

Chapel Street Transformation

Transport Network Existing Conditions Analysis



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EXECUTIVE SUMMARY

Background

The City of Stonnington is undertaking a project to reimagine what Chapel Street could be, with a new place-based approach. The vision for this broader area seeks to create a thriving, creative and unique cultural destination that fosters a strong sense of community pride and belonging.

This report aims to provide a background of the existing car parking, traffic, pedestrian and cyclist data of the study area which can be utilised to assess the viability of various options as the project progresses.

Study Area

For the purposes of the Transformation project, Chapel Street has been broken into three precincts - with South Yarra to the north, followed by Prahran and ending with Windsor to the south.

The key streets within the road network are made up of Chapel Street, Alexandra Avenue, Toorak Road, Commercial Road, Malvern Road and Dandenong Road.

The study area is service by various train lines from multiple stations as well as tram and bus routes running north-south and east-west that provide excellent connection to the wider public transport network.

Car Parking

Supply

The car parking supply in the Chapel Street precinct is made up of on-street parking along Chapel Street and a number of off-street car parks – both Council and privately owned. An overview of the total car parking supply is outlined in the table below.

Table 1 Car Parking Supply

Car Parking Area		No. Of Spaces	% Of Total Spaces
Council On-Street (Chapel Street only)		398	6.6%
Council Off-Street	Major Car Parks	1,807	35.0%
	Minor Car Parks	289	
Private Off-Street		3,500	58.4%
Total		5,994	100%

This is not representative of every single parking space in the study area as it does not include on-street parking along streets other than Chapel Street and other smaller private car parking areas. However, it is anticipated that this does capture the vast majority of spaces utilised to access the Chapel Street precinct.

Occupancy

A detailed breakdown of various components of the car parking survey results and car parking areas are provided throughout the report, but some key takeaways from the results of the surveys are as follows:

- On-street parking along Chapel Street is free of charge.
- Costs to park in the off-street Council car parks varies based on duration of stay, time of arrival / departure and day of the week. The exact pricing for each car park can be found online, with many of the car parks providing online bookings for parking.
- Each car parking area had a peak occupancy at different times individually, but the precinct as a whole observed peak car parking occupancy at 1pm on Friday.
- There is a supply of approximately 400 on-street car parking spaces along Chapel Street between Alexandra Avenue and Dandenong Road, with supply fluctuating throughout the day as a result of time restrictions on loading zones, taxi zones, clearway restrictions, etc.
- It was observed that of the 1,807 spaces in the six (6) major off-street car parks, 776 spaces were unoccupied and available for use at the peak time (Friday 1pm), equating to 195% of the supply of on-street spaces along Chapel Street between Alexandra Avenue and Dandenong Road (398 spaces).
- Majority of off-street available spaces at the peak time (Friday 1pm) were observed in the Elizabeth Street car park and the King Street car park in the Prahran Precinct.
- Traffic engineers at Stonnington Council have advised that the occupancy levels observed in the off-street car parks on the survey dates were representation of typical occupancy levels throughout the year, noting that the off-street car parks do reach full capacity on the busiest days of the year (pre-Christmas, Easter and some public/school holidays).

Traffic

In order to establish a baseline for any future analysis, an existing conditions analysis for 21 intersections and 3 pedestrian operated signals has been undertaken which utilises turning movement surveys taken across three (3) days in July 2022.

The survey results for each intersection were compiled together to determine the overall network peak hours instead of individual intersection peak hours. As such, it was determined that the peak hours of the overall network occurred during the following times:

- Weekday AM Commuter Peak: Wednesday, 8am – 9am
- Weekday PM Commuter Peak: Wednesday, 5:15pm – 6:15pm
- Retail Trade Peak: Saturday, 11:30am – 12:30pm

All intersections across all peak hours with the exception of the Punt Road / Toorak Road intersection were operating within their respective capacities under existing conditions.

