

Transport Impact Assessment;

Royal Randwick Racecourse,
Night Racing Events

For Australian Turf Club
16 March 2021

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Royal Randwick Racecourse, Night Racing Events, Traffic Impact Report

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Contents

1	Executive Summary	1
2	Introduction	2
2.1	Project Summary	2
2.2	Scope of this Report	3
2.3	SEAR's Reference Table	4
3	Proposal Context	6
3.1	Randwick Locality	6
3.2	Royal Randwick Racecourse	6
3.3	Moore Park Event Operations Group (MEOG)	7
3.4	Proposal Details	7
4	Racecourse Access & Transport Facilities	8
5	Existing Transport Facilities	10
5.1	Road Hierarchy	10
5.1.1	Anzac Parade	11
5.1.2	Alison Road	11
5.1.3	Doncaster Avenue	12
5.1.4	Wansey Road	12
5.1.5	High Street	13
5.2	Public Transport	13
5.2.1	Regular Bus Service	14
5.2.2	Event Bus Service	15
5.2.3	Light Rail	15
5.3	Active Transport	16
5.3.1	Pedestrians	16
5.3.2	Cyclists	17
6	Existing Traffic Conditions	18
6.1	Traffic Surveys	18
6.2	Existing Traffic Volumes	20
7	Pedestrian, Transport & Traffic Assessment	22
7.1	Travel Catchment	22
7.2	Travel Mode Share	22
7.2.1	ATC Data	22
7.2.2	ptc. Surveys	23
7.2.3	Existing Mode Share Comparison	24
7.3	Projected Mode Share	24
7.4	Peak Traffic Assessment	27
7.4.1	Private Vehicle Trips	27
7.4.2	Trip Distribution	27
7.5	Off-peak Trips	31
7.5.1	Heavy Vehicle & Service Vehicle Trips	31
7.5.2	Horse Floats	31
7.6	Traffic Network Modelling	32
7.6.1	SIDRA Intersection Modelling Tool	32
7.6.2	Intersection Upgrade	33
7.6.3	Modelling Scenarios	34
7.6.4	2020 and Future Road Network Performance	35

7.6.5	Impacts to Road Users	37
7.6.6	Mitigation Measures for Road Management	38
7.7	Public Transport Assessment	39
7.8	Pedestrian and Cyclist Assessment	40
8	Parking and Servicing Assessment	41
8.1	Private Parking	41
8.1.1	Parking Capacity and Demand	41
8.1.2	Parking Management	41
8.2	Drop-Off Provisions	42
8.2.1	Bus Provisions	42
8.2.2	Taxi Rank	42
8.2.3	Limousine, Shuttle and Coach Drop-off	42
8.3	Horse Float Provisions	43
8.4	Service Vehicle Provisions	43
9	Traffic Management Plan	44
10	Impact and Mitigation Summary	45
Attachment 1	SIDRA RESULTS	47

List of Figures

Figure 1: Royal Randwick Racecourse	6
Figure 2: Overview of Internal Site Arrangements	9
Figure 3: Road hierarchy (Source: RMS Road Hierarchy Review)	10
Figure 4: Street View – Anzac Parade southbound towards Alison Road	11
Figure 5: Street View - Alison Road westbound towards Doncaster Avenue	11
Figure 6: Street View – Doncaster Avenue	12
Figure 7: Street View - Wansey Road northbound towards Alison Road	12
Figure 8: Street View – Hight Street eastbound towards Gate Two Avenue	13
Figure 9: 800m Walking Catchment	14
Figure 10: Sydney Bus Network Map	15
Figure 11: CBD and South East Light Rail Route Map	16
Figure 12: Randwick Bicycle Plan (Route Priorities) 2007	17
Figure 13: Survey Locations	19
Figure 14: Existing Weekday Evening Peak Hour Traffic Volume	21
Figure 15: Direction of Approach	22
Figure 16: Anticipated Mode Split, Multiple Events	24
Figure 17: Anticipated Mode Split, Class 2 Event	24
Figure 18: Infield Traffic Count Survey at Everest (14th October, 2017)	27
Figure 19: Traffic Distribution for Class 3 Event – Taxi/Uber via Ascot Street	28
Figure 20: Traffic Distribution for Class 3 Event – Taxi/Uber via Gate 1	29
Figure 21: Traffic Distribution for Class 2 Event – Taxi/Uber via Ascot Street	30
Figure 22: Traffic Distribution for Class 2 Event – Taxi/Uber via Gate 1	31
Figure 23: New Geometry of Doncaster Avenue / Ascot Street (Priority) Intersection	33
Figure 24: Signalisation option of Doncaster Avenue / Ascot Street Intersection	34

List of Tables

Table 1: SEAR's	4
Table 2: Proposed Night Racing Events	7
Table 3: Additional Bus Services during Current Events	15
Table 4: List of Surveyed Intersections	18
Table 5: Traffic Survey Results	20
Table 6: Average Mode Share Over Autumn 2017 Season	24
Table 7: Projected Mode Share	25
Table 8: Peak Hourly Arrival Trip Summary	26
Table 9: Intersection Performance - Levels of Service	32
Table 10: Road Network Analysis (Existing, Class 3 and Class 2 Event)	35
Table 11 - Parking Provisions	41

1 Executive Summary

ptc. has been engaged by The Australian Turf Club (ATC) to provide a traffic impact assessment to accompany a State Significant Development Application (SSDA) for the proposal to permit night racing at Royal Randwick Racecourse (the Racecourse).

In particular, this assessment addresses the Secretary's Environmental Assessment Requirements (SEARs) in relation to the transport and accessibility matters associated with the proposal. A summary of the SEARs identified by the NSW Department of Planning is included in Section 2.3.

The application seeks approval for night racing during 16 times per year to be held up to 10pm at the Racecourse. These events will predominantly attract up to 10,000 patrons and these have been assessed in the context of the road and transport networks during a weekday evening.

Traffic modelling undertaken for this assessment demonstrates that the existing network is typically operating satisfactorily, with the exception of the intersection of Anzac Parade/Alison Road/Dacey Avenue.

The future scenario model forecasts the likely road network performance of the additional traffic generation associated with the proposal, taking into account the overlap with the evening commuter peak period. The results indicate that the road network will accommodate the additional traffic activity, although some intersections are currently operating at capacity and will require specific traffic control/management and/or the management of the mode share through the provision of additional transport options. This is consistent with the management measures put in place by the ATC during daytime racing events.

A review of the existing public transport infrastructure indicates that the Racecourse is readily accessible in terms of public transport with regular bus services and the South East Light Rail (CSELR) providing a regular connection between the CBD and the Racecourse. The CSELR will likely result in a shift in the mode share from private car and taxi/Uber use towards public transport with additional capacity to transport up to 10,000 patrons in each direction, thus providing relief to the surrounding road network.

An assessment of the parking provisions indicates that there is a parking demand of 1,876 spaces based on mode share surveys. This demand is adequately accommodated by the combined on-site parking provision of 4,074 spaces.

In summary, the proposal to host night racing events at the Racecourse has been assessed against the SEARs requirements in relation to parking and traffic matters. Based on our assessment, the proposal for events of up to 15,000 patrons is able to be accommodated by the road and transport networks.

2 Introduction

2.1 Project Summary

This traffic impact assessment has been prepared to support a State Significant Development (SSD) application for Night Racing at the Royal Randwick Racecourse (the Racecourse). The Australian Turf Club (ATC) is seeking opportunities to improve the racing experience at the Racecourse for spectators and re-invest into its people, racing infrastructure and entertainment facilities.

The Racecourse has been part of Australia's racing culture for over 150 years and is the country's oldest horse racing venue, with a history of racing dating back to 1833. Today, Royal Randwick enjoys a reputation as being one of Australia's premier racing venues and is considered the Jewel in the Crown of Sydney racing - hosting some of the world's richest turf races, including The TAB Everest and the Longines Queen Elizabeth Stakes.

As part of a vision to secure Royal Randwick's long-term future and enhance its status as a world-class destination for thoroughbred racing, the ATC has prepared a proposal to introduce night racing at Royal Randwick. The ability to host racing at night will create a new spectator experience, attract new audiences and enhance the status of Royal Randwick on the state, national and international racing stage. The night racing events will also provide an alternative night-time cultural and sporting event with the opportunity for providing increased tourism and boosting Sydney's night-time economy.

The scope of the proposal includes:

- Consent for up to 16 night racing events per annum (predominately between October and March).
- Predominantly up to 10,000 patrons, with a maximum of 15,000 patrons during special events.
- New trackside lighting to facilitate televised broadcasting.
- Upgrade to Spectator Precinct lighting for patron safety.
- Permanent Electricity Generators.

Specifically, this assessment has been prepared in response to the traffic and parking related matters raised in the Secretary's Environmental Assessment Requirements (SEAR's), issued on the 21st September 2017, application number: SSD 8706. These requirements are outlined in Table 1.

2.2 Scope of this Report

This report presents the following considerations in relation to the Traffic and Parking assessment of the Proposal:

This assessment takes into account the relevant Policies and Guidelines:

- Guide to Traffic Generating Developments (Roads and Maritime Services);
- EIS Guidelines — Road and Related Facilities (DoPE);
- Cycling Aspects of Austroads Guides;
- NSW Planning Guidelines for Walking and Cycling; and
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development.
- NSW Long Term Transport Master Plan 2012
- A Plan for Growing Sydney

2.3 SEARs Reference Table

Table 1: SEAR's

SEARs Item #	Description	Addressed in:
8.1	details existing and future public transport, pedestrian access and cycle infrastructure within the vicinity of the site	Section 5.2 & 5.3
8.2	details proposed access arrangements during construction, pre-event, during event and post-events for all modes of transport including point to point transport and measures to mitigate any associated traffic impacts and transport, access and safety impacts, including measures to ensure safe and efficient transport for patrons directly from the site	Section 4
8.3	details the adequacy of public transport (including pre-light rail operation), pedestrian, bicycle and point to point transport infrastructure to meet the likely future demand of the proposed operation, including a clear understanding of the travel task for each mode	Section 7.7
8.4	details the anticipated travel mode, spilt and traffic generated by the proposal, including point to point transport and assess the impacts of the traffic generated on the local road network, and surrounding intersections using SIDRA or similar traffic model and any potential need for upgrading or road works (local and classified) to maintain existing levels of service. The assessment needs to be supported by appropriate modelling and analysis to the satisfaction of Roads and Maritime Services	Section 7.1, 7.2, 7.4, 7.5 & 7.6
8.5	assesses the impact on local traffic/non-event road users, including details of road closure management and traffic diversions	Section 7.6.5
8.6	outline measures to promote sustainable means of transport, including public transport use, pedestrian and bicycle linkages, in addition to establishing and implementing an event specific sustainable travel plan	Section 7.6.6
8.7	demonstrates the provision of sufficient on-site car parking, bicycle parking and point to point transport parking, having regard to the availability of public transport during the events, the existing car park capacity on site and potential for off-street parking arrangements in nearby sites in order to identify the total available parking capacity and establish requirements for alternative travel modes than driving to discourage parking on nearby residential streets	Section 8.1
8.8	assesses the likely impacts of the proposal on on-street parking including surveys of parking occupancy and turnover survey in Randwick and Kensington	Section 8.1.1
8.9	detailed measures to be implemented to control off-site parking in surrounding residential streets	Section 8.1.2
8.10	provides details of pre and post event service vehicle provision, access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times)	Section 7.5.1, 7.5.2, 8.3 & 8.4
8.11	assesses traffic and transport impacts having regard to cumulative impacts of other proposed development during the events and how these impacts will be	Section 7.6.6 & 9

SEARs Item #	Description	Addressed in:
	mitigated for any associated traffic, pedestrian, bicycles, parking and public transport, including the preparation of a draft Event Traffic and Transport Management Plan that also includes details of traffic, public transport, pedestrian and cyclist management and safety measures and access for emergency vehicles.	
8.12	includes an evaluation of the predicted origins and destinations of patrons, potential travel paths in the immediate vicinity (eg: nearby town centres), and an operational plan to monitor the movement of patrons, measures to minimise adverse impacts on residential streets, and provide a safe and direct path of travel for patrons	Section 7.6.4
8.13	addresses the full range of possible days and times of future race events, including an assessment of the impact of race events during weekday evening peak periods, and mitigation measures to minimise local congestion, including (but not limited to) provision of additional direct public transport services and integrated race event ticketing with public transport access	Section 3.4
8.14	Includes a Pedestrian, Transport and Traffic Management Plan in accordance with the RMS's Guide to Traffic Generating Developments and developed in consultation with TfNSW.	Section 9

TfNSW Requirements

Item #	Description	Addressed in:
R1	Daily and peak traffic movements (including hoarse floats) likely to be generated by the proposed development including the impact on nearby intersections and the need/associated funding for upgrading or road improvement works (if required). The key intersections to be examined / modelled include the Racecourse vehicular access entry/exit points on Alison Road and Anzac Parade.	Section 7.4, 7.5 & 7.6
R2	Details of the proposed traffic management plan for vehicles transporting horses' pre-event and post-event on the classified road network and possible impacts on the light rail projects.	Section 7.5.2 & 8.3
R3	To ensure that the above requirements are fully addressed, the transport and traffic study must properly ascertain the cumulative study area traffic impacts associated with the development (and any other known proposed developments in the area). This process provides an opportunity to identify a package of traffic and transport infrastructure measures required to support future development. Regional and local intersection and road improvements, vehicular access options for adjoining sites, public transport needs, the timing and cost of infrastructure works and the identification of funding responsibilities associated with the development should be identified.	Section 7

3 Proposal Context

3.1 Randwick Locality

Randwick is located 4 kilometres south-east of Sydney CBD and is bounded by Kensington to the west and Clovelly and Coogee to the east. Major landmarks within the vicinity include the Royal Randwick Racecourse, Centennial Park, Moore Park, the Prince of Wales Hospital and the University of New South Wales Kensington Campus.

Major redevelopment occurred in the 1960s and 1970s with the construction of blocks of residential apartments, which greatly influenced the character of the suburb. Randwick is unusual in its housing mix, with a significant proportion of multi-storey apartment and unit buildings and high levels of private rentals. Approximately 60 per cent of all private dwellings in Randwick are units or apartments.

When compared with all other suburbs within Randwick City Council, Randwick has greater numbers of people aged between 25 and 34 years, fewer children and higher proportions of university students (Source: Randwick City Council).

Bus and light rail services operate on the major roads in Randwick, providing good links to Sydney CBD. It is estimated that only 15% of people commuting from Randwick use public transport, while 57% use cars (Source: Randwick City Council, September 2009). However, this data is before the light rail was operational, and therefore, it is likely that the completion of L2 CBD and South East Light Rail (CSELR) project in 2019 has provided an excellent opportunity to improve public travel uptake in the area.

3.2 Royal Randwick Racecourse

The Racecourse occupies an area of 80Ha and is located with frontages to Alison Road, Wansey Road and High Street, and is also bounded by properties fronting Doncaster Avenue.

The Racecourse has been operated and managed by ATC (formerly Australian Jockey Club) since 1863. Today, the Racecourse is a major event venue, hosting over 40 race events a year, in addition to various other non-race related events including university examinations, festivals, and various other functions.

A typical major event may attract between 10,000 to 15,000 patrons.



Figure 1: Royal Randwick Racecourse

3.3 Moore Park Event Operations Group (MEOG)

The Moore Park Event Operations Group (MEOG) is a body of representatives of key stakeholders within the Moore Park Precinct. The group meets monthly to discuss various considerations relating to local development and large events, including the coordination of traffic and transport associated with major events. Stakeholders that are represented in this coordination effort include:

- City of Sydney;
- Randwick City Council;
- NSW Police;
- Transport Management Centre, STA, Light Rail, Sydney Trains;
- ATC;
- Sydney Cricket Ground Trust;
- Centennial Parklands; and
- Fox Studios.

3.4 Proposal Details

The application seeks approval to host night racing at the Racecourse, which could be in the form of standalone events, or the extension of daytime events that currently terminate due to lighting conditions. Typical events will involve approximately 10,000 patrons, while up to 4 events may involve maximum 15,000 patrons (previously events were expected to involve up to 35,000 patrons). These events would be held on Thursday, Friday and Saturday night and any public holidays.

The event details are presented in Table 2.

Table 2: Proposed Night Racing Events

Component	Proposal
No. Events per annum	16
Event Dates	TBC (Provided annually by Racing NSW)
Event Timing	Between 6:00pm – 10:00pm
Maximum Patron Attendance	Class 2 Event: 10,000 - 15,000 (4 events)
Typical Patron Attendance	Class 3 Event: Less than 10,000 (12 events)

Additionally, the following mitigation measures are proposed to reduce noise and traffic volume at Ascot / Doncaster.

- Prior to 8pm, pedestrians, Ubers / taxis are able to use the entrance at Ascot Street/ Doncaster Avenue.
- From 8pm onwards, all pedestrians can only egress via the gates onto Alison Road. In addition, Taxis and Ubers can only enter and exit the site via Gate 1.
- Cars parked in the multi-deck carpark will continue to have access to Ascot Street/ Doncaster Avenue.

4 Racecourse Access and Transport Facilities

The Racecourse accommodates a wide range of internal transport facilities. The facilities that will be available for the purposes of night racing are summarised below and highlighted in Figure 2.

Gate 1, Alison Road: Gate 1 is a prominent access into the Racecourse. This Gate is the primary entrance/exit point for pedestrians moving between the Racecourse and the Alison Road Light Rail station.

Bus Layby, Alison Road: Access to this layby is integrated into the signalised intersection of Alison Road and Darley Road. This layby is a drive-through arrangement (one-way) accommodating 11 bus stands and is the major drop-off hub and pick-up for public transport users.

Gate 10, Wansey Road is primarily used for access to race-day stables, and rarely used during events. If required it may serve as a secondary infield car park exit.

Gate 13, High Street: Gate 13 is integrated into the signalised intersection between High Street and UNSW. This gate provides direct visitor (general admission and members) access to the infield car park located in the centre of the Racecourse. This parking area accommodates approximately 3,500 spaces.

Gate 18, Ascot Street: Gate 18 may be accessed via the roundabout intersection between Ascot Street and Doncaster Avenue, located towards the western side of the Racecourse. This gate currently provides access to the primary taxi (and car share) drop-off facility for events and is subject to heavy traffic volumes during these event periods. A multi-storey Members Car Park accommodating 574 spaces can also be accessed via this Gate.



Figure 2: Overview of Internal Site Arrangements

Figure 2 presents an overview of the internal transport facilities provided within the Royal Randwick. Key features include:

- The in-field car park situated in the centre of the site for private vehicle and hire car parking;
- Multi deck car park accessible via Gate 18 on the western site frontage, comprising approximately 574 spaces for member parking;
- Taxi drop-off/pick-up area and back-of-house servicing;

5 Existing Transport Facilities

5.1 Road Hierarchy

Royal Randwick Racecourse is situated amongst a number of state and regional-controlled roads, providing excellent accessibility within the Greater Sydney Region. The surrounding road network is presented in Figure 3.

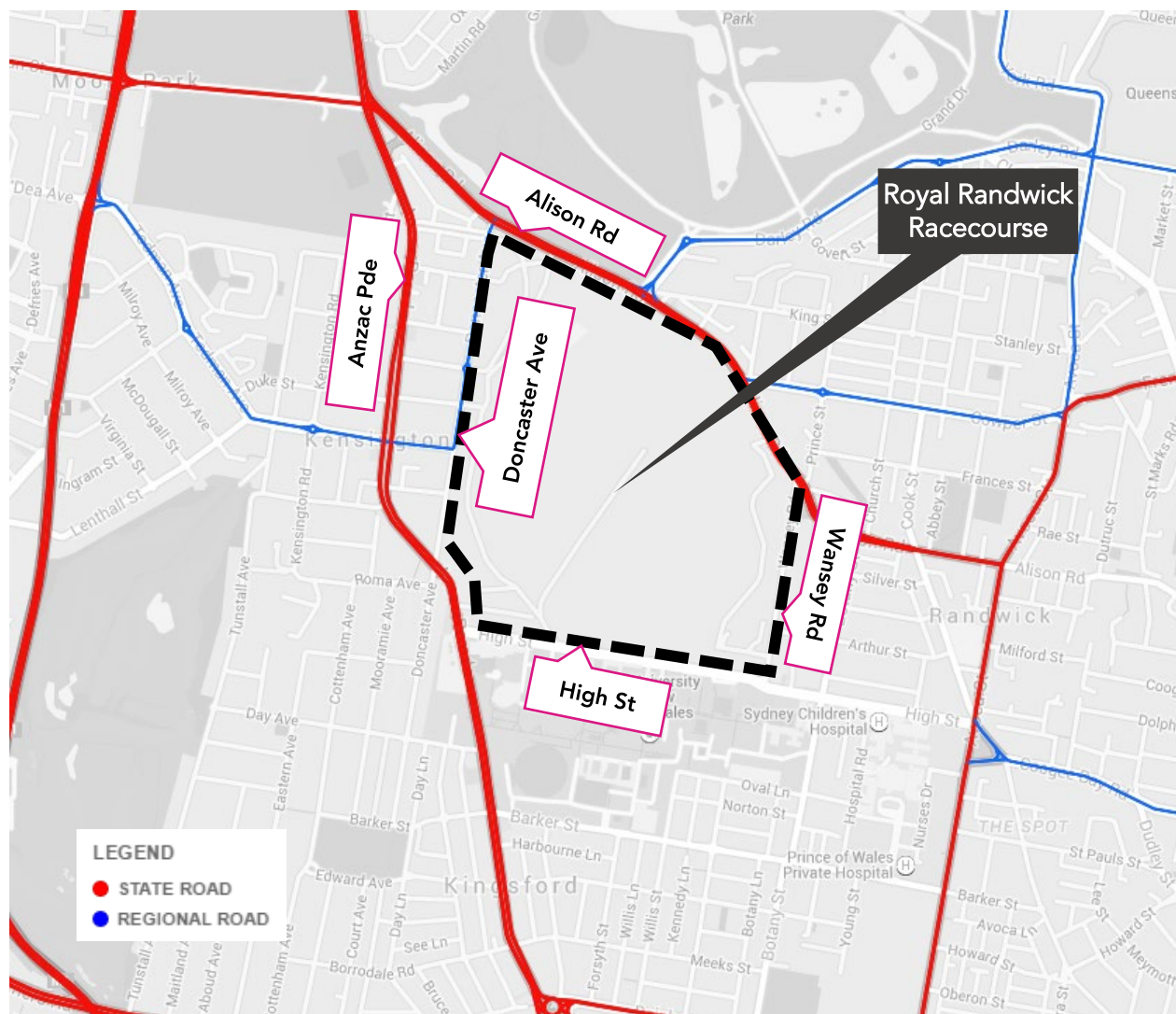


Figure 3: Road hierarchy (Source: RMS Road Hierarchy Review)

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy as follows:

- State Roads - Freeways and Primary Arterials (RMS Managed)
- Regional Roads - Secondary or sub arterials (Council Managed, Part funded by the State)
- Local Roads - Collector and local access roads (Council Managed)

5.1.1 Anzac Parade

A State road running north-south along the extent of the Randwick local Government Area (LGA). It possesses a divided carriageway. Within the vicinity of the site, Anzac Parade generally comprises three (3) lanes in either direction, with additional left and right turning lanes at/near the intersections. The CSELR aligns with Anzac Parade between Moore Park and Rainbow Street and off-road cycle routes are provided in parallel to Anzac Parade. The outermost lanes generally have time-dependant conditions, varying between on-street parking, bus lanes and clearway.

Speed restrictions vary between 50km/h and 60km/h within the vicinity of the site. Anzac Parade provides signalised access onto Alison Road for southbound travel and Dacey Avenue for both northbound and southbound travel.



Figure 4: Street View – Anzac Parade southbound towards Alison Road

5.1.2 Alison Road

A State road providing an east-west link between Anzac Parade and Avoca Street and forms the northern frontage of The Racecourse. The road possesses a divided carriageway with three (3) lanes in each direction. On-street parking is provided along sections of the outermost lanes, typically limited to outside the hours of 10am – 6pm. The CSELR aligns with Alison Road between Anzac Parade and Wansey Road. A dedicated off-road cycleway is provided along Alison Road. Dedicated bus lanes are provided along some sections of the road.

Speed limits vary between 50km/h and 60km/h. Alison Road provides direct site access (shown in Figure 5) as well as signalised access onto Doncaster Avenue for westbound travellers.



Figure 5: Street View - Alison Road westbound towards Doncaster Avenue

5.1.3 Doncaster Avenue

A Regional road aligned north-south between Alison Road and Anzac Parade. This road runs parallel to the western border of the Racecourse. The road is an undivided two-way carriageway, offering a mix of unrestricted, and restricted parking. The road is largely subject to school zone restrictions (40kph 8-9:30AM, 2:30-4PM, MON-FRI), and provides an on-street cyclist lane, as well as a number of pedestrian crossings and associated traffic controls. A posted speed limit of 50kph applies. Doncaster Road provides the most direct access and egress point for the Members Car Park and taxi rank, via Gate 18 off Ascot Street, as shown in Figure 6 below.



Figure 6: Street View – Doncaster Avenue

5.1.4 Wansey Road

A Local road aligned north-south between Alison Road and High Street. It forms a major eastern frontage of the Racecourse, with access via Gate 10. Wansey Road allows one-way, southbound traffic between Alison Road and Arthur Street, and two-way traffic between Arthur Street and High Street. A northbound contra-flow lane is provided from the Gate 10 to Alison Road to allow vehicles to exit the and access Alison Road (west-bound only). Time restricted parking lanes are provided along Wansey Road between Alison Road and Arthur Street.

Off-road cycle routes and CSELR routes are provided along the western side of Wansey Road. The CSELR aligns with Wansey Road between Alison Road and High Street. A light rail station is provided at the intersection of Wansey Road and Alison Road. Wansey Road is a high pedestrian activity zone with 40km/h speed limit.



Figure 7: Street View - Wansey Road northbound towards Alison Road

5.1.5 High Street

A Local road aligned east-west between Anzac Parade and Avoca Street. It forms a major southern frontage of the Racecourse, and provides access via Gate 13. High Street generally comprises one (1) traffic lane in either direction. Additional kerbside lanes on either side offer parking outside of bus zones. The street is subject to a speed limit of 50km/h.



Figure 8: Street View – High Street eastbound towards Gate Two Avenue

5.2 Public Transport

The NSW Planning Guidelines for Walking and Cycling (2004) suggests that an 800m catchment is an acceptable walkable distance if the development is within an area with public transport links. Furthermore, the document also suggests a distance of 1500m is a suitable catchment for cycling for accessibility to public transport facilities and local amenities. The immediate surrounds were reviewed with the above guides in consideration.

Figure 10 illustrates the 800m catchments from Royal Randwick Racecourse. Details of public transport options available are outlined in the following sections.

