site plan showing the multi-level car park in the context of the site surrounds is shown in Figure 4.2. A concept plan of the car park and drop-off/ pick-up zone at ground level is shown in Figure 4.3.

Figure 4.2: Site Plan of New Car Park (Subject to Separate Application)

Source: WINIM Developments Pty Ltd

Figure 4.3: Ground Level - Car Park and Drop-Off/ Pick-Up Zone (Subject to Separate Application)

Source: WINIM Developments Pty Ltd

4.3 Access Arrangement

A vehicular access to the new car park and drop-off/ pick-up zone would be located off Darcy Road at the north-east corner of the site. There is an existing driveway at the location of the proposed access which would be utilised as the access to the car park and drop-off/ pick-up zone. The current access driveway measures approximately 5.5m in width and is configured as shown in Figure 4.4.

In the proposed development case, the existing site access off Darcy Road, west of Mons Road would continue to service the site.

Figure 4.4: Existing Driveway at Proposed Car Park Access

Source: Google Street View, imagery dated December 2018

5 Journey to School

5.1 School Students and Staff

5.1.1 Mode Share

Student and staff travel mode share were captured through a questionnaire of transport use when travelling to/from school. Data for the primary schools and high schools were captured separately and are summarised in Table 5.1 and Table 5.2, respectively.

Amongst primary school students, travel by car is the most common mode of transport to/from school (89.9%) followed by walking (6.1%). Commuting by public transport makes up 3.7% of all journeys for primary school students.

High school students most commonly travel by public transport, namely bus (39.7%) and train (23.1%) as separate modes. Travel using a combination of bus and train forms 11.9% of all journeys to/from school while travel by car makes up 19.6%.

Commuting by car is the most common mode amongst staff, that is, 95.0% for primary school staff and 86.6% for high school staff. The remaining 5.0% of primary school staff travel by train. Of high school staff, 7.2% commute by train, 2.1% by bus and 3.1% walk to school. The number of staff commuting by bus and train (combination) or cycling to school was zero.

Table 5.1: Student Mode Share

Travel Mode	Primary School	High School
Car, dropped off (by parent/ caregiver)	89.9%	19.6%
Bus	3.3%	39.7%
Train	0.1%	23.1%
Bus & train	0.3%	11.9%
Walk	6.1%	5.1%
Cycle	0.4%	0.5%
Total	100%	100%

Table 5.2: Staff Mode Share

Travel Mode	Primary School	High School
Car, as driver (and parked at school)	95.0%	86.6%
Car, dropped off (by spouse/ other)	0%	1.0%
Bus	0%	2.1%
Train	5.0%	7.2%
Bus & train	0%	0%
Walk	0%	3.1%
Cycle	0%	0%
Total	100%	100%

In Table 5.1 and Table 5.2, similar mode shares have been aggregated into general categories and summarised in Table 5.3. General categories of mode share include private car, public transport and active travel. Mode share splits contained in Table 5.3 have been used to estimate trip generation and parking demand associated with the future school.

Table 5.3: Mode Share General Categories

Mode Share	Students		Staff	
	Primary School	High School	Primary School	High School
Private car [(a)]	89.9%	19.6%	95.0%	87.6%
Public transport [(b)]	3.7%	74.7%	5.0%	9.3%
Active travel [(c)]	6.5%	5.6%	0%	3.1%
Total	100%	100%	100%	100%

Notes:
(a) 'Private car' comprises students transported by parents.
(b) 'Public transport' comprises bus, train and bus + train combination.
(c) 'Active travel' comprises walking and cycling.

Table 5.3 indicates that being driven by a parent is most common for primary school students (89.9%) whilst the most common method of commuting for high school students is by public transport (74.7%). However, about one fifth (19.6%) of high school students travel to/ from school by car driven by a parent. Amongst school staff, private car use is most commonly followed by public transport. The latter makes up a small portion, that is, 5.0% for primary school staff and 9.3% of high school staff. Active travel is the less common mode of transport amongst students and staff. However, walking and cycling (6.5%) are still a more popular form of transport than public transport (3.7%) amongst primary school students.

5.1.2 Car Trips and Parking Demand

Trip generation for students and staff at these schools has been estimated by applying mode share splits (Table 5.3) to student and staff populations (Table 4.1). Estimates for existing and future student and staff travelling by private car are summarised in Table 5.4 and Table 5.5, respectively.

A car occupancy rate (i.e. person to car ratio) has been calculated using questionnaire and traffic survey data collected at the schools. This rate is based on the number of cars surveyed transporting students/ staff and the number of students/ staff dropped-off and picked-up by car.

An average car occupancy rate for primary school students has been calculated at 2.12 students per car while a rate of 1.85 students per car applies to high school students. These rates have been adopted in calculating the number of cars likely to be transporting students and staff at the subject site. Estimates for student car trip generation are contained in Table 5.4.

Data indicates that staff car occupancy is one staff per vehicle. Therefore, the number of staff car trips generated equals the number of parking spaces needed on-site. Table 5.5 contains staff car trip generation rates.

Table 5.4: Student Car Trip Generation

	Existing		Opening Year - 2023		Stabilisation Year - 2033	
	Primary School	High School	Primary School	High School	Primary School	High School
No. of students travelling by car	378	428	593	438	1,510	438
Car occupancy rate	2.12	1.85	2.12	1.85	2.12	1.85
No. of cars transporting students	178	231	280	237	712	237
Total	409		517		949	

Table 5.5: Staff Car Trip Generation

	Existing		Opening Year - 2023		Stabilisation Year - 2033	
	Primary School	High School	Primary School	High School	Primary School	High School
No. of staff travelling by car	23	145	38	144	95	144
Car occupancy rate	1.0					
No. of staff cars	23	145	38	144	95	144
Total	168		182		239	

In Year 2023, the proposed development would generate in the order of 517 student trips (one-way) per day and 183 staff trips (one-way) per day. In Year 2033, it is estimated that there would be 949 student trips (one-way) per day and 240 staff trips (one-way) per day.

The number of car trips estimated during the AM and PM school peak periods are contained and discussed in Section 7.1.

Determination of parking demand based on current mode share is considered to be a 'first principles' method of estimation. Based on this approach, there would be a need to provide 182 car parking spaces to accommodate staff on-site in the Year 2023. In the Year 2033, a total of 239 parking spaces would be required to accommodate school staff.

Car parking provision associated with the schools comprise staff and visitor/ parent parking. Visitor/ parent parking has been calculated based on current parking provision as follows. There are currently 286 parking spaces on-site with 190 full-time equivalent staff, which equates to a rate of approximately 1.5 on-site parking spaces per staff member (this includes staff and visitor/ parent parking).

Adopting a similar rate as above, the future visitor/ parent parking demand for the schools would be as follows:

- Opening Year – 2023: 103 spaces
- Stabilisation Year – 2033: 133 spaces.

In the absence of visitor/ parent parking rates for schools, parking demand is proposed to be provided in-line with parking rates at the subject site currently.

Analysis of the off-street parking provision adequacy, parking layout and space allocation is provided in Chapter 6.

5.1.3 Public Transport Trips

Trip generation through the use of public transport for students and staff has been estimated by applying the mode share splits (Table 5.3) to future student and staff populations. Estimates for existing and future student and staff travelling via public transport are summarised in Table 5.6 and Table 5.7, respectively.

Table 5.6: Student Trip Generation via Public Transport

	Existing		Opening Year - 2023		Stabilisation Year - 2033	
	Primary School	High School	Primary School	High School	Primary School	High School
No. of students travelling by public transport	14	1633	23	1671	57	1671
Total	1,647		1,694		1,728	

Table 5.7: Staff Trip Generation via Public Transport

	Existing		Opening Year - 2023		Stabilisation Year - 2033	
	Primary School	High School	Primary School	High School	Primary School	High School
No. of staff travelling by public transport	1	15	2	15	5	15
Total	16		17		20	

In the Year 2023, it is estimated that there would be in the order of 1,694 students and 17 staff per day travelling by public transport. In the Year 2033, there would be 1,728 students and 20 staff per day travelling by public transport.

5.1.4 Active Transport Trips

The number of person-based trips via active transport, that is walking and cycling, is estimated by similarly applying the student and staff mode share splits (Table 5.1 and Table 5.2) with the existing and future student and staff population as presented in Table 4.1.

Summaries of the student and staff trips via active transport are presented in Table 5.8 and Table 5.9, respectively.

Table 5.8: Student Trip Generation via Active Transport

	Existing			Opening Year - 2023			Stabilisation Year - 2033		
	Primary School	High School	Total	Primary School	High School	Total	Primary School	High School	Total
No. of students walking	26	111	**137**	40	114	**154**	102	114	**216**
No. of students cycling	2	11	**13**	3	11	**14**	7	11	**18**
Total students travelling via active transport	**28**	**122**	**150**	**43**	**125**	**168**	**109**	**125**	**234**

Table 5.9: Staff Trip Generation via Active Transport

	Existing			Opening Year - 2023			Stabilisation Year - 2033		
	Primary School	High School	Total	Primary School	High School	Total	Primary School	High School	Total
No. of staff walking	0	5	**5**	0	5	**5**	0	5	**5**
No. of staff cycling	0	0	**0**	0	0	**0**	0	0	**0**
Total staff travelling via active transport	**0**	**5**	**5**	**0**	**5**	**5**	**0**	**5**	**5**

In the Year 2023, it is estimated that there would be 154 students walking and 14 students cycling to/from school per day. In the Year 2033, there would be 216 students walking and 18 students cycling to/from school per day.

In the future scenarios, there would be no primary school staff walking or cycling to the site. Similarly, high school staff would not be expected to cycle, however, there would be approximately five staff walking to school.

5.1.5 Modal Shift

It should be noted that the analysis in this section has been made on the basis of existing modal share with no modal shift away from private cars. The promotion of alternative travel modes will be discussed in Chapter 9 of this report.

5.2 CELC Children and Staff

Currently, there is no CELC facility at the subject site. Therefore, mode share of primary school students and staff (Table 5.3) has been adopted for the future CELC children on the basis that travel behaviour for both groups would be comparable. A car occupancy rate for children of 2.12 children per car and 1.0 staff per car have also been applied to the estimates herein.

5.2.1 Car Trips and Parking Demand

Estimates for car trip generation resulting from the future CELC children and staff are summarised in Table 5.10 and Table 5.11 respectively.

Table 5.10: CELC Children Car Trip Generation

	Opening Year - 2023	Stabilisation Year - 2033
No. of children travelling by car	90	180
Car occupancy rate	2.12	
No. of cars transporting children	42	84

Table 5.11: CELC Staff Car Trip Generation

	Opening Year - 2023	Stabilisation Year - 2033
No. of staff travelling by car	14	24
Car occupancy rate	1.0	
No. of cars transporting staff	14	24

Based on the above, the future CELC would generate 42 daily car trips in 2023 and 84 daily car trips per day in 2033 by parents transporting children. There would be 14 daily car trips and 24 daily car trips generated by CELC staff in 2023 and 2033, respectively.

Based on first principles, there would be a need to provide 14 car parking spaces to accommodate CELC staff on-site in the Year 2023. In Year 2033, a total of 24 parking spaces would be required to accommodate CELC staff.

The CELC is proposed to operate between 6:00am-6:00pm. Traffic movements associated with CELC staff and children/ parents would occur before and after the school peak periods (i.e. approximately 5:30am-6:30am and 5:30pm-6:30pm). Therefore, trips generated by the CELC would have no impact on the local road network during school peak periods.

Analysis of the off-street parking provision adequacy, parking layout and space allocation is provided in Chapter 6.

5.2.2 Public Transport and Active Transport Trips

Estimates for travel via public transport and active transport by future CELC children and staff are summarised in Table 5.12 and Table 5.13 respectively.

Table 5.12: CELC Children Trip Generation via Public Transport

	Opening Year - 2023	Stabilisation Year - 2033
No. of children travelling by public transport	3	6
No. of children travelling by active transport	6	12

Table 5.13: CELC Staff Trip Generation via Public Transport

	Opening Year - 2023	Stabilisation Year - 2033
No. of children travelling by public transport	0	1
No. of children travelling by active transport	1	1

In 2023, there would be approximately nine children and one staff travelling by non-car modes while in 2033, there would be 18 children and two staff travelling by non-car modes.

6 Parking Assessment

6.1 Parking Requirements for Educational Establishments

6.1.1 State Environmental Planning Policy (Educational Establishments)

There is no specific car parking rate under the Educational State Environmental Planning Policy (SEPP). However, generally, any car parking must not reduce the number of car parking spaces provided and/or must not contravene any existing condition of the most recent development consent relating to car parking (where applicable).

6.1.2 Parramatta Council Development Control Plan

Parramatta Development Control Plan (DCP) 2011 does not stipulate parking provisions for schools. In the absence of parking rates, the DCP states that the Roads and Maritime Services' (RMS) *Guide to Traffic Generating Developments* (2002) is to be referred to for parking rates or undertake traffic and parking surveys of a similar land use in a similar location.

For completeness, both methods of estimating future parking provision have been assessed herein.

6.1.3 RMS Parking Requirement

The *Guide to Traffic Generating Developments* (2002) does not provide parking provisions for schools. RMS conducted a more recent study of traffic and parking generation associated with schools, namely, *Trip Generation Study for Schools Analysis Report (2014)*. This Study stipulates peak parking demand for schools in metropolitan areas as an average of 0.11 spaces per student.

According to RMS' parking provisions, the proposed development would be required to provide on-site parking as follows:

- Opening Year – 2023: 319 spaces based on a student population of 2,897 (Table 4.1)
- Stabilisation Year – 2033: 431 spaces based on a student population of 3,917 (Table 4.1).

6.1.4 'First Principles' Parking Requirement

As calculated in Section 5.1, the mode share of current staff at these schools suggests that future parking demand would be as follows:

- Opening Year – 2023:
  - 182 staff spaces (38 primary school staff + 144 high school staff), plus
  - 103 visitor/ parent spaces.
- Stabilisation Year – 2033:
  - 239 staff spaces (95 primary school staff + 144 high school staff), plus
  - 133 visitor/ parent spaces.

In summary, the future primary schools and high schools would require on-site parking spaces for staff and visitor/parents as follows:

- In 2023: 285 parking spaces
- In 2033: 372 parking spaces.

6.1.5 Parking Provision Adequacy

The future parking provision for the schools at the subject site would be up to 372 spaces by 2033 which has been estimated based on first principles. This amount if parking satisfies Council's DCP requirements; that is, to provide parking in accordance with current parking demand trends of the existing development (i.e. first principles).

As mentioned in Section 6.1.3, adopting RMS' parking rates would require 497 parking spaces to be provided on-site. This would be above the expected future parking demand of the proposed development which has been estimated using current mode share. Not only would it be unnecessary, over-provision of car parking could encourage negative mode shift towards greater car use.

Overall, the future parking provision for the schools as estimated on a first principles basis is deemed suitable and would satisfactorily accommodate the parking demand associated with the proposed development.

6.2 Parking for CELC

As described in Section 5.2, the travel behaviour of CELC staff is expected to be similar to that of primary school staff. Therefore, mode share of primary staff who drive (95.0%) has been applied to CELC staff to calculate the future parking demand as follows:

- Opening Year – 2023: 14 parking spaces
- Stabilisation Year – 2033: 24 parking spaces.

As calculated in Section 5.2.2, those who do not drive to school would commute by walking and public transport.

6.3 Parking for Parish Church

Sacred Heart Parish Church is currently co-located with Sacred Heart Primary School at 14 Ralph Street, Westmead. There are approximately 11 car parking spaces provided on-site for parish church staff. Visitors to the Church utilise the unrestricted weekend parking provided on-street surrounding the site.

6.3.1 DCP Parking Requirement

Parramatta City Council's DCP states the following regarding places of public worship:

> *5.3.3.5 P2. On-site parking shall be provided at the rate determined by the traffic impact statement having regard to the objectives of this clause. As a general guide for places of public worship, new development shall provide 1 car parking space per 5m2 of usable floor space for the first 100m2 and 1 car parking space per 3m2 of usable floor space thereafter. (Usable floor space not being corridor space, stairways, storage areas, toilets and other floor space that will not increase the capacity of the development.)*

The Parish Church is proposed to have a gross floor area of approximately 1,340 m^2 and usable floor area of 600 m^2. Applying the above parking rates generates an on-site parking requirement for 186 spaces for patrons. It is proposed that the Church would provide 12 car parking spaces, separate to patrons, for the church minister and associated members.

6.3.2 Parking Provision Adequacy

Typically, a full congregation at the Church would be expected on significant religious days, such as Christmas, Good Friday and Easter Sunday which would generate the highest parking demand. Such events occur very few times throughout the year and occur outside of teaching periods (i.e. public holidays). Therefore, such scenarios which generate peak parking demand would occur infrequently and would not coincide with school days.

Regular Sunday services would not be expected to generate a full congregation; thus, parking demand is expected to be lower than peak periods. Also, parking demand would occur on non-school days, therefore, on-site parking that is provided for the schools and CELC would be utilised by Church patrons during the weekend.

Weekday services may also take place, such as a baptism, wedding or funeral. In such cases, the typical attendance is expected to be less than half of the Church capacity. Assuming approximately 40% capacity, there would be a parking demand for 66 spaces.

It is estimated that the Parish Church would generate a parking demand in the order of 186 spaces which is expected to occur at peak times. This peak demand, as well as weekend and weekday services, would be sufficiently accommodated off-street by the approximate 472 car parking spaces to be located on-site

Overall, parking demand associated with the Parish Church would be adequately accommodated on-site during peak periods (e.g. a religious day service) and off-peak (e.g. weekend or weekday service) scenarios.

6.4 Summary of Parking Provision

A breakdown of the number of parking spaces required for each group on a weekday is given in Table 6.1.

Table 6.1: Future Parking Provision Breakdown

Group	Opening Year - 2023	Stabilisation Year - 2033
CELC Staff [a]	14	24
Primary School Staff [b]	38	95
High School Staff [b]	144	144
Primary and High School Visitor/Parents [b]	103	133
Parish Church (weekday service) [c]	66	66
Total	**365**	**462**

Notes:
(a) See Section 5.2.1 for estimation.
(b) See Section 5.1.2 for estimation.
(c) See Section 6.3.2 for estimation.

6.5 Parking Space Allocation

A preliminary plan showing how the above parking spaces (Table 6.1) would be allocated throughout the subject site is provided in Figure 6.1.

There would be a combination of parking for each user group which will be co-located in the car parks. Notwithstanding this, parking spaces would be signposted and/or delineated with linemarking to indicate the allocation of parking to drivers.

Supplementary spaces would be used to provide shared spaces adjacent to accessible parking spaces.

Figure 6.1: Future Parking Allocation – Indicative Plan

6.6 Bicycle Parking

Council's DCP does not stipulate bicycle parking provisions for educational establishments. In the absence of DCP bicycle parking rates, due regard is given to Cycling Aspects of Austroads Guides. The Guide specifies a rate of 1 space per 5 pupils over Year 4. Based on the 2023 student population of Year 5 to Year 12 the number of bicycle parking spaces for the site would be in in the order of 676 spaces.

The Bicycle Parking Facilities: Updating the Austroads Guide Traffic Management suggests a bicycle parking rate of 0.3 spaces per student and staff for primary and secondary schools. This would equate to a bicycle provision of 1,255 spaces by Year 2033 which is considered to be excessive when compared to the current mode share of students and staff at the school.

The current mode split of students and staff cycling to/from the site is 0.4%-0.5% and 0%, respectively.

As a comparison, Journey to Work (JTW) data obtained from the Australian Bureau of Statistics (ABS) 2016 census dataset provides an understanding of the travel methods to the Westmead region for work purposes. The destination zones selected in the Westmead region are shown in Figure 6.2.

Figure 6.2: Selected Destination Zones

Basemap Source: Google Maps Australia

The number of individuals cycling to the nominated destination zones for work purposes is 1% and is similar to the percentage of students cycling to/from the school at present. As such, the minimum provision of on-site bicycle parking from day one should be based upon current cycling mode share; that is, 0.5% of the future student and staff population. This would equate to a total of 21 bicycle parking spaces including 20 spaces for students and one space for staff.

In order to promote sustainable transport methods, it is ideal to aim for a 3-5% modal shift from private vehicle usage to active transport (i.e. walking and cycling) and public transport. Hence, the schools should progressively provide up to 208 bicycle parking spaces to achieve the modal shift target.

6.7 Car Park Layout

There is currently a car park provided on-site comprising 212 car parking spaces used by staff and visitors to the subject site. Adjacent to the main parking area is a bus zone which accommodated buses transporting students to/from school on a daily basis as well as weekly sports sessions (during teaching periods). This bus zone, which can accommodate up to seven buses at a time, services students attending all schools at the subject site.

One-way traffic circulation is provided through the car park and bus zone. The layout of the parking areas and bus zone is illustrated in Figure 6.3.

Figure 6.3: Existing Car Park and Bus Zone

Under a separate Development Application to Council a new multi-level car park containing approximately 260 parking spaces is proposed at the subject site. The car park which would be located at the eastern end of the site would provide parking at across two above-ground levels and one basement level. The car park would occupy some 2,500 m^2 on-site.

The access driveway to the car park would be via a separated ingress and egress. Entry would be via a left-in movement off Darcy Road at the location of the existing driveway (on the eastern site boundary) and exit would be via the existing traffic signals near the Catherine McAuley front office. The proposed ingress access driveway would measure approximately 6.3m in width.

A pedestrian pathway would run along the east side of the ingress driveway which will permit pedestrian access for students and staff directly into the site from key surrounding public transport nodes (Westmead train station, Darcy Road T-way, future Parramatta Light Rail) as shown in Figure 4.3. Vehicles would exit the site via the existing egress which forms the southern approach at the four-way signalised intersection of Darcy Road with Westmead Dental Hospital. Left-turn, through and right-turn traffic movements are permitted from the egress driveway. An aerial image overlain with the concept car park design is illustrated in Figure 6.4.

Figure 6.4: Subject Site Ingress and Egress

6.8 Drop-Off/ Pick-Up Zone

A new drop-off/ pick-up facility is to be proposed with the multi-level car park (subject to a separate application to Council). It would facilitate drop-off and pick-up activities by parents transporting high school students, while parents transporting primary school schools would continue to utilise the existing drop-off/ pick-up zone accessed from the site driveway west of Mons Road. Vehicles would access the drop-off/ pick-up zone via the new car park access off Darcy Road.

There would be approximately 21 car bays located around the outside of the car park as shown in Figure 6.5.

Figure 6.5: Proposed Drop-off/Pick-up for High Schools

Capacity of the drop-off/ pick-up has been assessed for the maximum number of cars expected to enter the site in the busiest 15-minute period during the morning and after school peak periods.

At the busiest time for drop-off and pick-up for high school students, it is estimated that there would be:

- Approximately 43 cars dropping off students in a 15-minute period, and
- Approximately 54 cars picking up students in a 15-minute period.

On average, it takes between 1-2 minutes per car when a parent is dropping-off or picking-up a students. Applying a rate using the upper end of the range (i.e. two minutes per vehicle), each bay could accommodate approximately 7.5 cars in a 15-minute period. Therefore, the 21 bays together could accommodate a turn-over of approximately 158 cars.

The peak number of cars in the morning and afternoon school peak periods would be significantly lower than the maximum capacity of the drop-off/ pick-up zone. On this basis, the number of cars would be sufficiently accommodated within the 21 bays proposed to be provided on-site.

Primary school students would utilise the current eight bays plus 23 spaces on the northside of the parking aisle as shown in Figure 6.6. Collectively, there would be 31 bays to facilitate the drop-off/pick-up operation.

Given that the majority of visitation occurs during teaching periods, the 23 spaces (which makes-up part of the visitor/ parent parking) would be available for use during peak drop-off/pick-ups. This would optimise the use of nearby parking spaces and would reduce the need for further hard-stand areas on-site.

Figure 6.6: Proposed Drop-off/Pick-up for Primary Schools

At the busiest time for drop-off and pick-up, it is estimated that there would be:

- In Year 2023:
  - Approximately 50 cars dropping off students in a 15-minute period (AM), and
  - Approximately 76 cars picking up students in a 15-minute period (PM).
- In Year 2033:
  - Approximately 128 cars dropping off students in a 15-minute period (AM), and
  - Approximately 194 cars picking up students in a 15-minute period (PM).

Similarly, applying a rate of two minute per car means that each bay could accommodate approximately 7.5 cars in a 15-minute period, and therefore, the 31 bays could accommodate a turn-over of approximately 233 cars.

In all of the above future scenarios, the drop-off and pick-up could be adequately accommodated for primary school students across the 31 bays.

All drop-off/pick-up zones would be supervised by teachers on-duty in the morning and afternoon peak periods to facilitate the movement of students, and in particular, students using the crossing within the zone. This would enable smooth and safe operation and circulation through the zone, and avoid parents standing in bays longer than two minutes.

In both locations, one-way vehicle circulation through the zone would be proposed in order to contain pedestrian activity to the left-side and to minimise the number of conflicting movements for vehicles and pedestrians.

7 Traffic Assessment

7.1 Traffic Generation

A first principles approach has been used to determine the traffic generation of the proposed development. The approach is outlined as follows and assumes the following:

- A travel mode share survey has been undertaken to capture how students and staff travel to/from school. The same modal splits have been applied to future populations.
- For students, survey data has been used to estimate a car occupancy rate (i.e. number of students per car). This has been used to calculate the number of car trips generated by current development. Data indicates that staff car occupancy is one staff per vehicle.
- An average of the mode share and car occupancy rate for school students have been considered in the traffic generation estimations herein.
- Current mode share and car occupancy data have been applied to the existing number of students and staff to obtain the number of people for each travel mode and number of cars for the existing base year (2019).
- This approach has been applied to the student population for the forecast years (2023 and 2033).
- The CELC is proposed to operate between 6:00am-6:00pm. Traffic movements associated with CELC staff and children/ parents would occur before and after the school peak periods (i.e. approximately 5:30am-6:30am and 5:30pm-6:30pm). Therefore, trips generated by the CELC would have no impact on the local road network during school peak periods.
- Weekday services at the Parish Church would take place after 10:00am and would conclude before 2:00pm. Traffic movements associated with Church staff and patrons would occur outside of the school peak periods, and therefore, would have no impact on the local road network during school peak periods.

On the above basis, the future population of the schools travelling by car is determined in Table 7.1

Table 7.1: Future Population Travelling by Car

School Type	Group	Future Population (Year 2023)	Future Population (Year 2033)	Percentage of Car Travel	2023 Future Population Travelling by Car	2033 Future Population Travelling by Car
Primary School	Staff	40	100	95.0%	38	95
	Student	420	1,680	89.9%	593	1,510
High School	Staff	166	166	87.6%	145	145
	Student	2,237	2,237	19.6%	438	438

7.2 School Peak Periods

In determining peak traffic generation of the proposed development, the following directional splits have been adopted:

- Of staff travelling to/from the subject site by car:
  - 75% would arrive during the morning peak.
  - 10% would depart during the afternoon peak.
- Of students travelling to/from the subject site by car:
  - 75% would arrive during the morning peak.
  - 85% would depart during the afternoon peak.
- Arrival/ departure rates for students above take into consideration the Out of School Hours Care proposed to be provided at the site which would be operational between 6am – 6pm on weekdays.
- The proposed multi-level car park located along the eastern boundary of the site (comprising a total of approximately 260 parking spaces) is occupied by high school staff.
- The existing car park located along the western boundary of the site (comprising of 212 parking spaces) would be utilised by primary school staff. In the Year 2033, a small portion of primary school staff would use the new multi-level car park.
- Car occupancy rates of 2.12 primary school students per car and 1.85 high school students per car for drop-off/pick-up movements, and 1.0 staff per car have been adopted.

Table 7.2 presents a summary of the future traffic generation of the proposed development during the school peak periods.

Table 7.2: Future Traffic Generation (School Peak Periods)

School Type	School Group	2023 Future Population Travelling via Private Vehicles	2033 Future Population Travelling via Private Vehicles	Car Occupancy Rate	2023 Future Traffic Generation		2023 Future Traffic Generation	
					AM	PM	AM	PM
Primary School	Staff	38	95	1.0	29	4	71	10
	Student	593	1,510	2.12	210	238	534	606
High School	Staff	145	145	1.0	109	15	109	15
	Student	438	438	1.85	178	201	178	201

Based on the above, the following traffic is generated in the morning and afternoon peaks:

- Year 2023:
  - 388 student/parent car trips and 138 staff car trips in the morning peak
  - 439 student/parent car trips and 19 staff car trips in the afternoon peak.
- Year 2033:
  - 712 student/parent car trips and 180 staff car trips in the morning peak
  - 807 student/parent car trips and 25 staff car trips in the afternoon peak.

The net change in traffic generation is presented in Table 7.3.

Table 7.3: Net Change in Traffic Generation

School Peak Period	Direction (In/ Out Movement)	Existing Traffic Generation via Traffic Surveys	Existing Traffic Generation from interview surveys	2023 Future Traffic Generation	2023 Net Change *	2033 Future Traffic Generation	2033 Net Change *
AM Peak	'IN'	593	433	525	+92	892	+459
	'OUT'	438	307	388	+80	712	+405
PM Peak	'IN'	160	348	439	+91	807	+459
	'OUT'	276	365	458	+93	831	+466

** The net change in traffic generation is based on the theoretical existing traffic generation.*

From Table 7.3, the surveyed existing traffic movements of the site in the afternoon peak appears to be significantly low in comparison with the morning peak. The theoretical existing traffic generation is estimated by utilising the 'first principles' approach with data obtained from interviews. The theoretical and surveyed existing traffic generation in the morning peak appears to be very similar while there is a substantial difference in the afternoon peak. This suggests that there may have been an extraordinary event in the traffic counts which rendered the traffic counts much lower than normal.

Hence, the net change in traffic generation is compared with the theoretical existing traffic movements as it is believed that the surveyed traffic movements in the afternoon peak is representing a non-typical school day and for a consistent approach.

7.3 Background Traffic Growth

Background traffic growth has been adopted based on the Sydney Strategic Traffic Forecasting Model (STFM) growth plots obtained from RMS. The STFM growth plots provide growth rates (per cent per annum growth) from 2016 to 2026 and are based on approved developments in Sydney. STFM growth plots have been used to increase background traffic flows for SIDRA modelling of future scenarios for the development.

Future traffic associated with the proposed development has been distributed through the local road network proportionally based on current traffic distribution.

7.4 Intersection Assessment

To assess the traffic implications arising from the proposal, intersection capacity analysis has been performed for the key intersections in the vicinity of the site, which include:

- Site Access (north-west access) - Darcy Road
- Darcy Road - Institute Road-Mons Road
- Darcy Road - Site Access (Catherine McCauley car park north)
- Darcy Road - Site Access (Catherine McCauley) - Westmead Hospital Access
- Darcy Road - Site Access (Catherine McCauley car park south)
- Darcy Road – UWS Precinct Access - Westmead Hospital Access
- Darcy Road - Hawkesbury Road
- Hawkesbury Road - Railway Parade
- Hawkesbury Road - Alexandra Avenue
- Alexandra Road - Bridge Road.

The following scenarios have been assessed in this regard:

- Scenario 0 – Existing conditions (base case).
- Scenario 1 – 2023 Future conditions with background traffic growth.
- Scenario 2 – 2023 Future conditions with background traffic growth and development traffic.
- Scenario 3 – 2033 Future conditions with background traffic growth
- Scenario 4 – 2033 Future conditions with background traffic growth and development traffic.

Signalised intersections have used optimised phase times in SIDRA for the future base case with development. This approach is consistent with advice from RMS in other recent projects.

7.5 Intersection Modelling Criteria

The existing operation of the nearby intersections to the site have been assessed using SIDRA Network version 8.0, a computer-based modelling package which assesses intersection performance under prevailing traffic conditions.

SIDRA calculates intersection performance as a level of service (LoS). SIDRA provides analysis of the operating conditions which can be compared to the performance criteria set out in Table 7.4.

Table 7.4: Level of Service Criteria for Intersection Operation

Level of Service	Average Delay (seconds per vehicle)	Traffic Signals, Roundabout	Give Way and Stop Signs
A	Less than 14	good operation	good operation
B	15 to 28	good with acceptable delays and spare capacity	acceptable delays and spare capacity
C	29 to 42	satisfactory	satisfactory, but accident study required
D	43 to 56	operating near capacity	near capacity and accident study required
E	57 to 70	at capacity, at signals, incidents will cause excessive delays, roundabouts require other control mode	at capacity, requires other control mode
F	Greater than 71	unsatisfactory with excessive queuing	unsatisfactory with excessive queuing; requires other control mode

Source: Roads and Maritime Guide to Traffic Generating Developments, 2002

7.6 Intersection Modelling Results

The operational levels of service in each scenario during the AM school peak and PM school peak periods are summarised in Table 7.5 and Table 7.6, respectively.

Table 7.5: Intersection Performance – AM Period

Intersections	Intersection Type	Existing		2023 Background Growth		2023 Background Growth + Dev		2033 Background Growth		2033 Background Growth + Dev	
		Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS
Darcy Rd – Site Access (Mother Teresa)	Priority (Stop)	13s	A	15s	B	9s[(a)]	A	19s	B	>100s[(c)]	F
Darcy Rd – Institute Rd – Mons Rd	Signalised	36s	C	33s[(b)]	C	34s[(b)]	C	32s[(b)]	C	32s	C
Darcy Rd – Site Access (Catherine McAuley)	Priority (Give Way)	4s	A	4s	A	4s	A	4s	A	5s	A
Darcy Rd – Site Access (Catherine McAuley) – Westmead Hospital	Signalised	27s	B	21s[(b)]	B	42s	C	22s[(b)]	B	32s	C
Darcy Rd – Site Access (Proposed Car Park Entry)	Priority (Give Way)	5s	A	5s	A	4s	A	6s	A	6s	A
Darcy Rd – UWS – Westmead Hospital	Signalised	26s	B	23s[(b)]	B	26s	B	21s[(b)]	B	23s	B
Darcy Rd – Hawkesbury Rd	Signalised	33s	C	34s	C	39s	C	37s	C	>100s	F
Hawkesbury Rd – Railway Pde	Signalised	18s	B	16s[(b)]	B	24s	C	15s[(b)]	A	41s	C
Hawkesbury Rd – Alexandra Ave	Signalised	71s	F	71s	F	>100s	F	>100s	F	>100s	F
Alexandra Ave – Bridge Rd	Priority (Roundabout)	17s	B	19s	B	19s	B	29s	C	25s	B
Darcy Rd – Bridge Rd – Coles Car Park	Signalised	32s	C	35s	C	23s	B	36s	C	71s	F

Notes:
(a) Intersection LoS improves as traffic movements by staff and parents associated with the high school are relocated to the new multi-level car park.
(b) Improved average delay at intersections in 2023 and 2033 background growth scenarios are the result of optimised phase times in SIDRA Network (i.e. user-given cycle times). As intersections operate in reality using SCATS system, SIDRA software will adjust phase times to optimise the intersection operation when a marginal increase of traffic movements is added to the network therefore producing a reduction in degree of situation from which comes the average delay.
(c) An increase in traffic movements along major movement (Darcy Road) is attributed to background traffic growth (up to the Year 2033) and the proposed development. As a result, the right-turn movement into the subject site would have less suitable gaps in opposing traffic flow (Darcy Road westbound flow) therefore increasing the average delay for the right turn movement and causing the degree of saturation to reduce for this movement.

Table 7.6: Intersection Performance – PM Period

Intersections	Intersection Type	Existing		2023 Background Growth		2023 Background Growth + Dev		2033 Background Growth		2033 Background Growth + Dev	
		Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS
Darcy Rd – Site Access (Mother Teresa)	Priority (Stop)	10s	A	11s	A	12s	B	14s	A	>100s	F
Darcy Rd – Institute Rd – Mons Rd	Signalised	48s	D	47s[(a)]	D	50s	D	46s[(a)]	D	>100s	F
Darcy Rd – Site Access (Catherine McAuley)	Priority (Give Way)	4s	A	4s	A	4s	A	4s	A	4s	A
Darcy Rd – Site Access (Catherine McAuley) – Westmead Hospital	Signalised	13s	A	13s	A	20s	B	13s	A	18s	B
Darcy Rd – Site Access (Proposed Car Park Entry)	Priority (Give Way)	5s	A	5s	A	5s	A	5s	A	5s	A
Darcy Rd – UWS – Westmead Hospital	Signalised	21s	B	19s[(a)]	B	19s	B	18s[(a)]	B	18s	B
Darcy Rd – Hawkesbury Rd	Signalised	37s	C	45s	C	55s	D	>100s	F	>100s	F
Hawkesbury Rd – Railway Pde	Signalised	27s	B	36s	C	38s	C	>100s	F	>100s	F
Hawkesbury Rd – Alexandra Ave	Signalised	38s	C	42s	C	46s	D	83s	F	95s	F
Alexandra Ave – Bridge Rd	Priority (Roundabout)	12s	A	13s	A	13s	A	16s	B	13s	A
Darcy Rd – Bridge Rd – Coles Car Park	Signalised	25s	B	30s	C	41s	E	40s	C	>100s	F

Notes:
(a) Improved average delay at intersections in 2023 and 2033 background growth scenarios are the result of optimised phase times in SIDRA Network (i.e. user-given cycle times). As intersections operate in reality using SCATS system, SIDRA software will adjust phase times to optimise the intersection operation when a marginal increase of traffic movements is added to the network therefore producing a reduction in degree of situation from which comes the average delay.

Scenario 0 - Existing Conditions

Generally, the level of service on the road network are acceptable under existing operating conditions. However, in the AM peak period the Hawkesbury Road - Alexandra Avenue intersection has existing traffic capacity issues and operates at a LoS F. In the PM peak period, the intersection of Darcy Road – Institute Road – Mons Road operates at LoS D which is nearing capacity.

It is noted that the results presented above for the intersection of Darcy Road – Hawkesbury Road align with the modelling results as presented in the Parramatta Light Rail Stage 1 Westmead to Carlingford via Camellia Environmental Impact Statement which show the intersection to operate at a LoS C within +/- five seconds of the results presented in Table 7.5 and Table 7.6.

Modelling results for existing peak operating conditions of the Darcy Road – Hawkesbury Road junction are presented are presented in Table 7.7.

Table 7.7: Existing Conditions - Darcy Road and Hawkesbury Road Intersection

INTERSECTION	PEAK HOUR	DEGREE OF SATURATION	AVERAGE DELAY (SECONDS)	LEVEL OF SERVICE
Hawkesbury Road/Darcy Road	AM	0.64	34	C
	PM	0.80	32	C

Source: Parramatta Light Rail Stage 1 Westmead to Carlingford via Camellia Environmental Impact Statement

Scenario 1 – 2023 Future Base (Background Growth)

Additional trips generated by background traffic growth in the 2023 future base scenario would increase average delay but not change the level of service of intersections in the AM peak period.

In the PM peak period, background traffic growth would result in a reduction in intersection performance at the following junctions:

- Darcy Road - Bridge Road – Coles Car Park would reduce from LoS B to LoS C
- Hawkesbury Road - Railway Parade would reduce from LoS B to LoS C.

Scenario 2 – 2023 Future Base plus Development Traffic

Additional trips generated by the proposal with background growth would cause the following intersections to exceed capacity in the AM peak period:

- Darcy Road – Hawkesbury Road (LoS F)
- Hawkesbury Road – Alexandra Avenue (LoS F).

In the PM peak period, the background traffic growth with the proposal would cause the following intersections to operate at capacity (i.e. LoS D):

- Darcy Road – Institute Road – Mons Road
- Darcy Road – Hawkesbury Road
- Hawkesbury Road – Alexandra Avenue.

Scenario 3 – 2033 Future Base (Background Growth)

Further additional trips due to background traffic growth in the 2033 future base scenario would increase the average delay but not change the level of service of intersections in the AM peak period.

However, the following intersections would be over capacity in the PM peak period:

- Darcy Road – Hawkesbury Road
- Hawkesbury Road – Railway Parade
- Hawkesbury Road – Alexandra Avenue.

Scenario 4 – 2033 Future Base plus Development Traffic

Additional trips due to background traffic growth with the proposal in Year 2033 would cause the following intersections to operate over capacity:

- AM Peak
  - Darcy Road – Site Access (Mother Teresa)
  - Darcy Road – Hawkesbury Road
  - Hawkesbury Road – Alexandra Avenue
  - Darcy Road – Bridge Road – Coles Car Park
- PM Peak
  - Darcy Road – Site Access (Mother Teresa)
  - Darcy Road – Institute Road – Mons Road
  - Darcy Road – Hawkesbury Road
  - Hawkesbury Road – Railway Parade
  - Hawkesbury Road – Alexandra Avenue
  - Darcy Road – Bridge Road – Coles Car Park.

Notwithstanding the above, some junctions would exceed operational capacity of the intersection with additional trips generated by the 2033 background traffic growth alone (i.e. prior to site-generated traffic flows being applied). These junctions include:

- Darcy Road – Hawkesbury Road
- Hawkesbury Road – Railway Parade
- Hawkesbury Road – Alexandra Avenue.

The modelling results show that the proposed development in Year 2023 would result in a lower average delay and improved intersection performance overall at the school access on Darcy Road, west of Mons Road. This is a result of traffic movements associated with high school staff and parents dropping-off/ picking-up becoming redirected towards the new multi-level car park.

However, with the further additional car trips generated in Year 2033, the school access would exceed capacity as more primary school staff and parents turning right into the subject site would have less suitable gaps with increased westbound through traffic flow on Darcy Road.

The traffic impacts will also be affected by the success of the Green Travel Plan. A significant modal shift would reduce the impact of site-generated traffic on the local road network. The modal shift would be triggered by encouragement and implementation of sustainable transport measures by the development as well as operation of the new Paramatta Light Rail and future uplift of residential dwellings within walking proximity to the subject site. Such key infrastructure changes, with the GTP, are pivotal in driving a modal shift away from single-occupant car trips to achieving more travel by public transport and active transport.

Chapter 8 includes a sensitivity test of the modelling to test the effect of a 10% modal shift in the school travel behaviour away from private car use. Consequently, discussion will need to be held with TfNSW about what modal shifts can be achieved based upon the Green Travel Plan, to investigate which intersection upgrades are planned.

8 Travel Demand Measures

8.1 Introduction

Travel demand management is a term for strategies to encourage a modal shift from single-occupant private vehicle trips and influence the way people move to/from a site to deliver better environmental outcomes to encourage sustainable travel and reduce traffic and parking impacts within communities.

A key element of travel demand management is the preparation of a Green Travel Plan (GTP). The primary purpose of GTPs at schools is to encapsulate a strategy for managing travel demand that embraces the principles of sustainable transport whilst recognising the unique context of travel planning at education facilities. In its simplest form, GTPs encourage travel using transport modes that have low environmental impacts, for example active transport modes including walking, cycling, public transport, and encourages better management of car use.

In the case of GTPs for schools, this is of vital importance as schools can often negatively impact local traffic and parking amenity during the concentrated peak periods of school pick up and drop off times. Furthermore, on-site car parking is often a luxury as schools cannot afford to apportion limited land resources due to teaching space and play area requirements.