The Punt Road / Toorak Road intersection is currently operating essentially at capacity, with a Degree of Saturation (DoS) at 1.00 and 0.96 in the morning commuter and evening commuter peak hours respectively. Whilst the DoS range of 0.91 – 1.00 is rated as 'poor', it is acceptable for critical movements at an intersection to be operating within this range during high peak periods. The result of the analysis is expected for a busy road such as Punt Road in any peak hour.

Pedestrian & Cyclists

As part of the traffic surveys undertaken, pedestrian and bicycle counts were also undertaken at each of the 21 intersections and 3 pedestrian operated signals across the three (3) survey days.

The survey results for each intersection were compiled together to determine the overall network peak hours for pedestrians and cyclists. As such, it was determined that the peak hours of the overall network occurred during the following times:

- Pedestrians:
 - + Weekday AM Peak: Wednesday, 8:15am – 9:15am
 - + Weekday PM Peak: Friday, 5pm – 6pm
 - + Retail Trade Peak: Saturday, 12:15pm – 1:15pm
- Cyclists:
 - + Weekday AM Peak: Wednesday, 8am – 9am
 - + Weekday PM Peak: Wednesday, 5:15pm – 6:15pm

Pedestrian volumes were highest at the intersection of Chapel Street / Toorak Road in both the weekday morning and afternoon peak hours, whereas on the Saturday during the retail trade peak hour pedestrian volumes were highest at the intersection Chapel Street / Malvern Road / Commercial Road. Pedestrian volumes as a whole across the study area were observed to be at their highest during the middle of the day on a Friday and Saturday as well as on a weekday evening between 5pm and 6pm.

The cyclist volumes indicate that the primary route through the study area is north-south along Chapel Street, which majority of vehicles headed northbound (towards the city) in the morning peak hour and then southbound (away from the city) during the afternoon peak hour.

CONTENTS

EXECUTIVE SUMMARY	3
1 INTRODUCTION.....	8
2 PROJECT BACKGROUND.....	8
3 STUDY AREA	9
3.1 General.....	9
3.2 Road Network.....	10
3.2.1 Chapel Street	10
3.2.2 Alexandra Avenue.....	10
3.2.3 Toorak Road, Commercial Road / Malvern Road & High Street	10
3.2.4 Dandenong Road	10
3.3 Public Transport	11
3.3.1 Existing Public Transport.....	11
3.3.2 Future Public Transport	12
3.4 Bicycle Network	14
3.4.1 Strategic Cycling Corridors.....	14
3.4.2 Cyclist Activity	16
3.4.3 Crashes History Involving Pedestrians & Cyclists.....	17
3.4.4 Bicycle Infrastructure	18
3.5 Movement & Place	21
3.5.1 Overview	21
3.5.2 Module 1 – Network Classifications	21
4 CAR PARKING	24
4.1 Total Car Parking Supply.....	24
4.2 Car Parking Surveys.....	26
4.2.1 Survey Details	26
4.2.2 Survey Results – Key Takeaways	29
4.3 On-Street Car Parking.....	29
4.4 Council Owned Off-Street Parking.....	30
4.4.1 Major Off-Street Car Parks	30
4.4.2 Minor Off-Street Car Parks	32
4.5 Privately Owned Off-Street Car Parking	34
4.6 Precinct Car Parking Supply.....	36
4.7 Pedestrian Catchment.....	37
5 TRAFFIC.....	38
5.1 General.....	38
5.2 Intersection Volumes	38
5.3 Intersection Operation.....	40
5.3.1 General	40
5.3.2 Degree of Saturation – All Intersections.....	41
6 DESIGN HOUR TRAFFIC CONDITIONS	43
7 PEDESTRIANS & CYCLISTS.....	45
7.1 Peak Hour Volumes.....	45
7.2 Pedestrian Footpath Widths	45
7.3 Cyclist Lane Widths	47
7.4 Cyclist Volumes Comparison	48