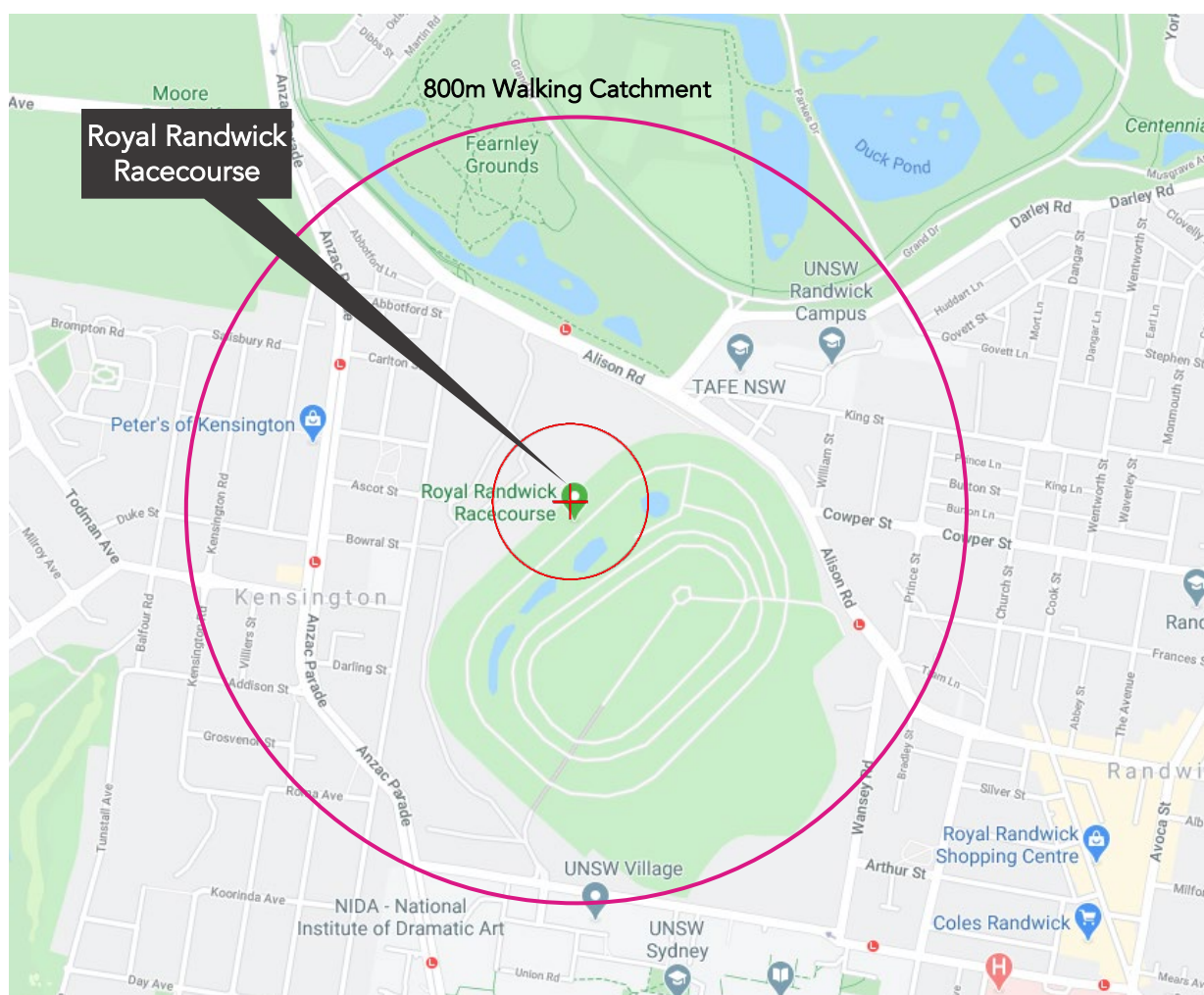


Figure 9: 800m Walking Catchment

5.2.1 Regular Bus Service

A high volume of bus routes was identified operating along roads making up the Racecourse frontages, including:

- Alison Road (Moore Park Busway): 338, 339, 373, 374, 376 & 377;
- Anzac Parade: 391, 392, 393, 394, 395, 396, 397, 399, L94, M10 & M50
- High Street: 348 & 370

These routes offer medium to high frequency services throughout the week, providing access to Sydney's CBD, South Sydney, Eastern Beaches area, Inner West, and links to major transport hubs including Central Station. Sydney's bus network map is outlined in Figure 10.

Notably, the major bus corridor along Anzac Parade provides visitors to the Spectator Precinct with access to much of the greater Sydney region via bus travel. This is located within a 1km radius of the site or a 15-25minute walk, which although lying outside the 800 metre 'comfortable' walking catchment, will still be considered a viable walking distance for a proportion of the demographic population.

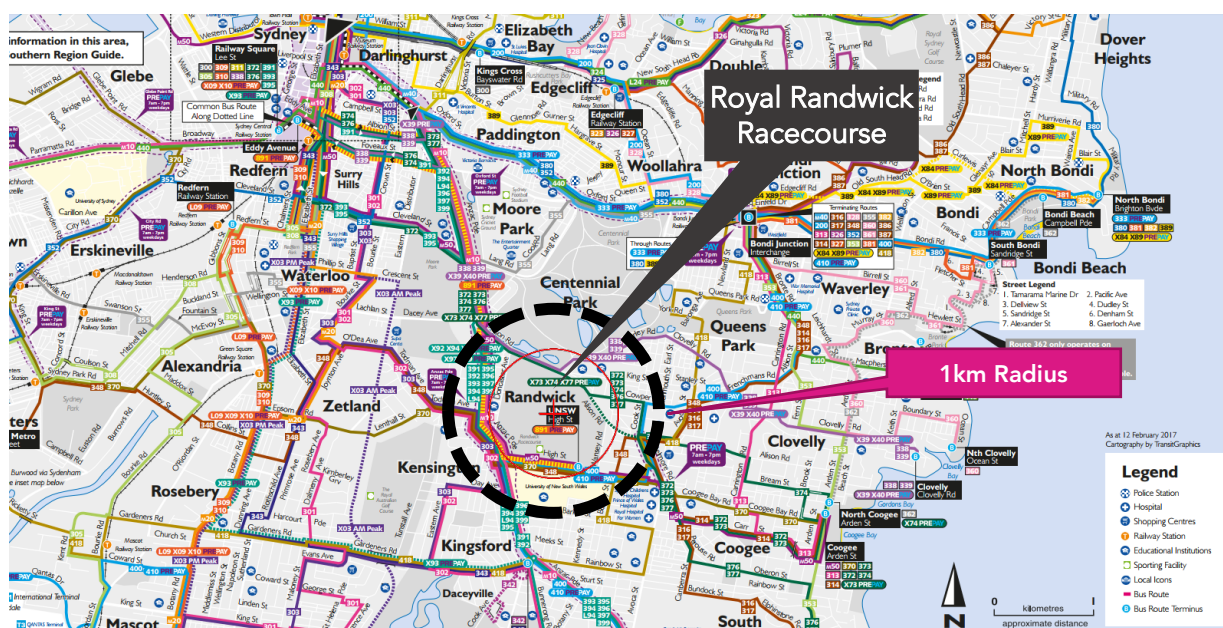


Figure 10: Sydney Bus Network Map

5.2.2 Event Bus Service

Through the MEOG, ATC and STA are able to plan additional special event bus services. These services provide direct connections between Central and Bondi, the details of which are outlined in Table 3.

Table 3: Additional Bus Services during Current Events

Route	Bus Capacity	Maximum Crowd	Bus / Crowd Ratio	Additional Buses	Additional Capacity (People)
Royal Randwick – Central	65	15,000	1 per 1000	15	975
Royal Randwick – Bondi	65	15,000	1 per 3000	5	325
Total:				20	1,300

As part of the aim to promote the use of public transport, it is proposed that special event buses will be arranged for the night racing events, as per those currently arranged for daytime events. The number of buses is determined based on the expected crowd size (on the basis of ticket sales), and as presented in Table 2. Buses have the ability to transport 1,300 patrons to and from the venue, using the internal busway.

5.2.3 Light Rail

The CBD & South East Light Rail Project (CSELR) provides a major light-rail link between Sydney's CBD and Randwick. The L2 Randwick line CSELR project was completed in 2019 and L3 Kingsford line CSELR project was completed in early 2020 (source: Wikipedia). The L2 service predominantly services the Racecourse and offers high frequency services (8-10 minutes) in both directions between 7am-7pm. Each light-rail vehicle is

capable of transporting up to 450 patrons, leading to an hourly capacity of approximately 2,700 to 3,375 patrons in each direction under standard operation.

Through a consultation process between Sydney Light Rail and the ATC, it is noted that during events at Royal Randwick, additional light rail services (northbound and southbound) may be arranged, meeting frequencies of up to every two minutes. This would amount to a total capacity of 13,500 persons, or, an additional capacity of 10,125 patrons in each direction.

The route map is presented in Figure 11. It is noted that the Racecourse is well integrated within the light rail route, which links a number of major destinations and transport hubs, including Sydney's CBD, Central Station, Moore Park, UNSW, and Prince of Wales Hospital among others.

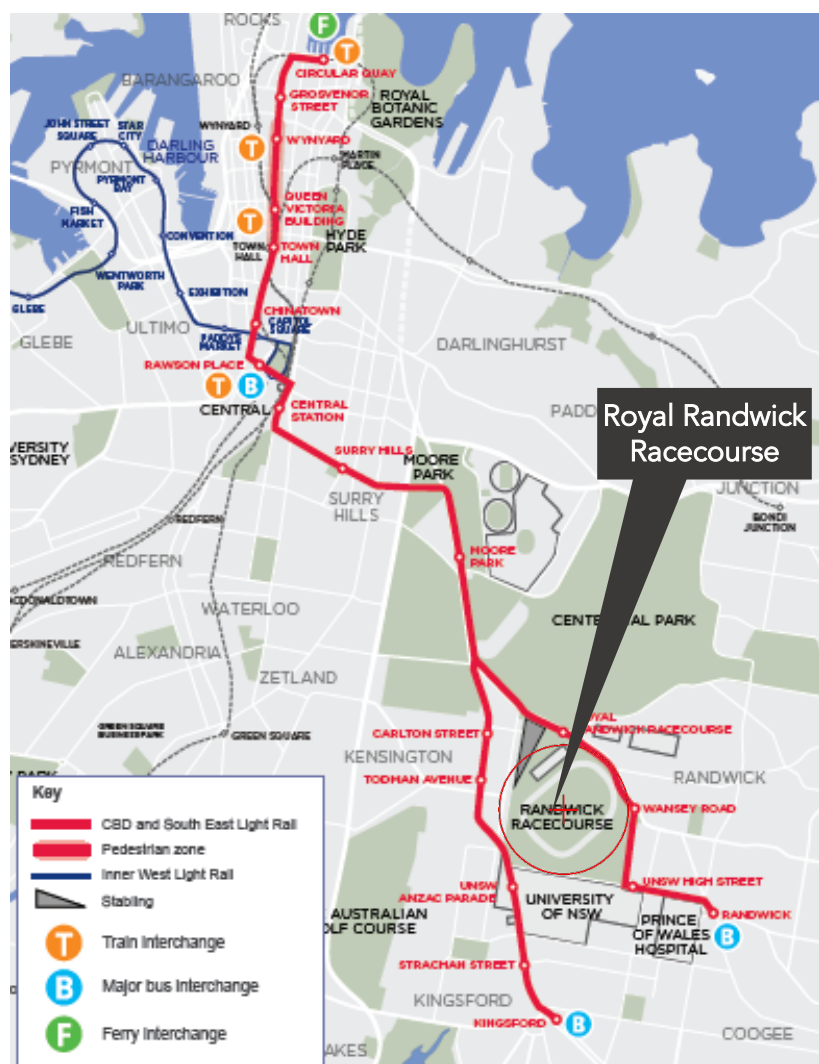


Figure 11: CBD and South East Light Rail Route Map

5.3 Active Transport

5.3.1 Pedestrians

It is noted that the immediate locality of the Racecourse is well established in regard to pedestrian infrastructure. All local roads provide paved footpaths, lighting, and ancillary signage, as well as various crossings at key decision points, in the form of refuge islands, 'Zebra' crossings and signalised crossings.

This is due to the large volume of existing pedestrian movements already in the area, generally associated with UNSW and the Racecourse. As such, walking trips between the Racecourse and the local residential precinct or nearby public transport facilities are readily achievable.

The key pedestrian desire lines (including along Anzac Parade, Alison Road and Wansey Road) have been upgraded in 2019 with improved footpaths, crossings, lighting, and connections to the light rail stations. Of particular note, is the bi-directional pedestrian crossing at the signalised intersection of Gate 1 and Alison Road. This is a key link across Alison Road and provides direct pedestrian connection between the Racecourse and the new light rail station along Alison Road.

5.3.2 Cyclists

A number of existing off-road cycle routes are also provided in the area, including along Anzac Parade, Alison Road, Wansey Road, Doncaster Avenue, and Darley Road, many of which were upgraded in 2019 as part of the CSELR works package. These routes provide connectivity to the Greater Randwick cycling network, and those of adjoining Councils, providing direct linkages between the Racecourse and the Greater Randwick area.

It is understood that Randwick is currently engaging with the community in regard to the future of cycling in Randwick, and has identified a number of priority bicycle routes, outlined in Figure 12.

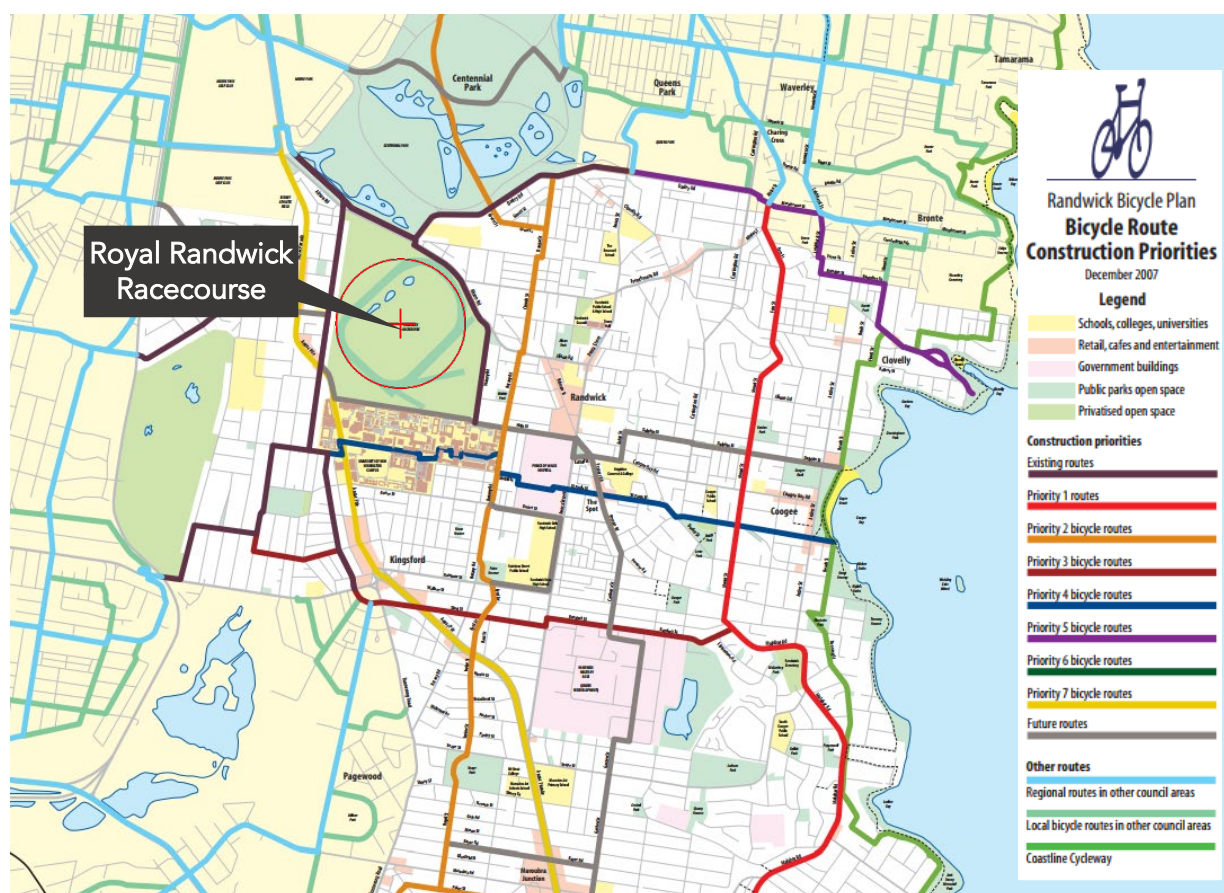


Figure 12: Randwick Bicycle Plan (Route Priorities) 2007

6 Existing Traffic Conditions

ptc. has undertaken site observations, traffic surveys, patron surveys and participated in community engagement to understand the current travel conditions in the vicinity of the Racecourse during the periods proposed for night racing.

It has been identified that the critical period for traffic assessment is between 5:00pm - 7:00pm on a weekday evening, as the grouped arrival traffic associated with a night racing event will coincide with the evening commuter peak period.

6.1 Traffic Surveys

A comprehensive series of traffic surveys were undertaken at key intersections surrounding the Racecourse on 17th October 2017 (Tuesday), to capture the existing local traffic volumes. The details of these surveys are provided in Table 4 and the locations are highlighted in Figure 13.

It is noted that during the time of survey, extensive construction activity associated with the CSELR was being undertaken along many of the major roads subject to this survey, and that these activities can impact traffic conditions. The traffic surveys have not been updated for this assessment due to the impact of the COVID19 restriction both on the road network and the CSLER, which are both operating well under capacity. As a sensitivity assessment we have increased the traffic volumes on the selected intersections by 1% each year (accumulative), which is considered a reasonable increase.

Table 4: List of Surveyed Intersections

No. #	Intersection Location	Intersection Type	Survey Times
1	Anzac Parade – Alison Road – Dacey Avenue	4-leg, Signalised	5:00pm-7:00pm
2	Alison Road – Doncaster Avenue	Signalised T-junction	5:00pm-7:00pm
3	Alison Road – Racecourse, Gate 1	Signalised T-Junction	5:00pm-7:00pm
4	Alison Road – Darley Road	Signalised T-junction	5:00pm-7:00pm
5	High Street – Gate Two Avenue	4-leg, Signalised	5:00pm-7:00pm
6	Anzac Parade - High Street	Signalised T-junction	5:00pm-7:00pm
7	Anzac Parade – Doncaster Avenue	4-leg, Signalised	5:00pm-7:00pm
8	Doncaster Avenue – Ascot Street	4-leg Roundabout	5:00pm-7:00pm



6.2 Existing Traffic Volumes

The key findings of the 2017 surveys and estimated increase for 2020 are summarised in Table 5.

Table 5: Traffic Survey Results

No. #	Intersection Location	Peak Period for Intersection	Dominant Movement in Intersection	Travel Direction of Dominant Movement	Peak Traffic Volume for Dominant Movement* (2017)	Estimated Peak Traffic Volume for Dominant Movement (2020)
1	Anzac Parade – Alison Road – Dacey Avenue	5:30pm-6:30pm	Anzac Pde (North) to Alison Road (East)	Eastbound	1,346	1,386
2	Alison Road – Doncaster Avenue	5:00pm-6:00pm	Alison Rd (West) to Alison Road (East)	Eastbound	1,844	1,899
3	Alison Road – Racecourse, Gate 1	5:15pm-6:15pm	Alison Rd (West) to Alison Road (East)	Eastbound	2,497	2,572
4	Alison Road – Darley Road	5:15pm-6:15pm	Alison Rd (West) to Alison Road (East)	Eastbound	1,536	1,582
5	High Street – Racecourse, Gate 13 – UNSW	5:45pm-6:45pm	High St (West) to High St (East)	Eastbound	361	372
6	Anzac Parade - High Street	5:15pm-6:15pm	Anzac Pde (North) to Anzac Pde (South)	Southbound	931	959
7	Anzac Parade – Doncaster Avenue	5:15pm-6:15pm	Anzac Pde (West) to Anzac Pde (East)	Eastbound	1,070	1,102
8	Doncaster Avenue – Ascot Street	5:00pm-6:00pm	Doncaster Ave (South) to Doncaster Ave (North)	Northbound	720	742

*Peak traffic volume includes both light and heavy vehicles

Figure 14 shows the traffic volumes for the respective movements at each intersection during the weekday evening peak hour (including the estimated increase to the 2017 surveys).

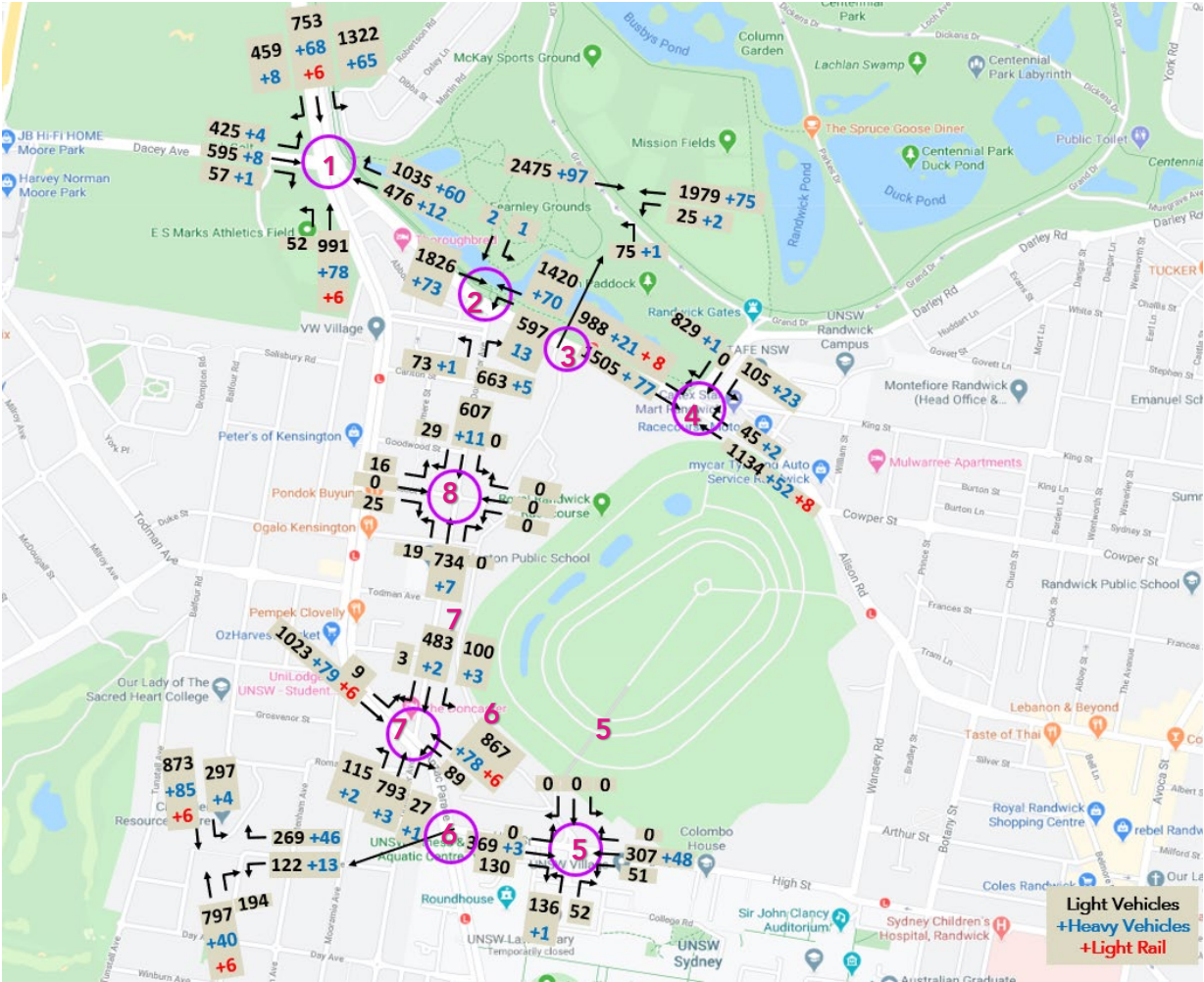


Figure 14: Existing Weekday Evening Peak Hour Traffic Volume

7 Pedestrian, Transport & Traffic Assessment

This section outlines the approach taken to determine the potential pedestrian and traffic volumes and patterns associated with the proposed night events, and subsequently identifies any possible impacts arising from these changes, and appropriate mitigation measures.

7.1 Travel Catchment

ATC have collected patron postcode data for each of the major racing events held at the Racecourse which assists in understanding the likely patron catchment area for the proposed night racing.

From this data, it was determined that key origins include the local Randwick and Eastern Suburbs area (14%), North Shore (12%), City and Inner West (11%), Sutherland (7%) and Liverpool (7%). Notably however, the remaining majority percentage of patrons are widely distributed throughout the outer extents of the Greater Sydney's northern, western and southern regions as well as regional NSW (Newcastle, Wollongong, Hunter Valley, Central Coast, South Coast, etc.)

The travel catchment in terms of the general direction of approach is illustrated in Figure 15. It is noted that a higher proportion of patrons will be travelling directly from work due to the timing of the night racing, and as such, employment hubs are likely to become more notable origins for patrons of the night racing. Notwithstanding, this general approach split remains appropriate.

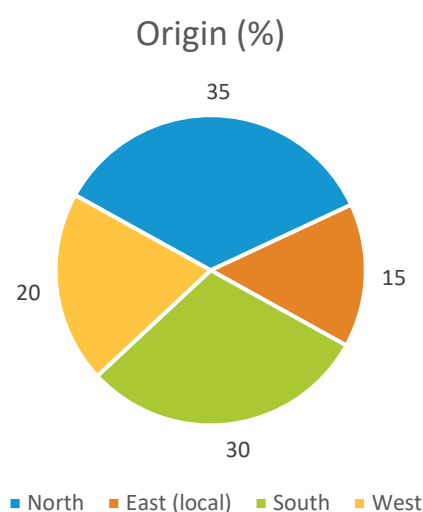


Figure 15: Direction of Approach

7.2 Travel Mode Share

7.2.1 ATC Data

ATC have collected travel mode share through patron surveys undertaken at racing events. This share is derived from an average over multiple events throughout the 2017 Autumn racing season. It is noted that these events, as an average, are smaller in scale than the Everest event on 14th October 2017.

The survey captured 1,500 responses, the results of which are summarised in Figure 16 and Table 6. This data is an average between arrival mode and departure mode, which were noted as being similar to one another.

7.2.2 ptc. Surveys

When reviewing the relevancy of this data to night events, the following considerations were made:

- **ptc.** has undertaken traffic counts and car occupancy surveys at the infield car park during the Everest event held on Saturday 14th November, 2017, between 10am and 5pm. The purpose of this survey was to capture more precise information relating to large events than could be obtained from the patron surveys gathered over the full autumn season. The Everest is the largest annual race event held at the Racecourse, and on this occasion, crowds were approaching 35,000 people. The survey revealed that the mode of private travel was approximately 25% during the Everest, including passengers, compared to 32% taken over the whole Autumn season;
- This difference is primarily attributed to the patron data capturing information over a whole season, including various Class 3 events that draw a crowd with different characteristics than Class 2 events. Often, these events are held mid-week and smaller in scale, and as such, there is more available parking. Therefore, driving is typically more popular for these smaller events,
- Private trips are anticipated to be slightly lower in general for night events, as there is a greater association with alcohol consumption at night, and a night event is more likely to be the final activity of the day, as opposed to a day event in which patrons may have other plans post-event.
- Weekday night events are anticipated to have a notable reduction in private trips and an uptake in public transport, car sharing, car occupancy and private shuttles. This is attributed to a higher percentage of people travelling to the night event directly from their place of work:
 - Whilst private travel is always an option from home (for car owners), travelling from their place of work will generally restrict private travel to employees who drive to work;
 - Employment areas generally have good access to public transport hubs. This is especially so for employees proximate to the CSELR;
- For all race events, regardless of timing, the completion of the CSELR is anticipated to result in an increased uptake of public transport to and from the Racecourse.

In light of the above, the modal share has been presented to reflect the private car share mode indicated in the traffic surveys (25%), with the difference being distributed amongst other modes that are likely to be more popular for a Class 2-night event scenario. This modal share is outlined in Figure 17 and Table 6.