Therefore, the implementation of a GTP would assist the travel demand management at the subject site, particularly with consideration to the future expansion of the school and consolidation of educational establishments associated with the site. It is expected that the GTP document would target staff, parents and students of the site.

8.2 Drivers of the Travel Plan

There are a number of social, environmental and economic drivers for developing and implementing a GTP for developments as detailed below.

8.2.1 Car Parking

Car parks utilise valuable land resources and impact amenity. If the area continues to grow and there is no modal shift towards non-car transport modes, the car parking demand could increase significantly. As such, the provision of car parking must reflect the site's proximity to public transport to influence a modal shift to sustainable transport modes. Furthermore, the cost to provide parking is significant and therefore, there are strong economic imperatives to reduce car parking demand by incentivising non-car travel modes.

8.2.2 Environmental Impacts

The transport sector (road, rail, air and ship) is Australia's third largest source of greenhouse gas emissions (GHG), accounting for 18 per cent of emissions in Australia in 2015 (Climate Council of Australia, 2016). Mitigating this impact is a key driver of the GTP. Within Australia, the transport sector has the highest rate of growth of GHG emissions per year having risen by 51 per cent since 1990 with private vehicles responsible for almost half of transport emissions. In comparison, travel modes such as walking and cycling have the lowest emissions while public transportation has significantly lower impact than private vehicles.

8.2.3 Health Benefits

The use of sustainable transport modes can have wide-ranging health benefits due to a corresponding reduction in greenhouse gas emissions and increase in physical activity from walking and cycling. The shift from private cars to sustainable transport "can yield much greater immediate health "co-benefits" than improving fuel and vehicle efficiencies" (World Health Organisation, 2011). The potential benefits can include reduced respiratory diseases from better air quality, prevention of heart disease, some cancers, type 2 diabetes and some obesity-related risks.

8.2.4 Social Equity

Transport has a fundamental role in supporting social equity, that is the equitable distribution of services, amenities and opportunities. The provision of sustainable transport modes can provide a more affordable alternative to car use. As such, it offers better mobility for women, children, young people, the aged, persons with disabilities and the poor, who have less access to private vehicles, thereby enhancing social equity.

8.2.5 Staff and Student Attraction

Ease of access has a significant impact on choices of work and study. Negative experiences and costs associated with travel can reduce the competitiveness of an education facility. High quality and efficient transport systems are key to attracting and retaining staff and students. Support for active transport modes is also highly desired by employers and employees because it improves health and productivity.

8.2.6 Education and Leadership

Educational facilities would have a great number of new persons coming through the organisation each year and as such, the organisation would have a unique opportunity to educate students into sustainable travel behaviours. These travel behaviours can help shape long-term travel behaviours that extend long after their completion at the organisation. Successful travel planning and education can reduce traffic impacts on the road network

while potentially supporting a positive influence on local areas by raising public transport service demand and improving amenity.

8.3 Transport Objectives

The following objectives have been identified in order to achieve the vision of the GTP:

Objective 1: Facilitate a modal shift towards more sustainable transport modes

- Improve access, safety, amenity and convenience of sustainable transport modes for travel to/from and within the School.
- Incentivise sustainable transport modes and establish a culture of active and public transport use.
- Limit convenience of car access and parking within the School.

Objective 2: Make the School a great place to study, work and visit

- Improve access and mobility within the School to key attractions and public transport hubs and enhance the sense of place.
- Reduce the need to travel by co-locating complementary land uses and/or promoting flexible learning and teaching environments.

Objective 3: Minimise the impact of travel on the built form of the School

- Prioritise road space allocation and priority decisions towards more sustainable transport modes (e.g. walking and cycling).
- Facilitate more efficient use of existing assets, such as parking management/policies and guidance.

8.4 Mode Shift Target

In order to mitigate the congestion in the road network surrounding the site, a mode shift from private car travel to sustainable transport methods (i.e. active and public transport) would have to occur.

A modal shift between 3-5% is typically considered to be a significant achievement (based on knowledge of local and international GTPs, and as stated by experts in Land Environment Court proceedings). This rate has been the mode shift target set at other educational establishments such as Australian Catholic University, Strathfield which is proposing an uplift in its student enrolments. To ensure effectiveness of measures implemented in order to achieve the mode shift, mode spilt at the University is being monitored over a four-year period which ends in late 2020.

As part of stage 1 of the Randwick Campus Redevelopment project, a GTP has been developed which targets an 8% mode shift away from single-occupant car use amongst its

staff by 2022. It is anticipated that the mode shift will offset increased parking demand generated by the project and reduce impacts on the surrounding road network.

Typically, a modal shift between 3-5% is considered to be a significant achievement. This rate has been the mode shift target set at other educational establishments. However, a higher modal shift would likely be achievable for the proposed development given the key transport infrastructure (i.e. new Paramatta Light Rail) and uplift of residential dwellings within the Westmead Precinct and within walking proximity to the subject site.

Modal shift would be further enhanced through encouragement and implementation of sustainable transport measures by the development as per the Green Travel Plan. Such key infrastructure changes, with the GTP, are pivotal in driving a modal shift away from single-occupant car trips to achieving more travel by public transport and active transport.

On this basis, a mode shift target of 10% has been applied to the surrounding road network as part of the sensitivity analysis. This has been assessed for the Year 2033 case.

The future traffic generation and net change in traffic movements to/from the site travelling via private vehicles following the 10% mode shift is presented in Table 8.1.

Table 8.1: Future Traffic Generation and Net Change After Mode Shift

School Peak Period	Direction (In/ Out Movements)	Existing Traffic Generation (1)	2033 Future Traffic Generation – No Mode Shift (1)		2033 Future Traffic Generation – 10% Reduction	
			Traffic Generation	Net Change from Existing*	Traffic Generation	Net Change from Existing*
AM Peak	'IN'	433	892	+459	803	+370
	'OUT'	307	712	+405	641	+334
PM Peak	'IN'	348	807	+459	726	+378
	'OUT'	365	831	+466	748	+383

Notes:
(1) Data extracted from Table 7.3.
** Based on the theoretical existing traffic generation.*

A 10% mode shift from private car use by staff and students would generate lower peak hourly traffic flows in the future as shown by comparing the 'Net Change' columns in Table 8.1.

SIDRA modelling results for intersections in the original future case with development traffic (as assessed above) and plus 10% mode shift during the AM and PM school peak periods are provided in Table 8.2 and Table 8.3 for comparison.

Table 8.2: Sensitivity Test Intersection Performance – AM Period

Intersections	Intersection Type	Existing		2033 Future Base + Dev		2033 Future Base + Dev (10% Reduction)	
		Average Delay	LOS	Average Delay	LOS	Average Delay	LOS
Darcy Rd – Site Access (Mother Teresa)	Priority (Stop)	13s	A	>100s	F	>100s	F
Darcy Rd – Institute Rd – Mons Rd	Signalised	36s	C	32s	C	33s	C
Darcy Rd – Site Access (Catherine McAuley)	Priority (Give Way)	4s	A	5s	A	5s	A
Darcy Rd – Site Access (Catherine McAuley) – Westmead Hospital	Signalised	27s	B	32s	C	31s	C
Darcy Rd – Site Access (Proposed Car Park Entry)	Priority (Give Way)	5s	A	6s	A	6s	A
Darcy Rd – UWS – Westmead Hospital	Signalised	26s	B	23s	B	23s	B
Darcy Rd – Hawkesbury Rd	Signalised	33s	C	>100s	F	96s	F
Hawkesbury Rd – Railway Pde	Signalised	18s	B	41s	C	43s	D
Hawkesbury Rd – Alexandra Ave	Signalised	71s	F	>100s	F	>100s	F
Alexandra Ave – Bridge Rd	Priority (Roundabout)	17s	B	25s	B	28s	B
Darcy Rd – Bridge Rd – Coles Car Park	Signalised	32s	C	71s	F	43s	D

Table 8.3: Sensitivity Test Intersection Performance – PM Period

Intersections	Intersection Type	Existing		2033 Future Base + Dev		2033 Future Base + Dev (10% Reduction)	
		Average Delay	LOS	Average Delay	LOS	Average Delay	LOS
Darcy Rd – Site Access (Mother Teresa)	Priority (Stop)	10s	A	>100s	F	>100s	F
Darcy Rd – Institute Rd – Mons Rd	Signalised	48s	D	>100s	F	73s	F
Darcy Rd – Site Access (Catherine McAuley)	Priority (Give Way)	4s	A	4s	A	5s	A
Darcy Rd – Site Access (Catherine McAuley) – Westmead Hospital	Signalised	13s	A	18s	B	16s	B
Darcy Rd – Site Access (Proposed Car Park Entry)	Priority (Give Way)	5s	A	5s	A	5s	A
Darcy Rd – UWS – Westmead Hospital	Signalised	21s	B	18s	B	18s	B
Darcy Rd – Hawkesbury Rd	Signalised	37s	C	>100s	F	>100s	F
Hawkesbury Rd – Railway Pde	Signalised	27s	B	>100s	F	>100s	F
Hawkesbury Rd – Alexandra Ave	Signalised	38s	C	95s	F	89s	F
Alexandra Ave – Bridge Rd	Priority (Roundabout)	12s	A	13s	A	14s	A
Darcy Rd – Bridge Rd – Coles Car Park	Signalised	25s	B	>100s	F	92s	F

Overall, operation of the local road network improves with the 10% mode shift as shown by lower average delays in comparison with average delays for the scenario that adopts zero mode shift. Notwithstanding this, some intersections would remain operating at capacity or over capacity; namely, those intersections with an LoS D or worse.

The above intersections would require additional measures which would be discussed with TfNSW.

8.5 Existing Transport Policy Context

The review of existing relevant policy clearly demonstrates a number of themes that should inform the approach to ongoing management of transport demand, and investment in the transport network. These themes include:

- provision of high quality local transport infrastructure and improved bike paths and networks and improving accessibly and connectivity
- address car parking issues in key locations, including residential and business districts and encouraging active transport
- create connected, liveable communities where people can walk, cycle and use public transport to promote healthier, active communities.

A summary of the existing policy framework documents is provided in Table 8.4.

Table 8.4: Summary of Policy Framework

Policy/Strategy	Key Aims/Objectives/Goals
NSW State Government	
New South Wales Long Term Transport Masterplan (NSW State Government, 2012)	The NSW Long Term Transport Masterplan guide the NSW Government's transport funding priorities over the next 20 years. As part of this Plan, short- and medium-term actions will focus on a more efficient and reliable bus network to be better integrated with the wider public transport system.
Future Transport Strategy 2056	The Strategy aims to increase the mode share of public transport services and reduce the use of single-occupant vehicles. The proposal will look to reduce private vehicle travel and aligning with the objectives of the Strategy.
Greater Sydney Region Plan: A Metropolis of Three Cities – Connecting People	The Greater Sydney Region Plan aims to deliver a 30-minute city where jobs, services and quality public transport spaces in easy reach of people's home. The site is well located to contribute towards creating a 30-minute city. The close proximity of the site to public transport facilities, as well as residential areas, means that students and staff can access easily access the site via public transport modes or walking. The site thus aligns with the objects of the Plan in creating jobs near public transport, including education precincts, to contribute towards a 30-minute city.
Sydney's Cycling Future, Cycling for Everyday Transport (NSW State Government, 2013)	Sydney's Cycling Future has targeted the 70% of residents in NSW who have indicated that they would cycle if it were safer to do so. Based on this, improving cycling infrastructure is a key focus of the strategy. The Three Pillars of Sydney's Cycling Future include: ▪ investing in separated cycleways ▪ providing connected bicycle networks to major centres and transport interchanges promoting better use of our existing network; and, ▪ engaging with our partners across government, councils, developers and bicycle users.

8.6 Green Travel Plan Initiatives

The following general travel strategies could be considered for implementation in the GTP to encourage more sustainable travel:

- Organise a carpool registry/forum for staff which could reduce single-occupant private vehicle car trips to and from the school. Currently, the car occupancy rate for staff is one staff member per vehicle therefore this is an opportunity to increase this rate. Promotion of carpooling forums would need to be carried out as part of staff inductions. In addition to this, social events will go hand in hand with this approach to promote social interaction between the staff to reduce social barriers which may deter staff from carpooling with other staff members.
- Similarly, a carpooling forum could be developed on the student/ parent portal to encourage students to travel in groups. The forum will provide a platform for people travelling on the same route to site to find each other and form groups. Existence of the forum will be advertised on noticeboards within the School, via the school newsletter and social media, and/or on the School's Transport Access Guide (TAG).

  Currently, the car occupancy rate for primary students is 2.12 students per vehicle and for high school students is 1.85 students per vehicle. Similarly, there is an opportunity to increase these rate and reduce the number of car trips.
- The 'Skoolbag' mobile app could be adopted which will provide more easily accessible information to students and parents. An extension to the mobile app could include an instant messaging service for parents to facilitate quick trip-planning and real-time communication.
- Provide a Transport Access Guide (TAG) which provides customised travel information for people travelling to and from a particular site using sustainable forms of transport – walking, cycling and public transport. It provides a simple quick visual look at a location making it easy to see the relationship of site to train stations, wharfs, bus stops and walking and cycling routes.
- Provision of public transport timetable, car share vehicle locations and cycle maps on noticeboards to make staff more aware of alternative transport options.
- Organise a cycling group, or similar, to promote use of bicycles of staff and students living in the same area.
- Provision of additional bicycle parking and end of trip facilities including shower and changing rooms as well as bicycle infrastructure.
- Arrange activities and promotions to encourage staff and parents of students to use public transport:
  - Hosting and participating in active travel events such as Ride2Work Day and National Bike Week.

  - Provision of Opal cards or GoGet car share discounts to staff to encourage more sustainable transport
  - Affiliation to local bicycle retailer and service centre to provide discounts for staff and students.
  - Host a breakfast for each mode of sustainable travel over the course of a year to reward those use commute by public transport, walking and cycling, and to encourage others to join
  - Students (and staff) who participate could go into a draw for a special prize
- Provision of a notification program to inform parents when their child has arrived at the school if they have travelled by public transport or active travel.
- Provide real-time public transport and school transport service information within the 'Skoolbag' mobile app which is being adopted by schools. It is noted that the Skoolbag app is currently available for use by parents at Mother Teresa Westmead, providing access to school notices, newsletters and events. However, the features of the mobile app should be extended to include transport information.
- Further staggering arrival and departure times - Staggering drop-off and pick-up times for school children can help alleviate congestion during peak periods. It is noted that the schools currently adopt a similar start time (8.35am) while finish times vary between primary schools and high schools (i.e. standard finish time is 2.45pm at Mother Teresa, and 3.10pm at Catherine McAuley and Parramatta Marist schools).

The above measures should be considered as part of the GTP for the school.

8.7 Monitoring of the GTP

For the GTP to be effective, it is recommended that the GTP be monitored on a regular basis, (e.g. yearly) through travel surveys, staff meetings, parent consultations or similar. Travel surveys would show how staff, students and parents travel to/from the site and assist identifying whether the proposed initiatives and measures outlined in the GTP are effective or are required to be replaced or modified to ensure that the best outcomes are achieved. Regular consultation with staff, students and parents would also be beneficial to help understand people's reasons for travelling the way they do and help identify any potential barriers to change their travel behaviours.

In order to ensure successful implementation of the GTP, CEDP would propose appointing a Travel Plan Coordinator (TPC) to oversee the measures and resultant impacts of the GTP at these schools and GTPs implemented at its other schools in the area.

9 Construction Traffic Impact

9.1 Construction Activity and Staging

Construction works for the proposal are expected to commence in August 2021 and take place over approximately 16 months. The planned construction activities and target milestone dates are given in Table 9.1.

Table 9.1: Construction Staging, Activities and Duration

Project Milestones	Planned Completion Dates
Assumed SSDA Approval	March 2021
Site Establishment	August 2021
New Building: K-6 – Works Commenced	September 2021
New Building: K-6 – Works - Completion	September 2022
New Building: Parish – Works Commenced	March 2022
New Building: Parish – Works - Completion	January 2022
Refurbishment: CELC – Works Commenced	November 2022
Refurbishment: CELC – Works Completion	January 2023
External Works	May 2022 – October 2022
Operational Milestone	January 2023

The extent of the work site shall generally be contained within the site boundary, with minimal impact on the surrounding road network.

A detailed Construction Traffic Management Plan would be prepared prior to the commencement of construction activities. However, a preliminary review of construction traffic management requirements is set out below.

9.2 Work Hours

It is proposed that construction works be only undertaken during the approved hours consistent with any relevant consent conditions. At this stage, the proposed development has not been approved, however, it is expected there will be a consent condition stipulating similar work hours to the following:

- 7:00am – 6:00pm, Monday to Friday
- 7:00am – 5:00pm, Saturday
- No work to be undertaken on Sundays or Public Holidays.

Any works outside the above work hours (as amended by the relevant consent conditions) will be subject to a separate application to Council.

9.3 Construction Work Zone, Hoarding and Crane Operation

An on-street work zone is not proposed in any stage of construction as all activities will be carried-out within the site.

It is proposed a tower crane is to be installed to lift and transport heavy construction material but this will be located within the site.

In addition, an A-Class hoarding will be installed along the northern and western boundaries of the site. Site security fencing with dust and sediment control measures will be installed along the remaining boundary of the site.

A separate application would be required to obtain approval from City of Parramatta Council to install and operate a tower crane and establish A-Class hoarding.

9.4 Construction Vehicle Types

Construction vehicles likely to be generated by the proposed construction activities in each stage would include:

- Demolition
  - Truck and dogs
  - Heavy rigid vehicles (HRV)
  - Medium rigid vehicles (MRV)
- Excavation
  - Truck and dogs
  - Heavy rigid vehicles (HRV)
  - Medium rigid vehicles (MRV)

- Structural
  - Heavy rigid vehicles (HRV)
  - Medium rigid vehicles (MRV)
- Façade/ Fit-Out and Finishing Works
  - Heavy rigid vehicles (HRV)
  - Medium rigid vehicles (MRV)
- External Works
  - Truck and dogs
  - Heavy rigid vehicles (HRV)
  - Medium rigid vehicles (MRV)

9.5 Construction Vehicle Routes

Construction vehicles generally have origins and destinations throughout Sydney, with an extensive network of roads made available for such trips.

To minimise the impact of construction traffic on local streets, dedicated construction routes will be developed to provide the shortest distances to/from the arterial road network.

All construction vehicles would enter and exit the site via the existing access on Darcy Road, west of Mons Road. Construction vehicles would turn left from the internal road to the work site. Subsequently, vehicles would leave the site via the same internal road and turn left onto Darcy Road.

The construction vehicle routes to/from the site as shown in Figure 9.1, are as follows:

- Arrival Route
  - Travelling on Hawkesbury Road northbound, left turn onto Darcy Road and left turn into the site.
- Departure Route
  - Left turn out of the site onto Darcy Road westbound and left/right turn onto Cumberland Highway.

Figure 9.1: Construction Vehicle Routes

Basemap Source: Google Maps

It is noted that the Parramatta Light Rail Stage 1 project is currently under construction and is anticipated to be complete in 2023. As part of these works, Hawkesbury Road will be widened to accommodate the future light rail line which may cause traffic disruptions and access restrictions on Hawkesbury Road. As such, there may be situations where all construction vehicles would approach the site from the west.

The construction manager will communicate with the Parramatta Light Rail project team and TfNSW to receive updates on future traffic changes along Hawkesbury Road.

9.6 Construction Worker Parking

Noting the proximity of the site to public transport and limited on-street parking availability (generally no parking or short-term parking provided on surrounding roads), construction workers would be encouraged to travel to/from the site via public transport.

A subcontractor parking area will be established within the work site providing limited on-site parking for construction workers. Construction workers who live near each other would be encouraged to carpool together to the site.

Site sheds and amenities will be provided within the work site. This will allow construction workers to drop off and store their tools, allowing them to use public transport to travel to and from the site.

9.7 Construction Traffic Generation

The proposed construction activities will be undertaken in five key stages as outlined in Section 9.1. The anticipated construction vehicle movements associated with each stage of construction are summarised in

Table 9.2: Construction Traffic Generation

Construction Stage	Construction Activities	Two-Way Vehicle Movements per Day	Peak Two-Way Vehicle Movements per Hour
1	Demolition	6	4
2	Excavation	16	4
3	Structural	20	8
4	Fit-out and Finishes	16	6
5	External Works	6	4

Based on Table 9.2, the construction activities are anticipated to generate up to 20 two-way construction vehicle movements per day. Based on a 11-hour working day, this would equate to an average of two vehicle movements in an hour. Peak two-way construction vehicle movement is anticipated to be up to eight two-way vehicle movements per hour. However, peak construction vehicle movements will occur outside the school and commuter peak periods to minimise the traffic impact and delay to the road network.

9.8 Pedestrian and Cyclist Access

Pedestrian and cyclist access along Darcy Road frontage of the site will be maintained at all times during construction of the proposed development.

The proposed A-Class hoarding along the northern and western boundaries of the work site allows clear separation between construction work area and existing pedestrian and cyclist movements.

9.9 Public Transport

The proposed construction activities would not adversely impact existing public transport services and the school bus services.

9.10 Emergency Vehicles

No special provisions for emergency service vehicles are required as part of the proposed construction works. Emergency vehicle access shall be maintained at all times.

9.11 Construction Traffic Management Measures

9.11.1 Traffic Management Plan

A site-specific Traffic Management Plan (TMP) will likely need to be prepared and submitted to TfNSW and City of Parramatta Council to appropriately manage the use of the designated construction routes.

The TMP, and any associated traffic control plans (TCPs) should also outline how potential construction vehicle manoeuvres could be accommodated in and out of the construction site.

9.11.2 Inspection of Traffic Control Measures

Temporary traffic controls will be regularly inspected by the contractor to identify potential safety hazards to enable implementation of corrective solutions.

Daily inspections and maintenance of controls will be undertaken by the contractor and maintenance will be recorded.

The site supervisor will check all relevant traffic control management measures on-site prior to commencement of works each day.

9.11.3 Worker Induction

All workers and subcontractors engaged on-site will be required to undergo a site induction. The induction will include permitted access routes to and from the construction site for all vehicles, as well as standard environmental, OH&S, driver protocols and emergency procedure.

Any workers required to undertake works or traffic control within the public domain shall be suitably trained and will be covered by adequate and appropriate insurances. All traffic control personnel will be required to hold RMS accreditation.

9.11.4 Vehicle Access

All construction vehicles will enter and exit the site on Darcy Road in a forward movement. Vehicles must not be permitted to reverse into the construction site from the road.

Construction vehicles shall radio/call the site office on approach to the site to ensure access to the work site is available. All loading and unloading shall be undertaken within the work site during the approved work hours. The queuing or marshalling of construction vehicles shall not be permitted on public roads. Construction vehicles are to egress out of the site when there is a suitable gap in traffic.

10 Road and Pedestrian Safety

A number of potential design measures should be considered to maintain road and pedestrian safety in accordance with the Crime Prevention Through Environmental Design (CPTED) principles of surveillance, access control and space and activity management.

The following measures are to be considered within and/or surrounding the site to increase road and pedestrian safety:

- Provision of appropriate lighting at pedestrian access points, parking areas and footpaths within the site.
- Trim or remove vegetation near pedestrian footpaths and car parking areas within the site to maximise sightlines.
- Provision of secure school gates at vehicular and pedestrian access points to restrict access to the site outside school hours.
- Provision of security on pedestrian access points to the school to reduce opportunities for third parties to enter the school undetected.
- Provision of crime awareness training with staff to identify any potential suspicious behaviour and reporting procedures within or near the site.
- Provision of security to patrol the site outside school hours to ensure trespassers are off the site and prevent potential vandalism and property damages.
- Provision of safety signage in different languages around designated drop-off and pick-up areas to enhance awareness for a larger audience and thus mitigate the risk of any safety issues around the schools.
- Establish regular maintenance including rubbish removal, repair of lighting structures and trimming of vegetation, where feasible.

11 Conclusion

This study details our assessment of the traffic and transport implications associated with the proposed expansion of the school. The key findings of this report are presented below.

- The proposal seeks approval for:
  - A primary school with capacity for approximately 1,680 students, to provide expanded facilities for the existing Mother Teresa Primary School on the site and to replace the existing Sacred Heart Primary School at Ralph Street;
  - A new Parish church;
  - A Catholic early learning centre (CELC) (fit-out within an existing building); and
  - New landscaping.
- Growth of student/ children population would progressively increase to 1,680 primary school students and 200 children at the CELC. The increase would occur gradually year-by-year between 2023 and 2033.
- It is proposed to provide approximately 472 car parking spaces off-street across two car parks, namely the existing at-grade car park and new multi-level car park. The car parks would accommodate all parking demand associated with the proposed development that is generated by staff (for CELC, primary schools and high schools), visitor/ parents of school students and Parish Church patrons (for special weekday services e.g. baptism or funeral).
- Increase in student and staff population would result in an increase in traffic movements in the AM and PM school peak periods.
- The traffic analysis shows that the following intersection are already overcapacity during school peak periods:
  - Hawkesbury Road – Alexandra Avenue (AM Peak)
  - Darcy Road – Institute Road – Mons Road (PM Peak).
- Additional trips generated by the proposed development and background growth in the future scenario Year 2023 (Scenario 2) would cause the following intersections to operate overcapacity during school peak periods:
  - Darcy Road – Hawkesbury Road (AM peak)
  - Darcy Road – Hawkesbury Road (PM peak)
  - Hawkesbury Road – Railway Parade (PM peak)
  - Hawkesbury Road – Alexandra Avenue (PM peak)
- Additional trips generated by the proposed development and background growth in the future scenario Year 2033 (Scenario 4) would cause the following intersections to operate overcapacity during school peak periods:

- Darcy Road – Site Access (Mother Teresa) (AM and PM peaks)
- Darcy Rd – Institute Rd – Mons Rd (PM peak)
- Darcy Rd – Hawkesbury Rd (AM and PM peaks)
- Hawkesbury Rd – Railway Pde (PM peak)
- Hawkesbury Rd – Alexandra Ave (AM and PM peaks)
- Darcy Rd – Bridge Rd – Coles Car Park (AM peak).

- Notwithstanding the above modelling results, RMS has recently been considering changes to phase times to optimise future modelling scenarios at traffic signals as with the light rail, traffic signal timings are likely to change significantly.
- In addition to improved signal phasing it is also anticipated that the increase in transport infrastructure to the immediate surrounds, including the Parramatta Light Rail, bus and train services will alleviate traffic volumes on the abovementioned intersections.
- Noting that there is limited space to provide physical intersection improvements, apart from changing traffic signal phase times, the best way of minimising traffic impact is to control travel demand by means of a Green Travel Plan:

For the School

- Provide real-time public and school transport service information within the 'Skoolbag' mobile app which is being used by all schools.
- Staggering Arrival and Departure Times - Staggering drop off and pick up times for school children can help alleviate congestion during peak periods.
- Encourage car pooling and set targets for increasing car occupancy rates for primary school trips above the current 2.12 rate to further reduce car trips in peak drop-off and pick-up periods.

For staff (of whom 95% drive alone in a car)

- Organise a carpool system/registry for staff which could reduce single-occupant private vehicle car trips to and from the school.
- Provide a Transport Access Guide (TAG) which provides customised travel information for people travelling to/from a particular site using sustainable forms of transport – walking, cycling and public transport. It provides a simple quick visual making it easy to see the relationship of site to train stations, wharfs, bus stops and walking and cycling routes.
- Provision of public transport timetable, car share vehicle locations and cycle maps on noticeboards to make staff more aware of alternative transport options.
- Organise a cycling group, or similar, to promote use of bicycles of staff living in the same area.

- Provision of additional bicycle parking and end of trip facilities including shower and changing rooms as well as bicycle infrastructure.
- Arrange activities and promotions to encourage staff to use public transport
- Provide prepaid Opal Cards to staff at start of terms
- Turn the Travel Plan into a Climate Change/ Sustainability project at school
- Hosting and participating on active travel events such as Ride2Work Day and National Bike Week
- Provision of GoGet car share membership to staff so that they can travel by public transport but have a car available if they need one in the daytime to encourage leaving their car at home
- Affiliation to local bicycle retailer and service centre to provide discounts for staff and students.

For students and parents

- Provision of a notification program to inform parents when their child has arrived at the school if they have travelled by public transport or active travel.
- Finally, if the school could achieve a modal shift of 10% this will reduce the traffic impact. The proposal has targeted an ideal shift of 10% which is deemed achievable given the existing and new nearby transport infrastructure, including Parramatta Light Rail, as well as anticipated future residential density within walking distance of the subject site.
- The results show that a 10% modal shift will improve the overall operation of the networks and will result in a reduction in the average delays at most intersections.

As outlined above, it is recognised that there will be some impact to the surrounding road network. However, the identified impacts will be gradual and will occur over a ten-year period as school enrolment numbers progressively increase in response to the growing Westmead Precinct and surrounding precincts.

During this time there will be significant changes to the existing public transport network including Parramatta Light Rail, Sydney Metro as well as bus lines, bike ways and pedestrian access routes. These changes, along with the anticipated densification of the surrounds, will ensure the success of the proposed green travel plan and the targeted 10% modal shift.

In addition, it is noted that RMS has recently been considering changes to phase times to optimise future modelling scenarios at traffic signals as with the introduction of Parramatta Light Rail, traffic signal timings are likely to change significantly. Consequently, TTPP has looked at signal optimisation in this way. Thus, going forward, discussion with TfNSW and RMS are imperative to investigating the necessary intersection upgrades in the vicinity.

Appendix A

SIDRA Results

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	409	3.1	409	3.1	0.487	4.1	LOS A	4.7	33.3	0.29	0.51	0.29	43.2
3	R2	267	0.0	267	0.0	0.487	6.9	LOS A	4.7	33.3	0.29	0.51	0.29	43.2
Approach		677	1.9	677	1.9	0.487	5.2	LOS A	4.7	33.3	0.29	0.51	0.29	43.2
East: Alexandra Rd														
4	L2	103	0.0	103	0.0	0.225	8.3	LOS A	1.2	8.5	0.56	0.73	0.56	43.8
6	R2	47	2.2	47	2.2	0.225	10.7	LOS A	1.2	8.5	0.56	0.73	0.56	40.2
Approach		151	0.7	151	0.7	0.225	9.0	LOS A	1.2	8.5	0.56	0.73	0.56	43.1
North: Bridge Rd - N														
7	L2	137	0.8	137	0.8	0.759	16.8	LOS B	9.0	64.1	0.72	0.87	0.90	36.9
8	T1	534	2.2	534	2.2	0.759	10.3	LOS A	9.0	64.1	0.72	0.87	0.90	42.6
Approach		671	1.9	671	1.9	0.759	11.6	LOS A	9.0	64.1	0.72	0.87	0.90	41.9
All Vehicles		1498	1.8	1498	1.8	0.759	8.4	LOS A	9.0	64.1	0.51	0.69	0.59	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 136 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	149	2.8	149	2.8	0.285	36.5	LOS C	7.6	54.8	0.74	0.74	0.74	32.6
2	T1	17	6.3	17	6.3	0.285	31.9	LOS C	7.6	54.8	0.74	0.74	0.74	32.8
3	R2	187	4.5	187	4.5	0.789	63.2	LOS E	12.3	89.2	0.96	0.90	1.12	17.1
Approach		354	3.9	354	3.9	0.789	50.4	LOS D	12.3	89.2	0.86	0.82	0.94	24.8
East: Darcy Rd - E														
4	L2	286	2.9	286	2.9	0.772	52.4	LOS D	26.4	189.6	0.98	0.88	1.00	15.4
5	T1	533	3.8	533	3.8	0.772	45.6	LOS D	26.4	189.6	0.94	0.84	0.97	27.9
6	R2	22	0.0	22	0.0	0.141	24.5	LOS B	0.6	4.4	0.72	0.67	0.72	35.0
Approach		841	3.4	841	3.4	0.772	47.4	LOS D	26.4	189.6	0.94	0.85	0.98	24.8
North: Coles Car Park Access														
7	L2	14	7.7	14	7.7	0.027	41.5	LOS C	0.6	4.8	0.74	0.67	0.74	23.6
8	T1	14	0.0	14	0.0	0.149	48.9	LOS D	2.3	16.6	0.86	0.71	0.86	20.9
9	R2	28	3.7	28	3.7	0.149	53.5	LOS D	2.3	16.6	0.86	0.71	0.86	29.2
Approach		56	3.8	56	3.8	0.149	49.4	LOS D	2.3	16.6	0.83	0.70	0.83	26.4
West: Darcy Rd - W														
10	L2	31	0.0	31	0.0	0.651	22.6	LOS B	32.1	228.6	0.70	0.65	0.70	39.7
11	T1	1152	2.2	1152	2.2	0.651	16.6	LOS B	32.1	228.6	0.64	0.58	0.64	34.5
12	R2	200	1.1	200	1.1	0.595	21.0	LOS B	5.0	35.4	0.75	0.76	0.75	32.0
Approach		1382	2.0	1382	2.0	0.651	17.3	LOS B	32.1	228.6	0.66	0.61	0.66	34.3
All Vehicles		2633	2.7	2633	2.7	0.789	32.1	LOS C	32.1	228.6	0.78	0.72	0.80	28.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	62.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	8	0.0	8	0.0	0.474	37.4	LOS C	13.6	100.2	0.72	0.63	0.72	24.8
22	T1	641	11.0	641	11.0	0.474	34.1	LOS C	13.9	102.5	0.72	0.62	0.72	9.2
23	R2	40	0.0	40	0.0	0.137	49.0	LOS D	2.4	16.5	0.96	0.76	0.96	21.4
Approach		689	10.2	689	10.2	0.474	35.0	LOS C	13.9	102.5	0.73	0.63	0.73	11.1
NorthEast: Site Access (Westmead Hospital)														
24	L2	15	0.0	15	0.0	0.018	6.7	LOS A	0.2	1.4	0.27	0.53	0.27	34.9
26	R2	28	0.0	28	0.0	0.091	50.7	LOS D	1.5	10.7	0.85	0.70	0.85	19.2
Approach		43	0.0	43	0.0	0.091	35.7	LOS C	1.5	10.7	0.65	0.64	0.65	22.7
NorthWest: Darcy Rd - NW														
27	L2	77	0.0	77	0.0	0.366	20.5	LOS B	12.3	90.2	0.88	0.77	0.88	30.3
28	T1	697	13.0	697	13.0	0.366	18.5	LOS B	13.4	100.0	0.88	0.76	0.88	14.4
29	R2	5	0.0	5	0.0	0.009	47.6	LOS D	0.3	2.2	0.94	0.66	0.94	21.6
Approach		779	11.6	779	11.6	0.366	18.9	LOS B	13.4	100.0	0.88	0.76	0.88	17.7
SouthWest: Stte Access (Parramatta Marist)														
30	L2	1	0.0	1	0.0	0.010	51.1	LOS D	0.2	1.2	0.84	0.59	0.84	19.4
31	T1	1	0.0	1	0.0	0.010	47.7	LOS D	0.2	1.2	0.84	0.59	0.84	25.9
32	R2	1	0.0	1	0.0	0.010	51.0	LOS D	0.2	1.2	0.84	0.59	0.84	19.4
Approach		3	0.0	3	0.0	0.010	49.9	LOS D	0.2	1.2	0.84	0.59	0.84	22.1
All Vehicles		1515	10.6	1515	10.6	0.474	26.8	LOS B	13.9	102.5	0.81	0.70	0.81	14.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	29.6	LOS C	0.1	0.1	0.91	0.91
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	53.4	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 152 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	254	5.0	254	5.0	0.368	32.5	LOS C	12.6	92.3	0.73	0.62	0.73	26.9
26	R2	115	4.6	115	4.6	0.392	37.3	LOS C	4.2	30.2	0.94	0.77	0.94	25.1
Approach		368	4.9	368	4.9	0.392	34.0	LOS C	12.6	92.3	0.79	0.67	0.79	26.3
NorthWest: Darcy Rd														
27	L2	202	5.7	202	5.7	0.467	22.6	LOS B	6.6	47.2	0.68	0.71	0.68	34.4
29	R2	405	17.7	405	17.7	0.526	59.1	LOS E	14.0	106.2	0.92	0.79	0.92	5.8
Approach		607	13.7	607	13.7	0.526	46.9	LOS D	14.0	106.2	0.84	0.76	0.84	14.8
SouthWest: Hawkesbury Rd - SW														
30	L2	626	9.7	626	9.7	0.498	11.5	LOS A	13.1	95.7	0.52	0.72	0.52	24.1
31	T1	341	1.9	341	1.9	0.538	44.3	LOS D	20.4	145.1	0.87	0.75	0.87	25.8
Approach		967	7.0	967	7.0	0.538	23.0	LOS B	20.4	145.1	0.65	0.73	0.65	25.3
All Vehicles		1943	8.7	1943	8.7	0.538	32.6	LOS C	20.4	145.1	0.73	0.73	0.73	21.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	70.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	364	6.9	364	6.9	0.404	6.4	LOS A	2.4	30.7	0.07	0.41	0.07	32.2
23a	R1	146	32.4	146	32.4	0.672	58.3	LOS E	13.7	107.5	0.96	0.82	0.97	20.3
23b	R3	97	2.2	97	2.2	0.672	60.3	LOS E	13.7	107.5	0.96	0.83	0.96	20.7
Approach		607	12.3	607	12.3	0.672	27.5	LOS B	13.7	107.5	0.43	0.57	0.43	22.3
East: Institute Road														
4b	L3	46	2.3	46	2.3	0.523	42.4	LOS C	3.1	22.1	1.00	0.76	1.00	18.5
5	T1	64	3.3	64	3.3	0.523	61.0	LOS E	3.1	22.1	1.00	0.75	1.01	14.5
6	R2	2	0.0	2	0.0	0.523	76.3	LOS F	3.1	22.0	1.00	0.74	1.01	20.6
Approach		113	2.8	113	2.8	0.523	53.7	LOS D	3.1	22.1	1.00	0.75	1.00	16.1
North: Mons Road														
7	L2	7	0.0	7	0.0	0.306	42.5	LOS C	5.2	37.2	0.90	0.74	0.90	26.2
7a	L1	134	29.1	134	29.1	0.306	40.9	LOS C	5.2	37.2	0.90	0.72	0.90	20.8
9	R2	104	13.1	104	13.1	0.637	69.8	LOS E	6.9	54.0	1.00	0.82	1.04	15.5
Approach		245	21.5	245	21.5	0.637	53.2	LOS D	6.9	54.0	0.94	0.76	0.96	18.4
West: Darcy Road - W														
10	L2	177	10.1	177	10.1	0.140	5.1	LOS A	1.6	12.4	0.26	0.51	0.26	37.1
11	T1	197	0.5	197	0.5	0.658	38.0	LOS C	11.6	81.6	0.85	0.75	0.85	20.2
12a	R1	561	2.3	561	2.3	0.658	41.6	LOS C	11.6	81.6	0.90	0.80	0.90	5.4
Approach		935	3.4	935	3.4	0.658	33.9	LOS C	11.6	81.6	0.77	0.74	0.77	15.6
All Vehicles		1900	8.5	1900	8.5	0.672	35.5	LOS C	13.7	107.5	0.69	0.69	0.70	18.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	36.9	LOS D	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	53.5	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.293	19.7	LOS B	10.5	76.8	0.56	0.49	0.56	20.3
22	T1	645	10.3	645	10.3	0.293	16.2	LOS B	10.5	76.9	0.56	0.48	0.56	14.6
23	R2	89	1.2	89	1.2	0.364	61.8	LOS E	5.5	38.7	0.95	0.77	0.95	18.9
Approach		740	9.1	740	9.1	0.364	21.7	LOS B	10.5	76.9	0.60	0.52	0.60	16.3
NorthEast: Site Access (Westmead Hospital)														
24	L2	34	0.0	34	0.0	0.134	56.0	LOS D	2.0	13.9	0.89	0.72	0.89	18.2
25	T1	1	0.0	1	0.0	0.134	52.6	LOS D	2.0	13.9	0.89	0.72	0.89	19.6
26	R2	51	10.4	51	10.4	0.232	56.1	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
Approach		85	6.2	85	6.2	0.232	56.0	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
NorthWest: Darcy Rd - NW														
27	L2	142	0.7	142	0.7	0.366	29.2	LOS C	18.9	138.9	0.84	0.77	0.84	26.9
28	T1	575	15.4	575	15.4	0.366	25.5	LOS B	18.9	138.9	0.80	0.71	0.80	12.7
29	R2	5	20.0	5	20.0	0.024	51.1	LOS D	0.3	2.2	0.78	0.61	0.78	10.5
Approach		722	12.5	722	12.5	0.366	26.4	LOS B	18.9	138.9	0.80	0.72	0.80	16.8
SouthWest: Stte Access (UWS Car Park)														
30	L2	8	12.5	8	12.5	0.045	54.7	LOS D	0.7	5.3	0.87	0.65	0.87	5.7
31	T1	4	0.0	4	0.0	0.045	51.2	LOS D	0.7	5.3	0.87	0.65	0.87	20.1
32	R2	17	0.0	17	0.0	0.071	56.1	LOS D	1.0	6.7	0.88	0.68	0.88	5.5
Approach		29	3.6	29	3.6	0.071	55.0	LOS D	1.0	6.7	0.88	0.67	0.88	8.8
All Vehicles		1577	10.4	1577	10.4	0.366	26.3	LOS B	18.9	138.9	0.72	0.62	0.72	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	19	5.6	19	5.6	1.008	117.9	LOS F	35.2	249.1	1.00	1.41	1.68	12.3
2	T1	843	0.9	843	0.9	1.008	108.2	LOS F	49.2	347.0	1.00	1.38	1.62	12.8
Approach		862	1.0	862	1.0	1.008	108.4	LOS F	49.2	347.0	1.00	1.38	1.62	12.7
East: Alexandra Ave - E														
4	L2	37	0.0	37	0.0	0.773	58.2	LOS E	15.3	113.8	0.99	0.92	1.10	28.2
5	T1	113	0.0	113	0.0	0.773	53.7	LOS D	15.3	113.8	0.99	0.92	1.10	20.1
6	R2	322	19.0	322	19.0	0.773	58.8	LOS E	15.3	113.8	0.99	0.91	1.11	19.7
Approach		472	12.9	472	12.9	0.773	57.5	LOS E	15.3	117.4	0.99	0.91	1.11	20.7
North: Hawkesbury Rd - N														
7	L2	318	20.2	318	20.2	0.693	18.8	LOS B	13.2	97.9	0.54	0.63	0.54	35.2
8	T1	371	2.6	371	2.6	0.693	27.9	LOS B	13.2	97.9	0.70	0.72	0.78	29.1
9	R2	54	0.0	54	0.0	0.693	65.4	LOS E	9.5	67.4	1.00	0.94	1.31	4.0
Approach		742	9.9	742	9.9	0.693	26.7	LOS B	13.2	97.9	0.65	0.70	0.72	29.5
West: Alexandra Ave - W														
10	L2	94	0.0	94	0.0	0.317	45.9	LOS D	4.8	33.5	0.85	0.77	0.85	22.4
11	T1	286	0.4	286	0.4	1.003	106.6	LOS F	25.7	180.2	1.00	1.31	1.66	20.4
Approach		380	0.3	380	0.3	1.003	91.6	LOS F	25.7	180.2	0.96	1.18	1.46	20.6
All Vehicles		2456	5.9	2456	5.9	1.008	71.4	LOS F	49.2	347.0	0.89	1.05	1.23	18.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: TTPP - THE TRANSPORT PLANNING PARTNERSHIP | Processed: Thursday, 5 March 2020 3:00:23 PM
Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	971	6.8	971	6.8	0.683	8.7	LOS A	13.2	97.9	0.45	0.44	0.45	18.5
3	R2	284	0.4	284	0.4	0.683	15.6	LOS B	10.3	74.0	0.66	0.70	0.66	37.0
Approach		1255	5.4	1255	5.4	0.683	10.2	LOS A	13.2	97.9	0.50	0.50	0.50	28.4
East: Railway Pde														
4	L2	172	1.2	172	1.2	0.333	29.5	LOS C	7.0	49.4	0.69	0.75	0.69	27.9
6	R2	26	0.0	26	0.0	0.099	54.8	LOS D	1.4	9.9	0.89	0.71	0.89	20.2
Approach		198	1.1	198	1.1	0.333	32.8	LOS C	7.0	49.4	0.72	0.75	0.72	26.5
North: Hawkesbury Rd - N														
7	L2	93	0.0	93	0.0	0.202	28.8	LOS C	5.2	46.6	0.66	0.64	0.66	31.2
8	T1	555	16.3	555	16.3	0.463	26.5	LOS B	14.0	105.4	0.74	0.65	0.74	13.9
Approach		647	14.0	647	14.0	0.463	26.7	LOS B	14.0	105.4	0.73	0.65	0.73	18.3
All Vehicles		2100	7.6	2100	7.6	0.683	17.5	LOS B	14.0	105.4	0.59	0.57	0.59	24.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Average Pedestrian Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	2	0.0	2	0.0	0.191	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	704	10.3	704	10.3	0.191	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	39.9
Approach		706	10.3	706	10.3	0.191	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9
NorthWest: Darcy Rd - NW														
28	T1	712	12.7	712	12.7	0.250	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		712	12.7	712	12.7	0.250	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.8	LOS A	0.0	0.0	0.38	0.45	0.38	36.1
Approach		1	0.0	1	0.0	0.001	4.8	LOS A	0.0	0.0	0.38	0.45	0.38	36.1
All Vehicles		1419	11.5	1419	11.5	0.250	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	38	0.0	38	0.0	0.114	3.4	LOS A	0.0	0.0	0.00	0.08	0.00	39.8
22	T1	633	11.3	633	11.3	0.114	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	39.3
Approach		671	10.7	671	10.7	0.114	0.2	NA	0.0	0.0	0.00	0.03	0.00	39.4
NorthWest: Darcy Rd - NW														
28	T1	757	11.7	757	11.7	0.196	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		757	11.7	757	11.7	0.196	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.0	LOS A	0.0	0.0	0.26	0.42	0.26	36.5
Approach		1	0.0	1	0.0	0.001	4.0	LOS A	0.0	0.0	0.26	0.42	0.26	36.5
All Vehicles		1428	11.2	1428	11.2	0.196	0.1	NA	0.0	0.0	0.00	0.01	0.00	39.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - Ex AM Final]