7.2.3 Existing Mode Share Comparison

Mode Share – ATC Data

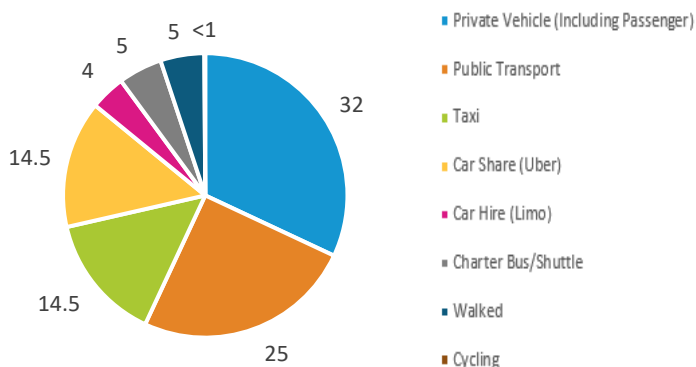


Figure 16: Anticipated Mode Split, Multiple Events

Mode Share – ptc. Survey

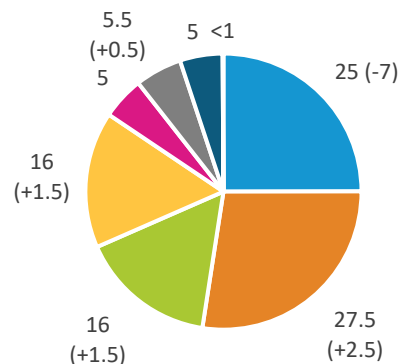


Figure 17: Anticipated Mode Split, Class 2 Event

Table 6: Average Mode Share Over Autumn 2017 Season

Mode	Mode Share (ATC Data)	Mode Share (ptc. Survey)
Private Trips	32%	25%
Hired Car (i.e. limo)	4%	5%
Taxi	14.5%	16%
Car Share (i.e. Uber)	14.5%	16%
Public Buses	25%	27.5%
Shuttle/Charter Bus/Coach	5%	5.5%
Walked	5%	5%
Cycling	<1%	<1%

The data sets indicated a fairly consistent mode share distribution.

7.3 Projected Mode Share

The tables below summarise the hourly peak arrival trips for each transport mode. This data is founded upon a significant collection of relevant data, including patron travel surveys, patron post-code data and traffic surveys.

It is noted however, that in order to predict likely traffic characteristics for a proposed night racing event, some additional assumptions have been made:

- An occupancy of 2.0 passengers has also been adopted for taxis and car share (excluding driver) based on the survey data of private vehicles;

- Public transport assumes 14.5m long buses with capacity of 80 patrons. Shuttles have been taken as small 12 seaters (Toyota HiAce). However, larger shuttles (21) and coaches (50) are also present during events;
- Car Hire vehicle occupancy is assumed to be high on average;
- Peak hour will occur between 5:00pm-6:00pm;
- Light rail has been assumed in this model;
- Taxis, Car Share and Bus arrive and depart the site within the same hour;
- 50% of hired cars, shuttles and coaches park in the infield car park for the event duration, whilst the remaining 50% leave the site;
- Post event trips (10:00pm-11:30pm) have not been assessed, as it is not the critical period for the road network operations.

A significant change in the transport network has occurred since the data collection in that the CSELR project is now complete and operating on both the Randwick and Kensington lines. It is considered that there will be a notable shift in the mode share towards the new light rail services, which offer an alternative transport option for travelling between the City and the Racecourse. The transfer of mode share assumptions is present in the following table:

Table 7: Projected Mode Share

Mode	Mode Share (ptc. Survey	Projected Mode Share
Private Trips	25%	25%*
Taxi/Car Share (i.e Uber)	32%	16%
Light Rail	NA	23.5%
Public Buses	27.5%	20%
Shuttle/Charter Bus/Coach	5.5%	5.5%
Hire Car (i.e limo)	5%	5%
Walked	5%	5%

* Car mode share has been retained at 25% in order to provide a robust traffic assessment, although the light rail services will likely reduce the use of private vehicles.

The trips for different events are summarised in Table 8.

Table 8: Peak Hourly Arrival Trip Summary

	Private Car	Taxi / Uber	Light Rail	Public Bus	Shuttles/ Coach	Hire Car	Walked
Mode Share	25%	16%	23.5%	20%	5.5%	5%	5%
Ave. Vehicle Occupancy	2	2	450	80	12	4	1
Maximum Hourly Arrival as a Percentage of Total Arrivals¹	50%	50%	50%	50%	50%	50%	50%

Class 3 Event (up to 12 events per year)

< 10,000 people

								Total
People	2,500	1,600	2,350	2,000	550	500	500	10,000
Arriving 5pm-6pm	625 (veh)	400 (veh)	5 (veh)	17 * (veh)	23 (veh)	63 (veh)	250 (pedestrian)	1,133 (veh)
Departing 5pm-6pm	0 (veh)	400 (veh)	5 (veh)	17* (veh)	12 (veh)	32 (veh)	0 (pedestrian)	466 (veh)

Class 2 Event (up to 4 events per year)

10,000 – 15,000 people

								Total
People	3,750	2,400	3,525	3,000	825	750	750	15,000
Arriving Veh 5pm-6pm	938 (veh)	600 (veh)	8 (veh)	26* (veh)	34 (veh)	94 (veh)	375 (pedestrian)	1,700 (veh)
Departing Veh 5pm-6pm	0 (veh)	600 (veh)	8 (veh)	26* (veh)	17 (veh)	47 (veh)	0 (pedestrian)	698 (veh)

* It is assumed that the buses are not at fully capacity

¹ This figure assumes a 2 hour arrival period

7.4 Peak Traffic Assessment

The following sections outline the predicted movement volumes for each of the key forms of travel to and from the Racecourse for a night event during the critical peak period.

All volumes are based on a Friday evening between 5pm-6pm, which has been taken as the critical period of assessment as a worst case scenario, being more likely to draw a large crowd than other weeknights, and where patron arrivals will align with the evening commuter peak period.

7.4.1 Private Vehicle Trips

To capture an accurate understanding of private travel patterns for a major event (previous Class 2 with up to 35,000 patrons), **ptc.** undertook a traffic count and car occupancy survey at the infield car park during the Everest event held on Saturday 14th October, 2017, between 10am and 5pm. The first race began at 12pm.

This was one of the largest annual race events held at the ATC, and on this occasion, crowds were approaching 35,000 people. As mentioned in Section 3.4, the new proposal is to accommodate a maximum of 15,000 people during Class 2 event.

This data revealed the travel pattern shown in Figure 18. In summary, the traffic patterns are largely tidal in flow, with a distinct arrival peak and a departure peak. The greatest volume of traffic reached 700 (615 arriving/85 exiting) vehicles over the hour leading up to the first race (11am-12pm). However, this volume is not sustained for long, with each hour on either of peaking at around 400-450 vehicles and continuing to decrease sharply.

Regarding car occupancy, **ptc.** surveyed an average of 2.0 people per vehicle based on 500 samples.

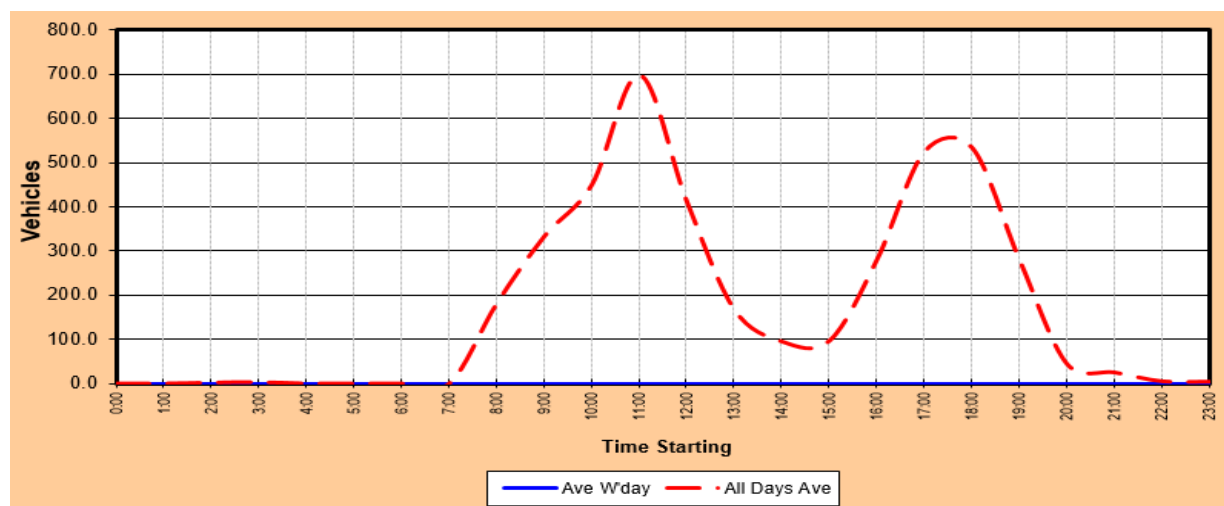


Figure 18: Infield Traffic Count Survey at Everest (14th October, 2017)

7.4.2 Trip Distribution

For the purpose of trip distribution, 40% private vehicles (including 35% private cars and 5% hired cars) are estimated to be parked in Members car park and 60% private cars are estimated to be parked in infield car park.

Different distribution options have been presented for taxi/uber with an option of entering/exiting via Ascot Street or Gate 1. Trip distribution for Class 3 event with taxi/uber entering/exiting via Ascot Street and Gate 1 are illustrated in Figure 19 and Figure 20 respectively. Similarly, trip distribution for Class 2 event with taxi/uber entering/exiting via Ascot Street and Gate 1 are illustrated in Figure 21 and Figure 22 respectively.

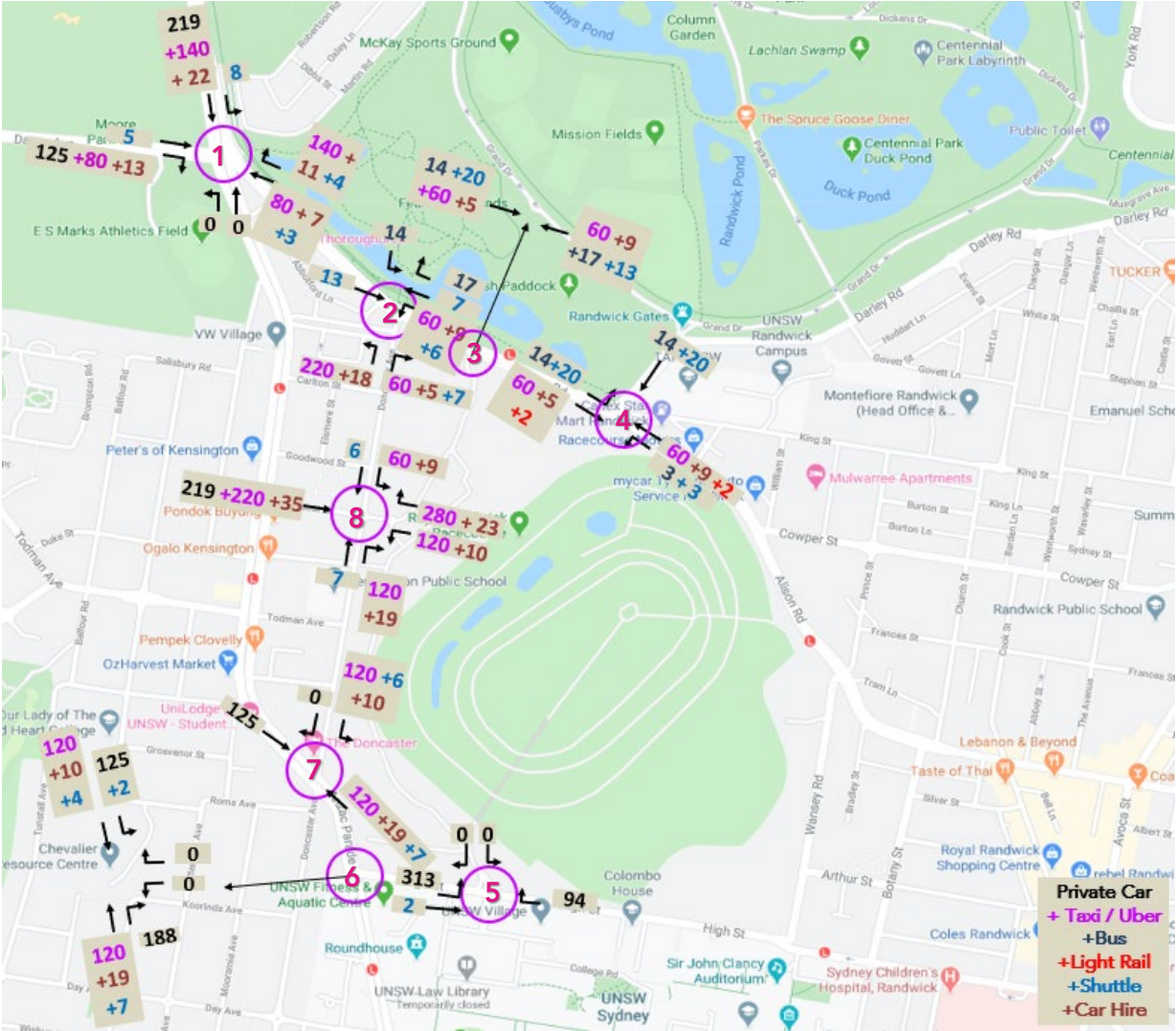


Figure 19: Traffic Distribution for Class 3 Event – Taxi/Uber via Ascot Street

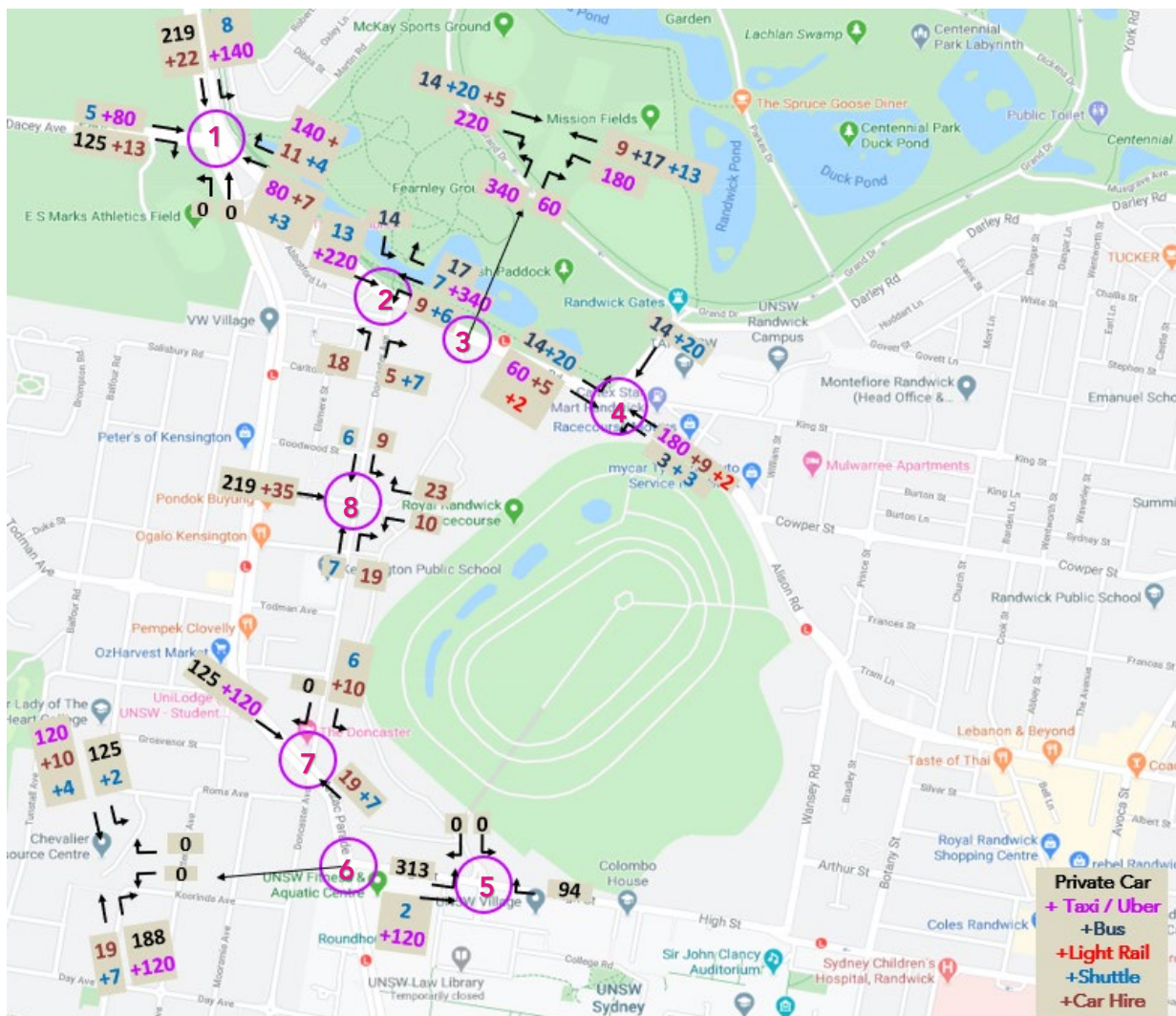


Figure 20: Traffic Distribution for Class 3 Event – Taxi/Uber via Gate 1

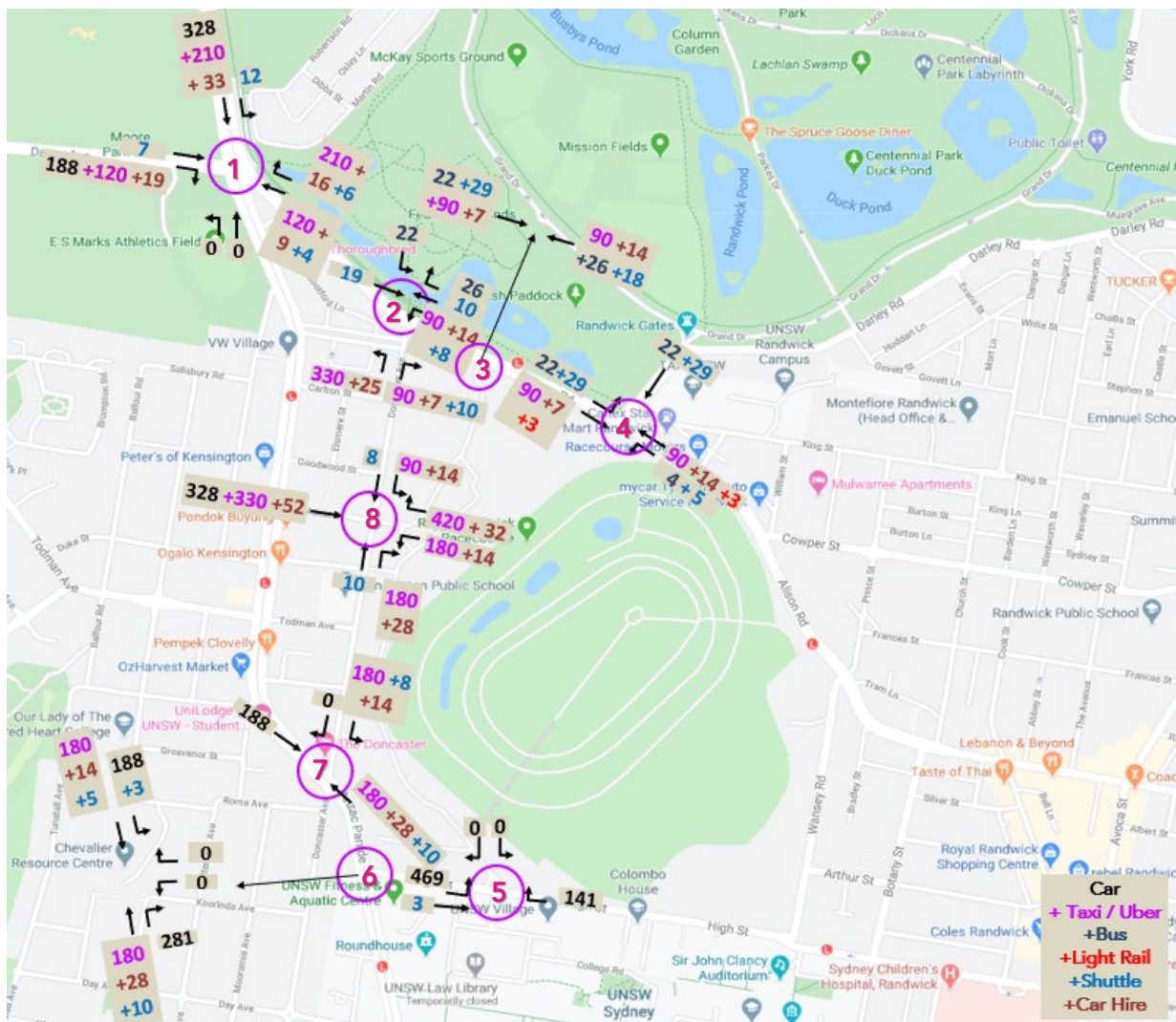


Figure 21: Traffic Distribution for Class 2 Event – Taxi/Uber via Ascot Street

been domiciled on-site days or weeks prior to the race. This will be the case for the proposed night racing events.

For the remaining non-domiciled horses arriving on the day of the event, these trips via horse floats will occur prior to the event start, as additional time is necessary to offload the horses and prepare them for racing. As such, horse float trips will occur prior to 5:00pm and the PM commuter peak. Consequently, horse float trips are not anticipated to generate any notable impacts to the local traffic conditions as a result of this proposal.

7.6 Traffic Network Modelling

7.6.1 SIDRA Intersection Modelling Tool

The surveyed intersections have been modelled with SIDRA Intersection 8.0 software, a micro-analytical tool for individual intersections and whole-network modelling. The models are based on the traffic survey data in Section 6.1. SIDRA provides a number of performance indicators, outlined below:

- Degree of Saturation (DoS) - The total usage of the intersection expressed as a factor of 1 with 1 representing 100% use/saturation (e.g. 0.8 = 80% saturation);
- Average Delay - The average delay encountered by all vehicles passing through the intersection. It is often important to review the average delay of each approach as a side road could have a long delay time, while the large free flowing major road traffic will provide an overall low average delay;
- Level of Service (LoS) - This is a categorisation of average delay, intended for simple reference. RMS adopts the bands
- 95% Queue lengths (Q95) - is defined to be the queue length in metres that has only a 5-percent probability of being exceeded during the analysis time period. It transforms the average delay into measurable distance units; and
- Congestion Coefficient (for networks) - the ratio of *desired* travel speed to *average* travel speed.

Level of Service is a good indicator of overall performance for individual intersections, with each level summarised in Table 9 below.

Table 9: Intersection Performance - Levels of Service

Level of Service	Average Delay (secs/vehicle)	Traffic Signals, Roundabout	Give Way & Stop Signs
A	<14	Good operation	
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity. At signals, incidents would cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	>70	Extra capacity required	Extreme delay, major treatment required

7.6.2 Intersection Upgrade

From the information provided by Randwick City Council it is understood that existing Doncaster Avenue / Ascot Street roundabout intersection is proposed to be modified into a stop-controlled intersection with the vehicles on Ascot Street required to give priority to the vehicles travelling on Doncaster Avenue. Bicycle lanes are proposed to be updated and a new pedestrian crossing is proposed as shown in Figure 23. Following consultation with the Council, it is understood that the construction work will be completed in 2021 and therefore, this geometry has been considered as the existing base for the intersection modelling. No changes are proposed to other surveyed intersections (refer Section 6.1) in the network.

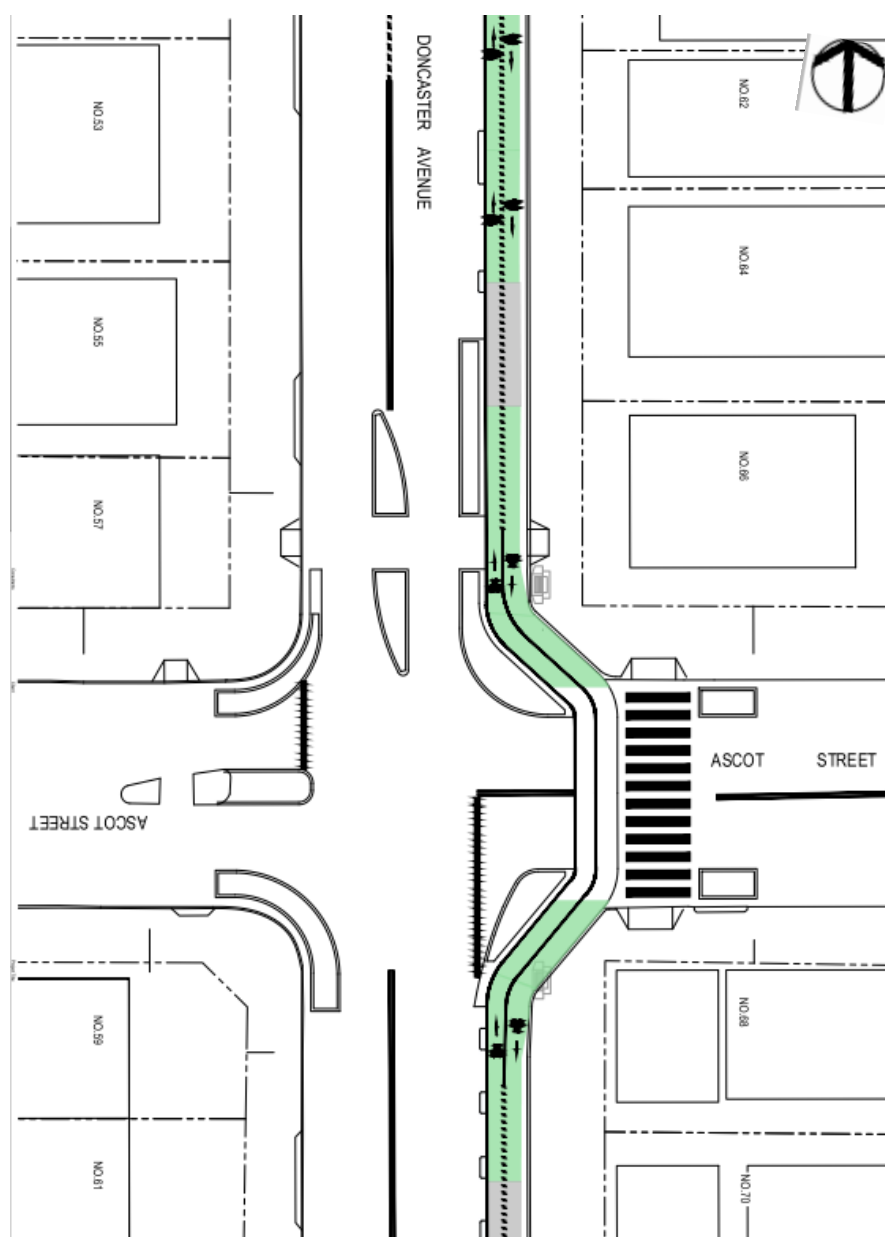


Figure 23: New Geometry of Doncaster Avenue / Ascot Street (Priority) Intersection

The intersection has also been modelled with a potential option of signalisation of the intersection along with an upgrade of cycleway and provision of pedestrian crossings on each arm of the intersection as shown in Figure 24.