Network: N101 [Ex AM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	457	1.2	457	1.2	0.643	6.7	LOS A	4.5	32.1	0.43	0.66	0.60	33.6
Approach		457	1.2	457	1.2	0.643	6.7	LOS A	4.5	32.1	0.43	0.66	0.60	33.6
East: Darcy Road - E														
4	L2	185	1.7	185	1.7	0.101	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	372	5.4	372	5.4	0.099	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		557	4.2	557	4.2	0.101	1.1	NA	0.0	0.0	0.00	0.15	0.00	33.2
West: Darcy Road - W														
11	T1	967	3.4	967	3.4	0.256	0.0	LOS A	12.0	86.7	0.00	0.00	0.00	40.0
12	R2	391	1.3	391	1.3	0.802	12.9	LOS A	4.6	32.7	0.55	1.18	1.34	27.5
Approach		1358	2.8	1358	2.8	0.802	3.7	NA	12.0	86.7	0.16	0.34	0.39	35.3
All Vehicles		2372	2.8	2372	2.8	0.802	3.7	NA	12.0	86.7	0.17	0.36	0.34	34.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	438	2.9	438	2.9	0.506	4.1	LOS A	5.0	35.8	0.30	0.50	0.30	43.2
3	R2	267	0.0	267	0.0	0.506	6.9	LOS A	5.0	35.8	0.30	0.50	0.30	43.2
Approach		705	1.8	705	1.8	0.506	5.2	LOS A	5.0	35.8	0.30	0.50	0.30	43.2
East: Alexandra Rd														
4	L2	103	0.0	103	0.0	0.245	8.8	LOS A	1.3	9.5	0.60	0.76	0.60	43.5
6	R2	47	2.2	47	2.2	0.245	11.3	LOS A	1.3	9.5	0.60	0.76	0.60	39.7
Approach		151	0.7	151	0.7	0.245	9.6	LOS A	1.3	9.5	0.60	0.76	0.60	42.7
North: Bridge Rd - N														
7	L2	137	0.8	137	0.8	0.820	18.6	LOS B	12.0	85.0	0.80	0.92	1.06	35.5
8	T1	593	2.0	593	2.0	0.820	12.1	LOS A	12.0	85.0	0.80	0.92	1.06	41.7
Approach		729	1.7	729	1.7	0.820	13.4	LOS A	12.0	85.0	0.80	0.92	1.06	41.0
All Vehicles		1585	1.7	1585	1.7	0.820	9.4	LOS A	12.0	85.0	0.56	0.72	0.68	41.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 136 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	154	2.7	154	2.7	0.305	36.6	LOS C	7.8	56.2	0.74	0.74	0.74	32.5
2	T1	17	6.3	17	6.3	0.305	32.0	LOS C	7.8	56.2	0.74	0.74	0.74	32.8
3	R2	187	4.5	187	4.5	0.823	66.9	LOS E	12.7	92.4	0.97	0.93	1.19	16.5
Approach		358	3.8	358	3.8	0.823	52.2	LOS D	12.7	92.4	0.86	0.84	0.97	24.4
East: Darcy Rd - E														
4	L2	286	2.9	286	2.9	0.817	55.7	LOS D	29.4	211.5	0.99	0.92	1.06	14.8
5	T1	581	3.4	581	3.4	0.817	49.0	LOS D	29.4	211.5	0.95	0.89	1.03	27.1
6	R2	22	0.0	22	0.0	0.111	22.9	LOS B	0.6	3.9	0.73	0.68	0.73	35.6
Approach		889	3.2	889	3.2	0.817	50.5	LOS D	29.4	211.5	0.96	0.89	1.03	24.1
North: Coles Car Park Access														
7	L2	14	7.7	14	7.7	0.024	37.7	LOS C	0.6	4.5	0.71	0.66	0.71	24.8
8	T1	14	0.0	14	0.0	0.151	49.8	LOS D	2.3	16.8	0.87	0.71	0.87	20.7
9	R2	28	3.7	28	3.7	0.151	54.4	LOS D	2.3	16.8	0.87	0.71	0.87	29.0
Approach		56	3.8	56	3.8	0.151	49.1	LOS D	2.3	16.8	0.83	0.70	0.83	26.5
West: Darcy Rd - W														
10	L2	31	0.0	31	0.0	0.721	26.8	LOS B	37.6	267.7	0.79	0.73	0.79	38.0
11	T1	1255	2.0	1255	2.0	0.721	20.4	LOS B	37.6	267.7	0.72	0.66	0.72	32.2
12	R2	200	1.1	200	1.1	0.659	22.2	LOS B	5.1	36.3	0.77	0.76	0.78	31.3
Approach		1485	1.8	1485	1.8	0.721	20.8	LOS B	37.6	267.7	0.73	0.67	0.73	32.3
All Vehicles		2788	2.6	2788	2.6	0.823	34.9	LOS C	37.6	267.7	0.82	0.77	0.86	27.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	62.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	8	0.0	8	0.0	0.480	28.0	LOS B	13.5	98.8	0.61	0.53	0.61	27.8
22	T1	760	9.3	760	9.3	0.480	24.8	LOS B	13.8	100.7	0.61	0.53	0.61	11.7
23	R2	40	0.0	40	0.0	0.165	56.0	LOS D	2.5	17.5	1.00	0.77	1.00	20.1
Approach		808	8.7	808	8.7	0.480	26.3	LOS B	13.8	100.7	0.62	0.54	0.62	13.2
NorthEast: Site Access (Westmead Hospital)														
24	L2	15	0.0	15	0.0	0.018	6.3	LOS A	0.2	1.3	0.25	0.53	0.25	35.2
26	R2	28	0.0	28	0.0	0.091	50.7	LOS D	1.5	10.7	0.85	0.70	0.85	19.2
Approach		43	0.0	43	0.0	0.091	35.6	LOS C	1.5	10.7	0.64	0.64	0.64	22.7
NorthWest: Darcy Rd - NW														
27	L2	77	0.0	77	0.0	0.378	16.5	LOS B	11.5	84.2	0.76	0.68	0.76	32.1
28	T1	735	12.3	735	12.3	0.378	14.0	LOS A	12.1	90.0	0.75	0.66	0.75	17.1
29	R2	5	0.0	5	0.0	0.011	53.3	LOS D	0.3	2.2	0.97	0.66	0.97	20.5
Approach		817	11.1	817	11.1	0.378	14.4	LOS A	12.1	90.0	0.76	0.66	0.76	20.2
SouthWest: Stte Access (Parramatta Marist)														
30	L2	1	0.0	1	0.0	0.010	51.1	LOS D	0.2	1.2	0.84	0.59	0.84	19.4
31	T1	1	0.0	1	0.0	0.010	47.7	LOS D	0.2	1.2	0.84	0.59	0.84	25.9
32	R2	1	0.0	1	0.0	0.010	51.0	LOS D	0.2	1.2	0.84	0.59	0.84	19.4
Approach		3	0.0	3	0.0	0.010	49.9	LOS D	0.2	1.2	0.84	0.59	0.84	22.1
All Vehicles		1672	9.6	1672	9.6	0.480	20.8	LOS B	13.8	100.7	0.69	0.60	0.69	16.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	28.4	LOS C	0.1	0.1	0.91	0.91
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	53.1	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 152 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	279	4.5	279	4.5	0.432	31.5	LOS C	13.7	99.6	0.73	0.62	0.73	27.3
26	R2	115	4.6	115	4.6	0.432	36.6	LOS C	4.2	30.1	0.94	0.77	0.94	25.4
Approach		394	4.5	394	4.5	0.432	33.0	LOS C	13.7	99.6	0.79	0.67	0.79	26.7
NorthWest: Darcy Rd														
27	L2	225	5.1	225	5.1	0.561	22.8	LOS B	7.6	54.3	0.68	0.72	0.68	34.2
29	R2	452	15.9	452	15.9	0.603	60.0	LOS E	16.5	124.3	0.93	0.80	0.93	5.8
Approach		677	12.3	677	12.3	0.603	47.6	LOS D	16.5	124.3	0.85	0.77	0.85	14.6
SouthWest: Hawkesbury Rd - SW														
30	L2	626	9.7	626	9.7	0.536	11.9	LOS A	13.6	99.3	0.55	0.73	0.55	23.6
31	T1	388	1.6	388	1.6	0.600	44.8	LOS D	23.7	168.3	0.89	0.78	0.89	25.7
Approach		1015	6.6	1015	6.6	0.600	24.5	LOS B	23.7	168.3	0.68	0.75	0.68	25.1
All Vehicles		2085	8.1	2085	8.1	0.603	33.6	LOS C	23.7	168.3	0.76	0.74	0.76	21.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	70.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	408	6.2	408	6.2	0.449	6.1	LOS A	2.4	30.9	0.07	0.41	0.07	32.3
23a	R1	146	32.4	146	32.4	0.672	47.3	LOS D	12.5	98.3	0.89	0.79	0.89	22.6
23b	R3	97	2.2	97	2.2	0.672	47.8	LOS D	12.5	98.3	0.88	0.79	0.88	23.9
Approach		652	11.5	652	11.5	0.672	21.5	LOS B	12.5	98.3	0.37	0.55	0.37	24.5
East: Institute Road														
4b	L3	46	2.3	46	2.3	0.523	42.8	LOS D	3.1	22.4	1.00	0.76	1.00	18.4
5	T1	64	3.3	64	3.3	0.523	61.1	LOS E	3.1	22.4	1.00	0.75	1.01	14.4
6	R2	2	0.0	2	0.0	0.523	76.3	LOS F	3.1	22.0	1.00	0.74	1.01	20.6
Approach		113	2.8	113	2.8	0.523	53.9	LOS D	3.1	22.4	1.00	0.75	1.00	16.0
North: Mons Road														
7	L2	7	0.0	7	0.0	0.319	43.6	LOS D	5.3	37.8	0.91	0.74	0.91	26.0
7a	L1	134	29.1	134	29.1	0.319	42.0	LOS C	5.3	37.8	0.90	0.73	0.90	20.5
9	R2	104	13.1	104	13.1	0.637	69.8	LOS E	6.9	54.0	1.00	0.82	1.04	15.5
Approach		245	21.5	245	21.5	0.637	53.8	LOS D	6.9	54.0	0.95	0.76	0.96	18.2
West: Darcy Road - W														
10	L2	177	10.1	177	10.1	0.139	5.0	LOS A	1.5	11.7	0.25	0.51	0.25	37.2
11	T1	197	0.5	197	0.5	0.670	37.4	LOS C	11.6	81.6	0.85	0.75	0.85	20.4
12a	R1	592	2.1	592	2.1	0.670	41.1	LOS C	11.6	81.6	0.90	0.80	0.90	5.5
Approach		965	3.3	965	3.3	0.670	33.7	LOS C	11.6	81.6	0.77	0.74	0.77	15.4
All Vehicles		1975	8.2	1975	8.2	0.672	33.3	LOS C	12.5	98.3	0.67	0.68	0.68	18.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	36.9	LOS D	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	53.5	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.338	19.2	LOS B	12.5	91.1	0.56	0.50	0.56	20.6
22	T1	764	8.7	764	8.7	0.338	15.6	LOS B	12.5	91.2	0.56	0.49	0.56	14.9
23	R2	89	1.2	89	1.2	0.410	64.2	LOS E	5.6	39.6	0.97	0.77	0.97	18.5
Approach		859	7.8	859	7.8	0.410	20.7	LOS B	12.5	91.2	0.60	0.52	0.60	16.2
NorthEast: Site Access (Westmead Hospital)														
24	L2	34	0.0	34	0.0	0.150	56.4	LOS D	2.0	14.0	0.89	0.72	0.89	18.1
25	T1	1	0.0	1	0.0	0.150	53.0	LOS D	2.0	14.0	0.89	0.72	0.89	19.5
26	R2	51	10.4	51	10.4	0.236	56.1	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
Approach		85	6.2	85	6.2	0.236	56.2	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
NorthWest: Darcy Rd - NW														
27	L2	142	0.7	142	0.7	0.423	22.6	LOS B	18.6	136.5	0.69	0.66	0.69	29.4
28	T1	641	13.8	641	13.8	0.423	18.4	LOS B	18.6	136.5	0.66	0.61	0.66	15.0
29	R2	5	20.0	5	20.0	0.027	66.8	LOS E	0.3	2.8	1.00	0.66	1.00	8.5
Approach		788	11.5	788	11.5	0.423	19.5	LOS B	18.6	136.5	0.67	0.62	0.67	19.4
SouthWest: Stte Access (UWS Car Park)														
30	L2	8	12.5	8	12.5	0.045	54.7	LOS D	0.7	5.3	0.87	0.65	0.87	5.7
31	T1	4	0.0	4	0.0	0.045	51.2	LOS D	0.7	5.3	0.87	0.65	0.87	20.1
32	R2	17	0.0	17	0.0	0.072	56.2	LOS D	1.0	6.7	0.88	0.68	0.88	5.5
Approach		29	3.6	29	3.6	0.072	55.1	LOS D	1.0	6.7	0.88	0.67	0.88	8.8
All Vehicles		1762	9.3	1762	9.3	0.423	22.5	LOS B	18.6	136.5	0.65	0.58	0.65	17.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	19	5.6	19	5.6	1.007	109.1	LOS F	49.4	348.5	1.00	1.35	1.58	13.1
2	T1	969	0.8	969	0.8	1.007	105.4	LOS F	49.4	348.5	1.00	1.36	1.59	13.0
Approach		988	0.9	988	0.9	1.007	105.4	LOS F	49.4	348.5	1.00	1.36	1.59	13.0
East: Alexandra Ave - E														
4	L2	37	0.0	37	0.0	0.742	54.6	LOS D	17.1	128.0	0.98	0.88	1.03	29.0
5	T1	113	0.0	113	0.0	0.742	50.0	LOS D	17.1	128.0	0.98	0.88	1.03	20.8
6	R2	346	17.6	346	17.6	0.742	55.9	LOS D	17.1	128.0	0.98	0.89	1.06	20.3
Approach		496	12.3	496	12.3	0.742	54.5	LOS D	17.1	128.0	0.98	0.88	1.05	21.3
North: Hawkesbury Rd - N														
7	L2	318	20.2	318	20.2	0.729	17.5	LOS B	13.2	97.9	0.52	0.62	0.52	36.0
8	T1	417	2.3	417	2.3	0.729	27.3	LOS B	13.2	97.9	0.69	0.72	0.78	29.4
9	R2	54	0.0	54	0.0	0.729	65.5	LOS E	10.4	74.1	1.00	0.96	1.33	4.0
Approach		788	9.3	788	9.3	0.729	26.0	LOS B	13.2	97.9	0.65	0.70	0.72	29.9
West: Alexandra Ave - W														
10	L2	94	0.0	94	0.0	0.273	45.8	LOS D	4.7	33.0	0.84	0.76	0.84	22.4
11	T1	286	0.4	286	0.4	1.020	115.5	LOS F	26.7	187.8	1.00	1.36	1.73	19.3
Approach		380	0.3	380	0.3	1.020	98.3	LOS F	26.7	187.8	0.96	1.21	1.51	19.7
All Vehicles		2653	5.4	2653	5.4	1.020	71.3	LOS F	49.4	348.5	0.89	1.05	1.22	18.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: TTPP - THE TRANSPORT PLANNING PARTNERSHIP | Processed: Thursday, 5 March 2020 3:02:23 PM
Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	1082	6.1	1082	6.1	0.675	3.5	LOS A	11.2	79.8	0.23	0.24	0.23	29.3
3	R2	284	0.4	284	0.4	0.675	16.1	LOS B	11.2	79.8	0.74	0.75	0.74	36.7
Approach		1366	4.9	1366	4.9	0.675	6.1	LOS A	11.2	79.8	0.34	0.35	0.34	33.9
East: Railway Pde														
4	L2	188	1.1	188	1.1	0.395	30.4	LOS C	8.0	56.3	0.72	0.76	0.72	27.5
6	R2	29	0.0	29	0.0	0.116	54.2	LOS D	1.6	11.1	0.89	0.72	0.89	20.3
Approach		218	1.0	218	1.0	0.395	33.6	LOS C	8.0	56.3	0.74	0.76	0.74	26.2
North: Hawkesbury Rd - N														
7	L2	93	0.0	93	0.0	0.202	28.8	LOS C	5.2	46.6	0.66	0.64	0.66	31.2
8	T1	619	14.6	619	14.6	0.585	28.5	LOS C	15.7	117.6	0.79	0.70	0.79	13.2
Approach		712	12.7	712	12.7	0.585	28.4	LOS B	15.7	117.6	0.78	0.69	0.78	17.2
All Vehicles		2296	7.0	2296	7.0	0.675	15.7	LOS B	15.7	117.6	0.51	0.49	0.51	25.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	2	0.0	2	0.0	0.223	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	835	8.7	835	8.7	0.223	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	39.9
Approach		837	8.7	837	8.7	0.223	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9
NorthWest: Darcy Rd - NW														
28	T1	794	11.4	794	11.4	0.243	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		794	11.4	794	11.4	0.243	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	5.1	LOS A	0.0	0.0	0.42	0.47	0.42	36.0
Approach		1	0.0	1	0.0	0.001	5.1	LOS A	0.0	0.0	0.42	0.47	0.42	36.0
All Vehicles		1632	10.0	1632	10.0	0.243	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	38	0.0	38	0.0	0.127	3.4	LOS A	0.0	0.0	0.00	0.07	0.00	39.8
22	T1	708	10.1	708	10.1	0.127	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	39.4
Approach		746	9.6	746	9.6	0.127	0.2	NA	0.0	0.0	0.00	0.02	0.00	39.5
NorthWest: Darcy Rd - NW														
28	T1	799	11.1	799	11.1	0.202	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		799	11.1	799	11.1	0.202	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.1	LOS A	0.0	0.0	0.28	0.43	0.28	36.4
Approach		1	0.0	1	0.0	0.001	4.1	LOS A	0.0	0.0	0.28	0.43	0.28	36.4
All Vehicles		1546	10.3	1546	10.3	0.202	0.1	NA	0.0	0.0	0.00	0.01	0.00	39.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2023 Fu Base AM Final - Cycle Time]

Network: N101 [2023 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	457	1.2	457	1.2	0.655	7.2	LOS A	4.8	33.7	0.46	0.70	0.66	33.3
Approach		457	1.2	457	1.2	0.655	7.2	LOS A	4.8	33.7	0.46	0.70	0.66	33.3
East: Darcy Road - E														
4	L2	185	1.7	185	1.7	0.101	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	405	4.9	405	4.9	0.107	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		591	3.9	591	3.9	0.107	1.1	NA	0.0	0.0	0.00	0.14	0.00	33.5
West: Darcy Road - W														
11	T1	1021	3.2	1021	3.2	0.270	0.0	LOS A	13.0	93.3	0.00	0.00	0.00	40.0
12	R2	391	1.3	391	1.3	0.834	14.6	LOS B	5.1	36.1	0.59	1.27	1.55	26.4
Approach		1412	2.7	1412	2.7	0.834	4.0	NA	13.0	93.3	0.16	0.35	0.43	35.0
All Vehicles		2459	2.7	2459	2.7	0.834	3.9	NA	13.0	93.3	0.18	0.37	0.37	34.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	438	2.9	438	2.9	0.505	4.1	LOS A	5.0	35.8	0.30	0.50	0.30	43.2
3	R2	267	0.0	267	0.0	0.505	6.9	LOS A	5.0	35.8	0.30	0.50	0.30	43.2
Approach		705	1.8	705	1.8	0.505	5.2	LOS A	5.0	35.8	0.30	0.50	0.30	43.2
East: Alexandra Rd														
4	L2	103	0.0	102	0.0	0.245	8.8	LOS A	1.3	9.3	0.60	0.77	0.60	43.5
6	R2	47	2.2	46	1.9	0.245	11.3	LOS A	1.3	9.3	0.60	0.77	0.60	39.7
Approach		151	0.7	148 N1	0.6	0.245	9.6	LOS A	1.3	9.3	0.60	0.77	0.60	42.8
North: Bridge Rd - N														
7	L2	137	0.8	137	0.8	0.819	18.9	LOS B	12.2	86.8	0.85	0.94	1.13	35.3
8	T1	593	2.0	593	2.0	0.819	12.4	LOS A	12.2	86.8	0.85	0.94	1.13	41.5
Approach		729	1.7	729	1.7	0.819	13.6	LOS A	12.2	86.8	0.85	0.94	1.13	40.8
All Vehicles		1585	1.7	1583 N1	1.7	0.819	9.5	LOS A	12.2	86.8	0.58	0.73	0.71	41.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 136 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	154	2.7	153	2.7	0.453	49.3	LOS D	9.3	66.8	0.87	0.78	0.87	29.1
2	T1	17	6.3	17	6.2	0.453	44.7	LOS D	9.3	66.8	0.87	0.78	0.87	29.2
3	R2	92	9.2	91	9.1	0.616	71.6	LOS F	6.1	46.3	1.00	0.80	1.04	15.7
Approach		262	5.2	262	5.2	0.616	56.8	LOS E	9.3	66.8	0.92	0.79	0.93	24.8
East: Darcy Rd - E														
4	L2	285	3.0	285	3.0	0.517	30.7	LOS C	20.7	148.7	0.75	0.75	0.75	22.0
5	T1	579	3.5	579	3.5	0.517	24.3	LOS B	20.7	148.7	0.71	0.65	0.71	35.0
6	R2	22	0.0	22	0.0	0.088	15.9	LOS B	0.5	3.3	0.57	0.66	0.57	39.0
Approach		886	3.2	886	3.2	0.517	26.1	LOS B	20.7	148.7	0.72	0.68	0.72	32.2
North: Coles Car Park Access														
7	L2	14	7.7	14	7.7	0.035	48.9	LOS D	0.7	5.3	0.81	0.68	0.81	21.6
8	T1	14	0.0	14	0.0	0.335	66.6	LOS E	2.8	19.8	0.98	0.74	0.98	17.5
9	R2	28	3.7	28	3.7	0.335	71.2	LOS F	2.8	19.8	0.98	0.74	0.98	25.6
Approach		56	3.8	56	3.8	0.335	64.6	LOS E	2.8	19.8	0.94	0.72	0.94	23.1
West: Darcy Rd - W														
10	L2	31	0.0	31	0.0	0.645	17.9	LOS B	31.2	222.3	0.62	0.59	0.62	41.9
11	T1	1159	2.2	1159	2.2	0.645	12.0	LOS A	31.2	222.3	0.56	0.52	0.56	37.7
12	R2	200	1.1	200	1.1	0.321	14.9	LOS B	4.6	32.3	0.63	0.73	0.63	35.7
Approach		1389	2.0	1389	2.0	0.645	12.6	LOS A	31.2	222.3	0.57	0.55	0.57	37.6
All Vehicles		2594	2.8	2593 [N1]	2.8	0.645	22.8	LOS B	31.2	222.3	0.67	0.62	0.67	32.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	62.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.605	61.9	LOS E	18.7	137.8	1.00	0.85	1.00	19.5
22	T1	631	11.2	619	11.4	0.605	58.4	LOS E	18.7	138.3	1.00	0.84	1.00	5.9
23	R2	40	0.0	39	0.0	0.172	57.2	LOS E	2.5	17.2	1.00	0.77	1.00	19.8
Approach		672	10.5	659[N1]	10.7	0.605	58.3	LOS E	18.7	138.3	1.00	0.84	1.00	7.3
NorthEast: Site Access (Westmead Hospital)														
24	L2	15	0.0	15	0.0	0.016	8.0	LOS A	0.2	1.7	0.31	0.54	0.31	34.1
26	R2	28	0.0	28	0.0	0.088	46.6	LOS D	1.5	10.2	0.81	0.69	0.81	20.0
Approach		43	0.0	43	0.0	0.088	33.4	LOS C	1.5	10.2	0.64	0.64	0.64	23.3
NorthWest: Darcy Rd - NW														
27	L2	77	0.0	77	0.0	0.468	30.2	LOS C	16.3	119.9	0.98	0.85	0.98	26.8
28	T1	735	12.3	735	12.3	0.468	28.8	LOS C	18.3	135.9	0.98	0.85	0.98	10.6
29	R2	5	0.0	5	0.0	0.010	50.0	LOS D	0.3	2.2	0.96	0.66	0.96	21.1
Approach		817	11.1	817	11.1	0.468	29.1	LOS C	18.3	135.9	0.98	0.85	0.98	13.5
SouthWest: Stte Access (Parramatta Marist)														
30	L2	176	0.0	176	0.0	0.520	44.5	LOS D	14.4	100.5	0.88	0.80	0.88	20.5
31	T1	1	0.0	1	0.0	0.520	41.1	LOS C	14.4	100.5	0.88	0.80	0.88	26.9
32	R2	88	0.0	88	0.0	0.520	44.4	LOS D	14.4	100.5	0.88	0.80	0.88	20.5
Approach		265	0.0	265	0.0	0.520	44.5	LOS D	14.4	100.5	0.88	0.80	0.88	20.5
All Vehicles		1797	9.0	1784[N1]	9.0	0.605	42.3	LOS C	18.7	138.3	0.96	0.83	0.96	12.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	33.3	LOS D	0.1	0.1	0.91	0.91
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	54.4	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 152 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	279	4.5	279	4.5	0.545	28.0	LOS B	13.0	94.4	0.68	0.58	0.68	28.7
26	R2	240	2.2	240	2.2	0.836	45.1	LOS D	10.5	74.1	1.00	0.93	1.17	22.7
Approach		519	3.4	519	3.4	0.836	35.9	LOS C	13.0	94.4	0.83	0.74	0.91	25.6
NorthWest: Darcy Rd														
27	L2	269	4.3	269	4.3	0.701	21.2	LOS B	8.9	63.7	0.66	0.72	0.67	35.1
29	R2	496	14.4	496	14.4	0.753	66.2	LOS E	19.6	146.9	0.97	0.87	1.04	5.3
Approach		765	10.9	765	10.9	0.753	50.3	LOS D	19.6	146.9	0.86	0.81	0.91	14.4
SouthWest: Hawkesbury Rd - SW														
30	L2	752	8.1	696	8.7	0.862	24.6	LOS B	24.9	181.6	0.86	0.89	0.92	15.2
31	T1	388	1.6	358	1.7	0.587	46.6	LOS D	22.1	156.9	0.90	0.78	0.90	25.2
Approach		1140	5.9	1053[N1]	6.3	0.862	32.1	LOS C	24.9	181.6	0.87	0.85	0.91	20.9
All Vehicles		2424	6.9	2338[N1]	7.2	0.862	38.9	LOS C	24.9	181.6	0.86	0.81	0.91	19.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	70.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	492	5.1	492	5.1	0.449	7.0	LOS A	2.4	30.9	0.12	0.43	0.12	30.1
23a	R1	146	32.4	146	32.4	0.672	58.4	LOS E	14.0	109.8	0.98	0.82	0.98	20.3
23b	R3	97	2.2	97	2.2	0.672	60.4	LOS E	14.0	109.8	0.98	0.83	0.98	20.7
Approach		735	10.2	735	10.2	0.672	24.3	LOS B	14.0	109.8	0.40	0.56	0.40	22.5
East: Institute Road														
4b	L3	46	2.3	46	2.3	0.523	42.8	LOS D	3.1	22.4	1.00	0.76	1.00	18.4
5	T1	64	3.3	64	3.3	0.523	61.1	LOS E	3.1	22.4	1.00	0.75	1.01	14.4
6	R2	2	0.0	2	0.0	0.523	76.3	LOS F	3.1	22.0	1.00	0.74	1.01	20.6
Approach		113	2.8	113	2.8	0.523	53.9	LOS D	3.1	22.4	1.00	0.75	1.00	16.0
North: Mons Road														
7	L2	7	0.0	7	0.0	0.319	43.6	LOS D	5.3	37.8	0.91	0.74	0.91	26.0
7a	L1	134	29.1	134	29.1	0.319	42.0	LOS C	5.3	37.8	0.90	0.73	0.90	20.5
9	R2	104	13.1	104	13.1	0.637	69.8	LOS E	6.9	54.0	1.00	0.82	1.04	15.5
Approach		245	21.5	245	21.5	0.637	53.8	LOS D	6.9	54.0	0.95	0.76	0.96	18.2
West: Darcy Road - W														
10	L2	177	10.1	177	10.1	0.140	5.1	LOS A	1.6	12.4	0.26	0.51	0.26	37.1
11	T1	197	0.5	197	0.5	0.670	37.4	LOS C	11.6	81.6	0.85	0.75	0.85	20.4
12a	R1	592	2.1	592	2.1	0.670	41.1	LOS C	11.6	81.6	0.90	0.80	0.90	5.5
Approach		965	3.3	965	3.3	0.670	33.7	LOS C	11.6	81.6	0.77	0.74	0.77	15.4
All Vehicles		2058	7.9	2058	7.9	0.672	33.9	LOS C	14.0	109.8	0.67	0.68	0.68	18.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	36.9	LOS D	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	53.5	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.413	18.5	LOS B	16.1	116.6	0.57	0.51	0.57	21.1
22	T1	1016	6.5	968	6.8	0.413	15.0	LOS B	16.2	116.7	0.57	0.51	0.57	15.3
23	R2	89	1.2	85	1.2	0.480	67.7	LOS E	5.5	38.9	0.99	0.77	0.99	18.0
Approach		1111	6.1	1058[N1]	6.3	0.480	19.3	LOS B	16.2	116.7	0.60	0.53	0.60	16.1
NorthEast: Site Access (Westmead Hospital)														
24	L2	34	0.0	34	0.0	0.180	57.2	LOS E	2.0	14.2	0.90	0.73	0.90	17.9
25	T1	1	0.0	1	0.0	0.180	53.8	LOS D	2.0	14.2	0.90	0.73	0.90	19.4
26	R2	51	10.4	51	10.4	0.241	56.1	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
Approach		85	6.2	85	6.2	0.241	56.5	LOS D	2.9	22.2	0.90	0.73	0.90	18.1
NorthWest: Darcy Rd - NW														
27	L2	142	0.7	142	0.7	0.507	32.5	LOS C	22.3	163.2	0.90	0.82	0.90	26.0
28	T1	728	12.1	728	12.1	0.507	28.5	LOS C	22.3	163.2	0.86	0.78	0.86	11.6
29	R2	5	20.0	5	20.0	0.034	67.7	LOS E	0.3	2.8	0.99	0.66	0.99	8.4
Approach		876	10.3	876	10.3	0.507	29.4	LOS C	22.3	163.2	0.87	0.79	0.87	15.0
SouthWest: Stte Access (UWS Car Park)														
30	L2	8	12.5	8	12.5	0.045	54.7	LOS D	0.7	5.3	0.87	0.65	0.87	5.7
31	T1	4	0.0	4	0.0	0.045	51.2	LOS D	0.7	5.3	0.87	0.65	0.87	20.1
32	R2	17	0.0	17	0.0	0.074	57.1	LOS E	1.0	6.8	0.89	0.69	0.89	5.4
Approach		29	3.6	29	3.6	0.074	55.6	LOS D	1.0	6.8	0.88	0.67	0.88	8.7
All Vehicles		2101	7.8	2049[N1]	8.0	0.507	25.7	LOS B	22.3	163.2	0.73	0.65	0.73	15.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	19	5.6	19	5.6	1.398	426.6	LOS F	99.6	702.6	1.00	2.65	3.22	3.9
2	T1	991	0.7	991	0.7	1.398	422.1	LOS F	99.6	702.6	1.00	2.64	3.22	3.9
Approach		1009	0.8	1009	0.8	1.398	422.2	LOS F	99.6	702.6	1.00	2.64	3.22	3.9
East: Alexandra Ave - E														
4	L2	37	0.0	37	0.0	0.963	94.4	LOS F	26.2	196.9	1.00	1.19	1.52	22.0
5	T1	113	0.0	113	0.0	0.963	89.8	LOS F	26.2	196.9	1.00	1.19	1.52	14.4
6	R2	367	16.6	367	16.6	0.963	98.6	LOS F	26.2	196.9	1.00	1.17	1.58	13.9
Approach		517	11.8	517	11.8	0.963	96.4	LOS F	26.2	196.9	1.00	1.18	1.56	14.7
North: Hawkesbury Rd - N														
7	L2	325	19.7	325	19.7	0.745	17.6	LOS B	13.3	97.9	0.54	0.63	0.54	36.0
8	T1	424	2.2	424	2.2	0.745	25.3	LOS B	13.3	97.9	0.68	0.71	0.77	30.2
9	R2	61	0.0	61	0.0	0.745	67.5	LOS E	9.7	68.8	1.00	0.97	1.40	3.9
Approach		811	9.1	811	9.1	0.745	25.4	LOS B	13.3	97.9	0.65	0.70	0.73	30.1
West: Alexandra Ave - W														
10	L2	115	0.0	115	0.0	0.542	53.4	LOS D	6.6	45.9	0.93	0.81	0.93	20.5
11	T1	286	0.4	286	0.4	1.234	277.6	LOS F	42.9	301.5	1.00	1.91	2.65	10.1
Approach		401	0.3	401	0.3	1.234	213.4	LOS F	42.9	301.5	0.98	1.59	2.16	11.1
All Vehicles		2738	5.3	2738	5.3	1.398	212.7	LOS F	99.6	702.6	0.89	1.64	2.01	8.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: TTPP - THE TRANSPORT PLANNING PARTNERSHIP | Processed: Thursday, 5 March 2020 3:05:46 PM
Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	1145	5.8	1021	6.4	0.860	18.1	LOS B	13.5	97.9	0.59	0.65	0.71	11.1
3	R2	284	0.4	252	0.4	0.860	24.3	LOS B	13.5	97.9	0.85	0.89	0.98	32.5
Approach		1429	4.7	1273 N1	5.2	0.860	19.3	LOS B	13.5	97.9	0.65	0.70	0.76	19.6
East: Railway Pde														
4	L2	188	1.1	188	1.1	0.383	31.5	LOS C	8.1	56.9	0.73	0.77	0.73	27.1
6	R2	92	0.0	92	0.0	0.598	64.1	LOS E	5.7	39.9	0.99	0.81	1.02	18.4
Approach		280	0.8	280	0.8	0.598	42.2	LOS C	8.1	56.9	0.81	0.78	0.82	23.4
North: Hawkesbury Rd - N														
7	L2	115	0.0	115	0.0	0.222	27.8	LOS B	6.0	51.8	0.65	0.65	0.65	31.5
8	T1	640	14.1	640	14.1	0.528	26.3	LOS B	16.4	122.7	0.76	0.67	0.76	14.0
Approach		755	12.0	755	12.0	0.528	26.3	LOS B	16.4	122.7	0.74	0.67	0.74	18.6
All Vehicles		2464	6.5	2308 N1	6.9	0.860	24.4	LOS B	16.4	122.7	0.70	0.70	0.76	20.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	382	0.0	369	0.0	0.364	3.4	LOS A	0.0	0.0	0.00	0.30	0.00	38.6
22	T1	705	10.3	683	10.6	0.364	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	37.5
Approach		1087	6.7	1052 N1	6.9	0.364	1.2	NA	0.0	0.0	0.00	0.16	0.00	38.3
NorthWest: Darcy Rd - NW														
28	T1	881	10.3	881	10.3	0.256	0.0	LOS A	5.9	43.1	0.00	0.00	0.00	40.0
Approach		881	10.3	881	10.3	0.256	0.0	NA	5.9	43.1	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.1	LOS A	0.0	0.0	0.28	0.43	0.28	36.4
Approach		1	0.0	1	0.0	0.001	4.1	LOS A	0.0	0.0	0.28	0.43	0.28	36.4
All Vehicles		1969	8.3	1934 N1	8.4	0.364	0.7	NA	5.9	43.1	0.00	0.09	0.00	38.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.134	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	793	9.0	789	9.1	0.134	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		794	9.0	790 N1	9.1	0.134	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	799	11.1	799	11.1	0.278	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		799	11.1	799	11.1	0.278	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.3	LOS A	0.0	0.0	0.32	0.43	0.32	36.3
Approach		1	0.0	1	0.0	0.001	4.3	LOS A	0.0	0.0	0.32	0.43	0.32	36.3
All Vehicles		1594	10.0	1590 N1	10.1	0.278	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2023 Fu Dev AM Final - Cycle Time]