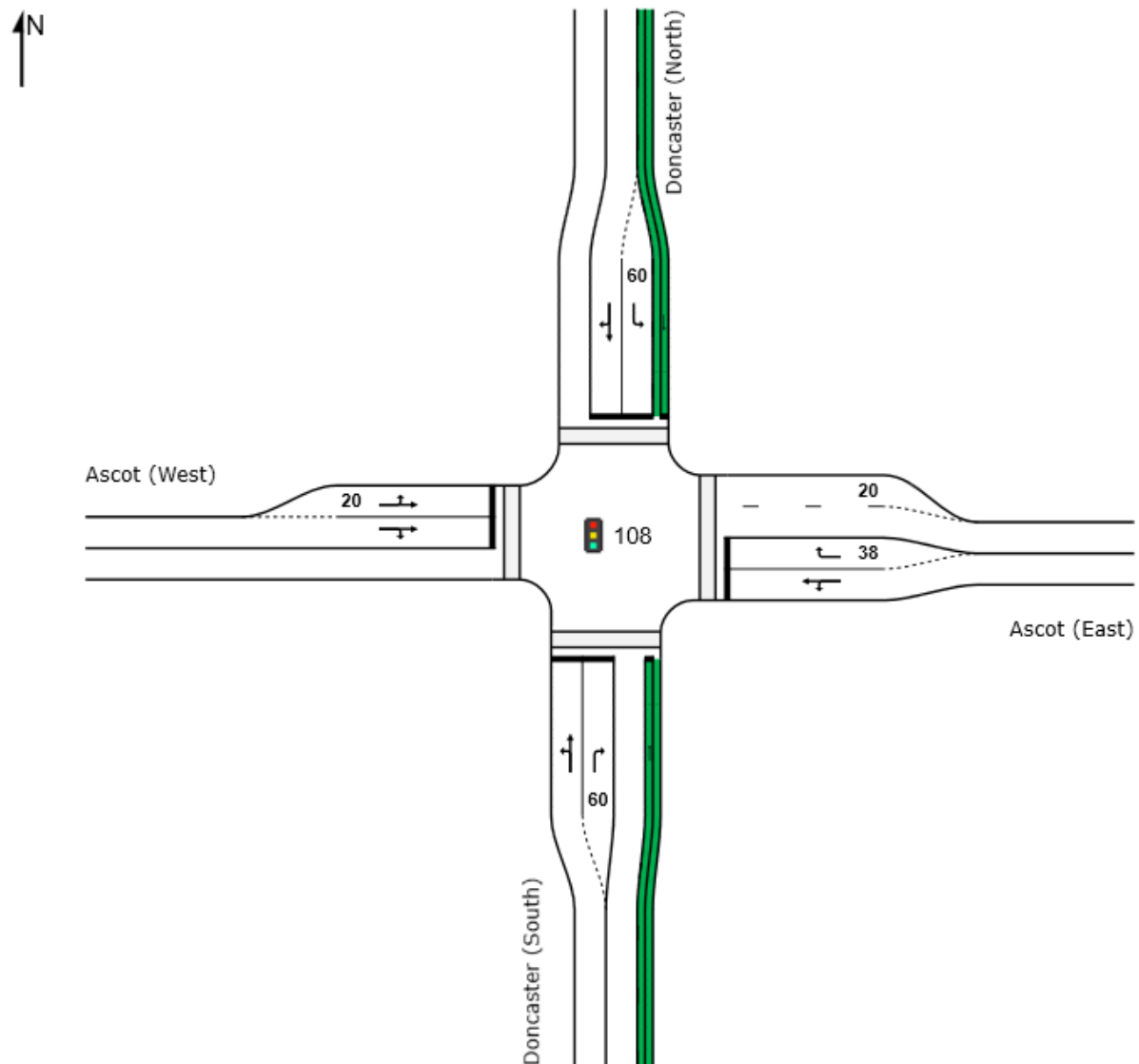


Figure 24: Signaliation option of Doncaster Avenue / Ascot Street Intersection

7.6.3 Modelling Scenarios

The intersection has been modelled for existing traffic, event 3 traffic and event 2 traffic. Event 3 traffic and event 2 traffic have been modelled with two (2) different scenarios as follows:

- Scenario 1 - In this scenario, all taxis / uber enter and exit via Ascot Street.
- Scenario 2 - In this scenario all taxis / uber enter and exit via Gate 1.

The Doncaster Avenue / Ascot Street intersection has been modelled with the new geometry (stop-controlled intersection) and potential option of signalisation (refer Section 7.6.2) for all three events and both scenarios.

7.6.4 2020 and Future Road Network Performance

To predict likely road network performance during the critical arrival period of a proposed night racing event (5:00pm-7:00pm Friday), the existing road network model has been updated with the anticipated bus, taxi/car share, and private vehicle trips determined in the previous section, in accordance with the likely approach distribution. An overview of the model results is tabulated in Table 10 which indicates the level of service, worst delay, degree of saturation and vehicle queue for the surveyed intersections. Detailed model results are provided in **Attachment 1**.

Table 10: Road Network Analysis (Existing, Class 3 and Class 2 Event)

Location	Events	Scenarios	LoS	Delay (secs) ²	Highest DoS	Highest Q95% (Veh) ³
Anzac Parade – Alison Road – Dacey Avenue	Existing Traffic	Existing ¹	F	110.5	1.804	81.5
	Class 3 Event	Scenario 1	F	132.1	2.162	94.1
		Scenario 2	F	136.3	2.067	103.3
	Class 2 Event	Scenario 1	F	145.5	2.174	94.7
		Scenario 2	F	148.3	2.195	114.0
Alison Road – Doncaster Avenue	Existing Traffic	Existing ¹	F	81.2	1.210	62.6
	Class 3 Event	Scenario 1	F	121.4	1.322	110.5
		Scenario 2	F	138.3	1.634	109.1
	Class 2 Event	Scenario 1	F	170.1	1.511	152.1
		Scenario 2	F	168.6	1.898	129.6
Alison Road – Racecourse, Gate 1	Existing Traffic	Existing ¹	F	116.9	1.190	58.1
	Class 3 Event	Scenario 1	F	79.3	1.099	58.0
		Scenario 2	E	66.6	1.065	58.0
	Class 2 Event	Scenario 1	F	81.5	1.105	58.0
		Scenario 2	F	106.5	1.172	58.0
Alison Road – Darley Road	Existing Traffic	Existing ¹	F	213.6	1.882	82.9
	Class 3 Event	Scenario 1	F	245.0	1.961	89.1
		Scenario 2	F	217.3	1.796	90.1
	Class 2 Event	Scenario 1	F	262.3	1.999	92.1

¹ Council advised that removal of the roundabout at Doncaster Avenue / Ascot Street will be completed in 2021. Therefore, the new geometry has been used as the existing base for the intersection modelling

² For signalised intersections, the average performance indicators have been reported. It is noted that for priority-controlled intersections, the minor road usually experiences the highest delay whereas the major road experiences zero delay. In light of this, the average performance indicators may not be a suitable method of assessing the performance of an intersection. Therefore, the performance indicators for the worst movement have been reported for priority-controlled intersections.

³ Resulting 95th percentile queue reported for the approach exhibiting the greatest vehicle queuing.

Location	Events	Scenarios		LoS	Delay (secs) ²	Highest DoS	Highest Q95% (Veh) ³
		Scenario 2		F	290.6	1.990	91.4
High Street – Racecourse, Gate 13 – UNSW	Existing Traffic	Existing		B	24.2	0.911	11.5
	Class 3 Event	Scenario 1		C	31.1	0.993	25.9
		Scenario 2		C	37.7	1.129	35.4
	Class 2 Event	Scenario 1		C	31.1	1.039	32.4
		Scenario 2		C	38.5	0.978	27.2
Anzac Parade – High Street	Existing Traffic	Existing		B	15.4	0.704	15.4
	Class 3 Event	Scenario 1		B	27.6	0.885	40.1
		Scenario 2		E	59.3	1.003	41.7
	Class 2 Event	Scenario 1		D	48.3	0.983	41.8
		Scenario 2		F	123.2	1.161	72.2
Anzac Parade – Doncaster Avenue	Existing Traffic	Existing		E	64.0	1.041	104.8
	Class 3 Event	Scenario 1		F	685.2	3.040	316.7
		Scenario 2		F	647.4	2.940	330.6
	Class 2 Event	Scenario 1		F	900.6	3.950	330.9
		Scenario 2		F	662.2	2.940	330.6
Doncaster Avenue – Ascot Street	Existing Traffic	Priority Intersection		D	48.5	0.4	1.0
		Signalised Intersection		B	15.3	0.628	29.3
	Class 3 Event	Scenario 1	Priority Intersection	F	12842.6	15.228	321.6
			Signalised Intersection	F	466.6	2.026	193.9
		Scenario 2	Priority Intersection	F	1681.5	2.829	134.6
			Signalised Intersection	F	287.5	1.616	159.8
	Class 2 Event	Scenario 1	Priority Intersection	F	13057.9	51.596	536.4
			Signalised Intersection	F	970.1	3.186	244.8
		Scenario 2	Priority Intersection	F	2992.4	4.294	225.5
			Signalised Intersection	F	483.6	1.909	186.1

7.6.5 Impacts to Road Users

As shown in Table 10, the surveyed intersections along Alison Road are currently operating at capacity with a corresponding LoS F during the critical evening peak hour. This correlates with the observed traffic survey data which indicates that there is a high volume of traffic travelling eastbound through the intersection.

Alison Road's classification as a State road is due to it being the major connection for commuters travelling from the Sydney CBD towards the eastern suburbs other than SR172, which results in long delays.

The intersection of Alison Road / Doncaster Avenue and intersection of Anzac Parade/Doncaster Avenue are currently operating at capacity with a LOS F and E respectively. Doncaster Avenue provides a connection between the State roads, Anzac Parade and Alison Road, by-passing the intersection of Anzac Parade/Alison Road/Dacey Avenue, which prohibits the right turn movement for vehicles travelling eastbound from Anzac Parade (South).

The SIDRA model indicates that during the critical peak hour of 5:00pm-6:00pm in a worst-case event, some delays are expected in the road network. As shown in Table 10 and Attachment 1, the additional traffic activity generated by the proposed night racing events will result in some extension to delays on the network. In particular, queues and delays are seen at the Anzac Parade / Alison Road / Dacey Avenue intersection, Alison Road / Doncaster Avenue intersection, Anzac Parade / High Street intersection, Anzac Parade / Doncaster Avenue intersection and Doncaster Avenue / Ascot Street intersection.

From site observations during the Everest day-time event, it is noted that current performance at the Doncaster Avenue and Ascot Street intersection experiences congestion due to taxis queuing across the intersection during the peak arrival time, which coincides with Saturday's peak midday network peak. It is expected that these conditions will be improved during night racing events due to the comparative reduction of patrons from maximum 35,000 to maximum 15,000 during the proposed night racing events. Nevertheless, high traffic activity is expected where arrivals will coincide with the evening commuter peak.

These associated impacts particularly relate to Class 3 events (<10,000 people), which is anticipated to be sustained for 1-2 hours, up to 12 events per year. In order to mitigate congestion within the road network, it is recommended that the available public transport options be promoted and encouraged as a means of reducing the number of patrons opting to drive to these events.

This issue is recognised, and ATC currently implement transport management plans associated with large events and modified versions of these would be applied to the night racing events as outlined in Section 7.6.6 of this report.

It is also noted that the impacts of the Class 3 and Class 2 event on the upgraded priority intersection of Doncaster Avenue / Ascot Street is significant with worse delays and queues. This is particularly due to the high flow of vehicles along Ascot Street during the events and the vehicles entering the Racecourse from the western approach now being required to stop and give-way to all vehicles travelling along Doncaster Avenue as well as pedestrians and cyclists. Allowing the taxis/uber to enter and exit the Racecourse via Gate 1 (Scenario 2) improves the performance of the intersection significantly.

The analysis demonstrates that the signalisation of the Doncaster Avenue / Ascot Street intersection is not warranted. Reference is made to the Roads and Traffic Authority (RTA) *Traffic Signal Design – Section 2 Warrants. Section 2.3 (a) Traffic demand* applies to this intersection as speed, sight distance, pedestrian safety and crashes are not an issue at this location. Therefore, where the major road is Doncaster Avenue and the minor road is Ascot Street, a signalised intersection may be considered if:

(a) Traffic demand:

For each of four on-hour periods of an average day:

- (i) the major road flow exceeds 600 vehicles/hour in each direction; and*
- (ii) the minor road flow exceeds 200 vehicles/hour in one direction.*

The traffic flow on the minor road (Ascot Street) is less than 200 veh/hr under normal circumstances, i.e. during hours outside of events. Hence, the warrants for signals are not met for Doncaster Avenue / Ascot Street intersection.

Therefore, it is recommended that traffic management along Doncaster Avenue / Ascot Street intersection be provided during the events to prioritise the flow of vehicles entering and existing via Ascot Street.

Additionally, signalisation of this intersections requires multiple lanes on approaches and departures to operate. However, the result not only still produces a LoS F which contradicts TfNSW policy of constructing such assets only if spare capacity is available, but it also removes on-street parking.

7.6.6 Mitigation Measures for Road Management

A number of mitigation measures are proposed to reduce or eliminate traffic impacts associated with the proposed night racing events. Some of the measures are already implemented for day-racing events and are therefore readily adopted. Other measures may be introduced as part of this proposal and can be adopted for general events as well. Moreover, given the scale of these events, some of these measures will require the cooperation of other stakeholders, such as STA and Sydney buses, and this must be coordinated through the MEOG.

Measures to address increased traffic and transport demands:

- Preparation of a Transport Management Plan for Night Events (TMP). This plan will provide a basic framework which may be adopted for event specific TMP's.
- Preparation of Traffic Control Plans (TCP's) to be submitted with each TMP prior to events.
- Regular consultation with the MEOG to coordinate events with other development or major events in the local area, thereby mitigating/preventing cumulative impacts to the Moore Park Precinct.
- Provide notification to local residents prior to events, with details of the events, and contact details for enquiries.
- Promote Night Racing as public transport events and facilitate this with Travel Access Guide information available on appropriate websites.

Measures to improve conditions specifically along Doncaster Avenue include:

- Allowing the taxis / uber to enter and exit via Gate 1 to reduce the delays and queues at the Doncaster Avenue / Ascot Street intersection (modelling Scenario 2).
- Undertake a taxi management study to review alternative access arrangements and management measures to significantly reduce impacts along Doncaster Avenue.
- Provide point duty Police at the Doncaster Avenue /Ascot Street intersection, to release queued traffic when required as part of event management and discourage illegal driver behaviour.

Measures to reduce private vehicle trip generations include:

- Establish event-specific sustainable travel plans in the lead up to events;

- Stagger arrivals by promoting early-bird parking prior to 5:00pm. Incentives may include premium parking, discounts on drinks, food or future tickets, etc.
- Promote car-pooling, with Premium parking for vehicles with 3+ passengers;
- Integrate free public transport services with pre-purchased tickets;
- Seek to increase mode share of cyclists, providing improved on-site cyclist parking facilities, including bike-share facilities;
- Support increased shuttle services between hotels;
- Continued patron surveys, to track travel trends and identify barriers and opportunities in public and active travel access;
- Regularly update the website and wayfinding to incorporate changes in local travel infrastructure and timetables, and seek opportunities to promote them;
- Continue organising additional event bus services and light rails services, to be coordinated within the MEOG.

7.7 Public Transport Assessment

It is recognised that without additional public transport services for events, regular public transport services would be notably impacted by events due to insufficient capacity. Consultation between ATC and Sydney Light Rail and STA has been on-going. However, and as a major event venue, these public transport providers recognise the need to design and provide for large crowds on occasions.

As mentioned in Section 5.2, it is understood that Light Rail will be able to provide increased service frequency for night racing events, providing capacity for up to 10,000 patrons per hour per direction, in addition to regular light rail users. Similarly, STA are able to provide additional bus services to access the Racecourse bus layby, capable of accommodating approximately 1,000 additional patrons between the Racecourse, Bondi and Central.

Based on an anticipated maximum crowd of 15,000 patrons, and taking the adopted public transport mode split of 43.5% (23.5% by light rail and 20% by public buses) amounts to 6,525 patrons travelling to and from the site via public transport. Based on the travel direction split in Figure 15, it is estimated that 75-85% of patrons using public transport will head towards Central.

Noting that additional light rail and bus services can accommodate approximately 11,000 additional people during events, this suggests that there is sufficient capacity to transport patrons between key origins (Bondi, Central) and the site. It will be important to discuss with Sydney Trains the flow-on implications, as patrons filter out along the train network. Sydney Trains should be represented within the MEOG for large events, if not already.

Measures to mitigate impacts to public transport include:

- Notify Sydney Trains of upcoming events, and arrange for necessary interfacing signage and management between light rail, bus and train interfacing.
- ATC staff to be positioned at the pedestrian crossing between Gate 1 and Alison Road. For Class 2 events, Police presence may also be required.

- Additional light rail staff management around light rail stations anticipated to receive significant increases in patrons.
- If required, temporary control devices around stations may be installed, including queue cordons, advisory signage, etc.
- Close monitoring of key light rail stations during events, to understand their performance, and identify and take action on any issues.

7.8 Pedestrian and Cyclist Assessment

Pedestrians and Cyclists, whether associated with the event or not, are likely to originate from the immediate locality, and be familiar with the locality. The locality provides well-lit footpaths around the site, along with signalised crossings along major junctions at State roads. Moreover, no road closures are proposed for night racing events, and all footpaths and cycle paths will be maintained throughout the event. As such, no significant impacts to pedestrians in the locality are anticipated to result from night racing events. Notwithstanding, during the lead-up to and wind-down of each event, vehicle and pedestrian movements in the area will increase, inherently increasing risks of conflict and delay to some extent.

Measures to improve pedestrian accessibility and reduce impacts include:

- Maintain a comprehensive site wayfinding approach, including maps, signage, and staff guidance;
- As part of ATC's Event Operations Plan, the movement of pedestrians through and around the site will be monitored, to ensure that pedestrians are provided with safe passage to their respective destinations, and that residential streets are not adversely impacted.

8 Parking and Servicing Assessment

8.1 Private Parking

8.1.1 Parking Capacity and Demand

The Racecourse has a large supply of on-site parking with the ability to use off-site parking at Moore Park when available.

Table 11 - Parking Provisions

	Members Car Park	Infield Car Park	On-Site Total	Off-site Parking (Moore Park)	Combined Total
<i>Capacity (Spaces)</i>	574	3,500	4,074	700	4,774

The mode share surveys indicate a parking demand of 1,876 spaces, which has been adopted as part of the traffic impact analysis. The infield traffic survey undertaken for the Everest event on Saturday 14th November, 2017, noted that the number of parked vehicles on-site peaked at 1,649 vehicles, before vehicles began to be redirected to the Moore Park car park off-site. It is understood that by 1pm, 100 vehicles had been redirected, and it is assumed that this number would not significantly increase over time as the event draws closer to conclusion. However, the Everest event included 35,000 patrons and since the new proposal is to include a maximum of 15,000 patrons, it is apparent that 1,876 cars will be easily accommodated within the infield and the Members car park.

When considering the site capacity on the day of the surveyed event, the following is noted:

- A large portion of infield was occupied by material storage (soil) related to works, reducing the total capacity of the infield car park;
- The Members multi-deck car park (574 spaces) was not completed at the time of this event;
- Parking arrangements of vehicles was not optimised.

Upon resolving the above points, the peak parking demand of 1,876 spaces will readily accommodated by the available parking provision on-site, being 4,074 spaces. As such, with appropriate promotion and management of on-site and off-site parking, local on-street parking impacts can be minimised.

8.1.2 Parking Management

It is noted that the bulk of on-site parking is provided within the infield area, as informal parking. Being informal parking, the capacity of this area is highly dependent on the arrangement of vehicles. To ensure a balance between parking efficiency and manoeuvrability, **ptc.** advise that the following measures be adopted by ATC parking management staff:

- Encourage reverse parking, which notably reduces the required width of parking;
- Limit aisle widths to between 6.2 - 6.6 metres;
- Ensure that vehicles park in the correct alignment, as far as is practicable.

To encourage uptake of ATC-provided parking and discourage on-street parking, the following additional measures are proposed:

- Variable Message Signage (VMS) established around the local road network to guide patrons directly towards the car park, and advise of capacity;
- Advise patrons that on-street parking is discouraged, and sufficient on-site parking is available. This may be done through the website, Traffic Marshals, VMS and as part of the email ticket purchase;
- As part of the overall event monitoring process, ATC staff will undertake observations of the local streets, and parking location data may be included in the patron survey. Any identifying issues should be raised to management for review and action.
- A feedback forum should be provided for residents to communicate with ATC regarding any parking issues.

8.2 Drop-Off Provisions

The Racecourse will operate all drop-off facilities as it would for existing day-events. These facilities include:

- Taxi Rank via Ascot Street, Gate 18;
- Public Bus layby via Alison Road; and
- Shuttle drop-off via Alison Road, Gate 1, and infield car park;
- Limousine, and large shuttle/coach drop off, via infield car park.

8.2.1 Bus Provisions

The Racecourse Bus rank accommodates 11 independent bus stops. According to NSW Bus Infrastructure Guide lines, 6 bus stops can accommodate between 120-180 buses per hour, based on a 30 second dwell time. In the case of the Racecourse, each bus would require longer dwell times due to larger intake of passengers. Notwithstanding, 11 bus stops is considered readily able to accommodate the additional 20 public bus serves (occurring over more than a single hour) with capacity to accommodate private coaches on demand.

8.2.2 Taxi Rank

The taxi rank (also used for car share drop off) and on-site queue is able to accommodate up to 48 vehicles at any one time, before queueing back onto Ascot Road. On-site observations during major events (30,000+) noted that this queue current extends to the Doncaster Avenue and Ascot Street roundabout, creating notable congestion along the length of Doncaster Avenue. This impact is likely to occur during the proposed night events, to a similar extent as is currently observed.

Furthermore, the measures listed in Section 7.6.6 to encourage public transport will help reduce demand at Gate 18, with a particular emphasis on the introduction of the CSELR.

8.2.3 Limousine, Shuttle and Coach Drop-off

Shuttles are able to access the site via Gate 1 from Alison Road, however as there is limited capacity, this is only permitted by prior arrangement.

Coaches may drop off via the bus layby off Alison Road.

Moreover, area is set aside within the Infield car park to drop off patrons from Shuttles, Limousines and Coaches as required.

8.3 Horse Float Provisions

No change in the demand of horse-floats is anticipated as part of this proposal. As such, float parking provision is proposed to remain as per the existing arrangement. Vehicles may range from light-vehicles towing a trailer, up to 19m long semi-trailers.

8.4 Service Vehicle Provisions

No notable change in servicing demands is anticipated between day events and the proposed night racing events. As such, servicing facilities on-site are proposed to remain as per the existing arrangements. Service vehicles will range from light commercial vans and utes, to a range of rigid trucks and articulated trucks. No deviation from existing permitted service vehicle conditions is proposed.

9 Traffic Management Plan

ATC will maintain a relevant Pedestrian, Transport Management Plan for Events, which may be adapted to each specific event, depending on their nature and scale.

10 Impact and Mitigation Summary

Identified Impact	Mitigation Measure
General increase in traffic congestion on State roads around the Moore Park Precinct during evening commuter period during Class 2 events (~15,000 people).	<ul style="list-style-type: none"> Establish event-specific sustainable travel plans in the lead up to events; Stagger arrivals by promoting early-bird parking prior to 5:00pm. Incentives may include premium parking, discounts on drinks, food or future tickets, etc.; Promote car-pooling, with Premium parking for vehicles with 3+ passengers; Integrate free public transport services with pre-purchased tickets; Seek to increase mode share of cyclists, providing improved on-site cyclist parking facilities, including bike-share facilities; Support increased shuttle services between hotels;
Congestion along Doncaster Avenue during event commencement and conclusion, attributed to large taxi volumes accessing Taxi Rank via Gate 18, Ascot Street.	<ul style="list-style-type: none"> Post Police at intersection during Class 3 and Class 2 events; Undertake taxi rank relocation and management assessment;
Demand on regular public transport services (buses, trains, and light rail) may exceed capacity during night events.	<ul style="list-style-type: none"> Consultation with public transport providers via MEOG; Arrange additional public transport service (bus and light rail) on event nights, as per existing arrangements through MEOG.
Potential overcrowding around Alison Road Light Rail Station, adjacent signalised crossing.	<ul style="list-style-type: none"> ATC staff to be positioned at the pedestrian crossing between Gate 1 and Alison Road. For Class 2 events, Police presence may also be required. If required, temporary control devices around stations may be installed, including queue cordons, advisory signage, etc.
Large crowds at key public transport hubs, including Central Station, and CSELR stations.	<ul style="list-style-type: none"> Notify Sydney Trains of upcoming events, and arrange for necessary interfacing signage and management between light rail, bus and train interfacing; ATC staff to be positioned at the future pedestrian crossing between Gate 1 and Alison Road. For Class 2 events, Police presence may also be required.

Identified Impact	Mitigation Measure
	<ul style="list-style-type: none"> • Additional light rail staff management around light rail stations anticipated to receive significant increases in patrons; • If required, temporary control devices around stations may be installed, including queue cordons, advisory signage, etc. • Close monitoring of key light rail stations during events, to understand their performance, and identify and take action on any issues.
High demand on local on-street parking is residential streets	<p>Ensure sufficient on-site and off-site parking and discourage on-street parking:</p> <ul style="list-style-type: none"> • Maintain off-site parking arrangement with Moore Park Car Park for 700 additional spaces if required, and provision of shuttle services between the two sites; • Improve informal parking efficiency to optimise capacity and flow; • Variable Message Signage (VMS) established around the local road network to guide patrons directly towards the car park, and advise of capacity; • Advise patrons that on-street parking is discouraged, and sufficient on-site parking is available. This may be done through the website, Traffic Marshals, VMS and as part of the email ticket purchase; • As part of the overall event monitoring process, ATC staff will undertake observations of the local streets, and parking location data may be included in the patron survey. Any identifying issues should be raised to management for review and action. • A feedback forum should be provided for residents to communicate with ATC regarding any parking issues.
Crowding on surrounding streets post event.	<ul style="list-style-type: none"> • Adopt and maintain Pedestrian, Transport and Traffic Management Plan, which will consider internal wayfinding and pedestrian management, as well as transport management to optimise moving crowds from the Spectator precinct to the car park, bus/taxi rank, light rail etc, providing clearly defined travel paths and minimising loitering.

Attachment 1 SIDRA RESULTS

MOVEMENT SUMMARY

 Site: 101 [1a. Anzac/Alison - Existing Traffic]

 Network: N101 [N1. Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed	
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m			km/h	
South: Anzac (South)														
1	L2	55	0.0	55	0.0	0.088	24.1	LOS B	1.6	11.5	0.71	0.71	39.8	
2	T1	1133	7.9	1133	7.9	0.943	62.7	LOS E	41.7	310.4	0.94	1.02	29.8	
Approach		1187	7.5	1187	7.5	0.943	60.9	LOS E	41.7	310.4	0.93	1.01	30.1	
SouthEast: Alison (South-East)														
21a	L1	514	2.5	503	2.5	0.585	55.1	LOS D	14.2	101.5	0.87	0.79	29.6	
23a	R1	1153	5.5	1129	5.5	0.894	55.8	LOS D	26.1	191.7	1.00	0.94	30.5	
Approach		1666	4.5	1632 ^{N1}	4.6	0.894	55.6	LOS D	26.1	191.7	0.96	0.89	30.2	
North: Anzac (North)														
7a	L1	1460	4.7	1460	4.7	0.493	4.7	LOS A	1.5	10.9	0.04	0.49	52.1	
8	T1	871	8.9	871	8.9	0.425	13.3	LOS A	11.2	84.0	0.42	0.37	49.4	
9	R2	492	1.7	492	1.7	0.919	86.5	LOS F	19.5	138.8	1.00	1.02	24.1	
Approach		2822	5.5	2822	5.5	0.919	21.6	LOS B	19.5	138.8	0.32	0.55	40.2	
West: Dacey Ave (West)														
10	L2	452	0.9	452	0.9	0.857	62.8	LOS E	31.9	224.8	1.00	0.94	27.8	
12a	R1	635	1.3	635	1.3	1.804	777.4	LOS F	81.5	577.3	1.00	2.66	2.3	
12	R2	61	1.7	61	1.7	0.179	69.1	LOS E	2.0	14.0	0.96	0.72	26.8	
Approach		1147	1.2	1147	1.2	1.804	458.5	LOS F	81.5	577.3	1.00	1.88	5.1	
All Vehicles		6823	4.9	6789 ^{N1}	4.9	1.804	110.5	LOS F	81.5	577.3	0.70	0.94	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.