Network: N101 [2023 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	279	1.9	279	1.9	0.443	6.2	LOS A	1.9	13.2	0.46	0.68	0.55	34.1
Approach		279	1.9	279	1.9	0.443	6.2	LOS A	1.9	13.2	0.46	0.68	0.55	34.1
East: Darcy Road - E														
4	L2	94	3.4	94	3.4	0.052	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	580	3.4	580	3.4	0.152	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		674	3.4	674	3.4	0.152	0.5	NA	0.0	0.0	0.00	0.06	0.00	36.8
West: Darcy Road - W														
11	T1	1021	3.2	1021	3.2	0.269	0.0	LOS A	13.0	93.3	0.00	0.00	0.00	40.0
12	R2	198	2.7	198	2.7	0.472	8.8	LOS A	1.3	9.5	0.56	0.87	0.76	30.5
Approach		1219	3.1	1219	3.1	0.472	1.4	NA	13.0	93.3	0.09	0.14	0.12	38.0
All Vehicles		2172	3.1	2171 [N1]	3.1	0.472	1.8	NA	13.0	93.3	0.11	0.19	0.14	37.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	496	2.5	496	2.5	0.545	4.1	LOS A	5.9	41.5	0.32	0.50	0.32	43.2
3	R2	267	0.0	267	0.0	0.545	6.9	LOS A	5.9	41.5	0.32	0.50	0.32	43.2
Approach		763	1.7	763	1.7	0.545	5.1	LOS A	5.9	41.5	0.32	0.50	0.32	43.2
East: Alexandra Rd														
4	L2	103	0.0	102	0.0	0.302	10.1	LOS A	1.7	11.9	0.70	0.85	0.70	42.9
6	R2	47	2.2	47	1.9	0.302	12.6	LOS A	1.7	11.9	0.70	0.85	0.70	38.7
Approach		151	0.7	148 [N1]	0.6	0.302	10.9	LOS A	1.7	11.9	0.70	0.85	0.70	42.0
North: Bridge Rd - N														
7	L2	137	0.8	137	0.8	0.938	28.8	LOS C	24.8	176.2	1.00	1.20	1.74	29.2
8	T1	709	1.6	709	1.6	0.938	22.3	LOS B	24.8	176.2	1.00	1.20	1.74	37.1
Approach		846	1.5	846	1.5	0.938	23.4	LOS B	24.8	176.2	1.00	1.20	1.74	36.3
All Vehicles		1760	1.5	1757 [N1]	1.5	0.938	14.4	LOS A	24.8	176.2	0.68	0.87	1.04	38.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 136 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	161	2.6	161	2.6	0.381	39.9	LOS C	8.6	61.7	0.78	0.75	0.78	31.6
2	T1	17	6.3	17	6.2	0.381	35.3	LOS C	8.6	61.7	0.78	0.75	0.78	31.8
3	R2	187	4.5	187	4.5	0.931	87.8	LOS F	14.9	108.1	0.99	1.06	1.47	13.6
Approach		365	3.7	365	3.7	0.931	64.2	LOS E	14.9	108.1	0.89	0.91	1.14	21.9
East: Darcy Rd - E														
4	L2	286	2.9	284	3.0	0.596	34.0	LOS C	24.3	174.8	0.80	0.78	0.80	20.8
5	T1	677	3.0	672	3.0	0.596	28.0	LOS B	24.3	174.8	0.77	0.70	0.77	33.6
6	R2	22	0.0	22	0.0	0.141	33.6	LOS C	0.8	5.8	0.88	0.71	0.88	31.6
Approach		985	2.9	979[N1]	2.9	0.596	29.8	LOS C	24.3	174.8	0.78	0.73	0.78	30.9
North: Coles Car Park Access														
7	L2	14	7.7	14	7.7	0.025	39.1	LOS C	0.6	4.6	0.72	0.66	0.72	24.4
8	T1	14	0.0	14	0.0	0.169	52.7	LOS D	2.4	17.3	0.89	0.72	0.89	20.1
9	R2	28	3.7	28	3.7	0.169	57.3	LOS E	2.4	17.3	0.89	0.72	0.89	28.3
Approach		56	3.8	56	3.8	0.169	51.7	LOS D	2.4	17.3	0.85	0.70	0.85	25.9
West: Darcy Rd - W														
10	L2	31	0.0	31	0.0	0.894	36.6	LOS C	62.7	445.4	0.95	0.93	1.00	34.5
11	T1	1462	1.7	1462	1.7	0.894	34.4	LOS C	62.7	445.4	0.83	0.85	0.94	26.0
12	R2	200	1.1	200	1.1	0.424	20.5	LOS B	5.2	36.8	0.78	0.78	0.78	32.2
Approach		1693	1.6	1693	1.6	0.894	32.8	LOS C	62.7	445.4	0.83	0.84	0.92	26.8
All Vehicles		3099	2.3	3092[N1]	2.3	0.931	35.9	LOS C	62.7	445.4	0.82	0.81	0.90	27.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	62.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	8	0.0	8	0.0	0.583	30.0	LOS C	19.3	139.4	0.68	0.61	0.68	27.1
22	T1	997	7.1	958	7.3	0.583	26.7	LOS B	19.5	141.2	0.68	0.60	0.68	11.0
23	R2	40	0.0	38	0.0	0.172	58.1	LOS E	2.4	17.0	1.00	0.77	1.00	19.7
Approach		1045	6.7	1005[N1]	7.0	0.583	27.9	LOS B	19.5	141.2	0.69	0.61	0.69	12.2
NorthEast: Site Access (Westmead Hospital)														
24	L2	15	0.0	15	0.0	0.019	6.7	LOS A	0.2	1.4	0.27	0.53	0.27	34.9
26	R2	28	0.0	28	0.0	0.091	50.7	LOS D	1.5	10.7	0.85	0.70	0.85	19.2
Approach		43	0.0	43	0.0	0.091	35.7	LOS C	1.5	10.7	0.65	0.64	0.65	22.7
NorthWest: Darcy Rd - NW														
27	L2	77	0.0	77	0.0	0.413	16.5	LOS B	12.6	92.5	0.76	0.68	0.76	32.2
28	T1	812	11.2	812	11.2	0.413	13.8	LOS A	13.3	98.2	0.75	0.66	0.75	17.2
29	R2	5	0.0	5	0.0	0.012	54.5	LOS D	0.3	2.3	0.98	0.66	0.98	20.2
Approach		894	10.1	894	10.1	0.413	14.2	LOS A	13.3	98.2	0.76	0.66	0.76	20.1
SouthWest: Stte Access (Parramatta Marist)														
30	L2	1	0.0	1	0.0	0.010	51.1	LOS D	0.2	1.2	0.84	0.59	0.84	19.4
31	T1	1	0.0	1	0.0	0.010	47.7	LOS D	0.2	1.2	0.84	0.59	0.84	25.9
32	R2	1	0.0	1	0.0	0.010	51.0	LOS D	0.2	1.2	0.84	0.59	0.84	19.4
Approach		3	0.0	3	0.0	0.010	49.9	LOS D	0.2	1.2	0.84	0.59	0.84	22.1
All Vehicles		1985	8.1	1945[N1]	8.3	0.583	21.8	LOS B	19.5	141.2	0.72	0.63	0.72	15.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	28.2	LOS C	0.1	0.1	0.91	0.91
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	53.0	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2033 Fu Base AM 200205 Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 152 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	329	3.8	329	3.8	0.561	32.5	LOS C	16.4	118.8	0.75	0.65	0.75	26.9
26	R2	115	4.6	115	4.6	0.561	37.8	LOS C	4.7	33.4	0.96	0.79	0.96	25.1
Approach		444	4.0	444	4.0	0.561	33.8	LOS C	16.4	118.8	0.80	0.68	0.80	26.4
NorthWest: Darcy Rd														
27	L2	272	4.3	272	4.3	0.710	21.3	LOS B	9.0	64.1	0.66	0.72	0.67	35.1
29	R2	545	13.1	545	13.1	0.732	61.3	LOS E	19.8	146.9	0.95	0.85	1.00	5.7
Approach		817	10.2	817	10.2	0.732	48.0	LOS D	19.8	146.9	0.85	0.80	0.89	14.5
SouthWest: Hawkesbury Rd - SW														
30	L2	626	9.7	577	10.5	0.663	13.7	LOS A	14.1	103.9	0.66	0.77	0.66	21.8
31	T1	484	1.3	443	1.4	0.725	49.3	LOS D	28.9	204.8	0.95	0.84	0.95	24.5
Approach		1111	6.1	1019 N1	6.5	0.725	29.2	LOS C	28.9	204.8	0.78	0.80	0.78	23.8
All Vehicles		2372	7.1	2280 N1	7.4	0.732	36.8	LOS C	28.9	204.8	0.81	0.78	0.82	20.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	70.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	496	5.1	484	5.2	0.449	5.7	LOS A	2.4	30.9	0.06	0.41	0.06	32.4
23a	R1	146	32.4	144	32.8	0.708	50.1	LOS D	12.8	101.0	0.92	0.81	0.94	22.0
23b	R3	97	2.2	95	2.2	0.708	50.9	LOS D	12.8	101.0	0.91	0.81	0.93	23.0
Approach		739	10.1	722[N1]	10.3	0.708	20.4	LOS B	12.8	101.0	0.34	0.54	0.35	24.4
East: Institute Road														
4b	L3	46	2.3	46	2.3	0.523	43.5	LOS D	3.2	22.9	1.00	0.76	1.00	18.2
5	T1	64	3.3	64	3.3	0.523	61.4	LOS E	3.2	22.9	1.00	0.75	1.01	14.4
6	R2	2	0.0	2	0.0	0.523	76.3	LOS F	3.1	22.0	1.00	0.74	1.01	20.6
Approach		113	2.8	113	2.8	0.523	54.3	LOS D	3.2	22.9	1.00	0.75	1.01	15.9
North: Mons Road														
7	L2	7	0.0	7	0.0	0.319	43.6	LOS D	5.3	37.8	0.91	0.74	0.91	26.0
7a	L1	134	29.1	134	29.1	0.319	42.0	LOS C	5.3	37.8	0.90	0.73	0.90	20.5
9	R2	104	13.1	104	13.1	0.637	69.8	LOS E	6.9	54.0	1.00	0.82	1.04	15.5
Approach		245	21.5	245	21.5	0.637	53.8	LOS D	6.9	54.0	0.95	0.76	0.96	18.2
West: Darcy Road - W														
10	L2	177	10.1	177	10.1	0.138	5.1	LOS A	1.6	12.4	0.26	0.51	0.26	37.1
11	T1	197	0.5	197	0.5	0.692	36.4	LOS C	11.6	81.6	0.85	0.75	0.85	20.6
12a	R1	654	1.9	654	1.9	0.692	40.1	LOS C	11.6	81.6	0.90	0.81	0.90	5.6
Approach		1027	3.1	1027	3.1	0.692	33.3	LOS C	11.6	81.6	0.78	0.75	0.78	15.1
All Vehicles		2124	7.6	2108[N1]	7.7	0.708	32.4	LOS C	12.8	101.0	0.66	0.68	0.66	18.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	36.9	LOS D	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	53.5	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.406	17.9	LOS B	15.8	113.8	0.56	0.50	0.56	21.5
22	T1	1003	6.6	964	6.8	0.406	14.4	LOS A	15.8	113.9	0.56	0.50	0.56	15.7
23	R2	89	1.2	86	1.2	0.524	69.1	LOS E	5.6	39.7	1.00	0.78	1.00	17.8
Approach		1098	6.1	1055[N1]	6.3	0.524	18.9	LOS B	15.8	113.9	0.59	0.52	0.59	16.3
NorthEast: Site Access (Westmead Hospital)														
24	L2	34	0.0	34	0.0	0.183	57.3	LOS E	2.0	14.2	0.90	0.73	0.90	17.9
25	T1	1	0.0	1	0.0	0.183	53.9	LOS D	2.0	14.2	0.90	0.73	0.90	19.4
26	R2	51	10.4	51	10.4	0.242	56.1	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
Approach		85	6.2	85	6.2	0.242	56.5	LOS E	2.9	22.2	0.90	0.73	0.90	18.1
NorthWest: Darcy Rd - NW														
27	L2	142	0.7	142	0.7	0.540	22.0	LOS B	22.4	163.2	0.72	0.69	0.72	29.7
28	T1	773	11.4	773	11.4	0.540	18.0	LOS B	22.4	163.2	0.69	0.64	0.69	15.0
29	R2	5	20.0	5	20.0	0.036	69.8	LOS E	0.3	2.8	1.00	0.66	1.00	8.2
Approach		920	9.8	920	9.8	0.540	18.9	LOS B	22.4	163.2	0.70	0.65	0.70	19.1
SouthWest: Stte Access (UWS Car Park)														
30	L2	8	12.5	8	12.5	0.045	54.7	LOS D	0.7	5.3	0.87	0.65	0.87	5.7
31	T1	4	0.0	4	0.0	0.045	51.2	LOS D	0.7	5.3	0.87	0.65	0.87	20.1
32	R2	17	0.0	17	0.0	0.074	57.2	LOS E	1.0	6.8	0.89	0.69	0.89	5.4
Approach		29	3.6	29	3.6	0.074	55.6	LOS D	1.0	6.8	0.88	0.67	0.88	8.7
All Vehicles		2133	7.7	2090[N1]	7.9	0.540	21.0	LOS B	22.4	163.2	0.65	0.59	0.65	17.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	19	5.6	19	5.6	1.252	298.6	LOS F	97.2	685.2	1.00	2.22	2.67	5.5
2	T1	1222	0.6	1222	0.6	1.252	293.2	LOS F	105.9	745.0	1.00	2.23	2.66	5.5
Approach		1241	0.7	1241	0.7	1.252	293.3	LOS F	105.9	745.0	1.00	2.23	2.66	5.5
East: Alexandra Ave - E														
4	L2	37	0.0	37	0.0	1.218	271.8	LOS F	45.1	337.1	1.00	1.83	2.60	10.4
5	T1	113	0.0	113	0.0	1.218	267.3	LOS F	45.1	337.1	1.00	1.83	2.60	5.9
6	R2	395	15.5	395	15.5	1.218	273.7	LOS F	45.1	337.1	1.00	1.72	2.62	5.8
Approach		544	11.2	544	11.2	1.218	272.3	LOS F	45.1	337.1	1.00	1.75	2.61	6.2
North: Hawkesbury Rd - N														
7	L2	318	20.2	318	20.2	0.707	17.5	LOS B	13.3	97.9	0.50	0.60	0.50	36.2
8	T1	509	1.9	509	1.9	0.707	24.4	LOS B	13.3	97.9	0.65	0.67	0.71	30.7
9	R2	54	0.0	54	0.0	0.707	65.2	LOS E	10.1	71.2	1.00	0.94	1.31	4.0
Approach		881	8.4	881	8.4	0.707	24.4	LOS B	13.3	97.9	0.62	0.66	0.67	30.7
West: Alexandra Ave - W														
10	L2	94	0.0	94	0.0	0.385	51.0	LOS D	5.1	35.7	0.89	0.78	0.89	21.1
11	T1	286	0.4	286	0.4	1.209	256.5	LOS F	41.1	288.6	1.00	1.85	2.55	10.8
Approach		380	0.3	380	0.3	1.209	205.8	LOS F	41.1	288.6	0.97	1.59	2.14	11.6
All Vehicles		3046	4.7	3046	4.7	1.252	200.9	LOS F	105.9	745.0	0.89	1.61	2.01	8.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2033 Fu Base AM 200205 Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	1305	5.1	1177	5.6	0.729	2.9	LOS A	12.2	87.0	0.22	0.22	0.22	31.5
3	R2	284	0.4	255	0.4	0.729	17.5	LOS B	12.2	87.0	0.81	0.80	0.82	35.7
Approach		1589	4.2	1433 N1	4.6	0.729	5.5	LOS A	12.2	87.0	0.32	0.33	0.33	34.0
East: Railway Pde														
4	L2	223	0.9	223	0.9	0.590	40.5	LOS C	11.3	80.1	0.86	0.81	0.86	23.9
6	R2	35	0.0	35	0.0	0.200	59.5	LOS E	2.0	14.0	0.93	0.73	0.93	19.2
Approach		258	0.8	258	0.8	0.590	43.1	LOS D	11.3	80.1	0.87	0.80	0.87	23.2
North: Hawkesbury Rd - N														
7	L2	93	0.0	93	0.0	0.168	22.0	LOS B	4.4	39.4	0.56	0.59	0.56	34.3
8	T1	746	12.1	746	12.1	0.570	21.4	LOS B	17.5	129.8	0.71	0.64	0.71	16.2
Approach		839	10.8	839	10.8	0.570	21.4	LOS B	17.5	129.8	0.70	0.64	0.70	19.9
All Vehicles		2686	6.0	2529 N1	6.3	0.729	14.6	LOS B	17.5	129.8	0.50	0.48	0.50	25.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	2	0.0	2	0.0	0.418	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	1095	6.6	1050	6.9	0.418	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	39.9
Approach		1097	6.6	1052 N1	6.8	0.418	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9
NorthWest: Darcy Rd - NW														
28	T1	957	9.5	957	9.5	0.256	0.0	LOS A	1.0	7.5	0.00	0.00	0.00	40.0
Approach		957	9.5	957	9.5	0.256	0.0	NA	1.0	7.5	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.002	5.7	LOS A	0.0	0.0	0.47	0.51	0.47	35.6
Approach		1	0.0	1	0.0	0.002	5.7	LOS A	0.0	0.0	0.47	0.51	0.47	35.6
All Vehicles		2055	7.9	2010 N1	8.1	0.418	0.0	NA	1.0	7.5	0.00	0.00	0.00	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	38	0.0	37	0.0	0.148	3.4	LOS A	0.0	0.0	0.00	0.06	0.00	39.9
22	T1	860	8.3	836	8.5	0.148	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	39.4
Approach		898	8.0	873 N1	8.1	0.148	0.1	NA	0.0	0.0	0.00	0.02	0.00	39.5
NorthWest: Darcy Rd - NW														
28	T1	882	10.0	882	10.0	0.227	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		882	10.0	882	10.0	0.227	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.3	LOS A	0.0	0.0	0.31	0.43	0.31	36.3
Approach		1	0.0	1	0.0	0.001	4.3	LOS A	0.0	0.0	0.31	0.43	0.31	36.3
All Vehicles		1781	9.0	1756 N1	9.1	0.227	0.1	NA	0.0	0.0	0.00	0.01	0.00	39.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2033 Fu Base AM Final - Cycle Time]

Network: N101 [2033 Fu Base AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	457	1.2	457	1.2	0.677	7.9	LOS A	5.1	36.1	0.49	0.78	0.77	32.7
Approach		457	1.2	457	1.2	0.677	7.9	LOS A	5.1	36.1	0.49	0.78	0.77	32.7
East: Darcy Road - E														
4	L2	185	1.7	182	1.7	0.099	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	472	4.2	462	4.3	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		657	3.5	644[N1]	3.6	0.122	1.0	NA	0.0	0.0	0.00	0.13	0.00	34.1
West: Darcy Road - W														
11	T1	1127	2.9	1127	2.9	0.297	0.0	LOS A	14.9	106.8	0.00	0.00	0.00	40.0
12	R2	391	1.3	390	1.3	0.888	18.8	LOS B	6.3	44.8	0.63	1.49	2.04	24.0
Approach		1518	2.5	1518	2.5	0.888	4.9	NA	14.9	106.8	0.16	0.38	0.52	34.1
All Vehicles		2632	2.5	2618[N1]	2.5	0.888	4.4	NA	14.9	106.8	0.18	0.39	0.44	33.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	496	2.5	496	2.5	0.540	4.1	LOS A	5.8	40.9	0.30	0.49	0.30	43.2
3	R2	267	0.0	267	0.0	0.540	6.9	LOS A	5.8	40.9	0.30	0.49	0.30	43.2
Approach		763	1.7	763	1.7	0.540	5.1	LOS A	5.8	40.9	0.30	0.49	0.30	43.2
East: Alexandra Rd														
4	L2	103	0.0	95	0.0	0.266	9.9	LOS A	1.5	10.5	0.67	0.82	0.67	43.0
6	R2	47	2.2	43	1.7	0.266	12.4	LOS A	1.5	10.5	0.67	0.82	0.67	38.8
Approach		151	0.7	138 N1	0.5	0.266	10.7	LOS A	1.5	10.5	0.67	0.82	0.67	42.1
North: Bridge Rd - N														
7	L2	137	0.8	134	0.8	0.921	25.3	LOS B	21.1	149.4	0.91	1.10	1.48	31.1
8	T1	709	1.6	696	1.6	0.921	18.8	LOS B	21.1	149.4	0.91	1.10	1.48	38.6
Approach		846	1.5	830 N1	1.5	0.921	19.9	LOS B	21.1	149.4	0.91	1.10	1.48	37.8
All Vehicles		1760	1.5	1731 N1	1.5	0.921	12.6	LOS A	21.1	149.4	0.62	0.81	0.90	39.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 136 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	161	2.6	160	2.6	0.331	35.2	LOS C	8.0	57.1	0.73	0.74	0.73	33.0
2	T1	17	6.3	17	6.1	0.331	30.6	LOS C	8.0	57.1	0.73	0.74	0.73	33.2
3	R2	222	3.8	221	3.7	1.012	127.6	LOS F	22.5	162.4	1.00	1.20	1.74	10.2
Approach		400	3.4	398[N1]	3.4	1.012	86.3	LOS F	22.5	162.4	0.88	0.99	1.29	18.0
East: Darcy Rd - E														
4	L2	456	1.8	452	1.9	1.027	118.8	LOS F	67.2	478.4	1.00	1.23	1.58	8.0
5	T1	845	2.4	838	2.4	1.027	114.7	LOS F	67.2	478.4	1.00	1.33	1.58	16.7
6	R2	22	0.0	22	0.0	0.137	30.6	LOS C	0.7	5.1	0.85	0.71	0.85	32.6
Approach		1323	2.1	1312[N1]	2.2	1.027	114.7	LOS F	67.2	478.4	1.00	1.29	1.57	14.3
North: Coles Car Park Access														
7	L2	14	7.7	14	7.7	0.026	36.4	LOS C	0.6	4.4	0.69	0.66	0.69	25.3
8	T1	14	0.0	14	0.0	0.142	47.9	LOS D	2.3	16.5	0.85	0.70	0.85	21.2
9	R2	28	3.7	28	3.7	0.142	52.5	LOS D	2.3	16.5	0.85	0.70	0.85	29.4
Approach		56	3.8	56	3.8	0.142	47.4	LOS D	2.3	16.5	0.81	0.69	0.81	27.0
West: Darcy Rd - W														
10	L2	31	0.0	31	0.0	0.850	32.3	LOS C	51.0	362.1	0.91	0.86	0.92	36.0
11	T1	1498	1.7	1498	1.7	0.850	29.1	LOS C	51.0	362.1	0.87	0.83	0.91	28.0
12	R2	200	1.1	200	1.1	0.946	73.5	LOS F	11.6	81.9	0.86	1.04	1.52	16.8
Approach		1728	1.6	1728	1.6	0.946	34.3	LOS C	51.0	362.1	0.87	0.86	0.98	26.2
All Vehicles		3507	2.0	3494[N1]	2.0	1.027	70.6	LOS F	67.2	478.4	0.92	1.03	1.23	18.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	62.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.641	41.5	LOS C	22.5	163.2	0.90	0.80	0.90	23.7
22	T1	993	7.1	883	7.6	0.641	37.4	LOS C	22.5	163.2	0.88	0.77	0.88	8.6
23	R2	40	0.0	35	0.0	0.180	61.8	LOS E	2.3	16.0	1.00	0.76	1.00	19.1
Approach		1034	6.8	919[N1]	7.3	0.641	38.3	LOS C	22.5	163.2	0.89	0.77	0.89	9.5
NorthEast: Site Access (Westmead Hospital)														
24	L2	15	0.0	15	0.0	0.018	7.7	LOS A	0.2	1.6	0.30	0.54	0.30	34.3
26	R2	28	0.0	28	0.0	0.112	53.9	LOS D	1.6	11.1	0.87	0.70	0.87	18.6
Approach		43	0.0	43	0.0	0.112	38.2	LOS C	1.6	11.1	0.68	0.65	0.68	22.0
NorthWest: Darcy Rd - NW														
27	L2	77	0.0	77	0.0	0.456	22.2	LOS B	15.7	114.9	0.88	0.77	0.88	29.7
28	T1	812	11.2	811	11.2	0.456	19.7	LOS B	16.9	125.2	0.88	0.76	0.88	13.7
29	R2	5	0.0	5	0.0	0.012	54.3	LOS D	0.3	2.2	0.97	0.66	0.97	20.3
Approach		894	10.1	893[N1]	10.1	0.456	20.1	LOS B	16.9	125.2	0.88	0.76	0.88	16.7
SouthWest: Stte Access (Parramatta Marist)														
30	L2	176	0.0	176	0.0	0.626	51.3	LOS D	15.6	108.9	0.94	0.83	0.94	19.0
31	T1	1	0.0	1	0.0	0.626	47.9	LOS D	15.6	108.9	0.94	0.83	0.94	25.6
32	R2	88	0.0	88	0.0	0.626	51.2	LOS D	15.6	108.9	0.94	0.83	0.94	19.0
Approach		265	0.0	265	0.0	0.626	51.3	LOS D	15.6	108.9	0.94	0.83	0.94	19.1
All Vehicles		2236	7.2	2120[N1]	7.6	0.641	32.3	LOS C	22.5	163.2	0.89	0.77	0.89	14.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	29.2	LOS C	0.1	0.1	0.91	0.91
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	53.3	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 152 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	329	3.8	329	3.8	0.708	22.9	LOS B	14.1	101.7	0.63	0.54	0.63	31.2
26	R2	302	1.7	302	1.7	1.117	176.1	LOS F	31.6	222.9	1.00	1.39	2.00	7.7
Approach		632	2.8	632	2.8	1.117	96.2	LOS F	31.6	222.9	0.81	0.95	1.29	12.5
NorthWest: Darcy Rd														
27	L2	316	3.7	316	3.7	0.959	22.7	LOS B	11.2	79.8	0.68	0.73	0.69	34.4
29	R2	588	12.2	588	12.2	1.182	242.2	LOS F	19.9	146.9	1.00	1.58	2.21	1.6
Approach		904	9.2	904	9.2	1.182	165.5	LOS F	19.9	146.9	0.89	1.28	1.68	5.3
SouthWest: Hawkesbury Rd - SW														
30	L2	814	7.5	657	8.7	1.126	176.8	LOS F	29.1	212.2	0.98	1.34	1.89	3.3
31	T1	484	1.3	387	1.5	0.609	45.6	LOS D	23.8	169.0	0.90	0.78	0.90	25.4
Approach		1298	5.2	1044 N1	6.0	1.126	128.2	LOS F	29.1	212.2	0.95	1.13	1.52	7.3
All Vehicles		2834	5.9	2580 N1	6.5	1.182	133.4	LOS F	31.6	222.9	0.89	1.14	1.52	7.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	70.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	703	3.6	671	3.7	0.449	9.3	LOS A	3.8	27.1	0.21	0.48	0.21	26.3
23a	R1	146	32.4	141	33.0	0.692	60.5	LOS E	13.6	107.4	0.99	0.83	1.01	19.9
23b	R3	97	2.2	92	2.2	0.692	62.6	LOS E	13.6	107.4	0.99	0.85	1.01	20.3
Approach		946	7.9	904[N1]	8.1	0.692	22.7	LOS B	13.6	107.4	0.41	0.57	0.41	22.0
East: Institute Road														
4b	L3	46	2.3	46	2.3	0.523	43.5	LOS D	3.2	22.9	1.00	0.76	1.00	18.2
5	T1	64	3.3	64	3.3	0.523	61.4	LOS E	3.2	22.9	1.00	0.75	1.01	14.4
6	R2	2	0.0	2	0.0	0.523	76.3	LOS F	3.1	22.0	1.00	0.74	1.01	20.6
Approach		113	2.8	113	2.8	0.523	54.3	LOS D	3.2	22.9	1.00	0.75	1.01	15.9
North: Mons Road														
7	L2	7	0.0	7	0.0	0.319	43.6	LOS D	5.3	37.8	0.91	0.74	0.91	26.0
7a	L1	134	29.1	134	29.1	0.319	42.0	LOS C	5.3	37.8	0.90	0.73	0.90	20.5
9	R2	104	13.1	104	13.1	0.637	69.8	LOS E	6.9	54.0	1.00	0.82	1.04	15.5
Approach		245	21.5	245	21.5	0.637	53.8	LOS D	6.9	54.0	0.95	0.76	0.96	18.2
West: Darcy Road - W														
10	L2	177	10.1	176	10.1	0.138	5.1	LOS A	1.6	12.4	0.26	0.51	0.26	37.1
11	T1	197	0.5	196	0.5	0.689	36.3	LOS C	11.6	81.6	0.85	0.75	0.85	20.7
12a	R1	654	1.9	651	1.9	0.689	40.0	LOS C	11.6	81.6	0.89	0.81	0.89	5.6
Approach		1027	3.1	1023[N1]	3.1	0.689	33.3	LOS C	11.6	81.6	0.78	0.75	0.78	15.1
All Vehicles		2332	7.0	2285[N1]	7.1	0.692	32.4	LOS C	13.6	107.4	0.66	0.68	0.66	18.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	36.9	LOS D	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	53.5	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	4	0.0	0.467	16.7	LOS B	18.9	135.7	0.56	0.51	0.56	22.4
22	T1	1379	4.8	1165	5.3	0.467	13.2	LOS A	19.0	135.8	0.55	0.50	0.55	16.5
23	R2	89	1.2	75	1.2	0.690	75.7	LOS F	5.2	37.0	1.00	0.84	1.13	16.9
Approach		1474	4.6	1245[N1]	5.0	0.690	17.0	LOS B	19.0	135.8	0.58	0.52	0.59	16.6
NorthEast: Site Access (Westmead Hospital)														
24	L2	34	0.0	34	0.0	0.236	58.6	LOS E	2.1	14.5	0.91	0.74	0.91	17.7
25	T1	1	0.0	1	0.0	0.236	55.2	LOS D	2.1	14.5	0.91	0.74	0.91	19.1
26	R2	51	10.4	51	10.4	0.252	56.1	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
Approach		85	6.2	85	6.2	0.252	57.1	LOS E	2.9	22.2	0.90	0.73	0.90	18.0
NorthWest: Darcy Rd - NW														
27	L2	142	0.7	142	0.7	0.750	29.6	LOS C	22.5	163.2	0.90	0.84	0.90	26.9
28	T1	860	10.3	859	10.3	0.750	25.8	LOS B	22.5	163.2	0.87	0.80	0.87	12.2
29	R2	5	20.0	5	20.0	0.055	73.3	LOS F	0.4	2.9	1.00	0.65	1.00	7.9
Approach		1007	9.0	1007	9.0	0.750	26.6	LOS B	22.5	163.2	0.87	0.81	0.87	15.4
SouthWest: Stte Access (UWS Car Park)														
30	L2	8	12.5	8	12.5	0.045	54.7	LOS D	0.7	5.3	0.87	0.65	0.87	5.7
31	T1	4	0.0	4	0.0	0.045	51.2	LOS D	0.7	5.3	0.87	0.65	0.87	20.1
32	R2	17	0.0	17	0.0	0.078	58.2	LOS E	1.0	6.8	0.90	0.69	0.90	5.3
Approach		29	3.6	29	3.6	0.078	56.2	LOS D	1.0	6.8	0.89	0.67	0.89	8.6
All Vehicles		2596	6.3	2366[N1]	6.9	0.750	23.0	LOS B	22.5	163.2	0.72	0.65	0.73	16.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	19	5.6	19	5.6	1.604	607.8	LOS F	147.9	1042.0	1.00	3.13	3.82	2.8
2	T1	1254	0.6	1254	0.6	1.604	603.3	LOS F	147.9	1042.0	1.00	3.14	3.82	2.8
Approach		1273	0.7	1273	0.7	1.604	603.4	LOS F	147.9	1042.0	1.00	3.14	3.82	2.8
East: Alexandra Ave - E														
4	L2	37	0.0	37	0.0	1.274	319.8	LOS F	54.7	408.7	1.00	1.95	2.81	9.1
5	T1	113	0.0	113	0.0	1.274	315.2	LOS F	54.7	408.7	1.00	1.95	2.81	5.1
6	R2	426	14.3	426	14.3	1.274	322.3	LOS F	54.7	408.7	1.00	1.85	2.84	5.0
Approach		576	10.6	576	10.6	1.274	320.7	LOS F	54.7	408.7	1.00	1.88	2.83	5.3
North: Hawkesbury Rd - N														
7	L2	325	19.7	313	19.9	0.739	19.2	LOS B	13.4	97.9	0.54	0.63	0.54	35.2
8	T1	517	1.8	497	1.8	0.739	25.7	LOS B	13.4	97.9	0.68	0.70	0.76	30.1
9	R2	61	0.0	59	0.0	0.739	66.7	LOS E	10.0	70.6	1.00	0.97	1.38	3.9
Approach		903	8.2	869 N1	8.2	0.739	26.1	LOS B	13.4	97.9	0.65	0.69	0.72	29.8
West: Alexandra Ave - W														
10	L2	125	0.0	125	0.0	0.595	54.1	LOS D	7.3	50.9	0.95	0.81	0.95	20.3
11	T1	286	0.4	286	0.4	1.241	283.3	LOS F	43.4	304.8	1.00	1.92	2.68	10.0
Approach		412	0.3	411 N1	0.3	1.241	213.5	LOS F	43.4	304.8	0.98	1.59	2.15	11.0
All Vehicles		3163	4.6	3129 N1	4.6	1.604	339.8	LOS F	147.9	1042.0	0.90	2.03	2.56	5.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	1399	4.7	1070	5.6	0.948	48.7	LOS D	13.6	97.9	0.81	1.01	1.15	4.9
3	R2	284	0.4	216	0.4	0.948	53.8	LOS D	13.6	97.9	1.00	1.16	1.37	22.3
Approach		1683	4.0	1286 N1	4.7	0.948	49.6	LOS D	13.6	97.9	0.84	1.03	1.18	9.3
East: Railway Pde														
4	L2	223	0.9	223	0.9	0.592	36.8	LOS C	10.7	75.4	0.81	0.80	0.81	25.1
6	R2	128	0.0	128	0.0	0.887	81.0	LOS F	9.5	66.6	1.00	1.03	1.45	15.7
Approach		352	0.6	352	0.6	0.887	52.9	LOS D	10.7	75.4	0.88	0.88	1.04	20.6
North: Hawkesbury Rd - N														
7	L2	115	0.0	111	0.0	0.200	24.5	LOS B	5.4	47.0	0.61	0.63	0.61	33.0
8	T1	768	11.8	744	11.9	0.584	24.1	LOS B	18.8	138.6	0.75	0.67	0.75	14.9
Approach		883	10.3	855 N1	10.4	0.584	24.0	LOS B	18.8	138.6	0.73	0.67	0.73	19.1
All Vehicles		2918	5.5	2492 N1	6.4	0.948	41.3	LOS C	18.8	138.6	0.81	0.89	1.01	14.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	382	0.0	330	0.0	0.434	3.4	LOS A	1.8	12.9	0.00	0.19	0.00	39.2
22	T1	1091	6.7	948	7.2	0.434	0.0	LOS A	1.8	12.9	0.00	0.10	0.00	37.2
Approach		1473	4.9	1278 N1	5.4	0.434	0.9	NA	1.8	12.9	0.00	0.12	0.00	38.5
NorthWest: Darcy Rd - NW														
28	T1	1044	8.7	1044	8.7	0.265	0.0	LOS A	4.5	32.8	0.00	0.00	0.00	40.0
Approach		1044	8.7	1044	8.7	0.265	0.0	NA	4.5	32.8	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.003	5.6	LOS A	0.0	0.0	0.46	0.51	0.46	35.7
Approach		1	0.0	1	0.0	0.003	5.6	LOS A	0.0	0.0	0.46	0.51	0.46	35.7
All Vehicles		2518	6.5	2323 N1	7.0	0.434	0.5	NA	4.5	32.8	0.00	0.07	0.00	38.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2033 Fu AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.168	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	1068	6.7	993	7.0	0.168	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		1069	6.7	994 [N1]	7.0	0.168	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	882	10.0	880	10.0	0.284	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		882	10.0	880 [N1]	10.0	0.284	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.37	0.44	0.37	36.2
Approach		1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.37	0.44	0.37	36.2
All Vehicles		1953	8.2	1875 [N1]	8.5	0.284	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2033 Fu Dev AM Final - Cycle Time]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	620	0.8	620	0.8	0.995	41.4	LOS C	28.7	202.6	0.71	2.43	3.64	18.5
Approach		620	0.8	620	0.8	0.995	41.4	LOS C	28.7	202.6	0.71	2.43	3.64	18.5
East: Darcy Road - E														
4	L2	219	1.4	213	1.5	0.116	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	647	3.1	631	3.2	0.289	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	39.9
Approach		866	2.7	844 N1	2.7	0.289	0.9	NA	0.0	0.0	0.00	0.11	0.00	34.6
West: Darcy Road - W														
11	T1	1127	2.9	1126	2.9	0.373	1.8	LOS A	14.7	105.7	0.20	0.00	0.25	37.6
12	R2	460	1.1	460	1.1	1.278	267.7	LOS F	68.7	485.3	1.00	8.35	17.49	3.8
Approach		1587	2.4	1586 N1	2.4	1.278	78.9	NA	68.7	485.3	0.43	2.42	5.24	10.4
All Vehicles		3074	2.2	3050 N1	2.2	1.278	49.7	NA	68.7	485.3	0.37	1.78	3.47	12.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	496	2.5	496	2.5	0.540	4.1	LOS A	5.8	41.0	0.31	0.49	0.31	43.2
3	R2	267	0.0	267	0.0	0.540	6.9	LOS A	5.8	41.0	0.31	0.49	0.31	43.2
Approach		763	1.7	763	1.7	0.540	5.1	LOS A	5.8	41.0	0.31	0.49	0.31	43.2
East: Alexandra Rd														
4	L2	103	0.0	95	0.0	0.276	10.0	LOS A	1.5	10.8	0.69	0.83	0.69	42.9
6	R2	47	2.2	43	1.7	0.276	12.5	LOS A	1.5	10.8	0.69	0.83	0.69	38.7
Approach		151	0.7	138 N1	0.5	0.276	10.8	LOS A	1.5	10.8	0.69	0.83	0.69	42.1
North: Bridge Rd - N														
7	L2	137	0.8	137	0.8	0.936	27.7	LOS B	23.8	168.4	0.97	1.17	1.66	29.7
8	T1	709	1.6	708	1.6	0.936	21.2	LOS B	23.8	168.4	0.97	1.17	1.66	37.6
Approach		846	1.5	844 N1	1.5	0.936	22.3	LOS B	23.8	168.4	0.97	1.17	1.66	36.8
All Vehicles		1760	1.5	1745 N1	1.5	0.936	13.8	LOS A	23.8	168.4	0.66	0.85	0.99	39.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 136 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	161	2.6	160	2.6	0.379	39.8	LOS C	8.5	61.3	0.78	0.75	0.78	31.6
2	T1	17	6.3	17	6.1	0.379	35.3	LOS C	8.5	61.3	0.78	0.75	0.78	31.8
3	R2	201	4.2	200	4.1	0.926	85.4	LOS F	15.7	114.0	0.98	1.05	1.44	13.9
Approach		379	3.6	377[N1]	3.5	0.926	63.8	LOS E	15.7	114.0	0.89	0.91	1.13	21.8
East: Darcy Rd - E														
4	L2	421	2.0	418	2.0	0.716	35.7	LOS C	32.3	230.2	0.87	0.83	0.87	20.0
5	T1	812	2.5	805	2.5	0.716	29.4	LOS C	32.3	230.2	0.84	0.76	0.84	33.1
6	R2	22	0.0	22	0.0	0.149	37.6	LOS C	0.9	6.2	0.93	0.71	0.93	30.3
Approach		1255	2.3	1244[N1]	2.3	0.716	31.6	LOS C	32.3	230.2	0.85	0.79	0.85	29.8
North: Coles Car Park Access														
7	L2	14	7.7	14	7.7	0.025	38.4	LOS C	0.6	4.6	0.71	0.66	0.71	24.6
8	T1	14	0.0	14	0.0	0.161	50.8	LOS D	2.4	17.0	0.88	0.71	0.88	20.5
9	R2	28	3.7	28	3.7	0.161	55.4	LOS D	2.4	17.0	0.88	0.71	0.88	28.7
Approach		56	3.8	56	3.8	0.161	50.1	LOS D	2.4	17.0	0.84	0.70	0.84	26.3
West: Darcy Rd - W														
10	L2	31	0.0	31	0.0	0.939	50.9	LOS D	77.7	551.3	1.00	1.05	1.15	30.4
11	T1	1476	1.7	1476	1.7	0.939	49.9	LOS D	77.7	551.3	0.87	0.97	1.08	21.3
12	R2	200	1.1	200	1.1	0.546	27.0	LOS B	7.4	52.3	0.94	0.83	0.94	29.0
Approach		1706	1.6	1706	1.6	0.939	47.2	LOS D	77.7	551.3	0.88	0.96	1.07	22.2
All Vehicles		3396	2.1	3384[N1]	2.1	0.939	43.4	LOS D	77.7	551.3	0.87	0.88	0.99	24.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	62.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	62.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.621	39.8	LOS C	22.5	163.2	0.87	0.77	0.87	24.2
22	T1	972	7.3	891	7.7	0.621	35.8	LOS C	22.5	163.2	0.85	0.75	0.85	8.9
23	R2	40	0.0	37	0.0	0.171	59.9	LOS E	2.3	16.3	1.00	0.76	1.00	19.4
Approach		1013	7.0	929 N1	7.4	0.621	36.7	LOS C	22.5	163.2	0.86	0.75	0.86	9.9
NorthEast: Site Access (Westmead Hospital)														
24	L2	15	0.0	15	0.0	0.018	7.4	LOS A	0.2	1.6	0.29	0.54	0.29	34.4
26	R2	28	0.0	28	0.0	0.117	54.9	LOS D	1.6	11.2	0.88	0.71	0.88	18.4
Approach		43	0.0	43	0.0	0.117	38.7	LOS C	1.6	11.2	0.68	0.65	0.68	21.9
NorthWest: Darcy Rd - NW														
27	L2	77	0.0	77	0.0	0.450	21.2	LOS B	15.1	110.3	0.87	0.77	0.87	30.1
28	T1	812	11.2	811	11.2	0.450	18.6	LOS B	16.2	119.9	0.86	0.75	0.86	14.3
29	R2	5	0.0	5	0.0	0.012	54.5	LOS D	0.3	2.3	0.98	0.66	0.98	20.3
Approach		894	10.1	894	10.1	0.450	19.0	LOS B	16.2	119.9	0.87	0.75	0.87	17.2
SouthWest: Stte Access (Parramatta Marist)														
30	L2	163	0.0	163	0.0	0.617	52.7	LOS D	14.6	101.9	0.95	0.83	0.95	18.8
31	T1	1	0.0	1	0.0	0.617	49.3	LOS D	14.6	101.9	0.95	0.83	0.95	25.4
32	R2	82	0.0	82	0.0	0.617	52.5	LOS D	14.6	101.9	0.95	0.83	0.95	18.8
Approach		246	0.0	246	0.0	0.617	52.6	LOS D	14.6	101.9	0.95	0.83	0.95	18.8
All Vehicles		2196	7.3	2112 N1	7.6	0.621	31.1	LOS C	22.5	163.2	0.87	0.76	0.87	14.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	28.9	LOS C	0.1	0.1	0.91	0.91
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	53.2	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 152 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	329	3.8	329	3.8	0.710	25.5	LOS B	14.8	107.3	0.66	0.57	0.66	29.9
26	R2	277	1.9	277	1.9	1.068	140.0	LOS F	25.1	177.8	1.00	1.29	1.83	9.0
Approach		606	3.0	606	3.0	1.068	77.8	LOS F	25.1	177.8	0.82	0.90	1.20	14.4
NorthWest: Darcy Rd														
27	L2	313	3.7	313	3.7	0.952	22.1	LOS B	10.9	77.4	0.67	0.73	0.68	34.7
29	R2	585	12.2	585	12.2	1.059	154.3	LOS F	19.8	146.9	1.00	1.31	1.78	2.4
Approach		898	9.3	898	9.3	1.059	108.2	LOS F	19.8	146.9	0.89	1.11	1.40	7.8
SouthWest: Hawkesbury Rd - SW														
30	L2	788	7.7	638	9.0	1.061	127.6	LOS F	29.1	212.2	0.98	1.22	1.64	4.1
31	T1	484	1.3	388	1.5	0.622	46.6	LOS D	24.1	171.2	0.91	0.79	0.91	25.2
Approach		1273	5.3	1026 N1	6.2	1.061	97.0	LOS F	29.1	212.2	0.95	1.06	1.36	9.2
All Vehicles		2777	6.1	2530 N1	6.7	1.068	96.4	LOS F	29.1	212.2	0.90	1.04	1.34	9.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	70.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	70.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	671	3.8	647	3.9	0.449	9.3	LOS A	3.6	25.5	0.20	0.48	0.20	26.4
23a	R1	146	32.4	142	33.0	0.700	60.8	LOS E	13.8	108.5	0.98	0.84	1.01	19.9
23b	R3	97	2.2	93	2.2	0.700	63.0	LOS E	13.8	108.5	0.98	0.85	1.02	20.2
Approach		914	8.2	883[N1]	8.4	0.700	23.3	LOS B	13.8	108.5	0.41	0.58	0.42	21.9
East: Institute Road														
4b	L3	46	2.3	46	2.3	0.523	43.5	LOS D	3.2	22.9	1.00	0.76	1.00	18.2
5	T1	64	3.3	64	3.3	0.523	61.4	LOS E	3.2	22.9	1.00	0.75	1.01	14.4
6	R2	2	0.0	2	0.0	0.523	76.3	LOS F	3.1	22.0	1.00	0.74	1.01	20.6
Approach		113	2.8	113	2.8	0.523	54.3	LOS D	3.2	22.9	1.00	0.75	1.01	15.9
North: Mons Road														
7	L2	7	0.0	7	0.0	0.319	43.6	LOS D	5.3	37.8	0.91	0.74	0.91	26.0
7a	L1	134	29.1	134	29.1	0.319	42.0	LOS C	5.3	37.8	0.90	0.73	0.90	20.5
9	R2	104	13.1	104	13.1	0.637	69.8	LOS E	6.9	54.0	1.00	0.82	1.04	15.5
Approach		245	21.5	245	21.5	0.637	53.8	LOS D	6.9	54.0	0.95	0.76	0.96	18.2
West: Darcy Road - W														
10	L2	177	10.1	177	10.1	0.139	5.1	LOS A	1.6	12.4	0.26	0.51	0.26	37.1
11	T1	197	0.5	197	0.5	0.692	36.4	LOS C	11.6	81.6	0.85	0.75	0.85	20.6
12a	R1	654	1.9	653	1.9	0.692	40.1	LOS C	11.6	81.6	0.90	0.81	0.90	5.6
Approach		1027	3.1	1027	3.1	0.692	33.3	LOS C	11.6	81.6	0.78	0.75	0.78	15.1
All Vehicles		2299	7.1	2267[N1]	7.1	0.700	32.7	LOS C	13.8	108.5	0.66	0.68	0.67	17.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	36.9	LOS D	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	53.5	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.465	16.7	LOS B	18.8	135.0	0.56	0.50	0.56	22.4
22	T1	1327	5.0	1160	5.4	0.465	13.2	LOS A	18.8	135.1	0.55	0.50	0.55	16.5
23	R2	89	1.2	78	1.2	0.714	76.1	LOS F	5.4	38.5	1.00	0.86	1.15	16.8
Approach		1422	4.7	1242[N1]	5.1	0.714	17.2	LOS B	18.8	135.1	0.58	0.52	0.59	16.6
NorthEast: Site Access (Westmead Hospital)														
24	L2	34	0.0	34	0.0	0.236	58.6	LOS E	2.1	14.5	0.91	0.74	0.91	17.7
25	T1	1	0.0	1	0.0	0.236	55.2	LOS D	2.1	14.5	0.91	0.74	0.91	19.1
26	R2	51	10.4	51	10.4	0.252	56.1	LOS D	2.9	22.2	0.90	0.73	0.90	18.2
Approach		85	6.2	85	6.2	0.252	57.1	LOS E	2.9	22.2	0.90	0.73	0.90	18.0
NorthWest: Darcy Rd - NW														
27	L2	142	0.7	142	0.7	0.746	29.0	LOS C	22.5	163.2	0.89	0.83	0.89	27.1
28	T1	855	10.3	855	10.3	0.746	25.0	LOS B	22.5	163.2	0.86	0.79	0.86	12.4
29	R2	5	20.0	5	20.0	0.055	73.3	LOS F	0.4	2.9	1.00	0.65	1.00	7.9
Approach		1002	9.0	1002	9.0	0.746	25.8	LOS B	22.5	163.2	0.86	0.80	0.86	15.7
SouthWest: Stte Access (UWS Car Park)														
30	L2	8	12.5	8	12.5	0.045	54.7	LOS D	0.7	5.3	0.87	0.65	0.87	5.7
31	T1	4	0.0	4	0.0	0.045	51.2	LOS D	0.7	5.3	0.87	0.65	0.87	20.1
32	R2	17	0.0	17	0.0	0.078	58.2	LOS E	1.0	6.8	0.90	0.69	0.90	5.3
Approach		29	3.6	29	3.6	0.078	56.2	LOS D	1.0	6.8	0.89	0.67	0.89	8.6
All Vehicles		2539	6.5	2359[N1]	7.0	0.746	22.8	LOS B	22.5	163.2	0.72	0.65	0.72	16.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	19	5.6	19	5.6	1.598	603.1	LOS F	146.9	1034.9	1.00	3.12	3.80	2.9
2	T1	1249	0.6	1249	0.6	1.598	598.6	LOS F	146.9	1034.9	1.00	3.13	3.80	2.9
Approach		1268	0.7	1268	0.7	1.598	598.6	LOS F	146.9	1034.9	1.00	3.13	3.80	2.9
East: Alexandra Ave - E														
4	L2	37	0.0	37	0.0	1.264	311.3	LOS F	53.6	400.5	1.00	1.93	2.77	9.3
5	T1	113	0.0	113	0.0	1.264	306.8	LOS F	53.6	400.5	1.00	1.93	2.77	5.2
6	R2	422	14.5	422	14.5	1.264	313.8	LOS F	53.6	400.5	1.00	1.83	2.80	5.2
Approach		572	10.7	572	10.7	1.264	312.3	LOS F	53.6	400.5	1.00	1.86	2.80	5.5
North: Hawkesbury Rd - N														
7	L2	324	19.8	322	19.8	0.759	19.4	LOS B	13.3	97.9	0.56	0.64	0.56	35.1
8	T1	516	1.8	511	1.8	0.759	26.2	LOS B	13.3	97.9	0.70	0.72	0.78	29.9
9	R2	60	0.0	59	0.0	0.759	67.0	LOS E	10.4	73.5	1.00	0.98	1.40	3.9
Approach		900	8.2	893 [N1]	8.2	0.759	26.5	LOS B	13.3	97.9	0.67	0.70	0.74	29.7
West: Alexandra Ave - W														
10	L2	121	0.0	121	0.0	0.575	53.8	LOS D	7.0	48.9	0.94	0.81	0.94	20.4
11	T1	286	0.4	286	0.4	1.239	281.4	LOS F	43.3	303.8	1.00	1.92	2.67	10.0
Approach		407	0.3	407	0.3	1.239	213.8	LOS F	43.3	303.8	0.98	1.59	2.15	11.0
All Vehicles		3147	4.6	3140 [N1]	4.6	1.598	333.9	LOS F	146.9	1034.9	0.90	2.01	2.54	5.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 128 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	1386	4.8	1068	5.5	0.955	52.2	LOS D	13.6	97.9	0.84	1.05	1.19	4.6
3	R2	284	0.4	217	0.4	0.955	57.3	LOS E	13.6	97.9	1.00	1.18	1.40	21.5
Approach		1671	4.0	1286 N1	4.7	0.955	53.0	LOS D	13.6	97.9	0.86	1.07	1.23	8.9
East: Railway Pde														
4	L2	223	0.9	223	0.9	0.590	36.8	LOS C	10.7	75.6	0.81	0.80	0.81	25.1
6	R2	116	0.0	116	0.0	0.805	72.3	LOS F	8.0	55.7	1.00	0.94	1.27	17.0
Approach		339	0.6	339	0.6	0.805	48.9	LOS D	10.7	75.6	0.88	0.85	0.97	21.6
North: Hawkesbury Rd - N														
7	L2	113	0.0	109	0.0	0.198	24.5	LOS B	5.3	46.5	0.61	0.62	0.61	33.0
8	T1	766	11.8	743	11.9	0.591	24.2	LOS B	18.7	137.9	0.75	0.68	0.75	14.9
Approach		879	10.3	852 N1	10.4	0.591	24.1	LOS B	18.7	137.9	0.73	0.67	0.73	19.0
All Vehicles		2888	5.5	2476 N1	6.5	0.955	42.6	LOS D	18.7	137.9	0.82	0.90	1.02	13.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	58.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	58.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	352	0.0	313	0.0	0.426	3.4	LOS A	1.1	8.0	0.00	0.18	0.00	39.2
22	T1	1069	6.8	958	7.3	0.426	0.0	LOS A	1.1	8.0	0.00	0.09	0.00	37.3
Approach		1421	5.1	1272 N1	5.5	0.426	0.9	NA	1.1	8.0	0.00	0.11	0.00	38.5
NorthWest: Darcy Rd - NW														
28	T1	1038	8.7	1038	8.7	0.264	0.0	LOS A	4.3	31.3	0.00	0.00	0.00	40.0
Approach		1038	8.7	1038	8.7	0.264	0.0	NA	4.3	31.3	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.003	5.6	LOS A	0.0	0.0	0.46	0.51	0.46	35.7
Approach		1	0.0	1	0.0	0.003	5.6	LOS A	0.0	0.0	0.46	0.51	0.46	35.7
All Vehicles		2460	6.6	2311 N1	7.1	0.426	0.5	NA	4.3	31.3	0.00	0.06	0.00	38.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.167	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	1036	6.9	985	7.2	0.167	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		1037	6.9	986 N1	7.1	0.167	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	882	10.0	882	10.0	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		882	10.0	882	10.0	0.271	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.36	0.44	0.36	36.2
Approach		1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.36	0.44	0.36	36.2
All Vehicles		1920	8.3	1869 N1	8.6	0.271	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2033 Fu Dev AM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev AM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	564	0.9	564	0.9	0.909	19.7	LOS B	15.3	108.3	0.66	1.59	2.14	25.7
Approach		564	0.9	564	0.9	0.909	19.7	LOS B	15.3	108.3	0.66	1.59	2.14	25.7
East: Darcy Road - E														
4	L2	198	1.6	193	1.6	0.105	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	635	3.2	619	3.2	0.162	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		833	2.8	812[N1]	2.8	0.162	0.8	NA	0.0	0.0	0.00	0.11	0.00	34.9
West: Darcy Road - W														
11	T1	1127	2.9	1127	2.9	0.364	1.7	LOS A	14.9	106.7	0.20	0.00	0.24	37.7
12	R2	417	1.3	417	1.3	1.119	131.9	LOS F	35.7	252.4	1.00	5.18	10.25	7.0
Approach		1544	2.5	1544	2.4	1.119	36.9	NA	35.7	252.4	0.41	1.40	2.94	17.2
All Vehicles		2941	2.3	2920[N1]	2.3	1.119	23.5	NA	35.7	252.4	0.35	1.08	1.97	19.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	395	2.9	395	2.9	0.461	4.8	LOS A	3.9	28.0	0.48	0.55	0.48	42.7
3	R2	141	0.7	141	0.7	0.461	7.6	LOS A	3.9	28.0	0.48	0.55	0.48	42.7
Approach		536	2.4	536	2.4	0.461	5.5	LOS A	3.9	28.0	0.48	0.55	0.48	42.7
East: Alexandra Rd														
4	L2	198	0.5	198	0.5	0.463	9.7	LOS A	3.2	22.6	0.66	0.78	0.68	43.0
6	R2	133	0.0	133	0.0	0.463	12.0	LOS A	3.2	22.6	0.66	0.78	0.68	38.9
Approach		331	0.3	331	0.3	0.463	10.6	LOS A	3.2	22.6	0.66	0.78	0.68	41.9
North: Bridge Rd - N														
7	L2	82	0.0	82	0.0	0.598	11.9	LOS A	4.9	35.2	0.46	0.63	0.46	41.7
8	T1	538	3.7	538	3.7	0.598	5.4	LOS A	4.9	35.2	0.46	0.63	0.46	45.4
Approach		620	3.2	620	3.2	0.598	6.3	LOS A	4.9	35.2	0.46	0.63	0.46	45.1
All Vehicles		1486	2.3	1486	2.3	0.598	7.0	LOS A	4.9	35.2	0.51	0.63	0.52	43.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 88 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	204	1.5	204	1.5	0.493	20.2	LOS B	5.0	35.7	0.89	0.79	0.89	38.5
2	T1	27	0.0	27	0.0	0.493	17.4	LOS B	5.0	35.7	0.89	0.79	0.89	38.1
3	R2	81	9.9	81	9.9	0.493	46.7	LOS D	3.6	27.0	0.98	0.77	0.98	20.7
Approach		312	3.5	312	3.5	0.493	26.9	LOS B	5.0	35.7	0.91	0.78	0.91	34.3
East: Darcy Rd - E														
4	L2	236	5.8	236	5.8	0.885	31.0	LOS C	19.0	136.9	1.00	1.04	1.24	22.4
5	T1	973	1.8	973	1.8	0.885	25.9	LOS B	19.4	138.2	0.99	1.03	1.23	34.5
6	R2	23	0.0	23	0.0	0.043	14.4	LOS A	0.4	2.6	0.66	0.66	0.66	39.7
Approach		1232	2.6	1232	2.6	0.885	26.6	LOS B	19.4	138.2	0.99	1.02	1.22	33.1
North: Coles Car Park Access														
7	L2	24	4.3	24	4.3	0.037	23.8	LOS B	0.7	4.8	0.67	0.67	0.67	30.5
8	T1	36	0.0	36	0.0	0.526	43.3	LOS D	3.5	25.1	0.99	0.77	0.99	22.5
9	R2	45	2.3	45	2.3	0.526	47.8	LOS D	3.5	25.1	0.99	0.77	0.99	30.7
Approach		105	2.0	105	2.0	0.526	40.8	LOS C	3.5	25.1	0.92	0.75	0.92	28.2
West: Darcy Rd - W														
10	L2	60	0.0	60	0.0	0.386	19.7	LOS B	9.7	68.7	0.67	0.61	0.67	40.7
11	T1	516	1.8	516	1.8	0.386	14.6	LOS B	9.7	68.7	0.65	0.57	0.65	35.6
12	R2	267	3.1	267	3.1	0.749	25.7	LOS B	7.7	55.3	0.91	0.85	1.04	29.6
Approach		843	2.1	843	2.1	0.749	18.5	LOS B	9.7	68.7	0.73	0.66	0.77	34.1
All Vehicles		2492	2.5	2492	2.5	0.885	24.5	LOS B	19.4	138.2	0.89	0.86	1.02	33.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	16.7	LOS B	0.1	0.1	0.87	0.87
P2	East Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P3	North Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P4	West Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
All Pedestrians		211	32.9	LOS D			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.255	13.7	LOS A	6.2	46.2	0.36	0.31	0.36	33.9
22	T1	613	12.2	613	12.2	0.255	9.0	LOS A	6.2	46.2	0.31	0.27	0.31	21.6
23	R2	31	0.0	31	0.0	0.277	72.0	LOS F	2.0	14.0	0.98	0.72	0.98	17.5
Approach		644	11.6	644	11.6	0.277	12.0	LOS A	6.2	46.2	0.35	0.29	0.35	20.4
NorthEast: Site Access (Westmead Hospital)														
24	L2	36	0.0	36	0.0	0.038	4.4	LOS A	0.3	1.8	0.16	0.51	0.16	36.5
26	R2	22	0.0	22	0.0	0.071	50.5	LOS D	1.2	8.3	0.84	0.68	0.84	19.2
Approach		58	0.0	58	0.0	0.071	22.0	LOS B	1.2	8.3	0.42	0.58	0.42	27.2
NorthWest: Darcy Rd - NW														
27	L2	60	0.0	60	0.0	0.271	15.5	LOS B	7.2	52.8	0.40	0.40	0.40	32.6
28	T1	581	12.3	581	12.3	0.271	11.1	LOS A	7.2	52.8	0.38	0.35	0.38	18.9
29	R2	2	50.0	2	50.0	0.026	70.7	LOS F	0.1	1.4	0.97	0.62	0.97	17.6
Approach		643	11.3	643	11.3	0.271	11.7	LOS A	7.2	52.8	0.39	0.36	0.39	22.2
SouthWest: Stte Access (Parramatta Marist)														
30	L2	4	75.0	4	75.0	0.030	50.8	LOS D	0.4	4.1	0.83	0.64	0.83	19.5
31	T1	1	0.0	1	0.0	0.030	46.9	LOS D	0.4	4.1	0.83	0.64	0.83	26.1
32	R2	2	50.0	2	50.0	0.030	50.5	LOS D	0.4	4.1	0.83	0.64	0.83	19.5
Approach		7	57.1	7	57.1	0.030	50.1	LOS D	0.4	4.1	0.83	0.64	0.83	20.8
All Vehicles		1353	11.2	1353	11.2	0.277	12.5	LOS A	7.2	52.8	0.37	0.34	0.37	21.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	232	2.7	232	2.7	0.288	27.0	LOS B	10.0	71.9	0.69	0.59	0.69	29.2
26	R2	398	4.2	398	4.2	0.735	27.1	LOS B	13.3	95.8	0.91	0.83	0.91	29.1
Approach		629	3.7	629	3.7	0.735	27.1	LOS B	13.3	95.8	0.83	0.74	0.83	29.1
NorthWest: Darcy Rd														
27	L2	155	6.8	155	6.8	0.702	14.4	LOS A	3.2	23.1	0.51	0.64	0.52	39.9
29	R2	473	14.0	473	14.0	0.742	63.4	LOS E	16.7	125.1	0.98	0.87	1.06	5.5
Approach		627	12.2	627	12.2	0.742	51.3	LOS D	16.7	125.1	0.86	0.81	0.93	12.2
SouthWest: Hawkesbury Rd - SW														
30	L2	348	20.5	348	20.5	0.377	17.1	LOS B	7.6	58.7	0.66	0.74	0.66	19.2
31	T1	242	3.5	242	3.5	0.613	54.6	LOS D	15.1	108.9	0.96	0.81	0.96	23.2
Approach		591	13.5	591	13.5	0.613	32.5	LOS C	15.1	108.9	0.78	0.77	0.78	22.1
All Vehicles		1847	9.7	1847	9.7	0.742	37.0	LOS C	16.7	125.1	0.83	0.77	0.85	20.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	64.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	527	3.2	527	3.2	0.421	39.0	LOS C	15.1	108.7	0.87	0.79	0.87	11.4
23a	R1	126	53.3	126	53.3	0.555	70.1	LOS E	6.9	60.0	0.99	0.78	0.99	18.3
23b	R3	16	0.0	16	0.0	0.555	75.0	LOS F	6.9	60.0	1.00	0.79	1.00	17.9
Approach		669	12.6	669	12.6	0.555	45.7	LOS D	15.1	108.7	0.89	0.79	0.89	14.0
East: Institute Road														
4b	L3	94	0.0	94	0.0	0.569	56.1	LOS D	7.5	52.8	0.97	0.93	1.33	15.7
5	T1	222	0.5	222	0.5	0.569	56.6	LOS E	10.2	71.7	0.98	0.84	1.08	15.2
6	R2	7	0.0	7	0.0	0.569	62.0	LOS E	10.2	71.7	0.98	0.80	0.98	22.8
Approach		323	0.3	323	0.3	0.569	56.6	LOS E	10.2	71.7	0.97	0.86	1.15	15.6
North: Mons Road														
7	L2	3	0.0	3	0.0	0.249	24.3	LOS B	4.4	36.3	0.78	0.69	0.78	31.0
7a	L1	152	31.9	152	31.9	0.249	22.5	LOS B	4.4	36.3	0.77	0.67	0.77	26.5
9	R2	231	3.7	231	3.7	0.632	55.8	LOS D	14.0	100.7	0.96	0.83	0.96	17.6
Approach		385	14.8	385	14.8	0.632	42.4	LOS C	14.0	100.7	0.89	0.77	0.89	20.4
West: Darcy Road - W														
10	L2	67	1.6	67	1.6	0.053	5.1	LOS A	0.6	4.3	0.24	0.50	0.24	37.2
11	T1	39	0.0	39	0.0	0.619	53.8	LOS D	11.4	81.6	0.96	0.81	0.96	16.8
12a	R1	391	3.8	391	3.8	0.619	55.8	LOS D	11.4	81.6	0.97	0.81	0.97	4.2
Approach		497	3.2	497	3.2	0.619	48.8	LOS D	11.4	81.6	0.87	0.77	0.87	9.3
All Vehicles		1875	8.4	1875	8.4	0.632	47.7	LOS D	15.1	108.7	0.90	0.79	0.93	14.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	28.2	LOS C	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	50.6	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.262	24.2	LOS B	9.0	67.4	0.62	0.53	0.62	17.8
22	T1	511	14.6	511	14.6	0.262	20.6	LOS B	9.0	67.6	0.61	0.52	0.61	12.4
23	R2	60	0.0	60	0.0	0.363	67.8	LOS E	3.9	27.0	0.98	0.75	0.98	18.0
Approach		576	13.0	576	13.0	0.363	25.6	LOS B	9.0	67.6	0.65	0.55	0.65	14.2
NorthEast: Site Access (Westmead Hospital)														
24	L2	51	0.0	51	0.0	0.139	43.1	LOS D	2.6	17.9	0.79	0.71	0.79	20.8
25	T1	1	0.0	1	0.0	0.139	39.7	LOS C	2.6	17.9	0.79	0.71	0.79	22.2
26	R2	124	1.7	124	1.7	0.396	45.4	LOS D	6.5	46.3	0.84	0.75	0.84	20.3
Approach		176	1.2	176	1.2	0.396	44.7	LOS D	6.5	46.3	0.82	0.74	0.82	20.4
NorthWest: Darcy Rd - NW														
27	L2	97	1.1	97	1.1	0.395	9.6	LOS A	4.6	33.9	0.22	0.29	0.22	35.6
28	T1	522	14.3	522	14.3	0.395	6.0	LOS A	4.6	33.9	0.21	0.23	0.21	24.4
29	R2	6	16.7	6	16.7	0.043	65.1	LOS E	0.4	3.2	0.98	0.66	0.98	8.7
Approach		625	12.3	625	12.3	0.395	7.2	LOS A	4.6	33.9	0.22	0.25	0.22	28.3
SouthWest: Stte Access (UWS Car Park)														
30	L2	23	0.0	23	0.0	0.058	42.5	LOS D	1.4	9.6	0.78	0.66	0.78	6.9
31	T1	5	0.0	5	0.0	0.058	39.1	LOS C	1.4	9.6	0.78	0.66	0.78	22.5
32	R2	47	0.0	47	0.0	0.128	44.5	LOS D	2.4	16.7	0.80	0.71	0.80	6.7
Approach		76	0.0	76	0.0	0.128	43.5	LOS D	2.4	16.7	0.79	0.69	0.79	8.7
All Vehicles		1453	10.6	1453	10.6	0.396	20.9	LOS B	9.0	67.6	0.49	0.45	0.49	19.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	39	0.0	39	0.0	0.742	62.5	LOS E	14.8	105.6	1.00	0.88	1.07	19.4
2	T1	413	2.3	413	2.3	0.742	58.2	LOS E	14.8	105.6	1.00	0.89	1.07	19.4
Approach		452	2.1	452	2.1	0.742	58.5	LOS E	14.8	105.6	1.00	0.89	1.07	19.4
East: Alexandra Ave - E														
4	L2	28	0.0	28	0.0	0.699	54.5	LOS D	17.5	128.6	0.98	0.84	0.98	29.4
5	T1	212	0.5	212	0.5	0.699	49.9	LOS D	17.5	128.6	0.98	0.84	0.98	21.2
6	R2	279	29.1	279	29.1	0.699	56.0	LOS D	17.5	128.6	0.97	0.85	1.00	20.4
Approach		519	15.8	519	15.8	0.699	53.5	LOS D	17.5	128.6	0.98	0.85	0.99	21.4
North: Hawkesbury Rd - N														
7	L2	269	26.6	269	26.6	0.647	19.7	LOS B	13.2	97.9	0.50	0.60	0.50	35.0
8	T1	699	1.5	699	1.5	0.647	20.0	LOS B	13.2	97.9	0.63	0.72	0.79	33.1
9	R2	108	32.0	108	32.0	0.647	26.7	LOS B	13.0	97.9	0.68	0.82	1.00	9.6
Approach		1077	10.9	1077	10.9	0.647	20.6	LOS B	13.2	97.9	0.60	0.70	0.74	32.3
West: Alexandra Ave - W														
10	L2	69	0.0	69	0.0	0.086	25.2	LOS B	2.4	16.9	0.59	0.68	0.59	29.8
11	T1	158	0.7	158	0.7	0.587	57.8	LOS E	9.6	67.6	0.99	0.80	0.99	28.0
Approach		227	0.5	227	0.5	0.587	47.8	LOS D	9.6	67.6	0.87	0.76	0.87	28.3
All Vehicles		2275	9.2	2275	9.2	0.742	38.4	LOS C	17.5	128.6	0.79	0.78	0.88	25.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	495	15.7	495	15.7	0.537	10.2	LOS A	9.0	65.1	0.38	0.37	0.38	16.8
3	R2	187	0.0	187	0.0	0.537	25.4	LOS B	9.0	65.1	0.74	0.73	0.76	31.3
Approach		682	11.4	682	11.4	0.537	14.4	LOS A	9.0	65.1	0.48	0.47	0.48	25.7
East: Railway Pde														
4	L2	228	0.5	228	0.5	0.632	38.6	LOS C	11.7	82.5	0.85	0.82	0.85	24.5
6	R2	20	0.0	20	0.0	0.087	59.6	LOS E	1.1	8.0	0.92	0.70	0.92	19.2
Approach		248	0.4	248	0.4	0.632	40.3	LOS C	11.7	82.5	0.86	0.81	0.86	24.0
North: Hawkesbury Rd - N														
7	L2	62	0.0	62	0.0	0.136	24.1	LOS B	3.4	31.5	0.58	0.58	0.58	33.4
8	T1	752	10.9	752	10.9	0.775	33.1	LOS C	20.2	149.0	0.87	0.83	0.93	11.9
Approach		814	10.1	814	10.1	0.775	32.3	LOS C	20.2	149.0	0.85	0.81	0.90	14.3
All Vehicles		1744	9.2	1744	9.2	0.775	26.5	LOS B	20.2	149.0	0.70	0.68	0.73	19.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.169	3.4	LOS A	0.0	0.0	0.00	0.01	0.00	40.2
22	T1	661	11.5	661	11.5	0.169	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	39.9
Approach		666	11.4	666	11.4	0.169	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9
NorthWest: Darcy Rd - NW														
28	T1	618	11.6	618	11.6	0.156	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		618	11.6	618	11.6	0.156	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.36	0.45	0.36	36.2
Approach		1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.36	0.45	0.36	36.2
All Vehicles		1285	11.5	1285	11.5	0.169	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.112	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	663	11.6	663	11.6	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		664	11.6	664	11.6	0.112	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	644	11.1	644	11.1	0.162	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		644	11.1	644	11.1	0.162	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	26	0.0	26	0.0	0.024	4.2	LOS A	0.1	0.6	0.29	0.48	0.29	36.4
Approach		26	0.0	26	0.0	0.024	4.2	LOS A	0.1	0.6	0.29	0.48	0.29	36.4
All Vehicles		1335	11.1	1335	11.1	0.162	0.1	NA	0.1	0.6	0.01	0.01	0.01	39.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - Ex PM Final]

Network: N101 [Ex PM - Final]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	257	4.1	257	4.1	0.491	9.0	LOS A	2.5	18.1	0.59	0.86	0.82	32.0
Approach		257	4.1	257	4.1	0.491	9.0	LOS A	2.5	18.1	0.59	0.86	0.82	32.0
East: Darcy Road - E														
4	L2	60	8.8	60	8.8	0.034	3.4	LOS A	8.2	61.6	0.00	0.45	0.00	25.4
5	T1	956	2.1	956	2.1	0.248	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		1016	2.5	1016	2.5	0.248	0.2	NA	8.2	61.6	0.00	0.03	0.00	38.5
West: Darcy Road - W														
11	T1	489	3.4	489	3.4	0.129	0.0	LOS A	2.3	16.3	0.00	0.00	0.00	40.0
12	R2	101	4.2	101	4.2	0.303	9.6	LOS A	13.8	100.0	0.63	0.84	0.71	29.8
Approach		591	3.6	591	3.6	0.303	1.7	NA	13.8	100.0	0.11	0.14	0.12	37.8
All Vehicles		1863	3.1	1863	3.1	0.491	1.9	NA	13.8	100.0	0.12	0.18	0.15	36.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	403	2.9	403	2.9	0.468	4.8	LOS A	4.0	28.8	0.49	0.55	0.49	42.7
3	R2	141	0.7	141	0.7	0.468	7.6	LOS A	4.0	28.8	0.49	0.55	0.49	42.7
Approach		544	2.3	544	2.3	0.468	5.5	LOS A	4.0	28.8	0.49	0.55	0.49	42.7
East: Alexandra Rd														
4	L2	197	0.5	197	0.5	0.490	10.9	LOS A	3.6	25.5	0.68	0.83	0.74	42.4
6	R2	133	0.0	133	0.0	0.490	13.2	LOS A	3.6	25.5	0.68	0.83	0.74	37.9
Approach		329	0.3	329	0.3	0.490	11.8	LOS A	3.6	25.5	0.68	0.83	0.74	41.2
North: Bridge Rd - N														
7	L2	82	0.0	82	0.0	0.643	12.0	LOS A	5.7	41.0	0.50	0.63	0.50	41.6
8	T1	589	3.4	589	3.4	0.643	5.5	LOS A	5.7	41.0	0.50	0.63	0.50	45.3
Approach		672	3.0	672	3.0	0.643	6.3	LOS A	5.7	41.0	0.50	0.63	0.50	45.1
All Vehicles		1545	2.2	1545	2.2	0.643	7.2	LOS A	5.7	41.0	0.53	0.64	0.55	43.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 88 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	233	1.4	233	1.4	0.525	19.9	LOS B	5.6	39.6	0.89	0.79	0.89	38.7
2	T1	28	0.0	28	0.0	0.525	18.3	LOS B	5.6	39.6	0.90	0.79	0.90	37.7
3	R2	85	9.9	85	9.9	0.525	46.9	LOS D	3.8	28.9	0.99	0.78	0.99	20.7
Approach		346	3.3	346	3.3	0.525	26.4	LOS B	5.6	39.6	0.91	0.79	0.91	34.5
East: Darcy Rd - E														
4	L2	236	5.8	236	5.8	0.935	41.8	LOS C	24.0	172.6	1.00	1.14	1.40	18.5
5	T1	1045	1.7	1045	1.7	0.935	36.6	LOS C	24.5	174.0	1.00	1.14	1.39	30.6
6	R2	23	0.0	23	0.0	0.044	14.3	LOS A	0.4	2.5	0.66	0.66	0.66	39.8
Approach		1304	2.4	1304	2.4	0.935	37.2	LOS C	24.5	174.0	0.99	1.13	1.38	29.2
North: Coles Car Park Access														
7	L2	24	4.3	24	4.3	0.036	23.1	LOS B	0.7	4.7	0.66	0.66	0.66	30.8
8	T1	36	0.0	36	0.0	0.514	43.1	LOS D	3.5	25.0	0.99	0.77	0.99	22.5
9	R2	45	2.3	45	2.3	0.514	47.7	LOS D	3.5	25.0	0.99	0.77	0.99	30.7
Approach		105	2.0	105	2.0	0.514	40.5	LOS C	3.5	25.0	0.91	0.75	0.91	28.3
West: Darcy Rd - W														
10	L2	60	0.0	60	0.0	0.390	20.4	LOS B	9.8	69.1	0.69	0.62	0.69	40.4
11	T1	542	1.7	542	1.7	0.390	15.3	LOS B	9.8	69.1	0.66	0.58	0.66	35.1
12	R2	267	3.1	267	3.1	0.792	28.2	LOS B	8.2	58.7	0.93	0.88	1.12	28.4
Approach		869	2.1	869	2.1	0.792	19.6	LOS B	9.8	69.1	0.75	0.68	0.81	33.4
All Vehicles		2625	2.4	2625	2.4	0.935	30.1	LOS C	24.5	174.0	0.90	0.92	1.11	31.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	16.6	LOS B	0.1	0.1	0.87	0.87
P2	East Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P3	North Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P4	West Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
All Pedestrians		211	32.9	LOS D			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.291	15.6	LOS B	8.3	61.2	0.42	0.37	0.42	32.9
22	T1	696	10.7	696	10.7	0.291	11.0	LOS A	8.3	61.2	0.38	0.33	0.38	19.6
23	R2	31	0.0	31	0.0	0.277	69.8	LOS E	2.0	13.8	0.97	0.71	0.97	17.8
Approach		727	10.3	727	10.3	0.291	13.4	LOS A	8.3	61.2	0.40	0.35	0.40	19.0
NorthEast: Site Access (Westmead Hospital)														
24	L2	36	0.0	36	0.0	0.039	4.5	LOS A	0.3	1.9	0.17	0.51	0.17	36.4
26	R2	22	0.0	22	0.0	0.071	50.5	LOS D	1.2	8.3	0.84	0.68	0.84	19.2
Approach		58	0.0	58	0.0	0.071	22.1	LOS B	1.2	8.3	0.43	0.58	0.43	27.1
NorthWest: Darcy Rd - NW														
27	L2	60	0.0	60	0.0	0.289	16.0	LOS B	8.1	59.0	0.42	0.42	0.42	32.4
28	T1	624	11.5	624	11.5	0.289	11.8	LOS A	8.1	59.0	0.41	0.37	0.41	18.4
29	R2	2	50.0	2	50.0	0.026	70.7	LOS F	0.1	1.4	0.97	0.62	0.97	17.6
Approach		686	10.6	686	10.6	0.289	12.3	LOS A	8.1	59.0	0.41	0.38	0.41	21.5
SouthWest: Stte Access (Parramatta Marist)														
30	L2	4	75.0	4	75.0	0.030	50.8	LOS D	0.4	4.1	0.83	0.64	0.83	19.5
31	T1	1	0.0	1	0.0	0.030	46.9	LOS D	0.4	4.1	0.83	0.64	0.83	26.1
32	R2	2	50.0	2	50.0	0.030	50.5	LOS D	0.4	4.1	0.83	0.64	0.83	19.5
Approach		7	57.1	7	57.1	0.030	50.1	LOS D	0.4	4.1	0.83	0.64	0.83	20.8
All Vehicles		1479	10.2	1479	10.2	0.291	13.4	LOS A	8.3	61.2	0.41	0.37	0.41	20.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	301	2.1	301	2.1	0.824	44.7	LOS D	18.2	129.6	0.82	0.83	0.97	22.9
26	R2	398	4.2	398	4.2	0.864	40.5	LOS C	18.1	130.2	0.98	0.93	1.14	24.1
Approach		699	3.3	699	3.3	0.864	42.3	LOS C	18.2	130.2	0.91	0.89	1.07	23.6
NorthWest: Darcy Rd														
27	L2	167	6.3	167	6.3	0.799	14.6	LOS B	3.5	25.2	0.52	0.65	0.54	39.8
29	R2	513	12.9	513	12.9	0.881	74.8	LOS F	19.8	146.9	0.99	1.02	1.29	4.7
Approach		680	11.3	680	11.3	0.881	60.0	LOS E	19.8	146.9	0.87	0.93	1.10	10.8
SouthWest: Hawkesbury Rd - SW														
30	L2	348	20.5	348	20.5	0.342	14.8	LOS B	6.7	51.4	0.60	0.72	0.60	21.1
31	T1	273	3.1	273	3.1	0.689	55.6	LOS D	17.3	124.6	0.98	0.83	0.98	23.0
Approach		621	12.9	621	12.9	0.689	32.7	LOS C	17.3	124.6	0.77	0.77	0.77	22.5
All Vehicles		2000	9.0	2000	9.0	0.881	45.3	LOS D	19.8	146.9	0.85	0.87	0.98	18.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	64.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	559	3.0	559	3.0	0.411	36.8	LOS C	14.2	102.2	0.82	0.77	0.82	11.8
23a	R1	126	53.3	126	53.3	0.592	70.3	LOS E	6.9	60.1	0.99	0.78	0.99	18.3
23b	R3	16	0.0	16	0.0	0.592	75.2	LOS F	6.9	60.1	1.00	0.80	1.00	17.9
Approach		701	12.0	701	12.0	0.592	43.7	LOS D	14.2	102.2	0.85	0.77	0.85	14.3
East: Institute Road														
4b	L3	94	0.0	94	0.0	0.583	57.6	LOS E	7.9	55.3	0.97	0.93	1.35	15.5
5	T1	222	0.5	222	0.5	0.583	57.7	LOS E	10.0	70.4	0.98	0.84	1.10	15.0
6	R2	7	0.0	7	0.0	0.583	63.0	LOS E	10.0	70.4	0.99	0.80	0.99	22.6
Approach		323	0.3	323	0.3	0.583	57.8	LOS E	10.0	70.4	0.98	0.87	1.17	15.4
North: Mons Road														
7	L2	3	0.0	3	0.0	0.249	24.5	LOS B	4.5	36.9	0.78	0.69	0.78	31.0
7a	L1	152	31.9	152	31.9	0.249	22.8	LOS B	4.5	36.9	0.77	0.67	0.77	26.4
9	R2	231	3.7	231	3.7	0.593	55.1	LOS D	13.8	99.5	0.95	0.82	0.95	17.8
Approach		385	14.8	385	14.8	0.593	42.1	LOS C	13.8	99.5	0.88	0.76	0.88	20.5
West: Darcy Road - W														
10	L2	67	1.6	67	1.6	0.053	5.1	LOS A	0.6	4.3	0.24	0.50	0.24	37.2
11	T1	39	0.0	39	0.0	0.606	52.0	LOS D	11.4	81.6	0.95	0.80	0.95	17.1
12a	R1	414	3.6	414	3.6	0.606	54.1	LOS D	11.4	81.6	0.96	0.81	0.96	4.3
Approach		520	3.0	520	3.0	0.606	47.6	LOS D	11.4	81.6	0.86	0.77	0.86	9.3
All Vehicles		1929	8.2	1929	8.2	0.606	46.8	LOS D	14.2	102.2	0.88	0.78	0.91	14.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	28.3	LOS C	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	50.6	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.233	20.6	LOS B	7.9	59.1	0.56	0.48	0.56	19.8
22	T1	495	15.1	495	15.1	0.233	17.0	LOS B	7.9	59.3	0.56	0.47	0.56	14.1
23	R2	60	0.0	60	0.0	0.436	70.6	LOS F	4.0	27.7	1.00	0.76	1.00	17.6
Approach		560	13.3	560	13.3	0.436	22.8	LOS B	7.9	59.3	0.60	0.50	0.60	15.4
NorthEast: Site Access (Westmead Hospital)														
24	L2	51	0.0	51	0.0	0.208	47.4	LOS D	2.7	19.1	0.83	0.72	0.83	19.8
25	T1	1	0.0	1	0.0	0.208	44.0	LOS D	2.7	19.1	0.83	0.72	0.83	21.3
26	R2	124	1.7	124	1.7	0.467	49.0	LOS D	6.8	48.4	0.87	0.76	0.87	19.5
Approach		176	1.2	176	1.2	0.467	48.5	LOS D	6.8	48.4	0.86	0.75	0.86	19.6
NorthWest: Darcy Rd - NW														
27	L2	97	1.1	97	1.1	0.460	7.9	LOS A	4.4	32.5	0.19	0.26	0.19	36.6
28	T1	566	13.2	566	13.2	0.460	4.3	LOS A	4.4	32.5	0.18	0.20	0.18	27.4
29	R2	6	16.7	6	16.7	0.051	70.5	LOS E	0.4	3.3	0.99	0.66	0.99	8.1
Approach		669	11.5	669	11.5	0.460	5.4	LOS A	4.4	32.5	0.19	0.22	0.19	30.3
SouthWest: Stte Access (UWS Car Park)														
30	L2	23	0.0	23	0.0	0.065	45.9	LOS D	1.4	10.1	0.81	0.67	0.81	6.5
31	T1	5	0.0	5	0.0	0.065	42.5	LOS D	1.4	10.1	0.81	0.67	0.81	21.7
32	R2	47	0.0	47	0.0	0.149	49.0	LOS D	2.5	17.7	0.84	0.72	0.84	6.2
Approach		76	0.0	76	0.0	0.149	47.6	LOS D	2.5	17.7	0.83	0.70	0.83	8.1
All Vehicles		1481	10.4	1481	10.4	0.467	19.3	LOS B	7.9	59.3	0.46	0.41	0.46	19.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	39	0.0	39	0.0	0.817	65.4	LOS E	17.4	123.7	1.00	0.96	1.15	18.8
2	T1	468	2.0	468	2.0	0.817	61.2	LOS E	17.4	123.7	1.00	0.96	1.16	18.8
Approach		507	1.9	507	1.9	0.817	61.5	LOS E	17.4	123.7	1.00	0.96	1.16	18.8
East: Alexandra Ave - E														
4	L2	28	0.0	28	0.0	0.851	66.2	LOS E	21.4	158.4	1.00	0.98	1.18	26.8
5	T1	212	0.5	212	0.5	0.851	61.6	LOS E	21.4	158.4	1.00	0.98	1.18	18.7
6	R2	308	26.3	308	26.3	0.851	68.9	LOS E	21.4	158.4	1.00	0.97	1.23	17.9
Approach		548	15.0	548	15.0	0.851	65.9	LOS E	21.4	158.4	1.00	0.98	1.21	18.8
North: Hawkesbury Rd - N														
7	L2	269	26.6	269	26.6	0.704	19.8	LOS B	13.3	97.9	0.53	0.62	0.53	35.1
8	T1	842	1.3	842	1.3	0.704	22.4	LOS B	13.3	97.9	0.67	0.75	0.84	31.9
9	R2	108	32.0	108	32.0	0.704	31.7	LOS C	13.1	97.9	0.74	0.88	1.09	8.2
Approach		1220	9.6	1220	9.6	0.704	22.7	LOS B	13.3	97.9	0.65	0.73	0.80	31.4
West: Alexandra Ave - W														
10	L2	69	0.0	69	0.0	0.091	24.8	LOS B	2.4	16.8	0.58	0.68	0.58	30.0
11	T1	158	0.7	158	0.7	0.587	57.8	LOS E	9.6	67.6	0.99	0.80	0.99	28.0
Approach		227	0.5	227	0.5	0.587	47.7	LOS D	9.6	67.6	0.86	0.76	0.86	28.3
All Vehicles		2503	8.4	2503	8.4	0.851	42.3	LOS C	21.4	158.4	0.82	0.84	0.97	24.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	527	14.8	527	14.8	0.587	11.1	LOS A	9.6	75.5	0.41	0.40	0.42	16.0
3	R2	187	0.0	187	0.0	0.587	27.5	LOS B	9.5	69.1	0.78	0.75	0.81	30.4
Approach		715	10.9	715	10.9	0.587	15.4	LOS B	9.6	75.5	0.51	0.49	0.52	24.5
East: Railway Pde														
4	L2	297	0.4	297	0.4	0.871	63.1	LOS E	21.4	150.5	0.98	1.00	1.24	18.5
6	R2	26	0.0	26	0.0	0.116	59.9	LOS E	1.5	10.5	0.92	0.71	0.92	19.1
Approach		323	0.3	323	0.3	0.871	62.8	LOS E	21.4	150.5	0.98	0.98	1.22	18.6
North: Hawkesbury Rd - N														
7	L2	62	0.0	62	0.0	0.129	22.4	LOS B	3.3	30.0	0.56	0.56	0.56	34.2
8	T1	868	9.5	868	9.5	0.857	42.9	LOS D	27.8	203.3	0.92	0.97	1.08	9.8
Approach		931	8.8	931	8.8	0.857	41.5	LOS C	27.8	203.3	0.90	0.94	1.05	11.7
All Vehicles		1968	8.2	1968	8.2	0.871	35.5	LOS C	27.8	203.3	0.77	0.78	0.88	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.192	3.4	LOS A	0.0	0.0	0.00	0.01	0.00	40.2
22	T1	751	10.1	751	10.1	0.192	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	39.9
Approach		756	10.0	756	10.0	0.192	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9
NorthWest: Darcy Rd - NW														
28	T1	671	10.7	671	10.7	0.169	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		671	10.7	671	10.7	0.169	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.8	LOS A	0.0	0.0	0.39	0.46	0.39	36.1
Approach		1	0.0	1	0.0	0.001	4.8	LOS A	0.0	0.0	0.39	0.46	0.39	36.1
All Vehicles		1427	10.3	1427	10.3	0.192	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.119	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	703	10.9	703	10.9	0.119	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		704	10.9	704	10.9	0.119	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	693	10.3	693	10.3	0.175	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		693	10.3	693	10.3	0.175	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	26	0.0	26	0.0	0.024	4.3	LOS A	0.1	0.6	0.30	0.48	0.30	36.4
Approach		26	0.0	26	0.0	0.024	4.3	LOS A	0.1	0.6	0.30	0.48	0.30	36.4
All Vehicles		1423	10.4	1423	10.4	0.175	0.1	NA	0.1	0.6	0.01	0.01	0.01	39.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2023 Fu Base PM Final - Cycle Time]