^{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	156	64.5	LOS F	0.6	0.6	0.96	0.96	
P5	SouthEast Full Crossing	233	26.1	LOS C	0.6	0.6	0.61	0.61	
P3S	North Slip/Bypass Lane Crossing	375	62.3	LOS F	1.4	1.4	0.95	0.95	
P4	West Full Crossing	237	42.9	LOS E	0.7	0.7	0.79	0.79	
All Pedestrians		1000	49.6	LOS E			0.84	0.84	

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: 102 [2a. Alison/Doncaster - Existing Traffic]

 Network: N101 [N1. Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	m				km/h
South: Doncaster (South)														
1	L2	78	1.4	78	1.4	1.210	270.0	LOS F	62.6	441.8	1.00	1.59	2.41	4.8
3	R2	703	0.7	703	0.7	1.210	270.5	LOS F	62.6	441.8	1.00	1.60	2.42	4.8
Approach		781	0.8	781	0.8	1.210	270.4	LOS F	62.6	441.8	1.00	1.60	2.42	4.8
East: Alison (East)														
4	L2	642	2.1	615	2.1	0.724	36.3	LOS C	23.5	168.1	0.89	0.87	0.89	25.7
5	T1	1568	4.7	1503	4.7	0.724	26.6	LOS B	23.5	168.1	0.82	0.75	0.82	12.4
6	R2	1	100.0	1	100.0	0.011	65.4	LOS E	0.1	0.9	0.92	0.61	0.92	20.5
Approach		2212	4.0	2120 ^{N1}	4.0	0.724	29.4	LOS C	23.5	168.1	0.84	0.79	0.84	18.6
North: Bus Leg														
7	L2	1	100.0	1	100.0	0.023	78.6	LOS F	0.1	1.0	0.98	0.60	0.98	16.3
8	T1	2	100.0	2	100.0	0.042	74.0	LOS F	0.1	1.9	0.98	0.61	0.98	23.6
Approach		3	100.0	3	100.0	0.042	75.5	LOS F	0.1	1.9	0.98	0.61	0.98	21.5
West: Alison (West)														
11	T1	1999	3.8	1729	4.2	0.897	59.2	LOS E	51.4	373.1	0.98	1.02	1.14	19.0
Approach		1999	3.8	1729 ^{N1}	4.2	0.897	59.2	LOS E	51.4	373.1	0.98	1.02	1.14	19.0
All Vehicles		4995	3.5	4633 ^{N1}	3.8	1.210	81.2	LOS F	62.6	441.8	0.92	1.01	1.22	11.9

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	Average Delay	Level of Service	Average Back of Queue	Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian ped	m			
P1	South Full Crossing	329	19.8	LOS B	0.7	0.7	0.54	0.54	
P3	North Full Crossing	53	25.3	LOS C	0.1	0.1	0.60	0.60	
P3S	North Slip/Bypass Lane Crossing	53	23.5	LOS C	0.1	0.1	0.58	0.58	
P4	West Full Crossing	664	39.0	LOS D	2.0	2.0	0.76	0.76	
All Pedestrians		1099	31.8	LOS D			0.67	0.67	

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: 103 [3a. Alison/Gate 1 - Existing Traffic]

 Network: N101 [N1. Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		veh	m				km/h
South: Gate 1														
1	L2	80	1.3	80	1.3	0.393	51.6	LOS D	4.8	34.1	0.90	0.73	0.90	12.9
3	R2	1	0.0	1	0.0	0.005	58.6	LOS E	0.1	0.4	0.90	0.54	0.90	12.3
Approach		81	1.3	81	1.3	0.393	51.7	LOS D	4.8	34.1	0.90	0.72	0.90	12.8
East: Alison (East)														
4	L2	28	7.4	28	7.4	1.190	241.7	LOS F	58.0	419.4	1.00	1.89	2.24	8.0
5	T1	2162	3.7	2162	3.7	1.190	238.6	LOS F	58.1	419.4	1.00	1.94	2.26	3.8
Approach		2191	3.7	2191	3.7	1.190	238.7	LOS F	58.1	419.4	1.00	1.94	2.26	3.8
West: Alison (West)														
11	T1	2707	3.8	2317	4.2	0.523	4.1	LOS A	19.2	139.0	0.28	0.26	0.28	37.7
12	R2	1	0.0	1	0.0	0.011	76.8	LOS F	0.1	0.4	0.97	0.58	0.97	12.8
Approach		2708	3.8	2318 ^{N1}	4.2	0.523	4.2	LOS A	19.2	139.0	0.28	0.26	0.28	37.6
All Vehicles		4980	3.7	4590 ^{N1}	4.0	1.190	116.9	LOS F	58.1	419.4	0.63	1.07	1.23	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	Average Delay	Level of Service	Average Back of Queue	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		
P1	South Full Crossing	974	9.3	LOS A	1.4	1.4	0.37	0.37
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		1026	12.1	LOS B			0.40	0.40

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: PARKING AND TRAFFIC CONSULTANTS | Processed: Wednesday, 17 February 2021 2:21:47 PM

Project: Z:\PCI - PROJECT WORK FILES\NSWA AUSTRALIAN TURF CLUB - RRR Night Racing (21-3052)\Analysis\2021 Sidra Analysis V210217 - Existing Traffic.sip8

MOVEMENT SUMMARY

 Site: 104 [4a. Alison/Darley - Existing Traffic]

 Network: N101 [N1. Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
East: Alison Rd (East)														
4	L2	1	100.0	1	100.0	1.106	166.9	LOS F	40.6	295.6	0.52	1.15	1.48	13.7
5	T1	1248	4.4	1248	4.4	1.106	159.7	LOS F	46.3	336.2	0.53	1.17	1.48	9.9
6a	R1	8	100.0	8	100.0	0.209	82.1	LOS F	0.6	16.7	0.99	0.68	0.99	25.7
6	R2	49	4.3	49	4.3	0.331	34.1	LOS C	2.6	19.0	0.78	0.78	0.78	36.3
Approach		1307	5.1	1307	5.1	1.106	154.5	LOS F	46.3	336.2	0.54	1.15	1.45	10.5
North: Darley Ave (North)														
7	L2	112	0.9	112	0.9	0.667	63.6	LOS E	7.1	49.8	0.94	0.81	1.01	27.6
8	T1	1	100.0	1	100.0	1.882	852.5	LOS F	76.8	551.5	1.00	2.45	4.19	3.1
9	R2	896	2.6	896	2.6	1.882	856.7	LOS F	82.9	593.2	1.00	2.45	4.19	2.0
Approach		1008	2.5	1008	2.5	1.882	768.9	LOS F	82.9	593.2	0.99	2.27	3.83	2.5
NorthWest: Alison Rd (West)														
27a	L1	8	100.0	8	100.0	0.212	82.4	LOS F	0.6	16.7	0.99	0.68	0.99	25.5
Approach		8	100.0	8	100.0	0.212	82.4	LOS F	0.6	16.7	0.99	0.68	0.99	25.5
West: Alison Rd (West)														
10	L2	1062	2.1	909	2.3	0.670	6.7	LOS A	4.3	30.5	0.14	0.63	0.14	46.5
11	T1	1665	4.9	1430	5.4	0.673	8.6	LOS A	17.5	128.4	0.39	0.35	0.39	50.7
Approach		2727	3.8	2339 ^{N1}	4.2	0.673	7.8	LOS A	17.5	128.4	0.29	0.46	0.29	49.0
All Vehicles		5052	4.0	4664 ^{N1}	4.4	1.882	213.6	LOS F	82.9	593.2	0.52	1.04	1.38	9.2

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	191	5.5	LOS A	0.2	0.2	0.28	0.28
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	15.6	LOS B	0.1	0.1	0.47	0.47
All Pedestrians		296	17.7	LOS B			0.44	0.44

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.

MOVEMENT SUMMARY

 Site: 105 [5a. High/Gate13 - Existing Traffic]

 Network: N101 [N1. Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		veh	m				km/h
South: UNSW														
1	L2	144	0.7	144	0.7	0.911	83.8	LOS F	11.3	79.9	1.00	1.23	1.43	6.9
3	R2	55	0.0	55	0.0	0.312	64.0	LOS E	3.6	24.9	0.96	0.73	0.96	12.7
Approach		199	0.5	199	0.5	0.911	78.4	LOS F	11.3	79.9	0.99	1.09	1.30	8.6
East: High (East)														
4	L2	52	0.0	52	0.0	0.089	14.5	LOS B	2.3	17.2	0.32	0.59	0.32	16.1
5	T1	363	13.6	363	13.6	0.240	5.6	LOS A	6.1	47.7	0.33	0.32	0.33	42.7
6	R2	1	0.0	1	0.0	0.240	10.0	LOS A	6.1	47.7	0.33	0.27	0.33	27.6
Approach		416	11.9	416	11.9	0.240	6.7	LOS A	6.1	47.7	0.33	0.36	0.33	31.3
North: Gate 13														
7	L2	1	0.0	1	0.0	0.008	55.7	LOS D	0.1	0.9	0.88	0.60	0.88	19.5
8	T1	1	0.0	1	0.0	0.008	59.8	LOS E	0.1	0.9	0.88	0.60	0.88	11.1
9	R2	1	0.0	1	0.0	0.013	63.9	LOS E	0.1	0.5	0.97	0.55	0.97	11.8
Approach		3	0.0	3	0.0	0.013	59.8	LOS E	0.1	0.9	0.91	0.59	0.91	13.6
West: High (West)														
10	L2	1	0.0	1	0.0	0.273	13.2	LOS A	4.6	32.6	0.24	0.21	0.24	23.6
11	T1	392	0.8	392	0.8	0.321	11.0	LOS A	11.5	80.7	0.36	0.33	0.36	41.0
12	R2	137	0.0	137	0.0	0.321	35.4	LOS C	11.5	80.7	0.84	0.83	0.84	11.8
Approach		529	0.6	529	0.6	0.321	17.3	LOS B	11.5	80.7	0.48	0.46	0.48	25.0
All Vehicles		1147	4.7	1147	4.7	0.911	24.2	LOS B	11.5	80.7	0.52	0.53	0.57	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	Average Delay	Level of Service	Average Back of Queue	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		
P1	South Full Crossing	132	6.6	LOS A	0.2	0.2	0.31	0.31
P2	East Full Crossing	132	58.8	LOS E	0.5	0.5	0.92	0.92
P3	North Full Crossing	53	16.1	LOS B	0.1	0.1	0.48	0.48
P4	West Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		368	34.9	LOS D			0.64	0.64

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: 106 [6a. Anzac/High - Existing Traffic]

 Network: N101 [N1. Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles													
Mov ID	Turn	Demand Flows Total veh/h	Arrival Flows HV % Total veh/h	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: Anzac (south)													
2	T1	887	5.5	887	5.5	0.443	3.7	LOS A	5.0	36.1	0.17	0.15	45.4
3	R2	204	0.0	204	0.0	0.615	53.5	LOS D	12.8	89.8	0.98	1.01	20.5
Approach		1092	4.4	1092	4.4	0.615	13.0	LOS A	12.8	89.8	0.32	0.31	37.0
East: High (east)													
4	L2	142	9.6	142	9.6	0.704	38.4	LOS C	14.0	108.3	0.80	0.79	29.1
6	R2	332	14.6	332	14.6	0.704	39.4	LOS C	14.0	108.3	0.81	0.79	16.1
Approach		474	13.1	474	13.1	0.704	39.1	LOS C	14.0	108.3	0.81	0.79	21.4
North: Anzac (North)													
7	L2	317	1.3	317	1.3	0.699	14.5	LOS B	17.7	129.1	0.43	0.54	27.1
8	T1	1015	9.4	1015	9.4	0.699	7.1	LOS A	17.7	129.1	0.34	0.36	43.3
Approach		1332	7.5	1332	7.5	0.699	8.9	LOS A	17.7	129.1	0.36	0.40	41.2
All Vehicles		2897	7.3	2897	7.3	0.704	15.4	LOS B	17.7	129.1	0.42	0.43	35.6

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
P1	South Full Crossing	211	57.2	LOS E	0.8	0.8	0.91	0.91
P2	East Full Crossing	487	22.2	LOS C	1.1	1.1	0.57	0.57
All Pedestrians		698	32.7	LOS D			0.67	0.67

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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V210217 - Existing Traffic.sip8

MOVEMENT SUMMARY

 Site: 107 [7a. Anzac/Doncaster - Existing Traffic]

 Network: N101 [N1. Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed	
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m			km/h	
South: Doncaster (South)														
1a	L1	123	1.7	123	1.7	1.041	117.7	LOS F	104.8	736.7	1.00	1.35	19.3	
2	T1	838	0.4	838	0.4	1.041	114.4	LOS F	104.8	736.7	1.00	1.35	19.3	
3b	R3	29	3.6	29	3.6	0.082	46.2	LOS D	1.5	10.8	0.78	0.71	22.4	
Approach		991	0.6	991	0.6	1.041	112.8	LOS F	104.8	736.7	0.99	1.33	19.4	
SouthEast: Anzac (South)														
21b	L3	94	0.0	94	0.0	0.252	52.5	LOS D	5.2	36.4	0.85	0.77	24.6	
22	T1	1001	8.8	1001	8.8	0.785	43.4	LOS D	31.3	234.7	0.94	0.84	26.8	
Approach		1095	8.1	1095	8.1	0.785	44.2	LOS D	31.3	234.7	0.93	0.84	26.6	
North: Doncaster (North)														
7a	L1	108	2.9	108	2.9	0.827	46.6	LOS D	39.0	275.2	0.97	0.90	23.0	
8	T1	511	0.4	511	0.4	0.827	43.3	LOS D	39.0	275.2	0.97	0.90	31.3	
9b	R3	3	0.0	3	0.0	0.028	73.9	LOS F	0.2	1.5	0.97	0.63	24.8	
Approach		622	0.8	622	0.8	0.827	44.0	LOS D	39.0	275.2	0.97	0.90	30.2	
NorthWest: Anzac (North)														
27b	L3	9	0.0	9	0.0	0.892	57.9	LOS E	39.9	295.9	0.98	0.97	29.0	
28	T1	1166	7.7	1166	7.7	0.892	51.8	LOS D	40.9	303.5	0.98	0.97	20.7	
Approach		1176	7.6	1176	7.6	0.892	51.8	LOS D	40.9	303.5	0.98	0.97	20.8	
All Vehicles		3883	4.9	3883	4.9	1.041	64.0	LOS E	104.8	736.7	0.97	1.01	22.9	

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	Average Delay	Level of Service	Average Back of Queue	Prop. Queued	Effective Stop Rate		
		ped/h	sec		Pedestrian ped	Distance m			
P1	South Full Crossing	263	34.0	LOS D	0.7	0.7	0.70		0.70
P5	SouthEast Full Crossing	593	23.4	LOS C	1.4	1.4	0.59		0.59
P3	North Full Crossing	263	34.0	LOS D	0.7	0.7	0.70		0.70
P7	NorthWest Full Crossing	263	23.7	LOS C	0.6	0.6	0.58		0.58
All Pedestrians		1382	27.5	LOS C			0.63		0.63

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: 108 [8a. Doncaster/Ascot - Stop Controlled - Existing Traffic]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	0.400	4.9	LOS A	0.0	0.3	0.00	0.01	0.01	49.4
2	T1	780	0.9	0.400	0.0	LOS A	0.0	0.3	0.00	0.01	0.01	49.9
3	R2	1	0.0	0.400	9.8	LOS A	0.0	0.3	0.00	0.01	0.01	49.1
Approach		801	0.9	0.400	0.2	NA	0.0	0.3	0.00	0.01	0.01	49.9
East: Ascot (East)												
4	L2	1	0.0	0.022	7.7	LOS A	0.1	0.4	0.86	0.95	0.86	30.2
5	T1	1	0.0	0.022	31.2	LOS C	0.1	0.4	0.86	0.95	0.86	30.0
6	R2	1	0.0	0.022	37.5	LOS C	0.1	0.4	0.86	0.95	0.86	27.2
Approach		3	0.0	0.022	25.5	LOS B	0.1	0.4	0.86	0.95	0.86	29.2
North: Doncaster (North)												
7	L2	1	0.0	0.371	11.5	LOS A	0.9	6.3	0.13	0.03	0.18	22.0
8	T1	651	1.8	0.371	0.8	LOS A	0.9	6.3	0.13	0.03	0.18	49.0
9	R2	31	0.0	0.371	11.6	LOS A	0.9	6.3	0.13	0.03	0.18	48.2
Approach		682	1.7	0.371	1.3	NA	0.9	6.3	0.13	0.03	0.18	48.9
West: Ascot (West)												
10	L2	17	0.0	0.319	17.2	LOS B	1.0	7.0	0.90	1.04	1.04	32.5
11	T1	1	0.0	0.319	40.6	LOS C	1.0	7.0	0.90	1.04	1.04	18.1
12	R2	26	0.0	0.319	48.5	LOS D	1.0	7.0	0.90	1.04	1.04	33.6
Approach		44	0.0	0.319	36.4	LOS C	1.0	7.0	0.90	1.04	1.04	32.8
All Vehicles		1531	1.2	0.400	1.8	NA	1.0	7.0	0.09	0.05	0.12	48.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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: 109 [9a. Doncaster/Ascot - Cycleway & Pedcrossing - Existing Traffic]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
2	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
East: Ascot (East)												
5	T1	1	0.0	0.001	7.4	LOS A	0.0	0.0	0.13	0.98	0.13	41.6
Approach		1	0.0	0.001	7.4	LOS A	0.0	0.0	0.13	0.98	0.13	41.6
North: Doncaster (North)												
8	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Ascot (West)												
11	T1	1	0.0	0.001	4.0	LOS A	0.0	0.0	0.13	1.08	0.13	44.2
Approach		1	0.0	0.001	4.0	LOS A	0.0	0.0	0.13	1.08	0.13	44.2
All Vehicles		4	0.0	0.001	2.8	NA	0.0	0.0	0.07	0.51	0.07	47.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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: 108 [8a. Doncaster/Ascot - Signalised - Existing Traffic]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	0.547	13.5	LOS A	23.9	168.7	0.49	0.46	0.49	44.1
2	T1	781	0.9	0.547	8.9	LOS A	23.9	168.7	0.49	0.46	0.49	44.0
3	R2	1	0.0	0.003	24.4	LOS B	0.0	0.3	0.57	0.59	0.57	37.3
Approach		802	0.9	0.547	9.1	LOS A	23.9	168.7	0.49	0.46	0.49	43.9
East: Ascot (East)												
4	L2	1	0.0	0.009	63.3	LOS E	0.1	0.9	0.91	0.59	0.91	27.1
5	T1	1	0.0	0.009	58.7	LOS E	0.1	0.9	0.91	0.59	0.91	27.3
6	R2	1	0.0	0.005	59.7	LOS E	0.1	0.4	0.91	0.58	0.91	26.2
Approach		3	0.0	0.009	60.6	LOS E	0.1	0.9	0.91	0.59	0.91	26.9
North: Doncaster (North)												
7	L2	1	0.0	0.001	9.9	LOS A	0.0	0.1	0.28	0.55	0.28	43.1
8	T1	652	1.8	0.628	18.9	LOS B	29.3	207.9	0.69	0.64	0.69	38.7
9	R2	31	0.0	0.628	23.5	LOS B	29.3	207.9	0.70	0.64	0.70	38.5
Approach		683	1.7	0.628	19.1	LOS B	29.3	207.9	0.69	0.64	0.69	38.7
West: Ascot (West)												
10	L2	17	0.0	0.153	74.9	LOS F	1.1	7.8	0.96	0.69	0.96	23.2
11	T1	1	0.0	0.125	53.9	LOS D	1.5	10.8	0.87	0.70	0.87	27.8
12	R2	26	0.0	0.125	58.5	LOS E	1.5	10.8	0.87	0.70	0.87	27.7
Approach		44	0.0	0.153	64.6	LOS E	1.5	10.8	0.91	0.70	0.91	25.9
All Vehicles		1533	1.2	0.628	15.3	LOS B	29.3	207.9	0.59	0.55	0.59	40.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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	64.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	13.8	LOS B	0.1	0.1	0.44	0.44
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	7.9	LOS A	0.1	0.1	0.34	0.34
All Pedestrians		211	37.6	LOS D			0.67	0.67

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 [1c. Anzac/Alison - Class 2 Event - Scenario 1]



Network: N101 [N3a. Class 2 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles													
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m			km/h
South: Anzac (South)													
1	L2	55	0.0	55	0.0	0.092	25.1	LOS B	1.7	11.8	0.73	0.71	39.4
2	T1	1133	7.9	1133	7.9	0.943	62.7	LOS E	41.7	310.4	0.94	1.02	29.8
Approach		1187	7.5	1187	7.5	0.943	61.0	LOS E	41.7	310.4	0.93	1.01	30.1
SouthEast: Alison (South-East)													
21a	L1	654	2.6	559	2.8	0.655	45.7	LOS D	15.5	110.9	0.86	0.79	32.1
23a	R1	1397	5.0	1207	5.4	0.899	53.6	LOS D	28.4	207.8	0.98	0.93	31.1
Approach		2051	4.2	1766 ^{N1}	4.6	0.899	51.1	LOS D	28.4	207.8	0.94	0.89	31.4
North: Anzac (North)													
7a	L1	1473	5.5	1473	5.5	0.500	4.7	LOS A	1.5	11.2	0.04	0.49	52.1
8	T1	1472	5.3	1472	5.3	0.705	16.7	LOS B	27.1	198.0	0.60	0.55	47.2
9	R2	492	1.7	492	1.7	0.919	86.5	LOS F	19.5	138.8	1.00	1.02	24.1
Approach		3436	4.9	3436	4.9	0.919	21.5	LOS B	27.1	198.0	0.42	0.59	41.1
West: Dacey Ave (West)													
10	L2	452	0.9	452	0.9	0.902	71.6	LOS F	34.5	243.3	1.00	0.98	26.0
12a	R1	642	2.5	642	2.5	2.174	1103.9	LOS F	94.7	677.2	1.00	2.86	1.6
12	R2	405	0.3	405	0.3	1.391	420.2	LOS F	38.7	271.7	1.00	1.94	7.2
Approach		1499	1.4	1499	1.4	2.174	608.0	LOS F	94.7	677.2	1.00	2.05	4.3
All Vehicles		8173	4.5	7888 ^{N1}	4.6	2.174	145.5	LOS F	94.7	677.2	0.72	1.00	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	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	156	62.6	LOS F	0.6	0.6	0.95	0.95
P5	SouthEast Full Crossing	233	26.1	LOS C	0.6	0.6	0.61	0.61
P3S	North Slip/Bypass Lane Crossing	375	64.2	LOS F	1.4	1.4	0.97	0.97
P4	West Full Crossing	237	42.9	LOS E	0.7	0.7	0.79	0.79
All Pedestrians		1000	50.0	LOS E			0.84	0.84

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: 102 [2c. Alison/Doncaster - Class 2 Event - Scenario 1]  Network: N101 [N3a. Class 2 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Doncaster (South)														
1	L2	452	0.2	452	0.2	1.511	526.5	LOS F	152.1	1072.4	1.00	2.03	3.34	2.6
3	R2	816	1.9	816	1.9	1.511	528.4	LOS F	152.1	1072.4	1.00	2.08	3.35	2.6
Approach		1267	1.3	1267	1.3	1.511	527.7	LOS F	152.1	1072.4	1.00	2.06	3.34	2.6
East: Alison (East)														
4	L2	760	2.9	684	3.1	0.846	49.3	LOS D	23.4	168.1	0.99	0.92	1.02	21.6
5	T1	1579	5.3	1396	5.6	0.846	39.3	LOS C	23.4	168.1	0.94	0.89	0.99	9.0
6	R2	28	100.0	28	100.0	0.308	67.1	LOS E	1.8	24.0	0.92	0.73	0.92	20.2
Approach		2367	5.7	2109 ^{N1}	6.1	0.846	42.9	LOS D	23.4	168.1	0.96	0.90	1.00	15.1
North: Bus Leg														
7	L2	24	100.0	24	100.0	0.521	84.0	LOS F	1.8	23.6	1.00	0.75	1.06	15.5
8	T1	2	100.0	2	100.0	0.042	74.0	LOS F	0.1	1.9	0.98	0.61	0.98	23.6
Approach		26	100.0	26	100.0	0.521	83.2	LOS F	1.8	23.6	1.00	0.74	1.06	16.3
West: Alison (West)														
11	T1	2019	4.8	1659	5.3	0.893	60.0	LOS E	44.2	320.8	1.00	1.02	1.16	18.8
Approach		2019	4.8	1659 ^{N1}	5.3	0.893	60.0	LOS E	44.2	322.8	1.00	1.02	1.16	18.8
All Vehicles		5680	4.8	5061 ^{N1}	5.4	1.511	170.1	LOS F	152.1	1072.4	0.98	1.23	1.64	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	Distance m	Prop. Queued	Effective Stop Rate	
P1	South Full Crossing	329	25.6	LOS C	0.8	0.8	0.61	0.61	
P3	North Full Crossing	53	31.6	LOS D	0.1	0.1	0.67	0.67	
P3S	North Slip/Bypass Lane Crossing	53	29.6	LOS C	0.1	0.1	0.65	0.65	
P4	West Full Crossing	664	31.8	LOS D	1.8	1.8	0.68	0.68	
All Pedestrians		1099	29.8	LOS C			0.66	0.66	

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.