Network: N101 [2023 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	257	4.1	257	4.1	0.517	9.8	LOS A	2.6	19.1	0.61	0.92	0.90	31.4
Approach		257	4.1	257	4.1	0.517	9.8	LOS A	2.6	19.1	0.61	0.92	0.90	31.4
East: Darcy Road - E														
4	L2	60	8.8	60	8.8	0.034	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	1027	1.9	1027	1.9	0.267	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		1087	2.3	1087	2.3	0.267	0.2	NA	0.0	0.0	0.00	0.02	0.00	38.6
West: Darcy Road - W														
11	T1	519	3.2	519	3.2	0.137	0.0	LOS A	2.8	20.2	0.00	0.00	0.00	40.0
12	R2	101	4.2	101	4.2	0.335	10.9	LOS A	0.7	5.4	0.67	0.87	0.78	28.9
Approach		620	3.4	620	3.4	0.335	1.8	NA	2.8	20.2	0.11	0.14	0.13	37.6
All Vehicles		1964	2.9	1964	2.9	0.517	1.9	NA	2.8	20.2	0.11	0.18	0.16	35.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	403	2.9	403	2.9	0.467	4.8	LOS A	4.0	28.8	0.49	0.55	0.49	42.7
3	R2	141	0.7	141	0.7	0.467	7.6	LOS A	4.0	28.8	0.49	0.55	0.49	42.7
Approach		544	2.3	544	2.3	0.467	5.5	LOS A	4.0	28.8	0.49	0.55	0.49	42.7
East: Alexandra Rd														
4	L2	197	0.5	197	0.5	0.489	10.8	LOS A	3.6	25.5	0.68	0.82	0.74	42.4
6	R2	133	0.0	133	0.0	0.489	13.2	LOS A	3.6	25.5	0.68	0.82	0.74	37.9
Approach		329	0.3	329	0.3	0.489	11.8	LOS A	3.6	25.5	0.68	0.82	0.74	41.2
North: Bridge Rd - N														
7	L2	82	0.0	82	0.0	0.643	12.0	LOS A	5.7	41.0	0.50	0.63	0.50	41.6
8	T1	589	3.4	589	3.4	0.643	5.5	LOS A	5.7	41.0	0.50	0.63	0.50	45.3
Approach		672	3.0	672	3.0	0.643	6.3	LOS A	5.7	41.0	0.50	0.63	0.50	45.1
All Vehicles		1545	2.2	1545	2.2	0.643	7.2	LOS A	5.7	41.0	0.53	0.64	0.54	43.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 88 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	233	1.4	233	1.4	0.520	19.6	LOS B	5.2	36.6	0.89	0.79	0.89	38.8
2	T1	28	0.0	28	0.0	0.520	15.0	LOS B	5.2	36.6	0.89	0.79	0.89	39.1
3	R2	85	9.9	85	9.9	0.580	47.3	LOS D	3.8	28.6	0.99	0.81	1.04	20.5
Approach		346	3.3	346	3.3	0.580	26.0	LOS B	5.2	36.6	0.91	0.80	0.93	34.7
East: Darcy Rd - E														
4	L2	245	5.6	245	5.6	0.979	61.3	LOS E	29.8	214.7	1.00	1.30	1.65	14.0
5	T1	1056	1.7	1056	1.7	0.979	55.4	LOS D	30.1	213.5	1.00	1.29	1.63	25.6
6	R2	23	0.0	23	0.0	0.041	14.7	LOS B	0.4	2.5	0.67	0.66	0.67	39.6
Approach		1324	2.4	1324	2.4	0.979	55.8	LOS D	30.1	214.7	0.99	1.28	1.62	24.1
North: Coles Car Park Access														
7	L2	24	4.3	24	4.3	0.043	20.7	LOS B	0.6	4.4	0.61	0.66	0.61	32.1
8	T1	36	0.0	36	0.0	0.445	40.7	LOS C	3.4	24.2	0.97	0.76	0.97	23.2
9	R2	45	2.3	45	2.3	0.445	45.3	LOS D	3.4	24.2	0.97	0.76	0.97	31.3
Approach		105	2.0	105	2.0	0.445	38.1	LOS C	3.4	24.2	0.89	0.74	0.89	29.0
West: Darcy Rd - W														
10	L2	60	0.0	60	0.0	0.516	24.2	LOS B	13.4	94.9	0.78	0.70	0.78	38.8
11	T1	542	1.7	542	1.7	0.516	19.3	LOS B	13.4	94.9	0.76	0.67	0.76	32.7
12	R2	267	3.1	267	3.1	0.815	31.3	LOS C	9.1	65.4	0.93	0.91	1.17	27.1
Approach		869	2.1	869	2.1	0.815	23.3	LOS B	13.4	94.9	0.81	0.74	0.89	31.5
All Vehicles		2645	2.4	2645	2.4	0.979	40.5	LOS C	30.1	214.7	0.92	1.02	1.26	27.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	16.4	LOS B	0.1	0.1	0.87	0.87
P2	East Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P3	North Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P4	West Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
All Pedestrians		211	32.8	LOS D			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.327	21.2	LOS B	9.7	71.3	0.50	0.44	0.50	30.4
22	T1	668	11.2	668	11.2	0.327	16.5	LOS B	9.7	71.3	0.47	0.41	0.47	15.4
23	R2	31	0.0	31	0.0	0.317	73.6	LOS F	2.0	14.2	0.98	0.72	0.98	17.3
Approach		700	10.7	700	10.7	0.327	19.0	LOS B	9.7	71.3	0.49	0.42	0.49	15.7
NorthEast: Site Access (Westmead Hospital)														
24	L2	36	0.0	36	0.0	0.035	4.5	LOS A	0.3	2.0	0.17	0.51	0.17	36.4
26	R2	22	0.0	22	0.0	0.062	44.4	LOS D	1.1	7.7	0.79	0.67	0.79	20.5
Approach		58	0.0	58	0.0	0.062	19.7	LOS B	1.1	7.7	0.41	0.57	0.41	28.1
NorthWest: Darcy Rd - NW														
27	L2	60	0.0	60	0.0	0.339	18.8	LOS B	8.5	61.8	0.44	0.43	0.44	31.1
28	T1	624	11.5	624	11.5	0.339	14.5	LOS A	8.5	61.8	0.42	0.39	0.42	16.4
29	R2	2	50.0	2	50.0	0.030	74.5	LOS F	0.1	1.4	1.00	0.62	1.00	17.1
Approach		686	10.6	686	10.6	0.339	15.0	LOS B	8.5	61.8	0.43	0.39	0.43	19.5
SouthWest: Stte Access (Parramatta Marist)														
30	L2	106	3.0	106	3.0	0.341	43.4	LOS D	8.3	59.4	0.83	0.76	0.83	20.7
31	T1	1	0.0	1	0.0	0.341	40.0	LOS C	8.3	59.4	0.83	0.76	0.83	27.1
32	R2	54	2.0	54	2.0	0.341	43.3	LOS D	8.3	59.4	0.83	0.76	0.83	20.7
Approach		161	2.6	161	2.6	0.341	43.4	LOS D	8.3	59.4	0.83	0.76	0.83	20.8
All Vehicles		1605	9.4	1605	9.4	0.341	19.8	LOS B	9.7	71.3	0.50	0.45	0.50	19.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	301	2.1	301	2.1	0.862	51.9	LOS D	19.8	140.7	0.83	0.90	1.06	21.1
26	R2	433	3.9	433	3.9	0.936	56.0	LOS D	23.9	171.9	1.00	1.02	1.31	20.1
Approach		734	3.2	734	3.2	0.936	54.3	LOS D	23.9	171.9	0.93	0.97	1.21	20.5
NorthWest: Darcy Rd														
27	L2	194	5.4	194	5.4	0.955	14.8	LOS B	4.1	29.6	0.52	0.66	0.54	39.8
29	R2	538	12.3	538	12.3	0.955	97.0	LOS F	19.8	146.9	0.99	1.16	1.51	3.7
Approach		732	10.5	732	10.5	0.955	75.2	LOS F	19.8	146.9	0.87	1.02	1.25	9.3
SouthWest: Hawkesbury Rd - SW														
30	L2	383	18.7	383	18.7	0.377	15.0	LOS B	7.6	57.9	0.61	0.73	0.61	20.9
31	T1	273	3.1	273	3.1	0.689	55.6	LOS D	17.3	124.6	0.98	0.83	0.98	23.0
Approach		656	12.2	656	12.2	0.689	31.9	LOS C	17.3	124.6	0.77	0.77	0.77	22.4
All Vehicles		2121	8.5	2121	8.5	0.955	54.6	LOS D	23.9	171.9	0.86	0.93	1.09	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	64.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	635	2.7	635	2.7	0.691	45.2	LOS D	24.0	171.6	0.92	0.84	0.93	10.2
23a	R1	126	53.3	126	53.3	0.635	60.9	LOS E	6.5	56.4	0.95	0.77	0.96	19.8
23b	R3	16	0.0	16	0.0	0.635	64.8	LOS E	6.5	56.4	0.96	0.79	0.98	19.7
Approach		777	10.8	777	10.8	0.691	48.1	LOS D	24.0	171.6	0.92	0.83	0.94	13.1
East: Institute Road														
4b	L3	94	0.0	94	0.0	0.661	58.8	LOS E	7.1	49.5	0.98	0.96	1.40	15.2
5	T1	222	0.5	222	0.5	0.661	59.3	LOS E	11.5	81.1	1.00	0.86	1.10	14.8
6	R2	7	0.0	7	0.0	0.661	64.0	LOS E	11.5	81.1	1.00	0.83	1.01	22.5
Approach		323	0.3	323	0.3	0.661	59.3	LOS E	11.5	81.1	0.99	0.89	1.18	15.1
North: Mons Road														
7	L2	3	0.0	3	0.0	0.223	22.0	LOS B	4.2	34.3	0.74	0.66	0.74	31.8
7a	L1	152	31.9	152	31.9	0.223	20.3	LOS B	4.2	34.3	0.73	0.65	0.73	27.4
9	R2	231	3.7	231	3.7	0.716	54.1	LOS D	14.4	103.6	0.96	0.87	1.01	17.9
Approach		385	14.8	385	14.8	0.716	40.5	LOS C	14.4	103.6	0.87	0.78	0.90	20.9
West: Darcy Road - W														
10	L2	67	1.6	67	1.6	0.053	4.9	LOS A	0.6	4.0	0.24	0.50	0.24	37.3
11	T1	39	0.0	39	0.0	0.710	57.3	LOS E	11.4	81.6	0.98	0.85	1.03	16.1
12a	R1	414	3.6	414	3.6	0.710	59.3	LOS E	11.4	81.6	0.99	0.86	1.03	3.9
Approach		520	3.0	520	3.0	0.710	52.1	LOS D	11.4	81.6	0.89	0.81	0.93	8.7
All Vehicles		2005	7.9	2005	7.9	0.716	49.5	LOS D	24.0	171.6	0.92	0.82	0.97	14.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	28.1	LOS C	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	50.5	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.255	19.3	LOS B	8.8	65.3	0.55	0.47	0.55	20.6
22	T1	563	13.3	563	13.3	0.255	15.7	LOS B	8.8	65.4	0.54	0.47	0.54	14.8
23	R2	60	0.0	60	0.0	0.485	72.1	LOS F	4.0	28.1	1.00	0.76	1.00	17.4
Approach		628	11.9	628	11.9	0.485	21.1	LOS B	8.8	65.4	0.58	0.49	0.58	15.8
NorthEast: Site Access (Westmead Hospital)														
24	L2	51	0.0	51	0.0	0.244	49.6	LOS D	2.8	19.6	0.85	0.73	0.85	19.4
25	T1	1	0.0	1	0.0	0.244	46.2	LOS D	2.8	19.6	0.85	0.73	0.85	20.8
26	R2	124	1.7	124	1.7	0.506	50.9	LOS D	7.0	49.4	0.89	0.77	0.89	19.2
Approach		176	1.2	176	1.2	0.506	50.5	LOS D	7.0	49.4	0.88	0.76	0.88	19.2
NorthWest: Darcy Rd - NW														
27	L2	97	1.1	97	1.1	0.510	9.9	LOS A	7.0	51.5	0.28	0.33	0.28	35.5
28	T1	618	12.1	618	12.1	0.510	5.9	LOS A	7.0	51.5	0.26	0.27	0.26	24.9
29	R2	6	16.7	6	16.7	0.057	71.8	LOS F	0.4	3.3	1.00	0.66	1.00	8.0
Approach		721	10.7	721	10.7	0.510	7.0	LOS A	7.0	51.5	0.27	0.28	0.27	28.0
SouthWest: Stte Access (UWS Car Park)														
30	L2	23	0.0	23	0.0	0.070	47.7	LOS D	1.5	10.3	0.82	0.67	0.82	6.3
31	T1	5	0.0	5	0.0	0.070	44.3	LOS D	1.5	10.3	0.82	0.67	0.82	21.3
32	R2	47	0.0	47	0.0	0.161	51.7	LOS D	2.6	18.2	0.86	0.72	0.86	5.9
Approach		76	0.0	76	0.0	0.161	50.0	LOS D	2.6	18.2	0.85	0.70	0.85	7.8
All Vehicles		1601	9.6	1601	9.6	0.510	19.4	LOS B	8.8	65.4	0.49	0.44	0.49	19.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	39	0.0	39	0.0	0.861	70.1	LOS E	17.2	122.2	1.00	1.03	1.26	18.0
2	T1	474	2.0	474	2.0	0.861	65.0	LOS E	18.8	133.6	1.00	1.03	1.24	18.1
Approach		513	1.8	513	1.8	0.861	65.4	LOS E	18.8	133.6	1.00	1.03	1.25	18.1
East: Alexandra Ave - E														
4	L2	28	0.0	28	0.0	0.896	72.9	LOS F	23.1	170.5	1.00	1.05	1.28	25.6
5	T1	212	0.5	212	0.5	0.896	68.3	LOS E	23.1	170.5	1.00	1.05	1.28	17.5
6	R2	314	25.8	314	25.8	0.896	76.1	LOS F	23.1	170.5	1.00	1.03	1.33	16.7
Approach		554	14.8	554	14.8	0.896	73.0	LOS F	23.1	170.5	1.00	1.04	1.31	17.6
North: Hawkesbury Rd - N														
7	L2	274	26.2	274	26.2	0.750	20.7	LOS B	13.3	97.9	0.57	0.64	0.57	34.6
8	T1	846	1.2	846	1.2	0.750	25.3	LOS B	13.3	97.9	0.73	0.80	0.91	30.6
9	R2	113	30.8	113	30.8	0.750	37.5	LOS C	13.1	97.9	0.82	0.97	1.22	7.0
Approach		1233	9.5	1233	9.5	0.750	25.4	LOS B	13.3	97.9	0.70	0.78	0.86	30.0
West: Alexandra Ave - W														
10	L2	75	0.0	75	0.0	0.126	27.7	LOS B	2.8	19.5	0.63	0.70	0.63	28.7
11	T1	158	0.7	158	0.7	0.587	57.8	LOS E	9.6	67.6	0.99	0.80	0.99	28.0
Approach		233	0.5	233	0.5	0.587	48.1	LOS D	9.6	67.6	0.87	0.77	0.87	28.1
All Vehicles		2532	8.3	2532	8.3	0.896	46.0	LOS D	23.1	170.5	0.84	0.89	1.04	23.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Organisation: TTPP - THE TRANSPORT PLANNING PARTNERSHIP | Processed: Thursday, 5 March 2020 3:20:33 PM
Project: X:\18173 Westmead Catholic Community\07 Modelling Files\18173_200305_Existing and Future.sip8

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	544	14.3	544	14.3	0.567	10.4	LOS A	9.8	70.9	0.39	0.38	0.39	16.7
3	R2	187	0.0	187	0.0	0.567	29.5	LOS C	9.8	70.9	0.80	0.77	0.86	29.5
Approach		732	10.6	732	10.6	0.567	15.3	LOS B	9.8	71.0	0.49	0.48	0.51	24.4
East: Railway Pde														
4	L2	297	0.4	297	0.4	0.866	61.4	LOS E	21.1	148.1	0.97	0.99	1.22	18.8
6	R2	43	0.0	43	0.0	0.190	60.7	LOS E	2.5	17.5	0.93	0.73	0.93	19.0
Approach		340	0.3	340	0.3	0.866	61.3	LOS E	21.1	148.1	0.97	0.96	1.19	18.9
North: Hawkesbury Rd - N														
7	L2	75	0.0	75	0.0	0.146	23.7	LOS B	3.8	34.2	0.58	0.59	0.58	33.5
8	T1	881	9.3	881	9.3	0.882	49.5	LOS D	29.0	212.2	0.95	1.03	1.16	8.8
Approach		956	8.6	956	8.6	0.882	47.4	LOS D	29.0	212.2	0.92	1.00	1.11	10.8
All Vehicles		2027	7.9	2027	7.9	0.882	38.2	LOS C	29.0	212.2	0.77	0.80	0.91	15.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	101	0.0	101	0.0	0.211	3.4	LOS A	0.0	0.0	0.00	0.12	0.00	39.6
22	T1	723	10.5	723	10.5	0.211	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	38.6
Approach		824	9.2	824	9.2	0.211	0.4	NA	0.0	0.0	0.00	0.06	0.00	39.0
NorthWest: Darcy Rd - NW														
28	T1	722	9.9	722	9.9	0.182	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		722	9.9	722	9.9	0.182	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.5	LOS A	0.0	0.0	0.35	0.44	0.35	36.2
Approach		1	0.0	1	0.0	0.001	4.5	LOS A	0.0	0.0	0.35	0.44	0.35	36.2
All Vehicles		1547	9.5	1547	9.5	0.211	0.2	NA	0.0	0.0	0.00	0.03	0.00	39.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.134	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	779	9.9	779	9.9	0.134	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		780	9.9	780	9.9	0.134	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	693	10.3	693	10.3	0.175	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		693	10.3	693	10.3	0.175	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.3	LOS A	0.0	0.0	0.32	0.44	0.32	36.3
Approach		1	0.0	1	0.0	0.001	4.3	LOS A	0.0	0.0	0.32	0.44	0.32	36.3
All Vehicles		1474	10.1	1474	10.1	0.175	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2023 Fu Dev PM Final - Cycle Time]

Network: N101 [2023 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	201	5.2	201	5.2	0.424	9.2	LOS A	1.8	13.4	0.60	0.86	0.79	31.8
Approach		201	5.2	201	5.2	0.424	9.2	LOS A	1.8	13.4	0.60	0.86	0.79	31.8
East: Darcy Road - E														
4	L2	60	8.8	60	8.8	0.034	3.4	LOS A	16.5	124.3	0.00	0.45	0.00	25.4
5	T1	1103	1.8	1103	1.8	0.286	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		1163	2.2	1163	2.2	0.286	0.2	NA	16.5	124.3	0.00	0.02	0.00	38.7
West: Darcy Road - W														
11	T1	519	3.2	519	3.2	0.137	0.0	LOS A	3.4	24.3	0.00	0.00	0.00	40.0
12	R2	101	4.2	101	4.2	0.357	11.8	LOS A	94.1	682.5	0.70	0.89	0.83	28.2
Approach		620	3.4	620	3.4	0.357	1.9	NA	94.1	682.5	0.11	0.15	0.13	37.4
All Vehicles		1984	2.9	1984	2.9	0.424	1.6	NA	94.1	682.5	0.10	0.15	0.12	36.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	419	2.8	419	2.8	0.480	4.8	LOS A	4.2	30.3	0.50	0.55	0.50	42.7
3	R2	141	0.7	141	0.7	0.480	7.6	LOS A	4.2	30.3	0.50	0.55	0.50	42.7
Approach		560	2.3	560	2.3	0.480	5.5	LOS A	4.2	30.3	0.50	0.55	0.50	42.7
East: Alexandra Rd														
4	L2	197	0.5	194	0.5	0.556	13.7	LOS A	4.5	31.8	0.74	0.93	0.90	41.0
6	R2	133	0.0	130	0.0	0.556	16.1	LOS B	4.5	31.8	0.74	0.93	0.90	35.8
Approach		329	0.3	324 N1	0.3	0.556	14.7	LOS B	4.5	31.8	0.74	0.93	0.90	39.6
North: Bridge Rd - N														
7	L2	82	0.0	82	0.0	0.731	12.3	LOS A	7.8	55.8	0.60	0.63	0.60	41.2
8	T1	692	2.9	692	2.9	0.731	5.9	LOS A	7.8	55.8	0.60	0.63	0.60	45.2
Approach		774	2.6	774	2.6	0.731	6.6	LOS A	7.8	55.8	0.60	0.63	0.60	44.9
All Vehicles		1663	2.0	1658 N1	2.0	0.731	7.8	LOS A	7.8	55.8	0.59	0.66	0.62	43.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 88 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	269	1.2	269	1.2	0.583	20.0	LOS B	5.9	41.4	0.91	0.81	0.91	38.6
2	T1	28	0.0	28	0.0	0.583	23.1	LOS B	5.9	41.4	0.93	0.81	0.95	35.8
3	R2	85	9.9	85	9.9	0.583	48.6	LOS D	4.1	31.1	1.00	0.81	1.05	20.3
Approach		383	3.0	382[N1]	3.0	0.583	26.6	LOS B	5.9	41.4	0.93	0.81	0.94	34.6
East: Darcy Rd - E														
4	L2	236	5.8	236	5.8	0.974	59.2	LOS E	33.3	238.7	1.00	1.30	1.63	14.4
5	T1	1192	1.5	1192	1.5	0.974	53.6	LOS D	33.3	238.7	1.00	1.29	1.61	26.0
6	R2	23	0.0	23	0.0	0.037	13.7	LOS A	0.4	2.5	0.64	0.66	0.64	40.2
Approach		1451	2.2	1451	2.2	0.974	53.8	LOS D	33.3	238.7	0.99	1.28	1.60	24.8
North: Coles Car Park Access														
7	L2	24	4.3	24	4.3	0.031	19.9	LOS B	0.6	4.3	0.60	0.65	0.60	32.6
8	T1	36	0.0	36	0.0	0.547	43.5	LOS D	3.6	25.2	0.99	0.78	1.02	22.4
9	R2	45	2.3	45	2.3	0.547	48.1	LOS D	3.6	25.2	0.99	0.78	1.02	30.6
Approach		105	2.0	105	2.0	0.547	40.0	LOS C	3.6	25.2	0.90	0.75	0.92	28.4
West: Darcy Rd - W														
10	L2	60	0.0	60	0.0	0.499	24.7	LOS B	12.6	89.6	0.78	0.70	0.78	38.6
11	T1	594	1.6	594	1.6	0.499	19.3	LOS B	12.6	89.6	0.75	0.65	0.75	32.7
12	R2	267	3.1	267	3.1	0.814	31.8	LOS C	9.2	66.3	0.95	0.91	1.18	26.9
Approach		921	1.9	921	1.9	0.814	23.3	LOS B	12.6	89.6	0.81	0.73	0.88	31.4
All Vehicles		2860	2.2	2859[N1]	2.2	0.974	39.9	LOS C	33.3	238.7	0.92	1.02	1.25	27.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	16.5	LOS B	0.1	0.1	0.87	0.87
P2	East Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P3	North Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P4	West Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
All Pedestrians		211	32.8	LOS D			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.344	15.3	LOS B	10.4	75.8	0.43	0.38	0.43	33.1
22	T1	861	8.7	842	8.8	0.344	11.0	LOS A	10.4	75.8	0.40	0.35	0.40	19.4
23	R2	31	0.0	30	0.0	0.361	75.4	LOS F	2.0	14.1	0.99	0.72	0.99	17.1
Approach		893	8.4	873[N1]	8.5	0.361	13.2	LOS A	10.4	75.8	0.42	0.36	0.42	18.9
NorthEast: Site Access (Westmead Hospital)														
24	L2	36	0.0	36	0.0	0.041	4.5	LOS A	0.3	2.0	0.17	0.51	0.17	36.4
26	R2	22	0.0	22	0.0	0.071	50.5	LOS D	1.2	8.3	0.84	0.68	0.84	19.2
Approach		58	0.0	58	0.0	0.071	22.1	LOS B	1.2	8.3	0.43	0.58	0.43	27.1
NorthWest: Darcy Rd - NW														
27	L2	60	0.0	60	0.0	0.318	14.5	LOS B	8.6	62.7	0.40	0.39	0.40	33.2
28	T1	712	10.1	712	10.1	0.318	10.4	LOS A	8.6	62.7	0.38	0.35	0.38	19.6
29	R2	2	50.0	2	50.0	0.035	74.0	LOS F	0.1	1.4	0.99	0.62	0.99	17.2
Approach		774	9.4	774	9.4	0.318	10.9	LOS A	8.6	62.7	0.38	0.36	0.38	22.4
SouthWest: Stte Access (Parramatta Marist)														
30	L2	4	75.0	4	75.0	0.030	50.8	LOS D	0.4	4.1	0.83	0.64	0.83	19.5
31	T1	1	0.0	1	0.0	0.030	46.9	LOS D	0.4	4.1	0.83	0.64	0.83	26.1
32	R2	2	50.0	2	50.0	0.030	50.5	LOS D	0.4	4.1	0.83	0.64	0.83	19.5
Approach		7	57.1	7	57.1	0.030	50.1	LOS D	0.4	4.1	0.83	0.64	0.83	20.8
All Vehicles		1732	8.8	1712[N1]	8.9	0.361	12.6	LOS A	10.4	75.8	0.40	0.37	0.40	21.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	440	1.4	440	1.4	1.303	345.7	LOS F	72.2	511.7	1.00	2.19	2.76	4.8
26	R2	398	4.2	398	4.2	1.303	324.0	LOS F	66.7	480.0	1.00	1.80	2.72	4.9
Approach		838	2.8	838	2.8	1.303	335.4	LOS F	72.2	511.7	1.00	2.00	2.74	4.8
NorthWest: Darcy Rd														
27	L2	194	5.4	194	5.4	1.262	20.5	LOS B	6.3	82.0	0.52	0.67	0.57	39.6
29	R2	593	11.2	593	11.2	1.356	392.5	LOS F	19.9	146.9	1.00	2.05	2.96	1.0
Approach		786	9.8	786	9.8	1.356	300.9	LOS F	19.9	146.9	0.88	1.71	2.37	2.5
SouthWest: Hawkesbury Rd - SW														
30	L2	348	20.5	342	20.8	0.335	14.7	LOS B	6.5	50.2	0.59	0.72	0.59	21.1
31	T1	333	2.5	326	2.6	0.820	62.1	LOS E	22.6	162.0	1.00	0.94	1.11	21.6
Approach		681	11.7	668 N1	11.9	0.820	37.8	LOS C	22.6	162.0	0.79	0.83	0.85	21.5
All Vehicles		2305	7.8	2292 N1	7.9	1.356	236.8	LOS F	72.2	511.7	0.90	1.56	2.06	5.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	64.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	622	2.7	622	2.7	0.448	36.5	LOS C	15.3	109.6	0.80	0.77	0.80	11.9
23a	R1	126	53.3	126	53.3	0.635	68.1	LOS E	7.0	60.2	0.99	0.79	1.01	18.6
23b	R3	16	0.0	16	0.0	0.635	72.0	LOS F	7.0	60.2	1.00	0.81	1.03	18.4
Approach		764	11.0	764	11.0	0.635	42.5	LOS C	15.3	109.6	0.84	0.77	0.84	14.2
East: Institute Road														
4b	L3	94	0.0	94	0.0	0.584	58.0	LOS E	7.9	55.4	0.97	0.93	1.36	15.4
5	T1	222	0.5	222	0.5	0.584	57.8	LOS E	10.0	70.4	0.98	0.84	1.11	15.0
6	R2	7	0.0	7	0.0	0.584	63.0	LOS E	10.0	70.4	0.99	0.80	0.99	22.6
Approach		323	0.3	323	0.3	0.584	58.0	LOS E	10.0	70.4	0.98	0.87	1.18	15.4
North: Mons Road														
7	L2	3	0.0	3	0.0	0.255	25.1	LOS B	4.6	37.5	0.79	0.69	0.79	30.8
7a	L1	152	31.9	152	31.9	0.255	23.4	LOS B	4.6	37.5	0.78	0.68	0.78	26.2
9	R2	231	3.7	231	3.7	0.614	56.2	LOS D	13.9	100.5	0.96	0.82	0.96	17.6
Approach		385	14.8	385	14.8	0.614	43.0	LOS D	13.9	100.5	0.89	0.77	0.89	20.3
West: Darcy Road - W														
10	L2	67	1.6	67	1.6	0.053	5.1	LOS A	0.6	4.3	0.24	0.50	0.24	37.2
11	T1	39	0.0	39	0.0	0.627	50.6	LOS D	11.5	81.6	0.95	0.80	0.95	17.3
12a	R1	461	3.2	461	3.2	0.627	52.8	LOS D	11.5	81.6	0.95	0.81	0.95	4.4
Approach		567	2.8	567	2.8	0.627	47.0	LOS D	11.5	81.6	0.87	0.78	0.87	9.1
All Vehicles		2040	7.7	2040	7.7	0.635	46.3	LOS D	15.3	109.6	0.88	0.79	0.91	14.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	28.4	LOS C	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	50.6	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.243	16.7	LOS B	8.2	60.8	0.50	0.44	0.50	22.4
22	T1	613	12.2	574	12.8	0.243	13.2	LOS A	8.2	60.9	0.50	0.43	0.50	16.5
23	R2	60	0.0	56	0.0	0.579	75.4	LOS F	3.8	26.9	1.00	0.77	1.05	16.9
Approach		678	11.0	634 N1	11.6	0.579	18.7	LOS B	8.2	60.9	0.54	0.46	0.54	16.7
NorthEast: Site Access (Westmead Hospital)														
24	L2	51	0.0	51	0.0	0.328	53.5	LOS D	3.0	20.7	0.88	0.74	0.88	18.6
25	T1	1	0.0	1	0.0	0.328	50.0	LOS D	3.0	20.7	0.88	0.74	0.88	20.0
26	R2	124	1.7	124	1.7	0.589	53.9	LOS D	7.2	51.0	0.91	0.78	0.91	18.6
Approach		176	1.2	176	1.2	0.589	53.7	LOS D	7.2	51.0	0.90	0.77	0.90	18.6
NorthWest: Darcy Rd - NW														
27	L2	97	1.1	97	1.1	0.600	7.7	LOS A	5.2	38.2	0.23	0.30	0.23	36.7
28	T1	655	11.4	655	11.4	0.600	4.1	LOS A	5.2	38.2	0.21	0.23	0.21	27.7
29	R2	6	16.7	6	16.7	0.073	74.4	LOS F	0.4	3.4	1.00	0.66	1.00	7.8
Approach		758	10.1	758	10.1	0.600	5.2	LOS A	5.2	38.2	0.22	0.24	0.22	30.3
SouthWest: Stte Access (UWS Car Park)														
30	L2	23	0.0	23	0.0	0.078	50.4	LOS D	1.5	10.6	0.84	0.68	0.84	6.0
31	T1	5	0.0	5	0.0	0.078	47.0	LOS D	1.5	10.6	0.84	0.68	0.84	20.8
32	R2	47	0.0	47	0.0	0.187	55.7	LOS D	2.7	19.0	0.89	0.73	0.89	5.6
Approach		76	0.0	76	0.0	0.187	53.5	LOS D	2.7	19.0	0.88	0.71	0.88	7.3
All Vehicles		1687	9.1	1644 N1	9.3	0.600	17.8	LOS B	8.2	60.9	0.45	0.40	0.45	20.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	39	0.0	39	0.0	1.067	157.6	LOS F	29.7	210.6	1.00	1.51	1.97	9.6
2	T1	580	1.6	580	1.6	1.067	149.8	LOS F	39.3	278.7	1.00	1.54	1.92	9.7
Approach		619	1.5	619	1.5	1.067	150.3	LOS F	39.3	278.7	1.00	1.54	1.93	9.7
East: Alexandra Ave - E														
4	L2	28	0.0	28	0.0	0.846	62.2	LOS E	22.5	165.9	1.00	0.99	1.17	27.6
5	T1	212	0.5	212	0.5	0.846	57.7	LOS E	22.5	165.9	1.00	0.99	1.17	19.4
6	R2	366	22.1	366	22.1	0.846	64.1	LOS E	22.5	165.9	1.00	0.97	1.20	18.7
Approach		606	13.5	606	13.5	0.846	61.8	LOS E	22.5	165.9	1.00	0.98	1.19	19.5
North: Hawkesbury Rd - N														
7	L2	269	26.6	247	26.2	0.988	62.5	LOS E	13.4	97.9	0.88	1.07	1.17	22.0
8	T1	1128	0.9	1040	1.0	0.988	67.7	LOS E	13.4	97.9	0.99	1.24	1.52	18.9
9	R2	108	32.0	101	32.5	0.988	73.9	LOS F	13.2	97.9	1.00	1.37	1.81	3.6
Approach		1506	7.8	1388 N1	7.7	0.988	67.2	LOS E	13.4	97.9	0.97	1.22	1.48	18.3
West: Alexandra Ave - W														
10	L2	69	0.0	69	0.0	0.168	35.0	LOS C	3.0	21.0	0.72	0.72	0.72	25.7
11	T1	158	0.7	158	0.7	0.587	57.8	LOS E	9.6	67.6	0.99	0.80	0.99	28.0
Approach		227	0.5	227	0.5	0.587	50.8	LOS D	9.6	67.6	0.90	0.78	0.90	27.5
All Vehicles		2959	7.1	2841 N1	7.4	1.067	82.8	LOS F	39.3	278.7	0.98	1.20	1.47	16.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	592	13.2	585	13.3	0.518	13.1	LOS A	11.0	85.6	0.43	0.42	0.44	14.3
3	R2	187	0.0	185	0.0	0.518	35.0	LOS C	10.2	73.8	0.81	0.79	0.92	27.4
Approach		779	10.0	770 N1	10.1	0.518	18.3	LOS B	11.0	85.6	0.52	0.51	0.56	21.7
East: Railway Pde														
4	L2	434	0.2	434	0.2	1.100	179.0	LOS F	55.6	389.9	1.00	1.40	2.04	8.4
6	R2	38	0.0	38	0.0	0.193	61.1	LOS E	2.2	15.5	0.93	0.73	0.93	18.9
Approach		472	0.2	472	0.2	1.100	169.6	LOS F	55.6	389.9	0.99	1.34	1.95	8.8
North: Hawkesbury Rd - N														
7	L2	62	0.0	55	0.0	0.127	27.0	LOS B	3.1	28.8	0.62	0.60	0.62	32.0
8	T1	1101	7.5	970	7.2	1.096	165.5	LOS F	29.3	212.2	0.99	1.68	1.97	3.2
Approach		1163	7.1	1024 N1	6.9	1.096	158.1	LOS F	29.3	212.2	0.97	1.62	1.89	3.5
All Vehicles		2414	6.7	2266 N1	7.1	1.100	113.0	LOS F	55.6	389.9	0.82	1.18	1.45	6.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.229	3.4	LOS A	0.0	0.0	0.00	0.01	0.00	40.2
22	T1	928	8.2	897	8.3	0.229	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	39.9
Approach		934	8.1	902 N1	8.2	0.229	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9
NorthWest: Darcy Rd - NW														
28	T1	776	9.2	776	9.2	0.196	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		776	9.2	776	9.2	0.196	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	5.2	LOS A	0.0	0.0	0.43	0.48	0.43	35.9
Approach		1	0.0	1	0.0	0.001	5.2	LOS A	0.0	0.0	0.43	0.48	0.43	35.9
All Vehicles		1711	8.6	1679 N1	8.8	0.229	0.0	NA	0.0	0.0	0.00	0.00	0.00	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.132	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	782	9.8	777	9.9	0.132	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		783	9.8	778 N1	9.9	0.132	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	789	9.1	789	9.1	0.200	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		789	9.1	789	9.1	0.200	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	26	0.0	26	0.0	0.025	4.4	LOS A	0.1	0.7	0.32	0.49	0.32	36.3
Approach		26	0.0	26	0.0	0.025	4.4	LOS A	0.1	0.7	0.32	0.49	0.32	36.3
All Vehicles		1599	9.3	1593 N1	9.3	0.200	0.1	NA	0.1	0.7	0.01	0.01	0.01	39.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2033 Fu Base PM Final - Cycle Time]