MOVEMENT SUMMARY



Site: 103 [3c. Alison/Gate 1 - Class 2 Event - Scenario 1]



Network: N101 [N3a. Class 2 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Gate 1														
1	L2	80	1.3	80	1.3	0.393	51.6	LOS D	4.8	34.1	0.90	0.73	0.90	12.9
3	R2	1	0.0	1	0.0	0.005	58.6	LOS E	0.1	0.4	0.90	0.54	0.90	12.3
Approach		81	1.3	81	1.3	0.393	51.7	LOS D	4.8	34.1	0.90	0.72	0.90	12.8
East: Alison (East)														
4	L2	28	7.4	24	7.8	1.105	175.6	LOS F	54.7	419.4	1.00	1.64	1.91	9.9
5	T1	2318	5.4	1992	5.9	1.105	169.4	LOS F	58.0	419.4	1.00	1.66	1.91	5.2
Approach		2346	5.4	2016 ^{N1}	5.9	1.105	169.4	LOS F	58.0	419.4	1.00	1.66	1.91	5.3
West: Alison (West)														
11	T1	2863	5.4	2236	6.3	0.511	3.3	LOS A	18.4	133.9	0.22	0.20	0.22	40.8
12	R2	1	0.0	1	0.0	0.010	76.8	LOS F	0.1	0.4	0.97	0.58	0.97	12.9
Approach		2864	5.4	2237 ^{N1}	6.3	0.511	3.4	LOS A	18.4	133.9	0.22	0.20	0.22	40.4
All Vehicles		5292	5.4	4334 ^{N1}	6.6	1.105	81.5	LOS F	58.0	419.4	0.60	0.89	1.02	7.4

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	974	9.3	LOS A	1.4	1.4	0.37	0.37
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		1026	12.1	LOS B			0.40	0.40

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: PARKING AND TRAFFIC CONSULTANTS | Processed: Sunday, 21 February 2021 8:22:12 PM

Project: Z:\PCI - PROJECT WORK FILES\NSWA AUSTRALIAN TURF CLUB - RRR Night Racing (21-3052)\Analysis\2021 Sidra Analysis

V210217 - Class 2 Event - Scenario 1 Entry Ascot.sip8

MOVEMENT SUMMARY



Site: 104 [4c. Alison/Darley - Class 2 Event - Scenario 1]



Network: N101 [N3a. Class 2 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		veh	m				km/h
East: Alison Rd (East)														
4	L2	11	100.0	11	100.0	1.183	230.4	LOS F	52.0	384.0	0.53	1.40	1.80	10.6
5	T1	1358	4.0	1358	4.0	1.183	222.3	LOS F	63.7	461.3	0.54	1.42	1.80	7.4
6a	R1	12	100.0	12	100.0	0.288	82.8	LOS F	0.9	23.2	1.00	0.70	1.00	25.6
6	R2	49	4.3	49	4.3	0.330	36.5	LOS C	2.7	19.4	0.79	0.78	0.79	35.5
Approach		1429	5.5	1429	5.5	1.183	214.9	LOS F	63.7	461.3	0.56	1.39	1.76	7.9
North: Darley Ave (North)														
7	L2	112	0.9	112	0.9	0.691	64.2	LOS E	7.1	50.2	0.94	0.82	1.04	27.5
8	T1	55	100.0	55	100.0	1.999	956.5	LOS F	84.8	697.1	1.00	2.74	4.38	2.8
9	R2	896	2.6	896	2.6	1.999	960.7	LOS F	92.1	659.1	1.00	2.60	4.37	1.8
Approach		1062	7.4	1062	7.4	1.999	866.1	LOS F	92.1	697.1	0.99	2.42	4.02	2.3
NorthWest: Alison Rd (West)														
27a	L1	12	100.0	12	100.0	0.291	83.1	LOS F	0.9	23.2	1.00	0.70	1.00	25.3
Approach		12	100.0	12	100.0	0.291	83.1	LOS F	0.9	23.2	1.00	0.70	1.00	25.3
West: Alison Rd (West)														
10	L2	1116	6.8	877	7.6	0.670	6.7	LOS A	4.2	31.1	0.15	0.62	0.15	46.5
11	T1	1767	4.6	1379	5.5	0.649	10.2	LOS A	21.2	155.7	0.42	0.38	0.42	49.3
Approach		2883	5.4	2256 ^{N1}	6.3	0.670	8.8	LOS A	21.2	155.7	0.31	0.48	0.31	48.2
All Vehicles		5386	6.1	4759 ^{N1}	6.9	1.999	262.3	LOS F	92.1	697.1	0.54	1.19	1.58	7.7

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	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	191	5.5	LOS A	0.2	0.2	0.28	0.28
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	15.6	LOS B	0.1	0.1	0.47	0.47
All Pedestrians		296	17.7	LOS B			0.44	0.44

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

MOVEMENT SUMMARY

 Site: 105 [5c. High/Gate13 - Class 2 Event - Scenario 1]

 Network: N101 [N3a. Class 2 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: UNSW														
1	L2	144	0.7	144	0.7	0.911	83.8	LOS F	11.3	79.9	1.00	1.23	1.43	6.9
3	R2	55	0.0	55	0.0	0.312	64.0	LOS E	3.6	24.9	0.96	0.73	0.96	12.7
Approach		199	0.5	199	0.5	0.911	78.4	LOS F	11.3	79.9	0.99	1.09	1.30	8.6
East: High (East)														
4	L2	52	0.0	52	0.0	0.293	14.4	LOS A	3.4	25.7	0.33	0.50	0.33	16.2
5	T1	363	13.6	363	13.6	0.793	11.5	LOS A	11.2	84.1	0.47	0.56	0.51	36.6
6	R2	148	0.0	148	0.0	0.793	18.5	LOS B	11.2	84.1	0.53	0.59	0.60	25.6
Approach		563	8.8	563	8.8	0.793	13.6	LOS A	11.2	84.1	0.47	0.56	0.52	27.4
North: Gate 13														
7	L2	1	0.0	1	0.0	0.008	55.7	LOS D	0.1	0.9	0.88	0.60	0.88	19.5
8	T1	1	0.0	1	0.0	0.008	59.8	LOS E	0.1	0.9	0.88	0.60	0.88	11.1
9	R2	1	0.0	1	0.0	0.013	63.9	LOS E	0.1	0.5	0.97	0.55	0.97	11.8
Approach		3	0.0	3	0.0	0.013	59.8	LOS E	0.1	0.9	0.91	0.59	0.91	13.6
West: High (West)														
10	L2	494	0.0	484	0.0	0.642	18.3	LOS B	32.4	227.6	0.61	0.73	0.61	22.0
11	T1	395	1.6	378	1.0	0.642	12.0	LOS A	32.4	227.6	0.61	0.73	0.61	38.5
12	R2	137	0.0	132	0.0	1.039	135.4	LOS F	13.0	91.1	1.00	0.99	1.75	8.1
Approach		1025	0.6	994 ^{N1}	0.4	1.039	31.5	LOS C	32.4	227.6	0.66	0.77	0.76	20.7
All Vehicles		1791	3.2	1759 ^{N1}	3.2	1.039	31.1	LOS C	32.4	227.6	0.64	0.74	0.75	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	Average Delay	Level of Service	Average Back of Queue	Prop. Queued	Effective Stop Rate		
		ped/h	sec		Pedestrian ped	Distance m			
P1	South Full Crossing	132	6.6	LOS A	0.2	0.2	0.31	0.31	
P2	East Full Crossing	132	58.8	LOS E	0.5	0.5	0.92	0.92	
P3	North Full Crossing	53	12.0	LOS B	0.1	0.1	0.42	0.42	
P4	West Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96	
All Pedestrians		368	34.3	LOS D			0.63	0.63	

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: 106 [6c. Anzac/High - Class 2 Event - Scenario 1]

 Network: N101 [N3a. Class 2 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed	
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m			km/h	
South: Anzac (south)														
2	T1	1117	5.3	1117	5.3	0.399	0.6	LOS A	1.2	8.8	0.04	0.03	0.04	49.2
3	R2	500	0.0	500	0.0	0.873	67.0	LOS E	32.1	224.6	1.00	1.15	1.70	17.9
Approach		1617	3.6	1617	3.6	0.873	21.2	LOS B	32.1	224.6	0.33	0.38	0.55	31.9
East: High (east)														
4	L2	142	9.6	142	9.6	0.805	55.0	LOS D	15.9	122.4	0.94	0.86	1.01	24.7
6	R2	332	14.6	332	14.6	0.805	56.0	LOS D	15.9	122.4	0.94	0.86	1.02	12.6
Approach		474	13.1	474	13.1	0.805	55.7	LOS D	15.9	122.4	0.94	0.86	1.01	17.3
North: Anzac (North)														
7	L2	518	1.4	486	1.0	0.983	76.3	LOS F	41.8	301.9	1.00	1.09	1.30	8.1
8	T1	1224	8.3	1023	9.3	0.983	74.5	LOS F	41.8	301.9	1.00	1.13	1.30	20.1
Approach		1742	6.2	1509 ^{N1}	6.6	0.983	75.1	LOS F	41.8	301.9	1.00	1.12	1.30	17.1
All Vehicles		3833	6.0	3599 ^{N1}	6.4	0.983	48.3	LOS D	41.8	301.9	0.69	0.75	0.92	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.

^{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	211	64.7	LOS F	0.8	0.8	0.97	0.97
P2	East Full Crossing	487	30.9	LOS D	1.3	1.3	0.67	0.67
All Pedestrians		698	41.1	LOS E			0.76	0.76

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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V210217 - Class 2 Event - Scenario 1 Entry Ascot.sip8

MOVEMENT SUMMARY

 Site: 107 [7c. Anzac/Doncaster - Class 2 Event - Scenario 1]

 Network: N101 [N3a. Class 2 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles													
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m			km/h
South: Doncaster (South)													
1a	L1	123	1.7	123	1.7	2.947	1801.2	LOS F	330.9	2327.0	1.00	4.23	1.9
2	T1	838	0.4	838	0.4	2.947	1797.8	LOS F	330.9	2327.0	1.00	4.23	1.9
3b	R3	29	3.6	29	3.6	0.528	85.1	LOS F	2.2	15.7	1.00	0.71	15.3
Approach		991	0.6	991	0.6	2.947	1747.3	LOS F	330.9	2327.0	1.00	4.12	1.9
SouthEast: Anzac (South)													
21b	L3	94	0.0	94	0.0	0.095	17.4	LOS B	2.6	18.2	0.44	0.68	37.2
22	T1	1231	8.0	1231	8.0	0.448	7.2	LOS A	16.1	119.7	0.41	0.37	43.7
Approach		1324	7.5	1324	7.5	0.448	7.9	LOS A	16.1	119.7	0.41	0.39	43.2
North: Doncaster (North)													
7a	L1	321	3.6	321	3.6	3.950	2706.8	LOS F	316.4	2246.1	1.00	4.08	0.7
8	T1	511	0.4	511	0.4	3.950	2703.4	LOS F	316.4	2246.1	1.00	4.08	1.3
9b	R3	3	0.0	3	0.0	0.056	81.7	LOS F	0.2	1.6	1.00	0.61	23.6
Approach		835	1.6	835	1.6	3.950	2694.8	LOS F	316.4	2246.1	1.00	4.07	1.1
NorthWest: Anzac (North)													
27b	L3	9	0.0	9	0.0	0.995	66.7	LOS E	62.8	462.3	0.92	1.18	27.1
28	T1	1364	6.6	1364	6.6	0.995	60.5	LOS E	62.8	462.3	0.89	1.14	19.0
Approach		1374	6.5	1374	6.5	0.995	60.5	LOS E	62.8	462.3	0.89	1.14	19.0
All Vehicles		4523	4.6	4523	4.6	3.950	900.6	LOS F	330.9	2327.0	0.79	2.12	2.7

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	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	263	7.0	LOS A	0.3	0.3	0.32	0.32
P5	SouthEast Full Crossing	593	64.8	LOS F	2.3	2.3	0.97	0.97
P3	North Full Crossing	263	7.0	LOS A	0.3	0.3	0.32	0.32
P7	NorthWest Full Crossing	263	64.8	LOS F	1.0	1.0	0.97	0.97
All Pedestrians		1382	42.8	LOS E			0.72	0.72

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: 108 [8c. Doncaster/Ascot - Stop Controlled - Scenario 1]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	0.715	15.4	LOS B	11.1	79.1	1.00	0.27	1.70	44.5
2	T1	791	2.3	0.715	6.1	LOS A	11.1	79.1	1.00	0.27	1.70	44.4
3	R2	220	0.0	0.715	15.7	LOS B	11.1	79.1	1.00	0.27	1.70	40.4
Approach		1031	1.7	0.715	8.3	NA	11.1	79.1	1.00	0.27	1.70	43.8
East: Ascot (East)												
4	L2	205	0.0	51.596	45576.9	LOS F	536.4	3755.1	1.00	2.14	5.19	0.0
5	T1	1	0.0	51.596	45577.8	LOS F	536.4	3755.1	1.00	2.14	5.19	0.0
6	R2	477	0.0	51.596	45583.0	LOS F	536.4	3755.1	1.00	2.14	5.19	0.0
Approach		683	0.0	51.596	45581.1	LOS F	536.4	3755.1	1.00	2.14	5.19	0.0
North: Doncaster (North)												
7	L2	111	0.0	0.435	7.7	LOS A	1.4	10.3	0.18	0.09	0.26	21.7
8	T1	659	3.0	0.435	0.9	LOS A	1.4	10.3	0.18	0.09	0.26	48.3
9	R2	31	0.0	0.435	12.7	LOS A	1.4	10.3	0.18	0.09	0.26	47.5
Approach		800	2.5	0.435	2.3	NA	1.4	10.3	0.18	0.09	0.26	44.5
West: Ascot (West)												
10	L2	17	0.0	17.834	15168.9	LOS F	512.0	3584.2	1.00	3.96	12.80	0.2
11	T1	748	0.0	17.834	15172.7	LOS F	512.0	3584.2	1.00	3.96	12.80	0.1
12	R2	26	0.0	17.834	15174.5	LOS F	512.0	3584.2	1.00	3.96	12.80	0.2
Approach		792	0.0	17.834	15172.7	LOS F	512.0	3584.2	1.00	3.96	12.80	0.1
All Vehicles		3305	1.1	51.596	13057.9	NA	536.4	3755.1	0.80	1.50	4.73	0.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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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V210217 - Class 2 Event - Scenario 1 Entry Ascot.sip8

MOVEMENT SUMMARY

 **Site: 109 [9c. Doncaster/Ascot - Cycleway & Pedcrossing - Scenario 1]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
2	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
East: Ascot (East)												
5	T1	681	0.0	0.598	7.7	LOS A	4.4	31.1	0.28	0.92	0.28	41.6
Approach		681	0.0	0.598	7.7	LOS A	4.4	31.1	0.28	0.92	0.28	41.6
North: Doncaster (North)												
8	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Ascot (West)												
11	T1	1077	0.0	0.946	12.3	LOS A	48.4	338.8	1.00	0.56	1.18	38.5
Approach		1077	0.0	0.946	12.3	LOS A	48.4	338.8	1.00	0.56	1.18	38.5
All Vehicles		1760	0.0	0.946	10.5	NA	48.4	338.8	0.72	0.70	0.83	39.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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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V210217 - Class 2 Event - Scenario 1 Entry Ascot.sip8

MOVEMENT SUMMARY

 **Site: 108 [8c. Doncaster/Ascot - Signalised - Class 2 Event - Scenario 1]**

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Doncaster (South)												
1	L2	20	0.0	1.594	595.9	LOS F	186.5	1330.3	1.00	2.89	3.53	5.4
2	T1	792	2.3	1.594	590.6	LOS F	186.5	1330.3	1.00	2.89	3.53	4.9
3	R2	220	0.0	0.965	102.7	LOS F	18.0	126.0	1.00	1.26	2.15	20.7
Approach		1032	1.7	1.594	486.7	LOS F	186.5	1330.3	1.00	2.54	3.23	5.9
East: Ascot (East)												
4	L2	205	0.0	0.657	48.3	LOS D	11.3	79.4	0.86	0.79	0.86	29.9
5	T1	1	0.0	0.657	43.8	LOS D	11.3	79.4	0.86	0.79	0.86	30.1
6	R2	477	0.0	0.717	34.4	LOS C	23.5	164.2	0.79	0.80	0.79	32.8
Approach		683	0.0	0.717	38.6	LOS C	23.5	164.2	0.81	0.80	0.81	31.8
North: Doncaster (North)												
7	L2	111	0.0	0.090	14.8	LOS B	2.8	19.8	0.41	0.65	0.41	40.4
8	T1	660	3.0	2.989	1828.9	LOS F	238.4	1710.3	1.00	3.84	5.35	1.7
9	R2	31	0.0	2.989	1836.3	LOS F	238.4	1710.3	1.00	3.84	5.36	1.7
Approach		801	2.5	2.989	1578.9	LOS F	238.4	1710.3	0.92	3.40	4.67	2.0
West: Ascot (West)												
10	L2	17	0.0	0.723	67.6	LOS E	5.5	38.7	0.92	0.78	1.05	25.2
11	T1	748	0.0	3.186	1818.8	LOS F	244.8	1713.7	0.99	3.37	5.05	1.9
12	R2	26	0.0	3.186	2007.7	LOS F	244.8	1713.7	1.00	3.65	5.47	1.7
Approach		792	0.0	3.186	1787.9	LOS F	244.8	1713.7	0.99	3.33	4.98	1.9
All Vehicles		3307	1.1	3.186	970.1	LOS F	244.8	1713.7	0.94	2.58	3.50	3.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	61.4	LOS F	0.2	0.2	0.94	0.94
P2	East Full Crossing	53	62.4	LOS F	0.2	0.2	0.94	0.94
P3	North Full Crossing	53	61.4	LOS F	0.2	0.2	0.94	0.94
P4	West Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	62.4	LOS F			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 [1c. Anzac/Alison - Class 2 Event - Scenario 2]



Network: N101 [N3b. Class 2 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Anzac (South)														
1	L2	55	0.0	55	0.0	0.088	24.1	LOS B	1.6	11.5	0.71	0.71	0.71	39.8
2	T1	1133	7.9	1133	7.9	0.943	62.7	LOS E	41.7	310.4	0.94	1.02	1.17	29.8
Approach		1187	7.5	1187	7.5	0.943	60.9	LOS E	41.7	310.4	0.93	1.01	1.15	30.1
SouthEast: Alison (South-East)														
21a	L1	654	2.6	474	2.6	0.552	55.5	LOS D	14.0	100.6	0.92	0.81	0.92	29.5
23a	R1	1397	5.0	998	5.0	0.788	44.5	LOS D	19.9	145.2	0.91	0.84	0.94	33.8
Approach		2051	4.2	1471 ^{N1}	4.3	0.788	48.1	LOS D	19.9	145.2	0.91	0.83	0.93	32.3
North: Anzac (North)														
7a	L1	1694	4.8	1694	4.8	0.572	4.8	LOS A	2.0	14.9	0.05	0.50	0.05	52.1
8	T1	1251	6.2	1251	6.2	0.602	15.2	LOS B	19.9	146.3	0.52	0.47	0.52	48.1
9	R2	492	1.7	492	1.7	0.919	86.5	LOS F	19.5	138.8	1.00	1.02	1.36	24.1
Approach		3436	4.9	3436	4.9	0.919	20.3	LOS B	19.9	146.3	0.35	0.56	0.41	41.3
West: Dacey Ave (West)														
10	L2	452	0.9	452	0.9	0.857	62.8	LOS E	31.9	224.8	1.00	0.94	1.12	27.8
12a	R1	768	2.1	768	2.1	2.195	1123.4	LOS F	114.0	812.4	1.00	3.04	4.62	1.6
12	R2	279	0.4	279	0.4	0.811	78.4	LOS F	10.2	71.3	1.00	0.92	1.22	25.1
Approach		1499	1.4	1499	1.4	2.195	609.4	LOS F	114.0	812.4	1.00	2.01	2.93	4.1
All Vehicles		8173	4.5	7594 ^{N1}	4.8	2.195	148.3	LOS F	114.0	812.4	0.68	0.97	1.12	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.

^{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	Prop. Queued	Effective Stop Rate	
P1	South Full Crossing	156	64.5	LOS F	0.6	0.6	0.96	0.96
P5	SouthEast Full Crossing	233	26.1	LOS C	0.6	0.6	0.61	0.61
P3S	North Slip/Bypass Lane Crossing	375	62.3	LOS F	1.4	1.4	0.95	0.95
P4	West Full Crossing	237	42.9	LOS E	0.7	0.7	0.79	0.79
All Pedestrians		1000	49.6	LOS E			0.84	0.84

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: 102 [2c. Alison/Doncaster - Class 2 Event - Scenario 2]**  **Network: N101 [N3b. Class 2 Event - Scenario 2 - Taxi via Gate1]**

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Doncaster (South)														
1	L2	104	1.0	104	1.0	1.898	867.8	LOS F	129.6	922.0	1.00	2.48	4.18	1.6
3	R2	721	2.2	721	2.2	1.898	869.3	LOS F	129.6	922.0	1.00	2.49	4.19	1.6
Approach		825	2.0	825	2.0	1.898	869.1	LOS F	129.6	922.0	1.00	2.49	4.19	1.6
East: Alison (East)														
4	L2	665	3.3	432	3.8	0.562	14.6	LOS B	14.6	105.4	0.36	0.58	0.36	37.6
5	T1	2116	4.0	1560	3.9	0.562	8.6	LOS A	23.2	168.1	0.36	0.36	0.36	26.0
6	R2	28	100.0	24	100.0	0.262	37.1	LOS C	1.0	12.6	0.57	0.68	0.57	27.6
Approach		2809	4.8	2016 ^{N1}	5.0	0.562	10.3	LOS A	23.2	168.1	0.36	0.41	0.36	31.2
North: Bus Leg														
7	L2	24	100.0	24	100.0	0.521	84.0	LOS F	1.8	23.6	1.00	0.75	1.06	15.5
8	T1	2	100.0	2	100.0	0.042	74.0	LOS F	0.1	1.9	0.98	0.61	0.98	23.6
Approach		26	100.0	26	100.0	0.521	83.2	LOS F	1.8	23.6	1.00	0.74	1.06	16.3
West: Alison (West)														
11	T1	2366	4.1	1962	4.5	0.894	37.9	LOS C	57.5	418.7	0.91	0.92	1.01	25.2
Approach		2366	4.1	1962 ^{N1}	4.5	0.894	37.9	LOS C	57.5	418.7	0.91	0.92	1.01	25.2
All Vehicles		6027	4.6	4830 ^{N1}	5.7	1.898	168.6	LOS F	129.6	922.0	0.70	0.97	1.28	6.4

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	Distance m	Prop. Queued	Effective Stop Rate	
P1	South Full Crossing	329	12.6	LOS B	0.6	0.6	0.43	0.43	
P3	North Full Crossing	53	17.0	LOS B	0.1	0.1	0.49	0.49	
P3S	North Slip/Bypass Lane Crossing	53	15.6	LOS B	0.1	0.1	0.47	0.47	
P4	West Full Crossing	664	51.1	LOS E	2.3	2.3	0.87	0.87	
All Pedestrians		1099	36.3	LOS D			0.70	0.70	

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.

MOVEMENT SUMMARY



Site: 103 [3c. Alison/Gate 1 - Class 2 Event - Scenario 2]



Network: N101 [N3b. Class 2 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Gate 1														
1	L2	617	0.2	617	0.2	0.886	46.1	LOS D	41.3	289.6	0.91	0.96	1.04	13.4
3	R2	96	0.0	96	0.0	0.451	63.9	LOS E	6.3	43.9	0.98	0.77	0.98	11.9
Approach		713	0.1	713	0.1	0.886	48.5	LOS D	41.3	289.6	0.92	0.93	1.04	13.1
East: Alison (East)														
4	L2	313	0.7	260	0.6	1.172	233.3	LOS F	54.0	419.4	1.00	1.53	2.21	8.0
5	T1	2223	5.6	1641	6.5	1.172	224.3	LOS F	58.0	419.4	1.00	1.82	2.18	3.9
Approach		2536	5.0	1901 ^{N1}	5.7	1.172	225.6	LOS F	58.0	419.4	1.00	1.78	2.18	4.7
West: Alison (West)														
11	T1	2768	5.6	2133	6.6	0.543	3.8	LOS A	19.9	144.8	0.26	0.24	0.26	38.8
12	R2	348	0.0	279	0.0	1.150	228.4	LOS F	24.0	168.1	1.00	1.31	2.16	6.7
Approach		3117	5.0	2412 ^{N1}	5.8	1.150	29.8	LOS C	24.0	168.1	0.34	0.36	0.48	13.0
All Vehicles		6365	4.5	5025 ^{N1}	5.7	1.172	106.5	LOS F	58.0	419.4	0.67	0.98	1.20	7.2

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	974	26.3	LOS C	2.4	2.4	0.63	0.63
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		1026	28.2	LOS C			0.64	0.64

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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V210217 - Class 2 Event - Scenario 2 Entry Gate 1.sip8

MOVEMENT SUMMARY



Site: 104 [4c. Alison/Darley - Class 2 Event - Scenario 2]



Network: N101 [N3b. Class 2 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		veh	m				km/h
East: Alison Rd (East)														
4	L2	11	100.0	11	100.0	1.300	329.9	LOS F	72.3	530.6	0.53	1.72	2.23	7.8
5	T1	1547	3.5	1547	3.5	1.300	322.0	LOS F	90.1	649.7	0.55	1.76	2.24	5.3
6a	R1	12	100.0	12	100.0	0.288	82.8	LOS F	0.9	23.2	1.00	0.70	1.00	25.6
6	R2	49	4.3	49	4.3	0.329	37.1	LOS C	2.7	19.6	0.80	0.78	0.80	35.3
Approach		1619	4.9	1619	4.9	1.300	311.7	LOS F	90.1	649.7	0.56	1.72	2.18	5.7
North: Darley Ave (North)														
7	L2	112	0.9	112	0.9	0.687	64.1	LOS E	7.1	50.1	0.94	0.82	1.03	27.5
8	T1	55	100.0	55	100.0	1.990	947.8	LOS F	85.3	700.8	1.00	2.73	4.36	2.8
9	R2	896	2.6	896	2.6	1.990	952.0	LOS F	91.4	653.6	1.00	2.59	4.36	1.8
Approach		1062	7.4	1062	7.4	1.990	858.3	LOS F	91.4	700.8	0.99	2.41	4.01	2.3
NorthWest: Alison Rd (West)														
27a	L1	12	100.0	12	100.0	0.291	83.1	LOS F	0.9	23.2	1.00	0.70	1.00	25.3
Approach		12	100.0	12	100.0	0.291	83.1	LOS F	0.9	23.2	1.00	0.70	1.00	25.3
West: Alison Rd (West)														
10	L2	1116	6.8	864	7.6	0.660	6.8	LOS A	4.2	31.4	0.15	0.63	0.15	46.5
11	T1	1767	4.6	1390	5.4	0.654	10.4	LOS A	22.0	161.0	0.42	0.39	0.42	49.2
Approach		2883	5.4	2254 ^{N1}	6.3	0.660	9.0	LOS A	22.0	161.0	0.32	0.48	0.32	48.1
All Vehicles		5576	5.9	4946 ^{N1}	6.6	1.990	290.6	LOS F	91.4	700.8	0.55	1.30	1.72	7.0

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	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	191	5.5	LOS A	0.2	0.2	0.28	0.28
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	15.6	LOS B	0.1	0.1	0.47	0.47
All Pedestrians		296	17.7	LOS B			0.44	0.44

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

MOVEMENT SUMMARY



Site: 105 [5c. High/Gate13 - Class 2 Event - Scenario 2]



Network: N101 [N3b. Class 2 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: UNSW														
1	L2	144	0.7	144	0.7	0.911	83.8	LOS F	11.3	79.9	1.00	1.23	1.43	6.9
3	R2	55	0.0	55	0.0	0.312	64.0	LOS E	3.6	24.9	0.96	0.73	0.96	12.7
Approach		199	0.5	199	0.5	0.911	78.4	LOS F	11.3	79.9	0.99	1.09	1.30	8.6
East: High (East)														
4	L2	52	0.0	52	0.0	0.361	14.2	LOS A	3.9	29.8	0.32	0.47	0.32	16.2
5	T1	363	13.6	363	13.6	0.978	48.3	LOS D	27.2	203.7	0.73	0.89	1.03	21.2
6	R2	148	0.0	148	0.0	0.978	80.2	LOS F	27.2	203.7	1.00	1.16	1.49	17.9
Approach		563	8.8	563	8.8	0.978	53.6	LOS D	27.2	203.7	0.77	0.93	1.09	19.0
North: Gate 13														
7	L2	1	0.0	1	0.0	0.008	55.7	LOS D	0.1	0.9	0.88	0.60	0.88	19.5
8	T1	1	0.0	1	0.0	0.008	59.8	LOS E	0.1	0.9	0.88	0.60	0.88	11.1
9	R2	1	0.0	1	0.0	0.013	63.9	LOS E	0.1	0.5	0.97	0.55	0.97	11.8
Approach		3	0.0	3	0.0	0.013	59.8	LOS E	0.1	0.9	0.91	0.59	0.91	13.6
West: High (West)														
10	L2	494	0.0	427	0.0	0.556	15.7	LOS B	22.9	160.8	0.50	0.67	0.50	22.5
11	T1	584	1.1	502	0.7	0.654	21.8	LOS B	22.9	160.8	0.67	0.74	0.67	34.1
12	R2	137	0.0	115	0.0	0.654	51.6	LOS D	18.3	128.3	0.96	0.85	0.96	11.1
Approach		1215	0.5	1045 ^{N1}	0.4	0.654	22.6	LOS B	22.9	160.8	0.63	0.72	0.63	23.7
All Vehicles		1980	2.9	1810 ^{N1}	3.1	0.978	38.5	LOS C	27.2	203.7	0.71	0.83	0.85	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.