Network: N101 [2033 Fu Base PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	257	4.1	257	4.1	0.570	11.7	LOS A	3.0	21.5	0.65	1.02	1.07	30.1
Approach		257	4.1	257	4.1	0.570	11.7	LOS A	3.0	21.5	0.65	1.02	1.07	30.1
East: Darcy Road - E														
4	L2	60	8.8	60	8.8	0.034	3.4	LOS A	0.0	0.0	0.00	0.45	0.00	25.4
5	T1	1171	1.7	1171	1.7	0.303	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		1231	2.1	1231	2.1	0.303	0.2	NA	0.0	0.0	0.00	0.02	0.00	38.8
West: Darcy Road - W														
11	T1	578	2.9	578	2.9	0.152	0.0	LOS A	4.2	30.5	0.00	0.00	0.00	40.0
12	R2	101	4.2	101	4.2	0.403	13.6	LOS A	0.9	6.4	0.74	0.93	0.91	27.0
Approach		679	3.1	679	3.1	0.403	2.0	NA	4.2	30.5	0.11	0.14	0.14	37.3
All Vehicles		2166	2.6	2166	2.6	0.570	2.1	NA	4.2	30.5	0.11	0.18	0.17	35.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	419	2.8	419	2.8	0.477	4.8	LOS A	4.2	30.0	0.48	0.55	0.48	42.8
3	R2	141	0.7	141	0.7	0.477	7.6	LOS A	4.2	30.0	0.48	0.55	0.48	42.8
Approach		560	2.3	560	2.3	0.477	5.5	LOS A	4.2	30.0	0.48	0.55	0.48	42.8
East: Alexandra Rd														
4	L2	197	0.5	191	0.5	0.477	10.9	LOS A	3.6	25.2	0.67	0.80	0.70	42.4
6	R2	133	0.0	129	0.0	0.477	13.3	LOS A	3.6	25.2	0.67	0.80	0.70	37.9
Approach		329	0.3	319 N1	0.3	0.477	11.9	LOS A	3.6	25.2	0.67	0.80	0.70	41.1
North: Bridge Rd - N														
7	L2	82	0.0	72	0.0	0.651	12.0	LOS A	5.9	42.0	0.47	0.61	0.47	41.8
8	T1	692	2.9	610	2.9	0.651	5.5	LOS A	5.9	42.0	0.47	0.61	0.47	45.5
Approach		774	2.6	682 N1	2.6	0.651	6.2	LOS A	5.9	42.0	0.47	0.61	0.47	45.2
All Vehicles		1663	2.0	1562 N1	2.2	0.651	7.1	LOS A	5.9	42.0	0.52	0.63	0.52	43.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 88 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	269	1.2	268	1.2	0.585	21.1	LOS B	7.3	51.9	0.91	0.80	0.91	38.1
2	T1	28	0.0	28	0.0	0.585	16.5	LOS B	7.3	51.9	0.91	0.80	0.91	38.5
3	R2	206	4.1	205	4.1	1.111	165.9	LOS F	20.0	145.2	1.00	1.63	2.67	8.1
Approach		504	2.3	501[N1]	2.3	1.111	80.1	LOS F	20.0	145.2	0.94	1.14	1.63	19.8
East: Darcy Rd - E														
4	L2	442	3.1	404	3.1	1.153	181.3	LOS F	68.7	489.6	1.00	1.84	2.69	5.2
5	T1	1398	1.3	1278	1.3	1.153	176.6	LOS F	69.2	489.6	1.00	1.97	2.68	11.6
6	R2	23	0.0	21	0.0	0.030	13.9	LOS A	0.3	2.1	0.64	0.65	0.64	40.0
Approach		1863	1.7	1704[N1]	1.7	1.153	175.7	LOS F	69.2	489.6	1.00	1.92	2.66	10.3
North: Coles Car Park Access														
7	L2	24	4.3	24	4.3	0.028	14.4	LOS A	0.5	3.4	0.48	0.63	0.48	36.1
8	T1	36	0.0	36	0.0	0.388	38.4	LOS C	3.3	23.4	0.95	0.76	0.95	23.9
9	R2	45	2.3	45	2.3	0.388	43.0	LOS D	3.3	23.4	0.95	0.76	0.95	32.0
Approach		105	2.0	105	2.0	0.388	34.8	LOS C	3.3	23.4	0.84	0.73	0.84	30.1
West: Darcy Rd - W														
10	L2	60	0.0	60	0.0	0.837	41.5	LOS C	22.3	157.8	1.00	1.00	1.16	32.8
11	T1	715	1.3	715	1.3	0.837	37.5	LOS C	22.3	157.8	0.96	0.98	1.18	24.8
12	R2	267	3.1	267	3.1	0.957	61.0	LOS E	14.0	100.9	0.99	1.14	1.70	18.9
Approach		1042	1.7	1042	1.7	0.957	43.8	LOS D	22.3	157.8	0.97	1.03	1.31	23.6
All Vehicles		3515	1.8	3352[N1]	1.9	1.153	116.0	LOS F	69.2	489.6	0.98	1.49	2.03	13.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	17.8	LOS B	0.1	0.1	0.87	0.87
P2	East Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P3	North Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P4	West Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
All Pedestrians		211	33.2	LOS D			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.409	17.8	LOS B	12.4	90.1	0.47	0.42	0.47	31.9
22	T1	978	7.6	917	7.6	0.409	13.5	LOS A	12.4	90.1	0.44	0.39	0.44	17.2
23	R2	31	0.0	29	0.0	0.347	75.3	LOS F	2.0	13.7	1.00	0.72	1.00	17.1
Approach		1009	7.4	947[N1]	7.4	0.409	15.4	LOS B	12.4	90.1	0.46	0.40	0.46	17.2
NorthEast: Site Access (Westmead Hospital)														
24	L2	36	0.0	36	0.0	0.038	4.6	LOS A	0.3	2.1	0.18	0.51	0.18	36.3
26	R2	22	0.0	22	0.0	0.074	49.7	LOS D	1.2	8.2	0.84	0.69	0.84	19.4
Approach		58	0.0	58	0.0	0.074	21.9	LOS B	1.2	8.2	0.43	0.58	0.43	27.2
NorthWest: Darcy Rd - NW														
27	L2	60	0.0	59	0.0	0.342	17.5	LOS B	9.6	69.9	0.45	0.43	0.45	31.7
28	T1	712	10.1	702	10.1	0.342	13.3	LOS A	9.6	69.9	0.43	0.39	0.43	17.2
29	R2	2	50.0	2	50.1	0.034	73.9	LOS F	0.1	1.4	0.98	0.62	0.98	17.2
Approach		774	9.4	763[N1]	9.5	0.342	13.8	LOS A	9.6	69.9	0.43	0.40	0.43	20.0
SouthWest: Stte Access (Parramatta Marist)														
30	L2	106	3.0	106	3.0	0.403	48.9	LOS D	8.9	63.6	0.88	0.78	0.88	19.5
31	T1	1	0.0	1	0.0	0.403	45.5	LOS D	8.9	63.6	0.88	0.78	0.88	26.1
32	R2	54	2.0	54	2.0	0.403	48.8	LOS D	8.9	63.6	0.88	0.78	0.88	19.5
Approach		161	2.6	161	2.6	0.403	48.9	LOS D	8.9	63.6	0.88	0.78	0.88	19.6
All Vehicles		2002	7.6	1929[N1]	7.9	0.409	17.8	LOS B	12.4	90.1	0.48	0.44	0.48	19.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	440	1.4	440	1.4	1.354	390.3	LOS F	85.9	614.9	1.00	2.32	2.93	4.3
26	R2	504	3.3	504	3.3	1.354	367.5	LOS F	85.9	614.9	1.00	1.88	2.87	4.4
Approach		944	2.5	944	2.5	1.354	378.1	LOS F	85.9	614.9	1.00	2.09	2.90	4.3
NorthWest: Darcy Rd														
27	L2	220	4.8	218	4.8	1.472	23.9	LOS B	8.0	103.7	0.52	0.67	0.58	39.7
29	R2	619	10.7	612	10.8	1.472	444.0	LOS F	20.0	146.9	1.00	2.15	3.14	0.8
Approach		839	9.2	830[N1]	9.2	1.472	333.9	LOS F	20.0	146.9	0.87	1.76	2.47	2.4
SouthWest: Hawkesbury Rd - SW														
30	L2	455	15.7	445	16.0	0.444	15.7	LOS B	9.6	72.2	0.65	0.75	0.65	20.2
31	T1	333	2.5	325	2.6	0.817	61.9	LOS E	22.5	161.0	1.00	0.94	1.11	21.7
Approach		787	10.2	769[N1]	10.3	0.817	35.2	LOS C	22.5	161.0	0.80	0.83	0.84	21.3
All Vehicles		2571	7.0	2543[N1]	7.1	1.472	259.9	LOS F	85.9	614.9	0.90	1.60	2.14	4.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	64.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	842	2.0	807	2.0	1.089	171.9	LOS F	36.7	261.1	1.00	1.52	1.97	3.2
23a	R1	126	53.3	123	54.1	0.779	53.0	LOS D	4.5	39.0	0.81	0.76	0.93	21.8
23b	R3	16	0.0	15	0.0	0.306	43.6	LOS D	4.5	39.0	0.72	0.68	0.72	25.1
Approach		984	8.6	945 N1	8.8	1.089	154.3	LOS F	36.7	261.1	0.97	1.41	1.81	4.8
East: Institute Road														
4b	L3	94	0.0	94	0.0	1.045	109.1	LOS F	15.2	106.8	1.00	1.23	1.90	7.5
5	T1	222	0.5	222	0.5	1.045	127.6	LOS F	15.2	106.8	1.00	1.35	1.93	7.6
6	R2	7	0.0	7	0.0	1.045	146.6	LOS F	14.9	104.7	1.00	1.43	1.96	13.9
Approach		323	0.3	323	0.3	1.045	122.7	LOS F	15.2	106.8	1.00	1.32	1.92	7.8
North: Mons Road														
7	L2	3	0.0	3	0.0	0.268	27.5	LOS B	5.0	41.3	0.80	0.69	0.80	30.1
7a	L1	152	31.9	152	31.9	0.268	25.8	LOS B	5.0	41.3	0.79	0.68	0.79	25.3
9	R2	231	3.7	231	3.7	1.074	166.8	LOS F	27.5	198.7	1.00	1.46	2.00	8.2
Approach		385	14.8	385	14.8	1.074	110.1	LOS F	27.5	198.7	0.92	1.14	1.51	11.3
West: Darcy Road - W														
10	L2	67	1.6	66	1.5	0.052	4.8	LOS A	0.5	3.7	0.23	0.49	0.23	37.4
11	T1	39	0.0	38	0.0	0.972	94.8	LOS F	11.5	81.6	1.00	1.26	1.55	11.7
12a	R1	461	3.2	450	3.2	0.972	96.5	LOS F	11.5	81.6	1.00	1.26	1.54	2.5
Approach		567	2.8	554 N1	2.8	0.972	85.5	LOS F	11.5	81.6	0.91	1.17	1.39	5.6
All Vehicles		2260	7.0	2207 N1	7.2	1.089	124.7	LOS F	36.7	261.1	0.95	1.29	1.67	6.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	28.2	LOS C	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	50.6	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.312	16.9	LOS B	11.1	81.3	0.52	0.46	0.52	22.2
22	T1	825	9.1	743	9.6	0.312	13.4	LOS A	11.1	81.4	0.52	0.45	0.52	16.4
23	R2	60	0.0	54	0.0	0.558	75.2	LOS F	3.7	25.8	1.00	0.76	1.03	16.9
Approach		891	8.4	801 N1	8.9	0.558	17.6	LOS B	11.1	81.4	0.55	0.47	0.55	16.6
NorthEast: Site Access (Westmead Hospital)														
24	L2	51	0.0	51	0.0	0.344	54.5	LOS D	3.0	20.9	0.89	0.75	0.89	18.4
25	T1	1	0.0	1	0.0	0.344	51.1	LOS D	3.0	20.9	0.89	0.75	0.89	19.9
26	R2	124	1.7	124	1.7	0.610	55.0	LOS D	7.3	51.7	0.92	0.78	0.93	18.4
Approach		176	1.2	176	1.2	0.610	54.8	LOS D	7.3	51.7	0.91	0.77	0.92	18.4
NorthWest: Darcy Rd - NW														
27	L2	97	1.1	96	1.1	0.629	9.6	LOS A	6.9	50.3	0.28	0.34	0.28	35.7
28	T1	706	10.6	699	10.6	0.629	5.5	LOS A	6.9	50.3	0.25	0.26	0.25	25.6
29	R2	6	16.7	6	16.7	0.073	74.4	LOS F	0.4	3.4	1.00	0.66	1.00	7.8
Approach		809	9.5	801 N1	9.5	0.629	6.5	LOS A	6.9	50.3	0.26	0.28	0.26	28.3
SouthWest: Stte Access (UWS Car Park)														
30	L2	23	0.0	23	0.0	0.081	51.3	LOS D	1.5	10.7	0.85	0.68	0.85	5.9
31	T1	5	0.0	5	0.0	0.081	47.9	LOS D	1.5	10.7	0.85	0.68	0.85	20.6
32	R2	47	0.0	47	0.0	0.195	56.7	LOS E	2.7	19.2	0.90	0.73	0.90	5.5
Approach		76	0.0	76	0.0	0.195	54.5	LOS D	2.7	19.2	0.88	0.71	0.88	7.2
All Vehicles		1952	7.9	1854 N1	8.3	0.629	17.8	LOS B	11.1	81.4	0.47	0.43	0.47	19.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	39	0.0	39	0.0	1.138	210.7	LOS F	36.7	260.0	1.00	1.72	2.26	7.4
2	T1	598	1.6	598	1.6	1.138	203.8	LOS F	46.8	332.1	1.00	1.75	2.23	7.5
Approach		637	1.5	637	1.5	1.138	204.2	LOS F	46.8	332.1	1.00	1.75	2.24	7.5
East: Alexandra Ave - E														
4	L2	28	0.0	28	0.0	0.879	66.8	LOS E	24.6	182.3	1.00	1.03	1.24	26.6
5	T1	212	0.5	212	0.5	0.879	62.3	LOS E	24.6	182.3	1.00	1.03	1.24	18.5
6	R2	384	21.1	384	21.1	0.879	69.2	LOS E	24.6	182.3	1.00	1.01	1.27	17.8
Approach		624	13.2	624	13.2	0.879	66.8	LOS E	24.6	182.3	1.00	1.02	1.26	18.6
North: Hawkesbury Rd - N														
7	L2	274	26.2	243	26.6	0.981	58.4	LOS E	13.4	97.9	0.86	1.04	1.13	22.8
8	T1	1133	0.9	1000	1.0	0.981	63.8	LOS E	13.4	97.9	0.99	1.21	1.49	19.6
9	R2	113	30.8	101	31.7	0.981	70.7	LOS F	13.2	97.9	1.00	1.36	1.80	3.8
Approach		1519	7.7	1344 N1	7.9	0.981	63.3	LOS E	13.4	97.9	0.96	1.19	1.45	19.0
West: Alexandra Ave - W														
10	L2	87	0.0	84	0.0	0.213	36.3	LOS C	3.7	26.2	0.74	0.74	0.74	25.3
11	T1	158	0.7	152	0.7	0.564	57.5	LOS E	9.2	64.7	0.98	0.80	0.98	28.0
Approach		245	0.4	236 N1	0.4	0.564	50.0	LOS D	9.2	64.7	0.90	0.77	0.90	27.4
All Vehicles		3025	6.9	2841 N1	7.4	1.138	94.5	LOS F	46.8	332.1	0.97	1.24	1.54	14.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	644	12.1	622	12.4	0.530	14.3	LOS A	12.6	97.6	0.47	0.45	0.49	13.4
3	R2	187	0.0	180	0.0	0.530	34.7	LOS C	10.8	78.5	0.82	0.79	0.92	27.6
Approach		832	9.4	802 N1	9.7	0.530	18.8	LOS B	12.6	97.6	0.55	0.53	0.59	20.8
East: Railway Pde														
4	L2	434	0.2	434	0.2	1.124	198.6	LOS F	58.6	411.2	1.00	1.45	2.15	7.7
6	R2	92	0.0	92	0.0	0.465	63.6	LOS E	5.6	39.1	0.97	0.78	0.97	18.5
Approach		525	0.2	525	0.2	1.124	175.1	LOS F	58.6	411.2	1.00	1.33	1.95	8.6
North: Hawkesbury Rd - N														
7	L2	75	0.0	62	0.0	0.141	27.8	LOS B	3.5	31.7	0.63	0.61	0.63	31.6
8	T1	1114	7.4	932	7.4	1.069	146.1	LOS F	29.3	212.2	0.99	1.58	1.85	3.5
Approach		1188	6.9	994 N1	6.9	1.069	138.6	LOS F	29.3	212.2	0.97	1.52	1.77	4.1
All Vehicles		2545	6.3	2321 N1	6.9	1.124	105.5	LOS F	58.6	411.2	0.83	1.14	1.40	7.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	101	0.0	94	0.0	0.274	3.4	LOS A	0.0	0.0	0.00	0.08	0.00	39.8
22	T1	1045	7.3	979	7.5	0.274	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	38.9
Approach		1146	6.6	1074 N1	6.8	0.274	0.3	NA	0.0	0.0	0.00	0.04	0.00	39.2
NorthWest: Darcy Rd - NW														
28	T1	826	8.7	817	8.7	0.207	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		826	8.7	817 N1	8.7	0.207	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	5.2	LOS A	0.0	0.0	0.43	0.48	0.43	36.0
Approach		1	0.0	1	0.0	0.001	5.2	LOS A	0.0	0.0	0.43	0.48	0.43	36.0
All Vehicles		1974	7.5	1892 N1	7.8	0.274	0.2	NA	0.0	0.0	0.00	0.02	0.00	39.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.220	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	1003	7.7	957	7.7	0.220	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		1004	7.7	958[N1]	7.7	0.220	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	789	9.1	778	9.1	0.197	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		789	9.1	778[N1]	9.1	0.197	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.002	4.3	LOS A	0.0	0.0	0.32	0.44	0.32	36.3
Approach		1	0.0	1	0.0	0.002	4.3	LOS A	0.0	0.0	0.32	0.44	0.32	36.3
All Vehicles		1795	8.3	1737[N1]	8.5	0.220	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2033 Fu Dev PM Final - Cycle Time]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	594	1.8	594	1.8	1.309	298.2	LOS F	100.8	716.3	1.00	8.14	15.39	4.2
Approach		594	1.8	594	1.8	1.309	298.2	LOS F	100.8	716.3	1.00	8.14	15.39	4.2
East: Darcy Road - E														
4	L2	204	2.6	200	2.6	0.109	3.4	LOS A	17.4	124.3	0.00	0.45	0.00	25.4
5	T1	1247	1.6	1219	1.6	0.316	0.0	LOS A	11.5	81.6	0.00	0.00	0.00	40.0
Approach		1452	1.7	1418 [N1]	1.8	0.316	0.5	NA	17.4	124.3	0.00	0.06	0.00	36.8
West: Darcy Road - W														
11	T1	578	2.9	564	2.9	0.218	2.3	LOS A	7.3	52.0	0.19	0.00	0.20	37.0
12	R2	344	1.2	336	1.2	1.458	433.0	LOS F	70.4	498.1	1.00	8.70	20.33	2.4
Approach		922	2.3	900 [N1]	2.2	1.458	163.1	NA	70.4	498.1	0.49	3.25	7.71	5.8
All Vehicles		2967	1.9	2912 [N1]	2.0	1.458	111.4	NA	100.8	716.3	0.36	2.69	5.52	5.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Alexandra Rd-Bridge Rd - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd - S														
2	T1	419	2.8	419	2.8	0.478	4.8	LOS A	4.2	30.1	0.49	0.55	0.49	42.7
3	R2	141	0.7	141	0.7	0.478	7.6	LOS A	4.2	30.1	0.49	0.55	0.49	42.7
Approach		560	2.3	560	2.3	0.478	5.5	LOS A	4.2	30.1	0.49	0.55	0.49	42.7
East: Alexandra Rd														
4	L2	197	0.5	192	0.5	0.506	12.1	LOS A	4.0	28.2	0.69	0.84	0.78	41.8
6	R2	133	0.0	129	0.0	0.506	14.4	LOS A	4.0	28.2	0.69	0.84	0.78	37.0
Approach		329	0.3	321 N1	0.3	0.506	13.0	LOS A	4.0	28.2	0.69	0.84	0.78	40.5
North: Bridge Rd - N														
7	L2	82	0.0	77	0.0	0.688	12.2	LOS A	6.7	47.7	0.51	0.62	0.51	41.6
8	T1	692	2.9	648	2.9	0.688	5.7	LOS A	6.7	47.7	0.51	0.62	0.51	45.4
Approach		774	2.6	725 N1	2.5	0.688	6.4	LOS A	6.7	47.7	0.51	0.62	0.51	45.1
All Vehicles		1663	2.0	1606 N1	2.1	0.688	7.4	LOS A	6.7	47.7	0.54	0.64	0.56	43.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Bridge Rd-Coles Car Park - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 88 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Bridge Rd														
1	L2	269	1.2	268	1.2	0.639	22.1	LOS B	7.5	53.3	0.94	0.81	0.94	37.7
2	T1	28	0.0	28	0.0	0.639	17.6	LOS B	7.5	53.3	0.94	0.81	0.94	38.0
3	R2	186	4.5	185	4.5	1.052	121.3	LOS F	14.9	108.0	1.00	1.45	2.32	10.5
Approach		484	2.4	482 N1	2.4	1.052	60.0	LOS E	14.9	108.0	0.96	1.06	1.47	23.6
East: Darcy Rd - E														
4	L2	402	3.4	390	3.4	1.105	142.1	LOS F	68.6	489.6	1.00	1.68	2.36	6.4
5	T1	1358	1.3	1318	1.3	1.105	136.9	LOS F	69.2	489.6	1.00	1.77	2.35	13.8
6	R2	23	0.0	22	0.0	0.031	12.9	LOS A	0.3	2.2	0.61	0.65	0.61	40.6
Approach		1783	1.8	1730 N1	1.8	1.105	136.5	LOS F	69.2	489.6	0.99	1.73	2.33	12.5
North: Coles Car Park Access														
7	L2	24	4.3	24	4.3	0.027	14.8	LOS B	0.5	3.5	0.49	0.63	0.49	35.8
8	T1	36	0.0	36	0.0	0.458	40.9	LOS C	3.4	24.3	0.97	0.77	0.97	23.1
9	R2	45	2.3	45	2.3	0.458	45.5	LOS D	3.4	24.3	0.97	0.77	0.97	31.3
Approach		105	2.0	105	2.0	0.458	36.9	LOS C	3.4	24.3	0.86	0.74	0.86	29.4
West: Darcy Rd - W														
10	L2	60	0.0	60	0.0	0.766	36.0	LOS C	19.1	135.2	0.96	0.89	1.03	34.5
11	T1	695	1.4	695	1.4	0.766	31.3	LOS C	19.1	135.2	0.93	0.87	1.02	27.0
12	R2	267	3.1	267	3.1	0.943	55.8	LOS D	13.3	95.7	0.99	1.11	1.63	20.0
Approach		1022	1.8	1022	1.8	0.943	38.0	LOS C	19.1	135.2	0.95	0.94	1.18	25.4
All Vehicles		3395	1.9	3340 N1	1.9	1.105	92.2	LOS F	69.2	489.6	0.97	1.36	1.81	16.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	17.6	LOS B	0.1	0.1	0.87	0.87
P2	East Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P3	North Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
P4	West Full Crossing	53	38.3	LOS D	0.1	0.1	0.93	0.93
All Pedestrians		211	33.1	LOS D			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Catherine McCauley-Westmead Hospital - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:30-8:30)
PM Peak (3:30-4:30)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.393	15.8	LOS B	11.6	84.0	0.43	0.39	0.43	32.8
22	T1	980	7.6	926	7.4	0.393	11.6	LOS A	11.6	84.0	0.41	0.36	0.41	18.8
23	R2	31	0.0	29	0.0	0.350	75.3	LOS F	2.0	13.8	1.00	0.72	1.00	17.1
Approach		1012	7.4	956[N1]	7.2	0.393	13.5	LOS A	11.6	84.0	0.43	0.37	0.43	18.5
NorthEast: Site Access (Westmead Hospital)														
24	L2	36	0.0	36	0.0	0.040	4.5	LOS A	0.3	2.0	0.17	0.51	0.17	36.4
26	R2	22	0.0	22	0.0	0.082	53.4	LOS D	1.2	8.6	0.87	0.69	0.87	18.7
Approach		58	0.0	58	0.0	0.082	23.2	LOS B	1.2	8.6	0.44	0.58	0.44	26.7
NorthWest: Darcy Rd - NW														
27	L2	60	0.0	60	0.0	0.328	16.2	LOS B	9.3	67.7	0.43	0.42	0.43	32.4
28	T1	712	10.1	707	10.1	0.328	12.0	LOS A	9.3	67.7	0.41	0.38	0.41	18.2
29	R2	2	50.0	2	50.0	0.034	73.8	LOS F	0.1	1.4	0.97	0.62	0.97	17.2
Approach		774	9.4	769[N1]	9.4	0.328	12.5	LOS A	9.3	67.7	0.42	0.38	0.42	21.0
SouthWest: Stte Access (Parramatta Marist)														
30	L2	92	3.4	92	3.4	0.393	52.0	LOS D	7.8	56.1	0.90	0.78	0.90	18.9
31	T1	1	0.0	1	0.0	0.393	48.6	LOS D	7.8	56.1	0.90	0.78	0.90	25.5
32	R2	45	2.3	45	2.3	0.393	51.9	LOS D	7.8	56.1	0.90	0.78	0.90	18.9
Approach		138	3.1	138	3.1	0.393	52.0	LOS D	7.8	56.1	0.90	0.78	0.90	19.0
All Vehicles		1981	7.7	1921[N1]	7.9	0.393	16.2	LOS B	11.6	84.0	0.46	0.41	0.46	19.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	96	61.9	LOS F	0.4	0.4	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		201	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Hawkesbury Rd - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
NorthEast: Hawkesbury Rd - NE														
25	T1	301	2.1	301	2.1	1.155	226.9	LOS F	44.3	315.4	1.00	1.77	2.26	7.0
26	R2	495	3.4	495	3.4	1.296	313.8	LOS F	71.4	511.6	1.00	1.74	2.68	5.0
Approach		796	2.9	796	2.9	1.296	280.9	LOS F	71.4	511.6	1.00	1.75	2.52	5.5
NorthWest: Darcy Rd														
27	L2	216	4.9	215	4.9	1.262	19.8	LOS B	6.3	82.0	0.53	0.67	0.57	39.6
29	R2	615	10.8	614	10.8	1.262	261.8	LOS F	20.0	146.9	1.00	1.72	2.42	1.4
Approach		831	9.3	829[N1]	9.3	1.262	198.9	LOS F	20.0	146.9	0.88	1.45	1.94	3.8
SouthWest: Hawkesbury Rd - SW														
30	L2	445	16.1	432	16.5	0.389	13.1	LOS A	7.7	58.1	0.56	0.72	0.56	22.5
31	T1	333	2.5	321	2.6	0.808	61.2	LOS E	22.1	158.1	1.00	0.93	1.10	21.8
Approach		778	10.3	753[N1]	10.5	0.808	33.6	LOS C	22.1	158.1	0.75	0.81	0.79	21.9
All Vehicles		2404	7.5	2378[N1]	7.6	1.296	174.0	LOS F	71.4	511.6	0.88	1.35	1.77	6.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P6	NorthEast Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	64.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Darcy Rd-Institute Rd-Mons Rd - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Road - SE														
21a	L1	803	2.1	778	2.1	0.937	78.7	LOS F	36.6	261.1	1.00	1.13	1.37	6.6
23a	R1	126	53.3	124	53.9	0.779	56.2	LOS D	5.0	43.1	0.85	0.78	0.97	21.1
23b	R3	16	0.0	15	0.0	0.346	48.4	LOS D	5.0	43.1	0.78	0.70	0.78	23.6
Approach		945	8.9	917[N1]	9.1	0.937	75.2	LOS F	36.6	261.1	0.98	1.08	1.30	9.0
East: Institute Road														
4b	L3	94	0.0	94	0.0	0.912	85.9	LOS F	12.0	84.0	1.00	1.23	1.88	11.8
5	T1	222	0.5	222	0.5	0.912	82.5	LOS F	12.2	86.0	1.00	1.17	1.60	11.9
6	R2	7	0.0	7	0.0	0.912	86.2	LOS F	12.2	86.0	1.00	1.14	1.46	19.4
Approach		323	0.3	323	0.3	0.912	83.5	LOS F	12.2	86.0	1.00	1.19	1.68	12.1
North: Mons Road														
7	L2	3	0.0	3	0.0	0.261	26.9	LOS B	5.0	40.7	0.79	0.69	0.79	30.3
7a	L1	152	31.9	152	31.9	0.261	25.1	LOS B	5.0	40.7	0.79	0.68	0.79	25.5
9	R2	231	3.7	231	3.7	0.953	96.0	LOS F	20.4	147.5	1.00	1.17	1.53	12.6
Approach		385	14.8	385	14.8	0.953	67.6	LOS E	20.4	147.5	0.91	0.97	1.23	15.8
West: Darcy Road - W														
10	L2	67	1.6	67	1.6	0.052	4.8	LOS A	0.5	3.7	0.23	0.49	0.23	37.4
11	T1	39	0.0	39	0.0	0.892	72.7	LOS F	11.5	81.6	1.00	1.08	1.31	14.0
12a	R1	461	3.2	456	3.2	0.892	74.6	LOS F	11.5	81.6	1.00	1.07	1.30	3.2
Approach		567	2.8	561[N1]	2.8	0.892	66.2	LOS E	11.5	81.6	0.91	1.00	1.17	6.9
All Vehicles		2221	7.1	2186[N1]	7.2	0.953	72.8	LOS F	36.6	261.1	0.95	1.06	1.31	10.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P2	East Full Crossing	53	28.1	LOS C	0.1	0.1	0.91	0.91
P3	North Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	50.6	LOS E			0.94	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Darcy Rd-UWS Car Park-Westmead Hospital - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 135 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	5	0.0	5	0.0	0.308	16.9	LOS B	10.9	80.0	0.52	0.46	0.52	22.2
22	T1	806	9.3	734	9.8	0.308	13.4	LOS A	10.9	80.2	0.51	0.45	0.51	16.4
23	R2	60	0.0	54	0.0	0.564	75.2	LOS F	3.7	26.1	1.00	0.77	1.03	16.9
Approach		872	8.6	793[N1]	9.1	0.564	17.6	LOS B	10.9	80.2	0.55	0.47	0.55	16.6
NorthEast: Site Access (Westmead Hospital)														
24	L2	51	0.0	51	0.0	0.344	54.5	LOS D	3.0	20.9	0.89	0.75	0.89	18.4
25	T1	1	0.0	1	0.0	0.344	51.1	LOS D	3.0	20.9	0.89	0.75	0.89	19.9
26	R2	124	1.7	124	1.7	0.610	55.0	LOS D	7.3	51.7	0.92	0.78	0.93	18.4
Approach		176	1.2	176	1.2	0.610	54.8	LOS D	7.3	51.7	0.91	0.77	0.92	18.4
NorthWest: Darcy Rd - NW														
27	L2	97	1.1	97	1.1	0.629	9.7	LOS A	7.0	50.9	0.29	0.34	0.29	35.6
28	T1	699	10.7	698	10.7	0.629	5.6	LOS A	7.0	50.9	0.26	0.27	0.26	25.4
29	R2	6	16.7	6	16.7	0.073	74.4	LOS F	0.4	3.4	1.00	0.66	1.00	7.8
Approach		802	9.6	801[N1]	9.6	0.629	6.6	LOS A	7.0	50.9	0.27	0.28	0.27	28.2
SouthWest: Stte Access (UWS Car Park)														
30	L2	23	0.0	23	0.0	0.081	51.3	LOS D	1.5	10.7	0.85	0.68	0.85	5.9
31	T1	5	0.0	5	0.0	0.081	47.9	LOS D	1.5	10.7	0.85	0.68	0.85	20.6
32	R2	47	0.0	47	0.0	0.195	56.7	LOS E	2.7	19.2	0.90	0.73	0.90	5.5
Approach		76	0.0	76	0.0	0.195	54.5	LOS D	2.7	19.2	0.88	0.71	0.88	7.2
All Vehicles		1925	8.0	1845[N1]	8.3	0.629	17.9	LOS B	10.9	80.2	0.47	0.43	0.48	19.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P6	NorthEast Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P7	NorthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
P8	SouthWest Full Crossing	53	61.8	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	61.8	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Alexandra Ave - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
1	L2	39	0.0	39	0.0	1.091	173.5	LOS F	33.7	238.9	1.00	1.59	2.05	8.8
2	T1	596	1.6	596	1.6	1.091	167.0	LOS F	40.9	290.4	1.00	1.61	2.03	8.9
Approach		635	1.5	635	1.5	1.091	167.4	LOS F	40.9	290.4	1.00	1.61	2.03	8.9
East: Alexandra Ave - E														
4	L2	28	0.0	28	0.0	0.859	63.6	LOS E	23.7	175.2	1.00	1.00	1.19	27.3
5	T1	212	0.5	212	0.5	0.859	59.0	LOS E	23.7	175.2	1.00	1.00	1.19	19.1
6	R2	383	21.2	383	21.2	0.859	65.7	LOS E	23.7	175.2	1.00	0.98	1.22	18.4
Approach		623	13.2	623	13.2	0.859	63.3	LOS E	23.7	175.2	1.00	0.99	1.21	19.2
North: Hawkesbury Rd - N														
7	L2	273	26.3	256	27.0	0.994	65.4	LOS E	13.4	97.9	0.87	1.08	1.17	21.7
8	T1	1133	0.9	1054	0.9	0.994	71.4	LOS F	13.4	97.9	1.00	1.26	1.55	18.2
9	R2	112	31.1	104	31.3	0.994	76.7	LOS F	13.2	97.9	1.00	1.39	1.83	3.5
Approach		1517	7.7	1415 N1	7.9	0.994	70.7	LOS F	13.4	97.9	0.98	1.24	1.50	17.7
West: Alexandra Ave - W														
10	L2	85	0.0	83	0.0	0.187	34.5	LOS C	3.6	25.1	0.71	0.73	0.71	25.9
11	T1	158	0.7	155	0.7	0.575	57.6	LOS E	9.4	66.0	0.99	0.80	0.99	28.0
Approach		243	0.4	238 N1	0.4	0.575	49.5	LOS D	9.4	66.0	0.89	0.77	0.89	27.5
All Vehicles		3018	6.9	2910 N1	7.2	1.091	88.5	LOS F	40.9	290.4	0.98	1.23	1.50	15.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Hawkesbury Rd-Railway Pde - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Signals - Fixed Time Isolated Cycle Time = 130 seconds (CCG User-Given Cycle Time)
Common Control Group: CCG1 [Hawkesbury Rd-Railway Pde-Alexandra Ave]

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Hawkesbury Rd - S														
2	T1	640	12.2	610	12.6	0.534	14.8	LOS B	12.6	97.9	0.48	0.46	0.49	13.0
3	R2	187	0.0	178	0.0	0.534	34.7	LOS C	10.6	76.8	0.81	0.78	0.90	27.6
Approach		827	9.4	788 N1	9.8	0.534	19.3	LOS B	12.6	97.9	0.55	0.53	0.59	20.6
East: Railway Pde														
4	L2	434	0.2	434	0.2	1.138	209.5	LOS F	60.1	421.6	1.00	1.48	2.21	7.4
6	R2	86	0.0	86	0.0	0.433	63.2	LOS E	5.2	36.7	0.97	0.78	0.97	18.5
Approach		520	0.2	520	0.2	1.138	185.2	LOS F	60.1	421.6	1.00	1.36	2.01	8.2
North: Hawkesbury Rd - N														
7	L2	73	0.0	67	0.0	0.151	27.3	LOS B	3.8	34.5	0.63	0.61	0.63	31.9
8	T1	1112	7.4	1025	7.3	1.155	209.7	LOS F	29.3	212.2	0.99	1.87	2.21	2.6
Approach		1184	6.9	1092 N1	6.9	1.155	198.4	LOS F	29.3	212.2	0.97	1.79	2.11	2.9
All Vehicles		2532	6.4	2400 N1	6.7	1.155	136.8	LOS F	60.1	421.6	0.84	1.29	1.59	5.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	59.3	LOS E	0.2	0.2	0.96	0.96
All Pedestrians		158	59.3	LOS E			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Car Park) - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	80	0.0	75	0.0	0.271	3.4	LOS A	0.0	0.0	0.00	0.07	0.00	39.8
22	T1	1048	7.2	985	7.3	0.271	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	39.1
Approach		1128	6.7	1060 N1	6.8	0.271	0.2	NA	0.0	0.0	0.00	0.03	0.00	39.3
NorthWest: Darcy Rd - NW														
28	T1	819	8.7	817	8.7	0.207	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		819	8.7	817 N1	8.7	0.207	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	5.3	LOS A	0.0	0.0	0.43	0.48	0.43	35.9
Approach		1	0.0	1	0.0	0.001	5.3	LOS A	0.0	0.0	0.43	0.48	0.43	35.9
All Vehicles		1948	7.6	1878 N1	7.8	0.271	0.1	NA	0.0	0.0	0.00	0.02	0.00	39.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Catherine McCauley) - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: Darcy Rd - SE														
21	L2	1	0.0	1	0.0	0.190	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	40.2
22	T1	991	7.8	949	7.8	0.190	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		992	7.7	950 N1	7.8	0.190	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
NorthWest: Darcy Rd - NW														
28	T1	789	9.1	785	9.1	0.198	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		789	9.1	785 N1	9.1	0.198	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0
SouthWest: Site Access														
30	L2	1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.36	0.45	0.36	36.2
Approach		1	0.0	1	0.0	0.001	4.6	LOS A	0.0	0.0	0.36	0.45	0.36	36.2
All Vehicles		1782	8.3	1736 N1	8.5	0.198	0.0	NA	0.0	0.0	0.00	0.00	0.00	40.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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MOVEMENT SUMMARY

Site: 101 [Site Access-Darcy Rd (Mother Teresa) - 2033 Fu Dev PM Final - Cycle Time 10% Modal Shift]

Network: N101 [2033 Fu Dev PM - Final - Cycle Time 10% Modal Shift]

AM Peak (7:45-8:45)
PM Peak (3:00-4:00)
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Site Access														
1	L2	529	2.0	529	2.0	1.167	177.2	LOS F	62.5	444.7	1.00	5.86	10.78	6.7
Approach		529	2.0	529	2.0	1.167	177.2	LOS F	62.5	444.7	1.00	5.86	10.78	6.7
East: Darcy Road - E														
4	L2	180	2.9	178	2.9	0.098	3.4	LOS A	17.3	124.3	0.00	0.45	0.00	25.4
5	T1	1232	1.6	1215	1.6	0.315	0.0	LOS A	3.6	25.8	0.00	0.00	0.00	40.0
Approach		1412	1.8	1392 [N1]	1.8	0.315	0.4	NA	17.3	124.3	0.00	0.06	0.00	37.0
West: Darcy Road - W														
11	T1	578	2.9	572	2.9	0.218	2.3	LOS A	6.9	49.7	0.19	0.00	0.20	37.0
12	R2	304	1.4	301	1.4	1.281	278.4	LOS F	57.1	404.7	1.00	6.63	15.07	3.6
Approach		882	2.4	873 [N1]	2.4	1.281	97.5	NA	57.1	404.7	0.47	2.29	5.33	8.9
All Vehicles		2823	2.0	2794 [N1]	2.0	1.281	64.3	NA	62.5	444.7	0.34	1.85	3.71	8.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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Appendix B

Traffic Surveys

Location: 1, 2 and 3
Survey: turning movements & T-way turning movements

Location: 4a and 4b
Survey: turning movements & T-way turning movements
Location 4a
Location 4b
Darcy Road
Site Access
A
B
C
D
E
F
G
H
Location 4a
Location 4b
H – VEHICLE DRIVEWAY

Location: 5 and 6
Survey: turning movements & T-way turning movement

Location: 7 and 8
Survey: turning movements & T-way turning movementS

Location: 9
Survey: turning movements

Site 1

Date 17/10/2018

	A-B		A-C		B-A		B-C		C-A		C-B	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:00	212	2	14	0	60	2	3	0	4	1	0	0
7:15	228	2	23	0	82	7	11	0	10	0	0	0
7:30	277	2	41	0	115	3	16	0	22	0	0	0
7:45	241	7	65	0	93	3	22	1	58	1	0	0
8:00	192	9	127	2	95	4	63	1	127	0	0	0
8:15	230	5	135	3	74	6	70	1	146	4	0	0
8:30	225	10	39	0	72	6	18	0	98	0	0	0
8:45	191	2	4	0	84	6	1	0	4	0	0	0
9:00	212	6	2	0	84	2	1	0	20	0	2	0
9:15	204	8	8	0	89	7	3	0	7	0	0	0
2:30	119	7	15	0	220	2	7	0	3	0	0	0
2:45	82	5	25	0	193	4	25	0	82	0	0	0
3:00	103	3	31	0	201	8	17	2	50	0	0	0
3:15	110	6	34	1	234	4	18	1	79	4	0	0
3:30	122	3	21	3	225	4	15	0	85	4	0	0
3:45	114	4	6	0	229	3	2	2	20	2	0	0
4:00	96	6	10	0	278	3	3	0	20	0	0	0
4:15	95	1	9	0	253	4	5	0	20	0	0	0
4:30	80	3	9	0	276	2	6	0	47	0	0	0
4:45	86	1	8	0	223	3	4	0	15	0	0	0

Site 2

Date 17/10/2018

	B-E		B-F		B-D		E-B		E-D		E-F	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	42	1	85	0	136	2	22	1	14	8	2	0
7:45	36	2	63	0	131	0	11	1	17	14	0	0
8:00	37	6	41	1	111	2	25	5	18	7	2	0
8:15	35	5	48	0	134	1	26	4	20	5	2	0
8:30	43	4	34	0	145	5	24	3	16	10	3	0
8:45	36	1	27	0	135	1	25	2	17	5	1	0
9:00	35	0	28	0	147	7	27	1	15	10	0	0
9:15	43	3	19	1	154	3	19	1	13	8	2	0
2:30	20	5	14	0	88	2	45	0	26	7	2	0
2:45	7	4	11	0	71	1	67	5	15	4	1	0
3:00	16	0	2	0	87	1	58	2	29	6	1	0
3:15	19	1	8	0	74	3	74	4	23	6	1	0
3:30	14	0	10	0	94	4	50	2	25	6	1	0
3:45	14	0	17	0	102	2	29	0	21	7	0	0
4:00	10	0	9	11	73	5	72	1	38	7	1	0
4:15	20	0	6	0	74	1	41	1	9	5	0	0

	D-F		D-E		D-B		F-D		F-B		F-E	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	11	0	29	5	54	0	19	0	46	0	0	0
7:45	29	0	27	7	64	2	7	0	27	1	0	0
8:00	23	1	27	6	104	0	14	0	16	0	1	0
8:15	21	0	15	8	102	4	16	0	9	0	1	0
8:30	17	1	25	8	52	2	6	1	7	1	0	0
8:45	18	0	21	7	46	3	8	0	10	1	1	0
9:00	5	0	19	5	51	1	8	0	6	0	0	0
9:15	7	0	13	5	54	6	10	0	13	0	0	0
2:30	10	0	12	4	118	2	21	0	54	0	0	0
2:45	8	0	13	2	105	0	10	0	37	0	2	0
3:00	1	0	11	6	121	6	16	0	42	1	1	0
3:15	3	0	15	5	123	3	26	0	43	0	2	0
3:30	6	0	19	9	122	3	29	0	48	0	2	0
3:45	5	0	11	7	119	4	18	0	76	0	2	0
4:00	3	0	3	8	108	0	27	0	88	2	1	0
4:15	4	1	10	7	142	2	26	1	56	0	1	0

Site 3

Date 17/10/2018

	G-D		H-G		H-D	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:00	0	0	0	0	81	8
7:15	0	0	4	0	88	7
7:30	0	0	5	0	99	7
7:45	0	0	7	0	130	8
8:00	0	0	19	0	155	6
8:15	0	0	5	0	158	15
8:30	1	0	5	0	90	8
8:45	1	0	1	0	80	9
9:00	0	0	0	0	78	6
9:15	0	0	1	0	84	12
2:30	0	0	0	0	149	7
2:45	0	0	1	0	142	5
3:00	1	0	0	0	130	11
3:15	8	0	0	0	153	8
3:30	11	0	0	0	145	11
3:45	5	0	0	0	129	10
4:00	6	0	0	0	126	7
4:15	0	0	0	0	155	10
4:30	3	0	0	0	147	9
4:45	3	0	0	0	124	10

Site 4a

Date 17/10/2018

	A-B		A-C		A-D		B-A		B-C		B-D	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:00	29	0	87	10	1	0	0	0	3	0	0	0
7:15	39	0	102	11	0	0	2	0	3	0	0	0
7:30	32	0	138	11	0	0	1	0	2	0	0	0
7:45	27	0	139	12	0	0	4	0	4	0	0	0
8:00	15	0	113	11	1	0	9	0	3	0	0	0
8:15	21	0	170	7	4	0	8	0	5	0	0	0
8:30	10	0	154	17	0	0	6	0	2	0	0	0
8:45	15	0	159	5	1	0	5	0	3	0	0	0
9:00	13	0	152	11	1	0	5	0	3	0	0	0
9:15	20	0	166	14	0	0	8	0	5	0	0	0
2:30	11	0	128	9	1	0	3	0	4	0	0	0
2:45	9	0	87	7	1	0	2	0	5	0	0	0
3:00	10	0	112	6	0	1	2	0	3	0	0	0
3:15	13	0	118	11	0	0	5	0	23	0	0	0
3:30	17	0	128	10	1	0	9	0	6	0	0	0
3:45	17	0	126	8	0	0	5	0	2	0	0	0
4:00	2	0	132	12	1	1	3	0	3	0	0	0
4:15	1	0	124	7	0	0	0	0	5	0	0	0
4:30	5	0	126	8	0	0	2	0	5	0	0	0
4:45	5	0	123	9	0	0	5	0	2	0	0	0

	C-A		C-B		C-D		D-A		D-B		D-C	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:00	84	9	32	0	0	0	0	0	0	0	0	0
7:15	86	8	29	0	0	0	1	0	0	0	0	0
7:30	118	7	35	0	1	0	0	0	0	0	0	0
7:45	124	8	19	0	1	0	0	0	0	0	0	0
8:00	169	6	4	0	4	0	0	0	0	0	0	0
8:15	157	15	11	0	3	0	0	0	0	0	0	0
8:30	92	7	4	0	0	0	0	0	0	0	0	0
8:45	81	8	5	0	0	0	0	0	0	0	0	0
9:00	71	6	10	0	0	0	0	0	0	0	0	0
9:15	76	11	9	0	1	0	0	0	0	0	0	0
2:30	137	6	6	0	1	0	1	0	0	0	1	0
2:45	134	4	6	0	0	0	0	0	1	0	0	0
3:00	119	9	7	0	0	0	1	0	0	0	0	0
3:15	146	9	15	0	0	0	1	0	0	0	1	0
3:30	126	12	4	0	0	0	1	0	0	0	0	0
3:45	120	8	3	0	0	0	0	0	0	0	0	0
4:00	113	7	3	0	0	0	2	0	0	0	0	0
4:15	154	10	2	0	0	0	0	0	0	0	0	0
4:30	141	9	6	0	0	0	1	0	0	0	1	0
4:45	117	9	1	0	0	0	0	0	0	0	1	0

Site 4a - T-way

Date 17/10/2018

	A THRU			C THRU		
	LIGHT	HEAVY	BUS+AMBU	LIGHT	HEAVY	BUS+AMBU
7:00	117	2	10	116	1	8
7:15	141	3	8	115	3	5
7:30	170	1	10	154	1	6
7:45	166	2	10	144	0	8
8:00	129	2	9	177	0	6
8:15	195	0	7	171	3	12
8:30	164	4	13	96	2	5
8:45	175	2	3	86	0	8
9:00	166	3	8	81	1	5
9:15	186	4	10	86	3	8
2:30	140	2	7	144	1	5
2:45	97	2	5	140	0	4
3:00	122	0	6	126	1	8
3:15	131	0	11	161	2	7
3:30	146	1	9	130	2	10
3:45	143	1	7	123	0	8
4:00	135	1	11	116	0	7
4:15	125	0	7	156	3	7
4:30	131	2	6	147	1	8
4:45	128	0	9	118	0	9

Site 4b

Date 17/10/2018

	H-E		H-G		G-H		G-E	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:00	0	0	0	0	0	0	112	9
7:15	0	0	0	0	0	0	113	7
7:30	0	0	0	0	1	0	161	7
7:45	0	0	0	0	0	0	141	8
8:00	0	0	0	0	2	0	175	7
8:15	0	0	0	0	0	0	183	15
8:30	0	0	0	0	0	0	101	8
8:45	0	0	0	0	0	0	96	8
9:00	0	0	0	0	0	1	80	6
9:15	0	0	0	0	1	0	89	10
2:30	0	0	0	0	0	0	152	6
2:45	0	0	0	0	1	0	150	4
3:00	0	0	0	0	2	0	133	9
3:15	0	0	0	0	1	0	164	9
3:30	1	0	0	0	0	0	134	12
3:45	0	0	0	0	2	0	125	9
4:00	0	0	0	0	1	0	126	7
4:15	0	0	0	0	0	0	157	12
4:30	0	0	0	0	2	0	152	8
4:45	0	0	0	0	0	0	126	9