^{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	132	6.6	LOS A	0.2	0.2	0.31	0.31	
P2	East Full Crossing	132	58.8	LOS E	0.5	0.5	0.92	0.92	
P3	North Full Crossing	53	11.6	LOS B	0.1	0.1	0.41	0.41	
P4	West Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96	
All Pedestrians		368	34.2	LOS D			0.63	0.63	

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: 106 [6c. Anzac/High - Class 2 Event - Scenario 2]

 Network: N101 [N3b. Class 2 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles veh	Distance m				km/h
South: Anzac (south)														
2	T1	927	6.4	927	6.4	0.333	0.6	LOS A	0.9	6.7	0.03	0.03	0.03	49.2
3	R2	689	0.0	689	0.0	1.100	132.9	LOS F	72.2	505.4	1.00	1.23	1.87	8.5
Approach		1617	3.6	1617	3.6	1.100	57.0	LOS E	72.2	505.4	0.44	0.54	0.82	16.2
East: High (east)														
4	L2	142	9.6	142	9.6	0.807	55.4	LOS D	15.6	120.0	0.94	0.86	1.01	24.6
6	R2	332	14.6	332	14.6	0.807	56.5	LOS D	15.6	120.0	0.95	0.86	1.02	12.5
Approach		474	13.1	474	13.1	0.807	56.1	LOS D	15.6	120.0	0.94	0.86	1.02	17.2
North: Anzac (North)														
7	L2	518	1.4	492	1.1	1.161	210.6	LOS F	41.8	301.9	1.00	1.56	2.07	3.2
8	T1	1224	8.3	1173	8.2	1.161	204.7	LOS F	41.8	301.9	1.00	1.70	2.06	9.7
Approach		1742	6.2	1666 ^{N1}	6.1	1.161	206.4	LOS F	41.8	301.9	1.00	1.66	2.06	7.9
All Vehicles		3833	6.0	3756 ^{N1}	6.1	1.161	123.2	LOS F	72.2	505.4	0.75	1.07	1.39	10.9

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	Prop. Queued	Effective Stop Rate	
P1	South Full Crossing	211	64.7	LOS F	0.8	0.8	0.97	0.97
P2	East Full Crossing	487	33.6	LOS D	1.4	1.4	0.70	0.70
All Pedestrians		698	43.0	LOS E			0.78	0.78

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: Z:\PCI - PROJECT WORK FILES\NSWAUSTRALIAN TURF CLUB - RRR Night Racing (21-3052)\Analysis\2021 Sidra Analysis

V210217 - Class 2 Event - Scenario 2 Entry Gate 1.sip8

MOVEMENT SUMMARY

 Site: 107 [7c. Anzac/Doncaster - Class 2 Event - Scenario 2]

 Network: N101 [N3b. Class 2 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Doncaster (South)														
1a	L1	123	1.7	123	1.7	2.940	1794.8	LOS F	330.6	2324.8	1.00	4.22	5.32	1.9
2	T1	838	0.4	838	0.4	2.940	1791.5	LOS F	330.6	2324.8	1.00	4.22	5.32	1.9
3b	R3	29	3.6	29	3.6	0.664	87.6	LOS F	2.2	16.1	1.00	0.75	1.18	15.0
Approach		991	0.6	991	0.6	2.940	1741.2	LOS F	330.6	2324.8	1.00	4.12	5.19	2.0
SouthEast: Anzac (South)														
21b	L3	94	0.0	94	0.0	0.095	17.4	LOS B	2.6	18.2	0.44	0.68	0.44	37.2
22	T1	1041	9.5	1041	9.5	0.382	7.0	LOS A	12.7	95.3	0.37	0.33	0.37	43.9
Approach		1135	8.7	1135	8.7	0.382	7.9	LOS A	12.7	95.3	0.37	0.36	0.37	43.2
North: Doncaster (North)														
7a	L1	132	8.8	132	8.8	2.484	1387.0	LOS F	205.1	1462.1	1.00	3.69	4.94	1.3
8	T1	511	0.4	511	0.4	2.484	1383.6	LOS F	205.1	1462.1	1.00	3.69	4.94	2.5
9b	R3	3	0.0	3	0.0	0.056	81.7	LOS F	0.2	1.6	1.00	0.61	1.00	23.6
Approach		645	2.1	645	2.1	2.484	1377.9	LOS F	205.1	1462.1	1.00	3.67	4.92	2.2
NorthWest: Anzac (North)														
27b	L3	9	0.0	9	0.0	1.127	164.4	LOS F	107.9	789.7	1.00	1.69	1.94	15.7
28	T1	1554	5.8	1554	5.8	1.127	157.9	LOS F	108.6	795.3	1.00	1.69	1.94	9.6
Approach		1563	5.7	1563	5.7	1.127	158.0	LOS F	108.6	795.3	1.00	1.69	1.94	9.5
All Vehicles		4334	4.8	4334	4.8	2.940	662.2	LOS F	330.6	2324.8	0.83	2.19	2.72	3.6

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	
P1	South Full Crossing	263	7.0	LOS A	0.3	0.3	0.32	0.32	
P5	SouthEast Full Crossing	593	64.8	LOS F	2.3	2.3	0.97	0.97	
P3	North Full Crossing	263	7.0	LOS A	0.3	0.3	0.32	0.32	
P7	NorthWest Full Crossing	263	64.8	LOS F	1.0	1.0	0.97	0.97	
All Pedestrians		1382	42.8	LOS E			0.72	0.72	

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: 108 [8c. Doncaster/Ascot - Stop Controlled - Class 2 Event - Scenario 2]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	0.444	9.3	LOS A	1.0	6.9	0.12	0.03	0.16	48.8
2	T1	791	2.3	0.444	0.5	LOS A	1.0	6.9	0.12	0.03	0.16	49.2
3	R2	31	0.0	0.444	10.5	LOS A	1.0	6.9	0.12	0.03	0.16	47.9
Approach		841	2.1	0.444	1.1	NA	1.0	6.9	0.12	0.03	0.16	49.1
East: Ascot (East)												
4	L2	16	0.0	0.916	125.9	LOS F	4.1	28.9	0.98	1.34	2.18	8.5
5	T1	1	0.0	0.916	157.6	LOS F	4.1	28.9	0.98	1.34	2.18	8.5
6	R2	35	0.0	0.916	210.8	LOS F	4.1	28.9	0.98	1.34	2.18	7.0
Approach		52	0.0	0.916	183.7	LOS F	4.1	28.9	0.98	1.34	2.18	7.5
North: Doncaster (North)												
7	L2	16	0.0	0.386	11.0	LOS A	1.1	7.6	0.15	0.04	0.21	21.9
8	T1	659	3.0	0.386	0.9	LOS A	1.1	7.6	0.15	0.04	0.21	48.8
9	R2	31	0.0	0.386	12.1	LOS A	1.1	7.6	0.15	0.04	0.21	48.0
Approach		705	2.8	0.386	1.6	NA	1.1	7.6	0.15	0.04	0.21	48.2
West: Ascot (West)												
10	L2	17	0.0	4.294	2983.0	LOS F	225.5	1578.2	1.00	6.24	20.63	1.1
11	T1	401	0.0	4.294	2990.0	LOS F	225.5	1578.2	1.00	6.24	20.63	0.6
12	R2	26	0.0	4.294	2992.4	LOS F	225.5	1578.2	1.00	6.24	20.63	1.2
Approach		444	0.0	4.294	2989.9	LOS F	225.5	1578.2	1.00	6.24	20.63	0.7
All Vehicles		2042	1.9	4.294	656.0	NA	225.5	1578.2	0.34	1.42	4.68	4.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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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V210217 - Class 2 Event - Scenario 2 Entry Gate 1.sip8

MOVEMENT SUMMARY

 **Site: 109 [9c. Doncaster/Ascot - Cycleway & Pedcrossing - Class 2 Event - Scenario 2]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
2	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
East: Ascot (East)												
5	T1	49	0.0	0.043	7.4	LOS A	0.2	1.1	0.14	0.99	0.14	41.6
Approach		49	0.0	0.043	7.4	LOS A	0.2	1.1	0.14	0.99	0.14	41.6
North: Doncaster (North)												
8	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Ascot (West)												
11	T1	445	0.0	0.391	4.2	LOS A	2.1	14.5	0.20	1.05	0.20	44.3
Approach		445	0.0	0.391	4.2	LOS A	2.1	14.5	0.20	1.05	0.20	44.3
All Vehicles		497	0.0	0.391	4.5	NA	2.1	14.5	0.20	1.04	0.20	44.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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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V210217 - Class 2 Event - Scenario 2 Entry Gate 1.sip8

MOVEMENT SUMMARY

 **Site: 108 [8c. Doncaster/Ascot - Signalised - Class 2 Event - Scenario 2]**

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	1.157	215.7	LOS F	113.4	808.7	1.00	1.77	2.10	12.6
2	T1	792	2.3	1.157	210.9	LOS F	113.4	808.7	1.00	1.77	2.09	11.6
3	R2	31	0.0	0.229	72.0	LOS F	2.1	14.5	0.98	0.68	0.98	25.1
Approach		842	2.1	1.157	205.9	LOS F	113.4	808.7	1.00	1.73	2.05	11.9
East: Ascot (East)												
4	L2	16	0.0	0.043	51.8	LOS D	0.9	6.4	0.83	0.68	0.83	29.2
5	T1	1	0.0	0.043	47.2	LOS D	0.9	6.4	0.83	0.68	0.83	29.3
6	R2	35	0.0	0.045	31.3	LOS C	1.5	10.4	0.63	0.63	0.63	33.9
Approach		52	0.0	0.045	37.9	LOS C	1.5	10.4	0.70	0.64	0.70	32.1
North: Doncaster (North)												
7	L2	16	0.0	0.012	11.4	LOS A	0.3	2.2	0.32	0.59	0.32	42.2
8	T1	660	3.0	1.909	868.1	LOS F	186.1	1335.3	1.00	3.36	4.17	3.5
9	R2	31	0.0	1.909	874.0	LOS F	186.1	1335.3	1.00	3.37	4.18	3.4
Approach		706	2.8	1.909	849.2	LOS F	186.1	1335.3	0.98	3.30	4.09	3.5
West: Ascot (West)												
10	L2	17	0.0	0.359	66.3	LOS E	5.0	35.2	0.93	0.73	0.93	25.5
11	T1	402	0.0	1.580	491.1	LOS F	80.2	560.1	0.99	2.17	3.08	6.2
12	R2	26	0.0	1.580	578.0	LOS F	80.2	560.1	1.00	2.45	3.50	5.4
Approach		445	0.0	1.580	480.2	LOS F	80.2	560.1	0.99	2.14	3.03	6.3
All Vehicles		2045	1.9	1.909	483.6	LOS F	186.1	1335.3	0.98	2.33	2.93	5.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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	62.4	LOS F	0.2	0.2	0.94	0.94
P2	East Full Crossing	53	46.5	LOS E	0.2	0.2	0.82	0.82
P3	North Full Crossing	53	62.4	LOS F	0.2	0.2	0.94	0.94
P4	West Full Crossing	53	35.1	LOS D	0.1	0.1	0.71	0.71
All Pedestrians		211	51.6	LOS E			0.85	0.85

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 [1b. Anzac/Alison - Class 3 Event - Scenario 1]



Network: N101 [N2a. Class 3 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed	
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m			km/h	
South: Anzac (South)														
1	L2	55	0.0	55	0.0	0.092	25.1	LOS B	1.7	11.8	0.73	0.71	0.73	39.4
2	T1	1133	7.9	1133	7.9	0.943	62.7	LOS E	41.7	310.4	0.94	1.02	1.17	29.8
Approach		1187	7.5	1187	7.5	0.943	61.0	LOS E	41.7	310.4	0.93	1.01	1.15	30.1
SouthEast: Alison (South-East)														
21a	L1	608	2.6	549	2.7	0.631	46.3	LOS D	15.3	109.3	0.86	0.79	0.86	32.0
23a	R1	1316	5.1	1196	5.3	0.890	53.9	LOS D	27.7	202.6	0.98	0.93	1.10	31.0
Approach		1924	4.3	1745 ^{N1}	4.5	0.890	51.5	LOS D	27.7	202.6	0.94	0.88	1.02	31.3
North: Anzac (North)														
7a	L1	1468	5.2	1468	5.2	0.498	4.7	LOS A	1.5	11.1	0.04	0.49	0.04	52.1
8	T1	1272	6.1	1272	6.1	0.612	15.4	LOS B	20.5	150.6	0.52	0.47	0.52	48.0
9	R2	492	1.7	492	1.7	0.919	86.5	LOS F	19.5	138.8	1.00	1.02	1.36	24.1
Approach		3232	5.0	3232	5.0	0.919	21.4	LOS B	20.5	150.6	0.38	0.57	0.43	41.0
West: Dacey Ave (West)														
10	L2	452	0.9	452	0.9	0.902	71.6	LOS F	34.5	243.3	1.00	0.98	1.21	26.0
12a	R1	640	2.1	640	2.1	2.162	1093.3	LOS F	94.1	670.8	1.00	2.85	4.58	1.7
12	R2	291	0.4	291	0.4	0.998	115.6	LOS F	13.3	93.4	1.00	1.18	1.70	20.0
Approach		1382	1.4	1382	1.4	2.162	554.0	LOS F	94.1	670.8	1.00	1.89	2.88	4.6
All Vehicles		7725	4.6	7546 ^{N1}	4.7	2.162	132.1	LOS F	94.1	670.8	0.71	0.95	1.13	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.

^{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	156	62.6	LOS F	0.6	0.6	0.95	0.95
P5	SouthEast Full Crossing	233	26.1	LOS C	0.6	0.6	0.61	0.61
P3S	North Slip/Bypass Lane Crossing	375	64.2	LOS F	1.4	1.4	0.97	0.97
P4	West Full Crossing	237	42.9	LOS E	0.7	0.7	0.79	0.79
All Pedestrians		1000	50.0	LOS E			0.84	0.84

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: 102 [2b. Alison/Doncaster - Class 3 Event - Scenario 1]  Network: N101 [N2a. Class 3 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Doncaster (South)														
1	L2	328	0.3	328	0.3	1.322	361.1	LOS F	110.5	779.7	1.00	1.76	2.77	3.7
3	R2	779	1.6	779	1.6	1.322	363.1	LOS F	110.5	779.7	1.00	1.79	2.79	3.7
Approach		1107	1.2	1107	1.2	1.322	362.5	LOS F	110.5	779.7	1.00	1.78	2.78	3.7
East: Alison (East)														
4	L2	721	2.8	660	2.9	0.843	49.1	LOS D	23.4	168.1	0.99	0.92	1.02	21.7
5	T1	1576	5.1	1434	5.3	0.843	39.1	LOS C	23.4	168.1	0.95	0.89	0.99	9.1
6	R2	19	100.0	18	100.0	0.199	65.9	LOS E	1.2	15.1	0.90	0.71	0.90	20.4
Approach		2316	5.2	2112 ^{N1}	5.3	0.843	42.5	LOS C	23.4	168.1	0.96	0.90	1.00	15.0
North: Bus Leg														
7	L2	16	100.0	16	100.0	0.340	82.6	LOS F	1.2	15.1	1.00	0.71	1.00	15.7
8	T1	2	100.0	2	100.0	0.042	74.0	LOS F	0.1	1.9	0.98	0.61	0.98	23.6
Approach		18	100.0	18	100.0	0.340	81.6	LOS F	1.2	15.1	1.00	0.70	1.00	16.8
West: Alison (West)														
11	T1	2013	4.5	1657	5.0	0.894	61.2	LOS E	43.9	318.6	1.00	1.02	1.16	18.5
Approach		2013	4.5	1657 ^{N1}	5.0	0.894	61.2	LOS E	43.9	322.3	1.00	1.02	1.16	18.5
All Vehicles		5454	4.4	4895 ^{N1}	4.9	1.322	121.4	LOS F	110.5	779.7	0.98	1.14	1.45	8.7

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	329	25.6	LOS C	0.8	0.8	0.61	0.61
P3	North Full Crossing	53	31.6	LOS D	0.1	0.1	0.67	0.67
P3S	North Slip/Bypass Lane Crossing	53	29.6	LOS C	0.1	0.1	0.65	0.65
P4	West Full Crossing	664	31.8	LOS D	1.8	1.8	0.68	0.68
All Pedestrians		1099	29.8	LOS C			0.66	0.66

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.

MOVEMENT SUMMARY



Site: 103 [3b. Alison/Gate 1 - Class 3 Event - Scenario 1]



Network: N101 [N2a. Class 3 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Gate 1														
1	L2	80	1.3	80	1.3	0.393	51.6	LOS D	4.8	34.1	0.90	0.73	0.90	12.9
3	R2	1	0.0	1	0.0	0.005	58.6	LOS E	0.1	0.4	0.90	0.54	0.90	12.3
Approach		81	1.3	81	1.3	0.393	51.7	LOS D	4.8	34.1	0.90	0.72	0.90	12.8
East: Alison (East)														
4	L2	28	7.4	25	7.7	1.099	170.2	LOS F	55.7	419.4	1.00	1.61	1.88	10.1
5	T1	2266	4.9	1986	5.2	1.099	164.5	LOS F	58.0	419.4	1.00	1.64	1.89	5.3
Approach		2295	4.9	2011 ^{N1}	5.2	1.099	164.5	LOS F	58.0	419.4	1.00	1.64	1.89	5.4
West: Alison (West)														
11	T1	2812	4.9	2259	5.6	0.514	4.4	LOS A	18.6	135.2	0.28	0.26	0.28	37.0
12	R2	1	0.0	1	0.0	0.011	76.8	LOS F	0.1	0.4	0.97	0.58	0.97	12.8
Approach		2813	4.9	2260 ^{N1}	5.6	0.514	4.4	LOS A	18.6	135.2	0.28	0.26	0.28	36.8
All Vehicles		5188	4.8	4352 ^{N1}	5.8	1.099	79.3	LOS F	58.0	419.4	0.63	0.91	1.04	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
P1	South Full Crossing	974	9.3	LOS A	1.4	1.4	0.37	0.37
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		1026	12.1	LOS B			0.40	0.40

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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V210217 - Class 3 Event - Scenario 1 Entry Ascot.sip8

MOVEMENT SUMMARY



Site: 104 [4b. Alison/Darley - Class 3 Event - Scenario 1]



Network: N101 [N2a. Class 3 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		veh	m				km/h
East: Alison Rd (East)														
4	L2	7	100.0	7	100.0	1.150	202.4	LOS F	47.1	345.9	0.53	1.30	1.66	11.8
5	T1	1321	4.1	1321	4.1	1.150	194.5	LOS F	57.3	415.5	0.54	1.32	1.67	8.3
6a	R1	11	100.0	11	100.0	0.262	82.6	LOS F	0.8	21.0	1.00	0.69	1.00	25.6
6	R2	49	4.3	49	4.3	0.332	38.1	LOS C	2.7	19.9	0.81	0.79	0.81	35.0
Approach		1388	5.4	1388	5.4	1.150	188.1	LOS F	57.3	415.5	0.55	1.29	1.63	8.9
North: Darley Ave (North)														
7	L2	112	0.9	112	0.9	0.682	63.9	LOS E	7.1	50.0	0.94	0.81	1.03	27.5
8	T1	37	100.0	37	100.0	1.961	922.2	LOS F	82.1	647.6	1.00	2.65	4.32	2.9
9	R2	896	2.6	896	2.6	1.961	926.3	LOS F	89.1	637.4	1.00	2.56	4.31	1.9
Approach		1044	5.8	1044	5.8	1.961	833.9	LOS F	89.1	647.6	0.99	2.37	3.96	2.3
NorthWest: Alison Rd (West)														
27a	L1	11	100.0	11	100.0	0.265	82.9	LOS F	0.8	21.0	1.00	0.69	1.00	25.4
Approach		11	100.0	11	100.0	0.265	82.9	LOS F	0.8	21.0	1.00	0.69	1.00	25.4
West: Alison Rd (West)														
10	L2	1098	5.3	884	5.8	0.667	7.3	LOS A	6.2	45.9	0.22	0.65	0.22	46.1
11	T1	1734	4.7	1394	5.5	0.656	12.6	LOS A	23.4	171.7	0.47	0.43	0.47	47.4
Approach		2832	4.9	2278 ^{N1}	5.6	0.667	10.5	LOS A	23.4	171.7	0.37	0.52	0.37	46.8
All Vehicles		5275	5.4	4721 ^{N1}	6.0	1.961	245.0	LOS F	89.1	647.6	0.57	1.16	1.54	8.2

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	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	191	5.5	LOS A	0.2	0.2	0.28	0.28
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	15.6	LOS B	0.1	0.1	0.47	0.47
All Pedestrians		296	17.7	LOS B			0.44	0.44

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

MOVEMENT SUMMARY



Site: 105 [5b. High/Gate13 - Class 3 Event - Scenario 1]



Network: N101 [N2a. Class 3 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: UNSW														
1	L2	144	0.7	144	0.7	0.993	108.8	LOS F	13.1	92.0	1.00	1.49	1.69	6.3
3	R2	55	0.0	55	0.0	0.331	65.2	LOS E	3.6	25.2	0.97	0.74	0.97	12.7
Approach		199	0.5	199	0.5	0.993	96.8	LOS F	13.1	92.0	0.99	1.28	1.49	8.0
East: High (East)														
4	L2	52	0.0	52	0.0	0.189	14.0	LOS A	2.9	21.9	0.31	0.52	0.31	16.2
5	T1	363	13.6	363	13.6	0.514	6.7	LOS A	7.5	57.3	0.45	0.51	0.45	40.6
6	R2	99	0.0	99	0.0	0.514	11.6	LOS A	7.5	57.3	0.50	0.51	0.50	27.0
Approach		514	9.6	514	9.6	0.514	8.4	LOS A	7.5	57.3	0.45	0.51	0.45	29.4
North: Gate 13														
7	L2	1	0.0	1	0.0	0.008	55.7	LOS D	0.1	0.9	0.88	0.60	0.88	19.5
8	T1	1	0.0	1	0.0	0.008	59.8	LOS E	0.1	0.9	0.88	0.60	0.88	11.1
9	R2	1	0.0	1	0.0	0.015	65.0	LOS E	0.1	0.5	0.98	0.56	0.98	11.8
Approach		3	0.0	3	0.0	0.015	60.2	LOS E	0.1	0.9	0.92	0.59	0.92	13.6
West: High (West)														
10	L2	329	0.0	329	0.0	0.568	23.7	LOS B	25.9	181.9	0.65	0.71	0.65	21.3
11	T1	394	1.3	381	1.0	0.668	23.3	LOS B	25.9	181.9	0.71	0.74	0.71	33.6
12	R2	137	0.0	133	0.0	0.668	60.5	LOS E	13.4	94.3	1.00	0.86	1.01	10.6
Approach		860	0.6	843 ^{N1}	0.5	0.668	29.3	LOS C	25.9	181.9	0.73	0.75	0.73	21.5
All Vehicles		1576	3.5	1559 ^{N1}	3.6	0.993	31.1	LOS C	25.9	181.9	0.67	0.74	0.74	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 Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P1	South Full Crossing	132	6.3	LOS A	0.2	0.2	0.30	0.30	
P2	East Full Crossing	132	59.8	LOS E	0.5	0.5	0.93	0.93	
P3	North Full Crossing	53	18.0	LOS B	0.1	0.1	0.51	0.51	
P4	West Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96	
All Pedestrians		368	35.4	LOS D			0.65	0.65	

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: 106 [6b. Anzac/High - Class 3 Event - Scenario 1]



Network: N101 [N2a. Class 3 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Anzac (south)														
2	T1	1041	5.4	1041	5.4	0.372	0.6	LOS A	1.1	7.9	0.03	0.03	0.03	49.2
3	R2	402	0.0	402	0.0	0.745	55.9	LOS D	22.2	155.6	0.97	1.09	1.50	20.0
Approach		1443	3.9	1443	3.9	0.745	16.0	LOS B	22.2	155.6	0.29	0.32	0.44	35.0
East: High (east)														
4	L2	142	9.6	142	9.6	0.794	52.5	LOS D	15.1	116.3	0.92	0.85	0.98	25.3
6	R2	332	14.6	332	14.6	0.794	53.6	LOS D	15.1	116.3	0.93	0.85	1.00	13.0
Approach		474	13.1	474	13.1	0.794	53.3	LOS D	15.1	116.3	0.93	0.85	0.99	17.8
North: Anzac (North)														
7	L2	451	1.4	433	1.1	0.885	30.7	LOS C	39.2	284.6	0.81	0.83	0.86	16.7
8	T1	1156	8.7	1019	9.4	0.885	30.9	LOS C	40.1	301.9	0.87	0.85	0.92	30.7
Approach		1606	6.6	1452 ^{N1}	6.9	0.885	30.8	LOS C	40.1	301.9	0.85	0.84	0.90	28.2
All Vehicles		3523	6.4	3369 ^{N1}	6.7	0.885	27.6	LOS B	40.1	301.9	0.62	0.62	0.72	28.7

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	211	64.7	LOS F	0.8	0.8	0.97	0.97
P2	East Full Crossing	487	28.2	LOS C	1.2	1.2	0.64	0.64
All Pedestrians		698	39.2	LOS D			0.74	0.74

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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V210217 - Class 3 Event - Scenario 1 Entry Ascot.sip8

MOVEMENT SUMMARY

 Site: 107 [7b. Anzac/Doncaster - Class 3 Event - Scenario 1]

 Network: N101 [N2a. Class 3 Event - Scenario 1 - Taxi via Ascot]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Doncaster (South)														
1a	L1	123	1.7	123	1.7	2.656	1540.5	LOS F	316.7	2227.3	1.00	4.05	5.09	2.2
2	T1	838	0.4	838	0.4	2.656	1537.2	LOS F	316.7	2227.3	1.00	4.05	5.09	2.2
3b	R3	29	3.6	29	3.6	0.327	79.5	LOS F	2.1	14.9	1.00	0.71	1.00	16.1
Approach		991	0.6	991	0.6	2.656	1494.3	LOS F	316.7	2227.3	1.00	3.95	4.97	2.3
SouthEast: Anzac (South)														
21b	L3	94	0.0	94	0.0	0.100	19.2	LOS B	2.8	19.5	0.47	0.69	0.47	36.2
22	T1	1155	8.3	1155	8.3	0.438	8.6	LOS A	16.2	121.1	0.44	0.40	0.44	42.7
Approach		1248	7.7	1248	7.7	0.438	9.4	LOS A	16.2	121.1	0.44	0.42	0.44	42.1
North: Doncaster (North)														
7a	L1	252	3.8	252	3.8	3.040	1886.3	LOS F	266.2	1887.9	1.00	3.98	5.39	1.0
8	T1	511	0.4	511	0.4	3.040	1882.9	LOS F	266.2	1887.9	1.00	3.98	5.39	1.8
9b	R3	3	0.0	3	0.0	0.070	83.7	LOS F	0.2	1.6	1.00	0.60	1.00	23.3
Approach		765	1.5	765	1.5	3.040	1876.6	LOS F	266.2	1887.9	1.00	3.96	5.38	1.6
NorthWest: Anzac (North)														
27b	L3	9	0.0	9	0.0	0.898	24.2	LOS B	27.8	205.2	0.46	0.52	0.56	39.6
28	T1	1298	6.9	1298	6.9	0.898	20.0	LOS B	27.8	205.2	0.43	0.50	0.55	32.3
Approach		1307	6.8	1307	6.8	0.898	20.1	LOS B	27.8	205.2	0.43	0.50	0.55	32.4
All Vehicles		4312	4.7	4312	4.7	3.040	685.2	LOS F	316.7	2227.3	0.67	1.88	2.39	3.5

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	263	8.3	LOS A	0.4	0.4	0.35	0.35	
P5	SouthEast Full Crossing	593	60.9	LOS F	2.2	2.2	0.94	0.94	
P3	North Full Crossing	263	8.3	LOS A	0.4	0.4	0.35	0.35	
P7	NorthWest Full Crossing	263	61.0	LOS F	1.0	1.0	0.94	0.94	
All Pedestrians		1382	40.9	LOS E			0.72	0.72	

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: 108 [8b. Doncaster/Ascot - Stop Controlled - Class 3 Event - Scenario 1]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	0.598	12.7	LOS A	5.2	36.6	0.50	0.15	0.83	46.4
2	T1	787	1.9	0.598	3.3	LOS A	5.2	36.6	0.50	0.15	0.83	46.4
3	R2	147	0.0	0.598	13.0	LOS A	5.2	36.6	0.50	0.15	0.83	43.6
Approach		955	1.5	0.598	5.0	NA	5.2	36.6	0.50	0.15	0.83	46.2
East: Ascot (East)												
4	L2	138	0.0	15.228	12832.8	LOS F	305.1	2136.0	1.00	3.33	9.42	0.1
5	T1	1	0.0	15.228	12835.6	LOS F	305.1	2136.0	1.00	3.33	9.42	0.1
6	R2	320	0.0	15.228	12842.6	LOS F	305.1	2136.0	1.00	3.33	9.42	0.1
Approach		459	0.0	15.228	12839.6	LOS F	305.1	2136.0	1.00	3.33	9.42	0.1
North: Doncaster (North)												
7	L2	74	0.0	0.414	8.4	LOS A	1.3	9.4	0.18	0.07	0.25	21.7
8	T1	657	2.7	0.414	0.9	LOS A	1.3	9.4	0.18	0.07	0.25	48.4
9	R2	31	0.0	0.414	12.4	LOS A	1.3	9.4	0.18	0.07	0.25	47.6
Approach		761	2.4	0.414	2.1	NA	1.3	9.4	0.18	0.07	0.25	45.8
West: Ascot (West)												
10	L2	17	0.0	8.432	6707.5	LOS F	321.6	2250.9	1.00	4.92	16.21	0.5
11	T1	500	0.0	8.432	6713.2	LOS F	321.6	2250.9	1.00	4.92	16.21	0.3
12	R2	26	0.0	8.432	6715.7	LOS F	321.6	2250.9	1.00	4.92	16.21	0.5
Approach		543	0.0	8.432	6713.2	LOS F	321.6	2250.9	1.00	4.92	16.21	0.3
All Vehicles		2718	1.2	15.228	3512.0	NA	321.6	2250.9	0.59	1.62	5.19	0.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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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V210217 - Class 3 Event - Scenario 1 Entry Ascot.sip8

MOVEMENT SUMMARY

 **Site: 109 [9a. Doncaster/Ascot - Cycleway & Pedcrossing - Class 3 Event - Scenario 1]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
2	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
East: Ascot (East)												
5	T1	457	0.0	0.401	7.5	LOS A	2.2	15.1	0.21	0.96	0.21	41.6
Approach		457	0.0	0.401	7.5	LOS A	2.2	15.1	0.21	0.96	0.21	41.6
North: Doncaster (North)												
8	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Ascot (West)												
11	T1	719	0.0	0.632	4.4	LOS A	5.0	35.2	0.30	0.98	0.30	44.3
Approach		719	0.0	0.632	4.4	LOS A	5.0	35.2	0.30	0.98	0.30	44.3
All Vehicles		1178	0.0	0.632	5.6	NA	5.0	35.2	0.26	0.97	0.26	43.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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: 108 [8b. Doncaster/Ascot - Signalised - Class 3 Event - Scenario 1]**

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Doncaster (South)												
1	L2	20	0.0	1.260	303.3	LOS F	134.2	954.2	1.00	2.10	2.51	9.6
2	T1	788	1.9	1.260	298.4	LOS F	134.2	954.2	1.00	2.09	2.51	8.8
3	R2	147	0.0	1.103	140.0	LOS F	16.9	118.1	1.00	1.15	2.08	13.9
Approach		956	1.5	1.260	274.0	LOS F	134.2	954.2	1.00	1.95	2.44	9.4
East: Ascot (East)												
4	L2	138	0.0	0.309	51.9	LOS D	7.8	54.6	0.87	0.78	0.87	29.1
5	T1	1	0.0	0.309	47.4	LOS D	7.8	54.6	0.87	0.78	0.87	29.2
6	R2	320	0.0	0.411	39.0	LOS C	14.4	100.7	0.76	0.91	1.18	31.4
Approach		459	0.0	0.411	42.9	LOS D	14.4	100.7	0.79	0.87	1.09	30.6
North: Doncaster (North)												
7	L2	74	0.0	0.056	12.4	LOS A	1.6	11.4	0.35	0.62	0.35	41.7
8	T1	658	2.7	2.026	972.2	LOS F	193.9	1387.4	1.00	3.51	4.36	3.1
9	R2	31	0.0	2.026	978.3	LOS F	193.9	1387.4	1.00	3.51	4.37	3.1
Approach		762	2.3	2.026	879.7	LOS F	193.9	1387.4	0.94	3.23	3.97	3.4
West: Ascot (West)												
10	L2	17	0.0	0.391	63.5	LOS E	5.9	41.0	0.91	0.72	0.91	26.1
11	T1	500	0.0	1.722	595.2	LOS F	107.6	753.2	0.99	2.43	3.34	5.3
12	R2	26	0.0	1.722	703.1	LOS F	107.6	753.2	1.00	2.76	3.81	4.6
Approach		543	0.0	1.722	584.0	LOS F	107.6	753.2	0.98	2.39	3.29	5.4
All Vehicles		2720	1.2	2.026	466.6	LOS F	193.9	1387.4	0.94	2.21	2.81	6.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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	Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	60.5	LOS F	0.2	0.2	0.93	0.93
P2	East Full Crossing	53	48.2	LOS E	0.2	0.2	0.83	0.83
P3	North Full Crossing	53	60.5	LOS F	0.2	0.2	0.93	0.93
P4	West Full Crossing	53	36.5	LOS D	0.2	0.2	0.72	0.72
All Pedestrians		211	51.4	LOS E			0.85	0.85

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 [1b. Anzac/Alison - Class 3 Event - Scenario 2]



Network: N101 [N2b. Class 3 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles													
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m			km/h
South: Anzac (South)													
1	L2	55	0.0	55	0.0	0.088	24.1	LOS B	1.6	11.5	0.71	0.71	39.8
2	T1	1133	7.9	1133	7.9	0.943	62.7	LOS E	41.7	310.4	0.94	1.02	29.8
Approach		1187	7.5	1187	7.5	0.943	60.9	LOS E	41.7	310.4	0.93	1.01	30.1
SouthEast: Alison (South-East)													
21a	L1	608	2.6	449	2.7	0.523	55.1	LOS D	13.8	98.6	0.95	0.82	29.6
23a	R1	1316	5.1	964	5.3	0.763	46.7	LOS D	19.4	142.0	0.91	0.84	33.1
Approach		1924	4.3	1413 ^{N1}	4.5	0.763	49.4	LOS D	19.4	142.0	0.92	0.83	31.9
North: Anzac (North)													
7a	L1	1616	4.8	1616	4.8	0.546	4.8	LOS A	1.8	13.4	0.05	0.50	52.1
8	T1	1124	6.9	1124	6.9	0.543	14.5	LOS B	16.6	122.6	0.48	0.43	48.5
9	R2	492	1.7	492	1.7	0.919	86.5	LOS F	19.5	138.8	1.00	1.02	24.1
Approach		3232	5.0	3232	5.0	0.919	20.6	LOS B	19.5	138.8	0.34	0.55	41.1
West: Dacey Ave (West)													
10	L2	452	0.9	452	0.9	0.857	62.8	LOS E	31.9	224.8	1.00	0.94	27.8
12a	R1	724	1.9	724	1.9	2.067	1009.2	LOS F	103.3	735.0	1.00	2.93	1.8
12	R2	206	0.5	206	0.5	0.600	72.7	LOS F	7.0	49.4	1.00	0.79	26.1
Approach		1382	1.4	1382	1.4	2.067	560.2	LOS F	103.3	735.0	1.00	1.96	4.4
All Vehicles		7725	4.6	7214 ^{N1}	4.9	2.067	136.3	LOS F	103.3	735.0	0.68	0.95	15.9

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	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	156	64.5	LOS F	0.6	0.6	0.96	0.96
P5	SouthEast Full Crossing	233	26.1	LOS C	0.6	0.6	0.61	0.61
P3S	North Slip/Bypass Lane Crossing	375	62.3	LOS F	1.4	1.4	0.95	0.95
P4	West Full Crossing	237	42.9	LOS E	0.7	0.7	0.79	0.79
All Pedestrians		1000	49.6	LOS E			0.84	0.84

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: 102 [2b. Alison/Doncaster - Class 3 Event - Scenario 2]  Network: N101 [N2b. Class 3 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Doncaster (South)														
1	L2	97	1.1	97	1.1	1.634	636.0	LOS F	109.1	774.6	1.00	2.22	3.67	2.2
3	R2	716	1.8	716	1.8	1.634	637.5	LOS F	109.1	774.6	1.00	2.24	3.68	2.2
Approach		813	1.7	813	1.7	1.634	637.3	LOS F	109.1	774.6	1.00	2.23	3.68	2.2
East: Alison (East)														
4	L2	658	3.0	463	3.4	0.575	19.9	LOS B	19.3	139.1	0.50	0.67	0.50	33.7
5	T1	1934	4.2	1455	4.3	0.575	13.4	LOS A	23.2	168.1	0.48	0.46	0.48	20.1
6	R2	19	100.0	17	100.0	0.183	39.9	LOS C	0.7	8.9	0.57	0.67	0.57	26.7
Approach		2611	4.6	1934 ^{N1}	4.9	0.575	15.2	LOS B	23.2	168.1	0.48	0.51	0.48	26.3
North: Bus Leg														
7	L2	16	100.0	16	100.0	0.340	82.6	LOS F	1.2	15.1	1.00	0.71	1.00	15.7
8	T1	2	100.0	2	100.0	0.042	74.0	LOS F	0.1	1.9	0.98	0.61	0.98	23.6
Approach		18	100.0	18	100.0	0.340	81.6	LOS F	1.2	15.1	1.00	0.70	1.00	16.8
West: Alison (West)														
11	T1	2244	4.0	1886	4.4	0.904	50.0	LOS D	58.9	428.4	0.96	1.01	1.12	21.2
Approach		2244	4.0	1886 ^{N1}	4.4	0.904	50.0	LOS D	58.9	428.4	0.96	1.01	1.12	21.2
All Vehicles		5685	4.3	4650 ^{N1}	5.2	1.634	138.3	LOS F	109.1	774.6	0.77	1.02	1.30	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
P1	South Full Crossing	329	14.8	LOS B	0.6	0.6	0.46	0.46
P3	North Full Crossing	53	19.6	LOS B	0.1	0.1	0.53	0.53
P3S	North Slip/Bypass Lane Crossing	53	18.0	LOS B	0.1	0.1	0.51	0.51
P4	West Full Crossing	664	46.9	LOS E	2.2	2.2	0.83	0.83
All Pedestrians		1099	34.6	LOS D			0.69	0.69

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.

MOVEMENT SUMMARY



Site: 103 [3b. Alison/Gate 1 - Class 3 Event - Scenario 2]



Network: N101 [N2b. Class 3 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Gate 1														
1	L2	438	0.2	438	0.2	0.864	50.6	LOS D	30.3	212.6	0.94	0.99	1.09	12.9
3	R2	64	0.0	64	0.0	0.303	62.5	LOS E	4.1	28.8	0.96	0.73	0.96	12.0
Approach		502	0.2	502	0.2	0.864	52.2	LOS D	30.3	212.6	0.94	0.96	1.07	12.8
East: Alison (East)														
4	L2	218	1.0	190	0.9	1.058	145.6	LOS F	41.0	312.3	1.00	1.32	1.74	11.0
5	T1	2203	5.0	1691	5.6	1.058	132.4	LOS F	58.0	419.4	1.00	1.44	1.68	6.4
Approach		2421	4.7	1881 ^{N1}	5.1	1.058	133.8	LOS F	58.0	419.4	1.00	1.43	1.68	7.2
West: Alison (West)														
11	T1	2748	5.0	2175	5.8	0.536	3.9	LOS A	19.1	139.1	0.26	0.24	0.26	38.7
12	R2	233	0.0	189	0.0	1.065	159.0	LOS F	22.2	155.2	1.00	1.12	1.76	8.6
Approach		2981	4.6	2364 ^{N1}	5.3	1.065	16.2	LOS B	22.2	155.2	0.32	0.31	0.38	18.3
All Vehicles		5904	4.3	4747 ^{N1}	5.3	1.065	66.6	LOS E	58.0	419.4	0.65	0.82	0.97	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	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	974	22.1	LOS C	2.2	2.2	0.57	0.57
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		1026	24.2	LOS C			0.59	0.59

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: PARKING AND TRAFFIC CONSULTANTS | Processed: Wednesday, 17 February 2021 3:02:58 PM

Project: Z:\PCI - PROJECT WORK FILES\NSWAUSTRALIAN TURF CLUB - RRR Night Racing (21-3052)\Analysis\2021 Sidra Analysis

V210217 - Class 3 Event - Scenario 2 Entry Gate 1.sip8

MOVEMENT SUMMARY



Site: 104 [4b. Alison/Darley - Class 3 Event - Scenario 2]



Network: N101 [N2b. Class 3 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		veh	m				km/h
East: Alison Rd (East)														
4	L2	7	100.0	7	100.0	1.162	207.8	LOS F	59.3	433.5	0.51	1.36	1.66	11.5
5	T1	1447	3.8	1447	3.8	1.162	203.0	LOS F	59.3	433.5	0.53	1.36	1.70	8.0
6a	R1	11	100.0	11	100.0	0.262	82.6	LOS F	0.8	21.0	1.00	0.69	1.00	25.6
6	R2	49	4.3	49	4.3	0.326	33.7	LOS C	2.6	18.7	0.77	0.78	0.77	36.5
Approach		1515	4.9	1515	4.9	1.162	196.7	LOS F	59.3	433.5	0.54	1.34	1.66	8.5
North: Darley Ave (North)														
7	L2	112	0.9	112	0.9	0.635	62.9	LOS E	7.0	49.3	0.94	0.79	0.98	27.8
8	T1	37	100.0	37	100.0	1.796	773.8	LOS F	90.1	700.1	1.00	2.47	4.02	3.4
9	R2	896	2.6	896	2.6	1.796	779.6	LOS F	90.1	700.1	1.00	2.41	4.03	2.2
Approach		1044	5.8	1044	5.8	1.796	702.7	LOS F	90.1	700.1	0.99	2.24	3.70	2.7
NorthWest: Alison Rd (West)														
27a	L1	11	100.0	11	100.0	0.265	82.9	LOS F	0.8	21.0	1.00	0.69	1.00	25.4
Approach		11	100.0	11	100.0	0.265	82.9	LOS F	0.8	21.0	1.00	0.69	1.00	25.4
West: Alison Rd (West)														
10	L2	1098	5.3	872	5.9	0.659	6.9	LOS A	4.6	33.9	0.16	0.63	0.16	46.4
11	T1	1734	4.7	1393	5.5	0.655	8.4	LOS A	17.6	129.2	0.37	0.34	0.37	50.9
Approach		2832	4.9	2265 ^{N1}	5.6	0.659	7.8	LOS A	17.6	129.2	0.29	0.45	0.29	49.1
All Vehicles		5401	5.3	4834 ^{N1}	5.9	1.796	217.3	LOS F	90.1	700.1	0.52	1.11	1.46	9.0

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	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	191	5.5	LOS A	0.2	0.2	0.28	0.28
P2	East Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	15.6	LOS B	0.1	0.1	0.47	0.47
All Pedestrians		296	17.7	LOS B			0.44	0.44

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

MOVEMENT SUMMARY



Site: 105 [5b. High/Gate13 - Class 3 Event - Scenario 2]



Network: N101 [N2b. Class 3 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: UNSW														
1	L2	144	0.7	144	0.7	0.911	83.8	LOS F	11.3	79.9	1.00	1.23	1.43	6.9
3	R2	55	0.0	55	0.0	0.312	64.0	LOS E	3.6	24.9	0.96	0.73	0.96	12.7
Approach		199	0.5	199	0.5	0.911	78.4	LOS F	11.3	79.9	0.99	1.09	1.30	8.6
East: High (East)														
4	L2	52	0.0	52	0.0	0.274	14.4	LOS A	3.4	25.8	0.33	0.50	0.33	16.2
5	T1	363	13.6	363	13.6	0.743	9.4	LOS A	8.1	61.1	0.50	0.55	0.51	38.4
6	R2	99	0.0	99	0.0	0.743	15.4	LOS B	8.1	61.1	0.58	0.58	0.60	26.2
Approach		514	9.6	514	9.6	0.743	11.0	LOS A	8.1	61.1	0.50	0.55	0.51	28.5
North: Gate 13														
7	L2	1	0.0	1	0.0	0.008	55.7	LOS D	0.1	0.9	0.88	0.60	0.88	19.5
8	T1	1	0.0	1	0.0	0.008	59.8	LOS E	0.1	0.9	0.88	0.60	0.88	11.1
9	R2	1	0.0	1	0.0	0.013	63.9	LOS E	0.1	0.5	0.97	0.55	0.97	11.8
Approach		3	0.0	3	0.0	0.013	59.8	LOS E	0.1	0.9	0.91	0.59	0.91	13.6
West: High (West)														
10	L2	329	0.0	329	0.0	0.650	21.6	LOS B	35.4	249.2	0.69	0.75	0.69	21.4
11	T1	520	1.0	507	0.8	0.650	15.3	LOS B	35.4	249.2	0.69	0.75	0.69	37.0
12	R2	137	0.0	133	0.0	1.129	204.1	LOS F	16.6	116.2	1.00	1.07	2.03	6.6
Approach		986	0.5	969 ^{N1}	0.4	1.129	43.3	LOS D	35.4	249.2	0.73	0.79	0.87	19.8
All Vehicles		1702	3.3	1685 ^{N1}	3.3	1.129	37.7	LOS C	35.4	249.2	0.69	0.75	0.81	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	Average Delay	Level of Service	Average Back of Queue	Prop. Queued	Effective Stop Rate		
		ped/h	sec		Pedestrian ped	Distance m			
P1	South Full Crossing	132	6.6	LOS A	0.2	0.2	0.31	0.31	
P2	East Full Crossing	132	58.8	LOS E	0.5	0.5	0.92	0.92	
P3	North Full Crossing	53	12.5	LOS B	0.1	0.1	0.42	0.42	
P4	West Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96	
All Pedestrians		368	34.3	LOS D			0.64	0.64	

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: 106 [6b. Anzac/High - Class 3 Event - Scenario 2]

 Network: N101 [N2b. Class 3 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m				km/h
South: Anzac (south)														
2	T1	915	6.1	915	6.1	0.328	0.6	LOS A	0.9	6.5	0.03	0.03	0.03	49.2
3	R2	528	0.0	528	0.0	0.943	84.0	LOS F	39.9	279.4	1.00	1.23	1.87	15.4
Approach		1443	3.9	1443	3.9	0.943	31.1	LOS C	39.9	279.4	0.39	0.47	0.70	27.2
East: High (east)														
4	L2	142	9.6	142	9.6	0.797	53.6	LOS D	15.7	121.3	0.93	0.85	0.99	25.0
6	R2	332	14.6	332	14.6	0.797	54.5	LOS D	15.7	121.3	0.93	0.85	1.00	12.8
Approach		474	13.1	474	13.1	0.797	54.3	LOS D	15.7	121.3	0.93	0.85	1.00	17.6
North: Anzac (North)														
7	L2	451	1.4	434	1.2	1.003	91.5	LOS F	41.7	301.9	1.00	1.15	1.38	6.9
8	T1	1156	8.7	1100	8.7	1.003	85.6	LOS F	41.7	301.9	1.00	1.19	1.37	18.5
Approach		1606	6.6	1534 ^{N1}	6.6	1.003	87.3	LOS F	41.7	301.9	1.00	1.18	1.37	15.8
All Vehicles		3523	6.4	3451 ^{N1}	6.5	1.003	59.3	LOS E	41.7	301.9	0.73	0.84	1.04	19.4

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	211	64.7	LOS F	0.8	0.8	0.97	0.97
P2	East Full Crossing	487	30.2	LOS D	1.3	1.3	0.66	0.66
All Pedestrians		698	40.6	LOS E			0.75	0.75

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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V210217 - Class 3 Event - Scenario 2 Entry Gate 1.sip8

MOVEMENT SUMMARY

 Site: 107 [7b. Anzac/Doncaster - Class 3 Event - Scenario 2]

 Network: N101 [N2b. Class 3 Event - Scenario 2 - Taxi via Gate1]

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %	v/c	sec		veh	m				km/h
South: Doncaster (South)														
1a	L1	123	1.7	123	1.7	2.940	1794.8	LOS F	330.6	2324.8	1.00	4.22	5.32	1.9
2	T1	838	0.4	838	0.4	2.940	1791.5	LOS F	330.6	2324.8	1.00	4.22	5.32	1.9
3b	R3	29	3.6	29	3.6	0.664	87.6	LOS F	2.2	16.1	1.00	0.75	1.18	15.0
Approach		991	0.6	991	0.6	2.940	1741.2	LOS F	330.6	2324.8	1.00	4.12	5.19	2.0
SouthEast: Anzac (South)														
21b	L3	94	0.0	94	0.0	0.095	17.4	LOS B	2.6	18.2	0.44	0.68	0.44	37.2
22	T1	1028	9.3	1028	9.3	0.376	7.0	LOS A	12.4	93.5	0.37	0.33	0.37	43.9
Approach		1122	8.5	1122	8.5	0.376	7.9	LOS A	12.4	93.5	0.37	0.36	0.37	43.2
North: Doncaster (North)														
7a	L1	125	7.6	125	7.6	2.431	1339.4	LOS F	200.8	1427.7	1.00	3.66	4.88	1.3
8	T1	511	0.4	511	0.4	2.431	1336.0	LOS F	200.8	1427.7	1.00	3.66	4.88	2.5
9b	R3	3	0.0	3	0.0	0.056	81.7	LOS F	0.2	1.6	1.00	0.61	1.00	23.6
Approach		639	1.8	639	1.8	2.431	1330.5	LOS F	200.8	1427.7	1.00	3.64	4.86	2.3
NorthWest: Anzac (North)														
27b	L3	9	0.0	9	0.0	1.036	94.1	LOS F	81.1	595.6	1.00	1.38	1.55	22.5
28	T1	1424	6.3	1424	6.3	1.036	87.8	LOS F	81.6	600.0	1.00	1.38	1.55	14.8
Approach		1434	6.2	1434	6.2	1.036	87.9	LOS F	81.6	600.0	1.00	1.38	1.55	14.8
All Vehicles		4185	4.9	4185	4.9	2.940	647.4	LOS F	330.6	2324.8	0.83	2.10	2.60	3.7

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	Back of Queue Distance m	Prop. Queued	Effective Stop Rate	
P1	South Full Crossing	263	7.0	LOS A	0.3	0.3	0.32	0.32	
P5	SouthEast Full Crossing	593	64.8	LOS F	2.3	2.3	0.97	0.97	
P3	North Full Crossing	263	7.0	LOS A	0.3	0.3	0.32	0.32	
P7	NorthWest Full Crossing	263	64.8	LOS F	1.0	1.0	0.97	0.97	
All Pedestrians		1382	42.8	LOS E			0.72	0.72	

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: 108 [8b. Doncaster/Ascot - Stop Controlled - Class 3 Event - Scenario 2]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	0.430	8.6	LOS A	0.7	4.8	0.08	0.03	0.12	49.0
2	T1	787	1.9	0.430	0.4	LOS A	0.7	4.8	0.08	0.03	0.12	49.4
3	R2	21	0.0	0.430	10.3	LOS A	0.7	4.8	0.08	0.03	0.12	48.3
Approach		828	1.8	0.430	0.8	NA	0.7	4.8	0.08	0.03	0.12	49.4
East: Ascot (East)												
4	L2	12	0.0	0.503	28.2	LOS B	1.6	10.9	0.95	1.08	1.21	17.6
5	T1	1	0.0	0.503	57.4	LOS E	1.6	10.9	0.95	1.08	1.21	17.6
6	R2	25	0.0	0.503	89.3	LOS F	1.6	10.9	0.95	1.08	1.21	15.1
Approach		38	0.0	0.503	69.7	LOS E	1.6	10.9	0.95	1.08	1.21	16.0
North: Doncaster (North)												
7	L2	11	0.0	0.382	11.2	LOS A	1.0	7.2	0.15	0.04	0.20	21.9
8	T1	657	2.7	0.382	0.8	LOS A	1.0	7.2	0.15	0.04	0.20	48.9
9	R2	31	0.0	0.382	11.9	LOS A	1.0	7.2	0.15	0.04	0.20	48.1
Approach		698	2.6	0.382	1.5	NA	1.0	7.2	0.15	0.04	0.20	48.4
West: Ascot (West)												
10	L2	17	0.0	2.829	1667.9	LOS F	134.6	942.3	1.00	5.71	18.49	1.8
11	T1	268	0.0	2.829	1678.1	LOS F	134.6	942.3	1.00	5.71	18.49	1.1
12	R2	26	0.0	2.829	1681.5	LOS F	134.6	942.3	1.00	5.71	18.49	2.1
Approach		312	0.0	2.829	1677.8	LOS F	134.6	942.3	1.00	5.71	18.49	1.2
All Vehicles		1876	1.7	2.829	281.0	NA	134.6	942.3	0.28	1.00	3.22	8.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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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V210217 - Class 3 Event - Scenario 2 Entry Gate 1.sip8

MOVEMENT SUMMARY

 **Site: 109 [9b. Doncaster/Ascot - Cycleway & Pedcrossing - Class 3 Event - Scenario 2]**

New Site
Site Category: (None)
Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
2	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
East: Ascot (East)												
5	T1	36	0.0	0.031	7.4	LOS A	0.1	0.8	0.14	0.99	0.14	41.6
Approach		36	0.0	0.031	7.4	LOS A	0.1	0.8	0.14	0.99	0.14	41.6
North: Doncaster (North)												
8	T1	1	0.0	0.000	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		1	0.0	0.000	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Ascot (West)												
11	T1	298	0.0	0.262	4.1	LOS A	1.2	8.2	0.17	1.07	0.17	44.2
Approach		298	0.0	0.262	4.1	LOS A	1.2	8.2	0.17	1.07	0.17	44.2
All Vehicles		336	0.0	0.262	4.4	NA	1.2	8.2	0.17	1.05	0.17	44.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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: 108 [8b. Doncaster/Ascot - Signalised - Class 3 Event - Scenario 2]**

New Site

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows 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: Doncaster (South)												
1	L2	20	0.0	0.912	54.7	LOS D	57.8	411.1	0.99	1.01	1.12	29.5
2	T1	788	1.9	0.912	50.1	LOS D	57.8	411.1	0.99	1.01	1.12	28.4
3	R2	21	0.0	0.157	70.8	LOS F	1.4	9.9	0.97	0.68	0.97	25.3
Approach		829	1.8	0.912	50.7	LOS D	57.8	411.1	0.99	1.00	1.11	28.3
East: Ascot (East)												
4	L2	12	0.0	0.036	54.3	LOS D	0.7	4.9	0.85	0.67	0.85	28.6
5	T1	1	0.0	0.036	49.8	LOS D	0.7	4.9	0.85	0.67	0.85	28.8
6	R2	25	0.0	0.040	38.3	LOS C	1.2	8.5	0.71	0.64	0.71	31.6
Approach		38	0.0	0.040	43.5	LOS D	1.2	8.5	0.75	0.65	0.75	30.5
North: Doncaster (North)												
7	L2	11	0.0	0.008	10.8	LOS A	0.2	1.4	0.31	0.58	0.31	42.5
8	T1	658	2.7	1.616	609.5	LOS F	159.8	1143.9	1.00	2.91	3.58	4.8
9	R2	31	0.0	1.616	615.0	LOS F	159.8	1143.9	1.00	2.91	3.59	4.7
Approach		699	2.6	1.616	600.7	LOS F	159.8	1143.9	0.99	2.87	3.53	4.8
West: Ascot (West)												
10	L2	17	0.0	0.282	68.8	LOS E	3.5	24.7	0.94	0.72	0.94	24.9
11	T1	269	0.0	1.244	251.9	LOS F	39.2	273.8	0.99	1.60	2.27	10.8
12	R2	26	0.0	1.244	288.5	LOS F	39.2	273.8	1.00	1.75	2.50	9.8
Approach		313	0.0	1.244	245.1	LOS F	39.2	273.8	0.99	1.56	2.22	11.0
All Vehicles		1879	1.7	1.616	287.5	LOS F	159.8	1143.9	0.99	1.78	2.19	9.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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	64.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	36.5	LOS D	0.2	0.2	0.72	0.72
P3	North Full Crossing	53	64.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	26.5	LOS C	0.1	0.1	0.62	0.62
All Pedestrians		211	47.9	LOS E			0.81	0.81

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.