Site 5

Date 17/10/2018

	A-B		A-C		A-D		B-A		B-C		B-D	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	22	1	116	11	1	0	10	0	10	0	0	0
7:45	37	0	111	11	0	0	15	1	6	0	0	0
8:00	23	0	94	12	0	1	7	0	8	0	0	0
8:15	35	0	136	8	1	0	10	3	8	0	0	0
8:30	39	1	121	13	3	0	11	1	10	0	0	0
8:45	53	0	107	5	1	0	10	0	7	1	0	0
9:00	42	0	104	12	3	0	10	0	5	0	0	0
9:15	46	0	106	12	5	0	12	0	5	0	0	0
2:30	35	0	96	10	3	0	33	0	15	0	0	0
2:45	21	0	65	7	2	0	33	0	22	0	0	0
3:00	21	1	92	8	2	0	23	0	6	1	1	0
3:15	20	0	116	11	1	0	33	0	15	1	0	0
3:30	27	0	108	11	2	0	26	0	13	0	0	0
3:45	23	0	109	8	0	0	34	0	14	0	0	0
4:00	23	0	112	13	0	0	29	0	16	0	0	0
4:15	16	0	105	9	1	0	34	1	19	0	0	0

	C-A		C-B		C-D		D-A		D-B		D-C	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	137	7	14	1	0	0	2	0	0	0	1	0
7:45	123	8	15	1	1	0	2	0	0	0	4	0
8:00	171	6	23	0	1	0	1	1	3	0	0	0
8:15	168	13	22	0	0	0	2	0	1	0	6	0
8:30	88	7	24	0	3	0	2	0	0	0	6	0
8:45	82	8	18	0	2	0	0	0	1	0	0	0
9:00	63	7	19	0	1	0	1	0	0	0	0	1
9:15	76	10	24	0	2	0	1	0	0	0	2	0
2:30	108	6	9	0	0	0	5	0	0	0	6	1
2:45	110	4	18	0	1	0	4	0	0	0	4	0
3:00	110	9	14	0	4	0	4	0	3	0	5	0
3:15	117	9	23	0	1	0	10	0	0	0	23	0
3:30	96	12	12	0	0	0	7	0	0	0	13	0
3:45	91	8	8	0	0	0	1	0	2	0	4	0
4:00	94	7	13	0	0	0	5	0	1	0	4	0
4:15	116	11	10	0	2	0	2	0	1	0	5	0

Site 5 - T-way

Date 17/10/2018

	A THRU			C THRU		
	LIGHT	HEAVY	BUS+AMBU	LIGHT	HEAVY	BUS+AMBU
7:30	139	2	10	151	1	6
7:45	148	2	9	139	0	8
8:00	117	2	11	195	1	5
8:15	172	0	8	190	2	11
8:30	163	2	12	115	2	5
8:45	161	1	4	102	0	8
9:00	149	2	10	83	2	5
9:15	157	2	10	102	3	7
2:30	134	3	7	117	1	5
2:45	88	2	5	129	0	4
3:00	115	2	7	128	1	8
3:15	137	0	11	141	2	7
3:30	137	2	9	108	2	10
3:45	132	1	7	99	0	8
4:00	135	2	11	107	0	7
4:15	122	0	9	128	4	7

Site 6

Date 17/10/2018

	F-C		F-E		C-E		C-F		E-C		E-F	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	117	7	66	3	38	1	75	10	32	1	67	1
7:45	114	9	71	1	56	0	79	11	40	0	66	4
8:00	171	6	79	4	29	1	61	8	31	0	41	2
8:15	158	11	72	1	53	3	105	6	13	1	52	4
8:30	94	5	96	0	43	2	72	10	20	2	70	2
8:45	69	6	78	1	56	1	80	6	39	2	75	3
9:00	59	8	92	6	52	3	57	11	24	0	59	2
9:15	73	6	81	4	54	1	57	7	42	3	57	3
2:30	60	4	56	2	41	1	83	7	63	2	116	2
2:45	93	4	45	2	29	2	59	6	43	1	85	3
3:00	77	9	76	4	37	1	65	7	54	1	95	3
3:15	80	7	46	0	26	2	128	10	59	2	87	3
3:30	60	10	54	3	37	1	98	9	54	2	82	3
3:45	46	9	46	1	37	1	95	7	47	1	98	4
4:00	45	7	40	2	36	1	101	11	68	0	96	2
4:15	61	8	47	1	33	1	96	8	61	1	117	2

Site 6 - T-way

Date 17/10/2018

	C-E			C-F			F-C			E-C		
	LIGHT	HEAVY	BUS+AMBL	LIGHT	HEAVY	BUS+AMBL	LIGHT	HEAVY	BUS+AMBL	LIGHT	HEAVY	BUS+AMBL
7:30	38	0	1	75	1	9	117	1	6	32	0	1
7:45	56	0	0	79	2	9	114	0	9	40	0	0
8:00	29	0	1	61	0	8	171	1	5	31	0	0
8:15	53	0	3	105	0	6	158	2	9	13	0	1
8:30	43	1	1	72	0	10	94	1	4	20	1	1
8:45	56	1	0	80	0	6	69	0	6	39	0	2
9:00	52	1	2	57	3	8	59	2	6	24	0	0
9:15	54	0	1	57	1	6	73	1	5	42	2	1
2:30	41	1	0	83	2	5	60	0	4	63	1	1
2:45	29	1	1	59	1	5	93	0	4	43	0	1
3:00	37	0	1	65	1	6	77	0	9	54	1	0
3:15	26	0	2	128	0	10	80	2	5	59	1	1
3:30	37	0	1	98	1	8	60	0	10	54	1	1
3:45	37	0	1	95	1	6	46	0	9	47	0	1
4:00	36	0	1	101	2	11	45	2	5	68	0	0
4:15	33	0	1	96	0	8	61	2	6	61	0	1

Site 7

Date 17/10/2018

	A-B		A-C		B-A		B-C		C-A		C-B	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	19	0	104	14	5	0	44	0	162	12	59	0
7:45	36	0	101	13	11	0	43	0	193	8	83	0
8:00	11	0	90	8	8	0	28	1	242	12	60	0
8:15	20	0	139	11	4	0	30	0	238	11	66	1
8:30	21	0	111	13	2	0	60	1	186	5	60	0
8:45	27	0	127	10	2	0	58	0	195	5	58	1
9:00	23	0	88	12	5	0	65	0	188	4	55	0
9:15	32	0	84	8	3	0	25	2	143	10	61	2
2:30	18	0	162	7	8	0	46	0	104	6	32	0
2:45	14	0	120	10	5	0	34	0	126	5	44	2
3:00	10	0	135	8	8	0	53	0	137	11	49	0
3:15	20	0	186	11	2	0	42	0	107	8	51	0
3:30	13	0	161	14	3	0	58	0	83	12	41	0
3:45	16	0	153	10	6	0	63	1	69	10	37	0
4:00	21	0	153	14	4	0	60	0	73	9	40	0
4:15	14	0	158	11	10	0	49	0	83	3	29	0

Site 7 - T-way

Date 17/10/2018

	A THRU		
	LIGHT	HEAVY	BUS+AMBU
7:30	123	2	12
7:45	137	1	12
8:00	101	0	8
8:15	159	3	8
8:30	132	0	13
8:45	154	1	9
9:00	111	1	11
9:15	116	1	7
2:30	180	2	5
2:45	134	2	8
3:00	145	2	6
3:15	206	0	9
3:30	174	4	10
3:45	169	0	10
4:00	174	1	13
4:15	172	1	10

Site 8

Date 17/10/2018

	C-D		C-E		C-F		D-C		D-E		D-F	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	13	0	99	1	47	10	25	0	0	0	69	0
7:45	11	0	80	2	65	4	26	0	0	0	63	1
8:00	7	0	72	2	50	8	24	0	0	0	71	0
8:15	10	0	87	4	69	7	21	0	0	0	64	0
8:30	23	0	104	1	57	12	18	0	0	0	73	0
8:45	32	0	106	4	48	6	24	0	0	0	71	0
9:00	13	0	74	2	45	12	25	0	0	0	76	0
9:15	7	0	71	5	37	8	11	0	0	0	52	1
2:30	24	0	168	4	33	7	9	0	1	0	30	0
2:45	19	0	122	4	33	6	7	0	0	0	31	0
3:00	20	0	141	3	41	7	18	0	0	0	45	0
3:15	10	0	185	2	58	9	19	0	0	0	23	0
3:30	18	0	162	2	47	11	15	0	0	0	39	0
3:45	22	0	166	3	42	7	14	0	0	0	41	1
4:00	18	0	176	2	47	13	8	0	0	0	29	0
4:15	13	0	159	2	61	10	12	0	0	0	36	0

	E-D		E-C		E-F		F-C		F-D		F-E	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	1	0	146	3	0	0	52	9	15	0	8	0
7:45	6	0	188	1	0	0	73	7	24	0	16	0
8:00	6	0	197	2	0	0	65	10	26	0	13	0
8:15	3	0	241	3	0	0	54	9	23	0	4	0
8:30	2	1	168	1	0	0	56	5	34	0	2	0
8:45	5	0	172	1	0	0	46	6	23	0	7	0
9:00	6	0	173	8	0	0	41	6	18	0	6	0
9:15	3	0	129	4	0	0	39	9	20	0	9	0
2:30	3	0	107	1	0	0	29	5	27	0	7	1
2:45	3	0	113	4	0	0	49	4	37	0	6	0
3:00	9	0	110	3	0	0	65	9	48	0	3	0
3:15	10	0	109	4	0	0	54	5	53	0	8	0
3:30	5	0	93	1	0	0	37	11	45	0	6	0
3:45	13	0	71	1	0	0	32	9	54	0	10	0
4:00	7	0	77	3	0	0	33	6	51	0	12	0
4:15	6	0	71	3	0	0	40	6	59	0	11	1

Site 8 - T-way

Date 17/10/2018

	C-F		
	LIGHT	HEAVY	BUS+AMBU
7:30	47	0	10
7:45	65	1	3
8:00	50	0	8
8:15	69	0	7
8:30	57	0	12
8:45	48	1	5
9:00	45	2	10
9:15	37	1	7
2:30	33	0	7
2:45	33	0	6
3:00	41	0	7
3:15	58	0	9
3:30	47	1	10
3:45	42	0	7
4:00	47	1	12
4:15	61	1	9

Site 9

Date 17/10/2018

	A-A		A-B		A-C		B-A		B-B		B-C	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	0	0	33	0	88	1	10	0	0	0	15	0
7:45	0	0	33	1	94	4	14	0	0	0	25	0
8:00	0	0	34	0	108	3	12	0	1	0	25	0
8:15	0	0	29	0	138	3	9	1	0	0	24	0
8:30	0	0	33	0	156	1	9	0	1	0	24	0
8:45	0	0	34	0	84	2	19	1	0	0	32	0
9:00	0	0	30	1	67	1	17	0	0	0	25	0
9:15	0	0	24	0	71	4	13	0	0	0	20	1
2:30	0	0	14	0	98	1	14	0	0	0	33	1
2:45	0	0	22	0	93	2	24	0	0	0	31	0
3:00	0	0	17	0	129	2	29	0	0	0	40	0
3:15	0	0	15	0	124	7	41	0	0	0	41	0
3:30	0	0	23	0	134	7	23	0	0	0	45	1
3:45	0	0	23	0	105	3	33	0	0	0	61	0
4:00	0	0	12	0	114	2	30	0	0	0	51	0
4:15	0	0	22	0	119	2	28	0	0	0	47	0

	C-A		C-B		C-C	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	104	5	66	0	1	0
7:45	104	4	63	0	1	0
8:00	93	4	64	0	2	0
8:15	77	2	70	0	0	0
8:30	103	2	57	0	1	0
8:45	113	1	59	0	2	0
9:00	87	3	58	0	1	0
9:15	74	3	34	1	0	0
2:30	68	1	23	0	1	0
2:45	69	1	28	0	1	0
3:00	98	1	37	0	0	0
3:15	112	5	32	0	0	0
3:30	82	3	34	0	1	0
3:45	72	2	30	1	0	0
4:00	75	1	22	0	0	0
4:15	90	0	34	0	0	0

Site 10

Date 17/10/2018

	A-B		A-C		A-D		B-A		B-C		B-D	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	8	0	288	2	53	0	4	0	3	0	5	0
7:45	3	0	276	7	45	1	3	0	3	0	2	0
8:00	7	0	298	5	42	1	7	1	5	0	1	0
8:15	9	0	267	5	49	0	11	0	2	0	6	0
8:30	10	0	229	7	52	0	5	0	2	1	4	0
8:45	14	1	188	2	46	2	10	0	6	0	9	0
9:00	13	0	206	3	64	1	8	0	4	1	3	0
9:15	15	1	216	8	55	1	3	0	9	0	7	1
2:30	15	0	116	5	43	0	15	2	5	0	5	0
2:45	14	0	106	5	41	1	14	0	3	0	11	1
3:00	17	0	134	2	64	0	7	0	2	0	10	0
3:15	16	0	133	3	59	3	12	0	5	0	6	0
3:30	10	0	114	3	61	2	15	0	9	0	8	0
3:45	14	0	100	1	62	1	8	0	6	0	10	0
4:00	20	0	96	5	59	1	21	0	2	0	5	0
4:15	16	0	76	0	65	2	14	0	7	0	15	0

	C-A		C-B		C-D		D-A		D-B		D-C	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	110	2	1	0	29	1	38	4	2	0	39	0
7:45	91	2	2	0	43	2	35	2	6	0	37	1
8:00	148	4	4	0	66	3	28	1	3	0	43	4
8:15	138	7	8	0	80	3	34	0	3	1	52	2
8:30	110	6	7	0	75	0	41	1	3	0	38	1
8:45	66	5	4	1	13	1	58	0	6	0	30	0
9:00	84	2	4	0	16	0	39	0	4	0	29	2
9:15	81	5	0	0	16	1	36	0	10	0	14	1
2:30	187	2	6	0	41	1	43	1	11	0	14	0
2:45	210	6	3	0	51	0	57	0	3	0	22	0
3:00	212	5	4	0	53	3	50	0	9	0	14	0
3:15	221	2	5	0	60	4	66	0	8	0	25	6
3:30	276	7	5	0	64	4	43	1	3	0	15	1
3:45	198	3	8	0	34	2	51	2	7	0	19	1
4:00	216	3	6	0	47	0	66	0	6	0	7	1
4:15	222	3	11	0	41	1	49	0	7	0	16	0

Site 11

Date 17/10/2018

	B-G		B-F		G-B		G-F		F-B		F-G	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:00	0	0	4	0	0	0	0	0	6	0	0	0
7:15	0	0	3	0	0	0	0	0	1	0	0	0
7:30	0	0	10	0	0	0	0	0	5	0	0	0
7:45	3	0	9	0	0	0	0	0	6	0	1	0
8:00	2	0	13	0	0	0	0	0	6	0	2	0
8:15	0	0	26	1	0	0	0	0	7	0	1	0
8:30	0	0	58	1	0	0	0	0	10	0	0	0
8:45	1	0	44	0	0	0	0	0	5	0	0	0
9:00	0	0	44	0	0	0	0	0	6	0	0	0
9:15	0	0	11	1	0	0	0	0	5	0	0	0
2:30	1	0	9	0	0	0	0	0	7	0	0	0
2:45	0	0	21	0	0	0	0	0	3	0	0	0
3:00	0	0	19	0	0	0	0	0	3	0	0	0
3:15	0	0	46	0	1	0	0	0	18	0	0	0
3:30	0	0	9	0	2	0	1	0	5	0	0	0
3:45	0	0	8	0	1	0	0	0	8	0	0	0
4:00	0	0	11	0	0	0	1	0	4	0	0	0
4:15	0	0	7	0	0	0	0	0	2	0	0	0
4:30	0	0	13	0	0	0	0	0	12	0	0	0
4:45	0	0	6	0	1	0	1	0	7	0	0	0

Site 12a

Date 17/10/2018

	A-B		A-C		B-A		B-C		C-A		C-B	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	6	0	11	0	2	0	6	0	186	4	4	0
7:45	3	0	96	1	0	0	2	1	184	1	3	0
8:00	6	0	88	3	0	0	4	0	127	2	4	0
8:15	12	0	95	4	0	0	9	0	230	4	11	0
8:30	18	0	98	1	1	0	8	0	200	3	29	0
8:45	17	0	108	4	5	0	4	0	158	2	17	0
9:00	2	0	91	4	4	0	12	0	167	9	6	2
9:15	3	0	89	3	4	0	4	0	141	1	3	1
2:30	6	0	169	6	4	0	9	0	128	0	7	0
2:45	3	0	132	3	0	0	4	0	137	0	14	0
3:00	6	0	173	3	1	0	5	0	110	0	25	0
3:15	13	0	198	1	4	0	19	0	112	0	28	0
3:30	5	0	186	1	1	0	9	0	98	0	8	0
3:45	3	0	198	4	2	0	13	0	93	0	6	0
4:00	5	0	213	6	2	0	4	1	87	0	8	0
4:15	7	0	198	1	1	0	2	0	95	0	4	0

Site 12b

Date 17/10/2018

	D-E		D-C		E-C		E-D		C-E		C-D	
	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
7:30	6	0	190	4	3	0	1	0	2	0	81	3
7:45	3	0	187	1	9	0	2	0	5	0	111	0
8:00	3	0	231	2	10	0	1	0	3	0	87	3
8:15	3	0	241	4	10	1	4	0	4	0	99	3
8:30	8	0	229	3	12	1	4	0	4	0	99	1
8:45	4	0	181	2	20	0	1	0	6	0	105	4
9:00	4	0	173	11	1	0	2	0	1	0	105	4
9:15	7	0	144	2	1	0	1	0	5	0	87	4
2:30	4	1	134	2	2	0	2	0	2	0	176	6
2:45	10	0	147	4	5	0	2	0	7	0	132	3
3:00	5	0	127	4	8	0	3	0	6	0	171	3
3:15	8	0	136	2	4	0	1	0	10	0	201	1
3:30	3	1	105	1	1	1	3	0	3	0	192	1
3:45	5	0	98	1	1	0	1	0	5	1	207	5
4:00	4	0	92	3	3	0	0	0	5	0	223	6
4:15	5	0	96	2	4	0	1	0	4	0	194	1

Appendix C

Interview Surveys

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 7 *Year Coordinator Mrs Rehayem*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	66
Bus	71
Train	37
Bus and Train	9
Walk	12
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	8
In the school carpark	38
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	22
2 passengers	19
3 passengers	19
4 passengers	10
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	43
Bus	80
Train	33
Bus and Train	21
Walk	14
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	9
2	13
3	6
4	6
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 8 *Homeroom Teacher*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	43
Bus	70
Train	54
Bus and Train	10
Walk	15
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	5
In the school carpark	37
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	15
2 passengers	22
3 passengers	4
4 passengers	5
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	27
Bus	80
Train	48
Bus and Train	16
Walk	9
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	13
2	14
3	3
4	3
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 9	
Homeroom Teacher	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	49
Bus	49
Train	44
Bus and Train	14
Walk	7
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	11
In the school carpark	26
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	20
2 passengers	20
3 passengers	6
4 passengers	3
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	36
Bus	60
Train	43
Bus and Train	30
Walk	6
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	9
2	14
3	5
4	6
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 10 *Homeroom Teacher*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	24
Bus	58
Train	57
Bus and Train	16
Walk	8
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	2
In the school carpark	19
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	10
2 passengers	11
3 passengers	1
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	21
Bus	61
Train	45
Bus and Train	27
Walk	9
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	6
2	10
3	4
4	4
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 11 *Homeroom Teacher*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	48
Bus	52
Train	49
Bus and Train	12
Walk	6
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	6
In the school carpark	42
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	17
2 passengers	13
3 passengers	4
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	8
Bus	70
Train	56
Bus and Train	17
Walk	10
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	6
2	1
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**7.1** *Nikhita Jacobs*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	14
Train	4
Bus and Train	1
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	7
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	3
2 passengers	6
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	17
Train	4
Bus and Train	3
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	2
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Mr Bain*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	14
Train	4
Bus and Train	
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	4
3 passengers	2
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	16
Train	5
Bus and Train	2
Walk	3
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	1
3	2
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**2018** *John Lichaa*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	13
Train	2
Bus and Train	2
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	7
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	3
2 passengers	2
3 passengers	3
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	18
Train	2
Bus and Train	7
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**2018** *Shenae Northey*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	13
Train	4
Bus and Train	2
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	8
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	3
3 passengers	2
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	8
Train	1
Bus and Train	5
Walk	3
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	4
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Daniel Bateman*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	13
Train	4
Bus and Train	1
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	
3 passengers	
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**7.6** *Melinda McGrath*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	7
Bus	10
Train	5
Bus and Train	1
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	6
2 passengers	0
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Lauren Candido*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	8
Train	5
Bus and Train	3
Walk	1
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	8
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	3
3 passengers	1
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	12
Train	6
Bus and Train	3
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	1
3	1
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Rommel del Valle*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	9
Train	8
Bus and Train	5
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	2
3 passengers	3
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	6
Train	8
Bus and Train	2
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	
3	2
4	
Notes / Comments	

There were 6 students absent today. Could this have been collected in a Google Form?

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Gina Mari*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	9
Bus	8
Train	7
Bus and Train	2
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	5
2 passengers	3
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	13
Train	10
Bus and Train	4
Walk	4
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Noel Bajada*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	12
Train	5
Bus and Train	0
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	4
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	6
2 passengers	2
3 passengers	1
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	16
Train	8
Bus and Train	4
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	3
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8.5** *Louise Colbran*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	10
Train	8
Bus and Train	
Walk	
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	4
3 passengers	
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	12
Train	2
Bus and Train	4
Walk	
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	3
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Aditi Kataria*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	9
Bus	15
Train	3
Bus and Train	1
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	3
2 passengers	5
3 passengers	1
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	21
Train	1
Bus and Train	3
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	3
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*L.Barry-Donnellan*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	13
Bus	7
Train	5
Bus and Train	1
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	13
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	6
2 passengers	6
3 passengers	1
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	10
Train	5
Bus and Train	3
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	3
3	2
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**9.2** *Karyn West*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	9
Train	5
Bus and Train	1
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	4
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	5
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	8
Train	7
Bus and Train	2
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	3
2	2
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**9** *Vuki*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	3
Bus	12
Train	6
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	0
2 passengers	1
3 passengers	2
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	15
Train	2
Bus and Train	6
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	0
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**9.4** *Shamaine Jacobs*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	3
Bus	11
Train	3
Bus and Train	6
Walk	
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	
2 passengers	3
3 passengers	
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	11
Train	6
Bus and Train	4
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	2
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Bortoluzzi*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	12
Train	6
Bus and Train	4
Walk	
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	5
2 passengers	3
3 passengers	2
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	5
Bus	13
Train	7
Bus and Train	3
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	1
3	1
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Mr Alata*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	11
Bus	13
Train	3
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	5
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	3
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	15
Train	7
Bus and Train	4
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	3
2	0
3	0
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.1** *Skumar*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	9
Train	3
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	0
3 passengers	0
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	10
Train	3
Bus and Train	5
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	0
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.2** *K Parnis*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	4
Bus	9
Train	6
Bus and Train	2
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	3
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	2
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	9
Train	7
Bus and Train	3
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	2
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.3** *Kimberley Martin*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	8
Train	12
Bus and Train	3
Walk	3
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	6
In the school carpark	3
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	5
3 passengers	2
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	8
Train	17
Bus and Train	9
Walk	2
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	3
2	5
3	4
4	1
Notes / Comments	

Some students take a variety of modes of transport to and from schools. Some days boys would only have them, other days it would be with neighbours, siblings or a variety of both.

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10** *Clinton Rodoreda*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	7
Bus	11
Train	7
Bus and Train	3
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	2
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	1
Bus	13
Train	9
Bus and Train	2
Walk	3
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.5** *Mary Roche*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	8
Train	4
Bus and Train	4
Walk	1
Cycle	-
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	2
3 passengers	-
4 passengers	-
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	7
Train	8
Bus and Train	3
Walk	1
Cycle	-
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	2
3	-
4	-
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*T. Chippendale*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	9
Train	2
Bus and Train	2
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	2
In the school carpark	3
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	0
2 passengers	4
3 passengers	1
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	10
Train	1
Bus and Train	4
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	0
3	3
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**Year 11 (2018)** *Melissa Kervinen*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	7
Train	14
Bus and Train	4
Walk	1
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	2
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	2
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	1
Bus	11
Train	11
Bus and Train	8
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year 11 *Homeroom Teacher : Jack Jurd*	**11** *Jack Jurd (Tony Lahood)*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	4
Bus	6
Train	10
Bus and Train	2
Walk	1
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	1
3 passengers	0
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	8
Train	9
Bus and Train	6
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**11** *Phillips*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	13
Train	10
Bus and Train	5
Walk	0
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	1
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	1
Bus	18
Train	11
Bus and Train	8
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	0
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**11** *Ashby Keren*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	2
Bus	12
Train	6
Bus and Train	4
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	1
3 passengers	0
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	0
Bus	9
Train	6
Bus and Train	9
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	0
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Mr Wilson*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	10
Train	9
Bus and Train	4
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	1
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	3
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	16
Train	10
Bus and Train	5
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	0
3	3
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**11** *Tim Woodbine*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	13
Train	11
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	0
2 passengers	3
3 passengers	0
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	13
Train	11
Bus and Train	9
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	0
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	*Melissa Staunton*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	21
Bus	2
Train	0
Bus and Train	2
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	21
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	8
2 passengers	7
3 passengers	3
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	26
Bus	1
Train	
Bus and Train	
Walk	1
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	10
2	12
3	3
4	1
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**5** *Kirstie Hull*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	16
Bus	4
Train	
Bus and Train	
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	16
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	7
3 passengers	4
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	17
Bus	2
Train	
Bus and Train	
Walk	3
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	5
2	6
3	4
4	2
Notes/Comments	

Please note that 13 of the 16 students who park in the school car park get dropped off at the kiss and drop zone rather than the park the car.

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**3**
Teacher	*Karen Voda*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	22
Bus	0
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	22
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	7
2 passengers	8
3 passengers	5
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	22
Bus	0
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q4. If travelling home by car, how many school children will be in the car?	
1	7
2	8
3	5
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**3**
Teacher	*Melinda Callaghan*

Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	20
Bus	4
Train	
Bus and Train	
Walk	
Cycle	
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	14
3 passengers	3
4 passengers	4
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	22
Bus	2
Train	
Bus and Train	
Walk	
Cycle	
Q4. If travelling home by car, how many school children will be in the car?	
1	3
2	14
3	3
4	4
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**1 (54)**
Teacher	*Mr Bennett and Miss Wardan*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	50
Bus	3
Train	
Bus and Train	
Walk	1
Cycle	
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	7
In the school carpark	43
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	10
2 passengers	24
3 passengers	8
4 passengers	8
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	54
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4. If travelling home by car, how many school children will be in the car?	
1	11
2	27
3	8
4	8
Notes/Comments	

This was very difficult and may be innacurate given the confusion.

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**2** *Gabriella Oliveri and Julie Hooper*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	53
Bus	1
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	52
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	10
2 passengers	27
3 passengers	9
4 passengers	8
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	55
Bus	1
Train	0
Bus and Train	0
Walk	1
Cycle	0
Q4: If travelling home by car, how many school children will be in the car?	
1	12
2	28
3	9
4	6
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**K**
Teacher	*Miss Sherry*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	17
Bus	2
Train	0
Bus and Train	0
Walk	1
Cycle	4
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	7
In the school carpark	8
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	4
2 passengers	5
3 passengers	5
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	17
Bus	1
Train	0
Bus and Train	0
Walk	0
Cycle	3
Q4. If travelling home by car, how many school children will be in the car?	
1	6
2	5
3	6
4	5
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year 6 *Teacher Mr Wallis and Mrs Boyd*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	37
Bus	5
Train	1
Bus and Train	0
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	37
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	9
2 passengers	18
3 passengers	7
4 passengers	3
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	31
Bus	5
Train	0
Bus and Train	1
Walk	7
Cycle	1
Q4: If travelling home by car, how many school children will be in the car?	
1	6
2	14
3	8
4	3
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**Kindergarten** **Ashita Hay**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	25
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	11
2 passengers	11
3 passengers	1
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	25
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	11
2	11
3	1
4	
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**1** **Louise Kingsley**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	24
Bus	
Train	
Bus and Train	
Walk	5
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	24
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	9
2 passengers	9
3 passengers	2
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	23
Bus	
Train	
Bus and Train	
Walk	6
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	10
2	8
3	3
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**2** **Tracey Clogher**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	29
Bus	
Train	
Bus and Train	
Walk	0
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	1
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	19
3 passengers	3
4 passengers	4
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	29
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	3
2	19
3	3
4	4
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**3** *Mrs Doan Tran*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	
Train	
Bus and Train	
Walk	2
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	25
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	8
3 passengers	7
4 passengers	7
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	25
Bus	
Train	
Bus and Train	
Walk	2
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	3
2	14
3	6
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**4** **Nick Stevens**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	27
Bus	
Train	
Bus and Train	
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	30
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	19
2 passengers	7
3 passengers	3
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	27
Bus	1
Train	
Bus and Train	
Walk	2
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	9
2	12
3	5
4	1
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**5** **Katie Breen**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	0
Train	0
Bus and Train	0
Walk	4
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	24
In the school carpark	1
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	5
2 passengers	14
3 passengers	4
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	26
Bus	1
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q4: If travelling home by car, how many school children will be in the car?	
1	5
2	15
3	4
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**6** **Monique Isaac**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	
Train	
Bus and Train	
Walk	1
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	25
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	13
2 passengers	5
3 passengers	5
4 passengers	3
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	25
Bus	
Train	
Bus and Train	
Walk	1
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	10
2	6
3	5
4	5
Notes/Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**7.1** *Nikhita Jacobs*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	14
Train	4
Bus and Train	1
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	7
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	3
2 passengers	6
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	17
Train	4
Bus and Train	3
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	2
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Mr Bain*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	14
Train	4
Bus and Train	
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	4
3 passengers	2
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	16
Train	5
Bus and Train	2
Walk	3
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	1
3	2
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**2018** *John Lichaa*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	13
Train	2
Bus and Train	2
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	7
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	3
2 passengers	2
3 passengers	3
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	18
Train	2
Bus and Train	7
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**2018** *Shenae Northey*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	13
Train	4
Bus and Train	2
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	8
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	3
3 passengers	2
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	8
Train	1
Bus and Train	5
Walk	3
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	4
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Daniel Bateman*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	13
Train	4
Bus and Train	1
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	
3 passengers	
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**7.6** *Melinda McGrath*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	7
Bus	10
Train	5
Bus and Train	1
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	6
2 passengers	0
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Lauren Candido*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	8
Train	5
Bus and Train	3
Walk	1
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	8
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	3
3 passengers	1
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	12
Train	6
Bus and Train	3
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	1
3	1
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Rommel del Valle*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	9
Train	8
Bus and Train	5
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	2
3 passengers	3
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	6
Train	8
Bus and Train	2
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	
3	2
4	
Notes / Comments	

There were 6 students absent today. Could this have been collected in a Google Form?

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Gina Mari*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	9
Bus	8
Train	7
Bus and Train	2
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	5
2 passengers	3
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	13
Train	10
Bus and Train	4
Walk	4
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Noel Bajada*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	12
Train	5
Bus and Train	0
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	4
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	6
2 passengers	2
3 passengers	1
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	16
Train	8
Bus and Train	4
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	3
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8.5** *Louise Colbran*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	10
Train	8
Bus and Train	
Walk	
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	4
3 passengers	
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	12
Train	2
Bus and Train	4
Walk	
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	3
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**8** *Aditi Kataria*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	9
Bus	15
Train	3
Bus and Train	1
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	3
2 passengers	5
3 passengers	1
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	21
Train	1
Bus and Train	3
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	3
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*L.Barry-Donnellan*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	13
Bus	7
Train	5
Bus and Train	1
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	13
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	6
2 passengers	6
3 passengers	1
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	10
Train	5
Bus and Train	3
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	3
3	2
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**9.2** *Karyn West*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	8
Bus	9
Train	5
Bus and Train	1
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	4
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	5
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	8
Train	7
Bus and Train	2
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	3
2	2
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**9** *Vuki*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	3
Bus	12
Train	6
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	0
2 passengers	1
3 passengers	2
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	15
Train	2
Bus and Train	6
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	0
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**9.4** *Shamaine Jacobs*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	3
Bus	11
Train	3
Bus and Train	6
Walk	
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	
2 passengers	3
3 passengers	
4 passengers	
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	11
Train	6
Bus and Train	4
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	
2	2
3	
4	
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Bortoluzzi*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	12
Train	6
Bus and Train	4
Walk	
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	6
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	5
2 passengers	3
3 passengers	2
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	5
Bus	13
Train	7
Bus and Train	3
Walk	
Cycle	
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	1
3	1
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Mr Alata*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	11
Bus	13
Train	3
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	5
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	3
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	15
Train	7
Bus and Train	4
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	3
2	0
3	0
4	1
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.1** *Skumar*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	9
Train	3
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	0
3 passengers	0
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	10
Train	3
Bus and Train	5
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	0
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.2** *K Parnis*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	4
Bus	9
Train	6
Bus and Train	2
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	3
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	2
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	9
Train	7
Bus and Train	3
Walk	2
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	2
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.3** *Kimberley Martin*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	10
Bus	8
Train	12
Bus and Train	3
Walk	3
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	6
In the school carpark	3
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	5
3 passengers	2
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	6
Bus	8
Train	17
Bus and Train	9
Walk	2
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	3
2	5
3	4
4	1
Notes / Comments	

Some students take a variety of modes of transport to and from schools. Some days boys would only have them, other days it would be with neighbours, siblings or a variety of both.

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10** *Clinton Rodoreda*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	7
Bus	11
Train	7
Bus and Train	3
Walk	3
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	4
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	2
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	1
Bus	13
Train	9
Bus and Train	2
Walk	3
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**10.5** *Mary Roche*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	8
Train	4
Bus and Train	4
Walk	1
Cycle	-
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	4
2 passengers	2
3 passengers	-
4 passengers	-
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	4
Bus	7
Train	8
Bus and Train	3
Walk	1
Cycle	-
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	2
3	-
4	-
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*T. Chippendale*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	9
Train	2
Bus and Train	2
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	2
In the school carpark	3
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	0
2 passengers	4
3 passengers	1
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	10
Train	1
Bus and Train	4
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	0
3	3
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**Year 11 (2018)** *Melissa Kervinen*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	6
Bus	7
Train	14
Bus and Train	4
Walk	1
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	2
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	2
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	1
Bus	11
Train	11
Bus and Train	8
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	1
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year 11 *Homeroom Teacher : Jack Jurd*	**11** *Jack Jurd (Tony Lahood)*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	4
Bus	6
Train	10
Bus and Train	2
Walk	1
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	1
3 passengers	0
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	8
Train	9
Bus and Train	6
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	2
2	1
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**11** *Phillips*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	13
Train	10
Bus and Train	5
Walk	0
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	2
2 passengers	1
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	1
Bus	18
Train	11
Bus and Train	8
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	1
2	0
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**11** *Ashby Keren*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	2
Bus	12
Train	6
Bus and Train	4
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	0
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	1
3 passengers	0
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	0
Bus	9
Train	6
Bus and Train	9
Walk	1
Cycle	1
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	0
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	*Mr Wilson*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	10
Train	9
Bus and Train	4
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	1
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	1
2 passengers	3
3 passengers	1
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	3
Bus	16
Train	10
Bus and Train	5
Walk	0
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	0
3	3
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Parramatta Marist	*Please tally responses and type in the column below for each multiple choice response.*
Year *Homeroom Teacher*	**11** *Tim Woodbine*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	5
Bus	13
Train	11
Bus and Train	3
Walk	0
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	2
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	0
2 passengers	3
3 passengers	0
4 passengers	0
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	2
Bus	13
Train	11
Bus and Train	9
Walk	1
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	0
2	0
3	0
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**Kindergarten** **Ashita Hay**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	25
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	11
2 passengers	11
3 passengers	1
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	25
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	11
2	11
3	1
4	
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**1** **Louise Kingsley**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	24
Bus	
Train	
Bus and Train	
Walk	5
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	24
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	9
2 passengers	9
3 passengers	2
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	23
Bus	
Train	
Bus and Train	
Walk	6
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	10
2	8
3	3
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**2** **Tracey Clogher**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	29
Bus	
Train	
Bus and Train	
Walk	0
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	1
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	19
3 passengers	3
4 passengers	4
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	29
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	3
2	19
3	3
4	4
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**3** *Mrs Doan Tran*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	
Train	
Bus and Train	
Walk	2
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	25
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	8
3 passengers	7
4 passengers	7
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	25
Bus	
Train	
Bus and Train	
Walk	2
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	3
2	14
3	6
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**4** **Nick Stevens**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	27
Bus	
Train	
Bus and Train	
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	30
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	19
2 passengers	7
3 passengers	3
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	27
Bus	1
Train	
Bus and Train	
Walk	2
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	9
2	12
3	5
4	1
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**5** **Katie Breen**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	0
Train	0
Bus and Train	0
Walk	4
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	24
In the school carpark	1
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	5
2 passengers	14
3 passengers	4
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	26
Bus	1
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q4: If travelling home by car, how many school children will be in the car?	
1	5
2	15
3	4
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Sacred Heart Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**6** **Monique Isaac**
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	25
Bus	
Train	
Bus and Train	
Walk	1
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	25
In the school carpark	
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	13
2 passengers	5
3 passengers	5
4 passengers	3
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	25
Bus	
Train	
Bus and Train	
Walk	1
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	10
2	6
3	5
4	5
Notes/Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 7 *Year Coordinator Mrs Rehayem*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	66
Bus	71
Train	37
Bus and Train	9
Walk	12
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	8
In the school carpark	38
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	22
2 passengers	19
3 passengers	19
4 passengers	10
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	43
Bus	80
Train	33
Bus and Train	21
Walk	14
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	9
2	13
3	6
4	6
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 8 *Homeroom Teacher*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	43
Bus	70
Train	54
Bus and Train	10
Walk	15
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	5
In the school carpark	37
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	15
2 passengers	22
3 passengers	4
4 passengers	5
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	27
Bus	80
Train	48
Bus and Train	16
Walk	9
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	13
2	14
3	3
4	3
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 9	
Homeroom Teacher	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	49
Bus	49
Train	44
Bus and Train	14
Walk	7
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	11
In the school carpark	26
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	20
2 passengers	20
3 passengers	6
4 passengers	3
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	36
Bus	60
Train	43
Bus and Train	30
Walk	6
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	9
2	14
3	5
4	6
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 10 *Homeroom Teacher*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	24
Bus	58
Train	57
Bus and Train	16
Walk	8
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	2
In the school carpark	19
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	10
2 passengers	11
3 passengers	1
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	21
Bus	61
Train	45
Bus and Train	27
Walk	9
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	6
2	10
3	4
4	4
Notes / Comments	

Westmead Schools Student Travel Survey: Catherine McAuley High	*Please tally responses and type in the column below for each multiple choice response.*
Year 11 *Homeroom Teacher*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	48
Bus	52
Train	49
Bus and Train	12
Walk	6
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	6
In the school carpark	42
Q2: If you travelled by car, how many passengers were school students?	
1 passenger (only me)	17
2 passengers	13
3 passengers	4
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver/other	8
Bus	70
Train	56
Bus and Train	17
Walk	10
Cycle	0
Q4: If travelling home by car, how many passengers will be school students?	
1	6
2	1
3	1
4	0
Notes / Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	*Melissa Staunton*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	21
Bus	2
Train	0
Bus and Train	2
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	21
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	8
2 passengers	7
3 passengers	3
4 passengers	1
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	26
Bus	1
Train	
Bus and Train	
Walk	1
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	10
2	12
3	3
4	1
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**5** *Kirstie Hull*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	16
Bus	4
Train	
Bus and Train	
Walk	3
Cycle	
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	16
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	7
3 passengers	4
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	17
Bus	2
Train	
Bus and Train	
Walk	3
Cycle	
Q4: If travelling home by car, how many school children will be in the car?	
1	5
2	6
3	4
4	2
Notes/Comments	

Please note that 13 of the 16 students who park in the school car park get dropped off at the kiss and drop zone rather than the park the car.

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**3**
Teacher	*Karen Voda*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	22
Bus	0
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	0
In the school carpark	22
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	7
2 passengers	8
3 passengers	5
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	22
Bus	0
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q4. If travelling home by car, how many school children will be in the car?	
1	7
2	8
3	5
4	2
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**3**
Teacher	*Melinda Callaghan*

Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	20
Bus	4
Train	
Bus and Train	
Walk	
Cycle	
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	3
In the school carpark	
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	3
2 passengers	14
3 passengers	3
4 passengers	4
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	22
Bus	2
Train	
Bus and Train	
Walk	
Cycle	
Q4. If travelling home by car, how many school children will be in the car?	
1	3
2	14
3	3
4	4
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**1 (54)**
Teacher	*Mr Bennett and Miss Wardan*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	50
Bus	3
Train	
Bus and Train	
Walk	1
Cycle	
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	7
In the school carpark	43
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	10
2 passengers	24
3 passengers	8
4 passengers	8
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	54
Bus	
Train	
Bus and Train	
Walk	
Cycle	
Q4. If travelling home by car, how many school children will be in the car?	
1	11
2	27
3	8
4	8
Notes/Comments	

This was very difficult and may be innacurate given the confusion.

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year *Teacher*	**2** *Gabriella Oliveri and Julie Hooper*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	53
Bus	1
Train	0
Bus and Train	0
Walk	2
Cycle	0
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	1
In the school carpark	52
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	10
2 passengers	27
3 passengers	9
4 passengers	8
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	55
Bus	1
Train	0
Bus and Train	0
Walk	1
Cycle	0
Q4: If travelling home by car, how many school children will be in the car?	
1	12
2	28
3	9
4	6
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year	**K**
Teacher	*Miss Sherry*
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	17
Bus	2
Train	0
Bus and Train	0
Walk	1
Cycle	4
Q1a. If you were dropped off by a parent/caregiver/other, did they park	
On the street	7
In the school carpark	8
Q2. If you travelled by car, how many school children were in the car?	
1 passenger (only me)	4
2 passengers	5
3 passengers	5
4 passengers	2
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	17
Bus	1
Train	0
Bus and Train	0
Walk	0
Cycle	3
Q4. If travelling home by car, how many school children will be in the car?	
1	6
2	5
3	6
4	5
Notes/Comments	

Westmead Schools Student Travel Survey: Mother Teresa Primary	*Please tally responses and type in the column below for each multiple choice response.*
Year 6 *Teacher Mr Wallis and Mrs Boyd*	
Q1: How did you travel to school today?	
Car - driven by a parent/caregiver/other (see also Q1a)	37
Bus	5
Train	1
Bus and Train	0
Walk	1
Cycle	1
Q1a: If you were dropped off by a parent/caregiver/other, did they park	
On the street	
In the school carpark	37
Q2: If you travelled by car, how many school children were in the car?	
1 passenger (only me)	9
2 passengers	18
3 passengers	7
4 passengers	3
Q3: How will you travel home from school today?	
Car - driven by parent/caregiver	31
Bus	5
Train	0
Bus and Train	1
Walk	7
Cycle	1
Q4: If travelling home by car, how many school children will be in the car?	
1	6
2	14
3	8
4	3
Notes/Comments	

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