TABLES

Table 1	Car Parking Supply.....	3
Table 2	Public Transport Provision.....	12
Table 3	Movement and Place Summary	23
Table 4	Car Parking Supply.....	24
Table 5	Car Parking Survey Date and Time.....	26
Table 6	On-Street Parking @ Peak Time	29
Table 7	Major Off-Street Parking Areas @ Peak Time	30
Table 8	Council Surveyed Car Parking Summary @ Peak Time.....	30
Table 9	Minor Council Off-Street Car Parks	32
Table 10	Privately Owned Off-Street Car Parking	34
Table 11	Precinct Car Parking Supply.....	36
Table 12	Turning Movement Survey Days & Times	39
Table 13	SIDRA Intersection Parameters	40
Table 14	SIDRA Analysis Results – Existing Conditions.....	41
Table 15	Design Hour – Peak Hour Traffic Volume Adjustment Factor.....	43
Table 16	SIDRA Analysis Results – Design Hour Conditions.....	44
Table 17	Two-Way Bicycle Volumes.....	50

FIGURES

Figure 1	Study Area	9
Figure 2	Public Transport Provision.....	11
Figure 3	Metro Tunnel Project – New Train Stations.....	13
Figure 4	Metro Tunnel Project – Eastern Tunnel Entrance	13
Figure 5	Strategic Cycling Corridors.....	15
Figure 6	Strava Cycling Heatmap	16
Figure 7	Crash Stats Involving Pedestrians & Cyclists along Chapel Street.....	17
Figure 8	Chapel Street On-Road Bicycle Lanes	18
Figure 9	Community Suggestions for Bike Facilities	19
Figure 10	Movement and Place Framework Matrix.....	22
Figure 11	Movement and Place Classifications.....	22
Figure 12	Overall Car Parking Supply Locations	25
Figure 13	Car Parking Survey Area – Locations	27
Figure 14	Car Parking Survey Area – Precincts	28
Figure 15	Minor Council Off-Street Car Parking Areas.....	33
Figure 16	Privately Owned Car Parking Locations	35
Figure 17	Pedestrian Car Park Catchment – 400m Radius.....	37
Figure 18	Surveyed Intersections.....	39
Figure 19	Path Widths for 50/50 Directional Split.....	46
Figure 20	Cycling Aspects of Austroads Guide (Austroads, 2017)	47
Figure 21	Movement and Place – The Cycling Guide (Victorian DoT, 2020).....	47
Figure 22	Guidance on the separation of cyclist and motor vehicles (Sustrans, 2014))	48
Figure 23	Other Strategic Cycle Corridor Locations	49

APPENDICES

APPENDIX A	CAR PARKING PROFILES
APPENDIX B	TRAFFIC VOLUMES – EXISTING CONDITIONS
APPENDIX C	SIDRA ANALYSIS – EXISTING CONDITIONS
APPENDIX D	SIDRA ANALYSIS – DESIGN HOUR CONDITIONS
APPENDIX E	PEDESTRIAN VOLUMES – EXISTING CONDITIONS
APPENDIX F	CYCLIST VOLUMES – EXISTING CONDITIONS

1 INTRODUCTION

onemilegrid has been requested by Hassell to undertake an existing conditions car parking and traffic network analysis of the Chapel Street Precinct as part of the Chapel Street Transformation Project.

As part of this assessment the subject site has been inspected, traffic and parking data has been sourced and relevant background reports have been reviewed.

2 PROJECT BACKGROUND

The City of Stonnington is undertaking a project to reimagine what Chapel Street could be, with a new place-based approach. The vision for this broader area seeks to create a thriving, creative and unique cultural destination that fosters a strong sense of community pride and belonging.

There are a number of challenging factors that are affecting Chapel Street, the main ones relating to traffic and parking being poor access and movement, with traffic congestion and road safety issues for drivers, pedestrians and cyclists being at the forefront of the project's focus. It is therefore important to collect recent and accurate traffic and transport data of the study area to determine the impacts any future transformation may have on Chapel Street and the wider transport network.

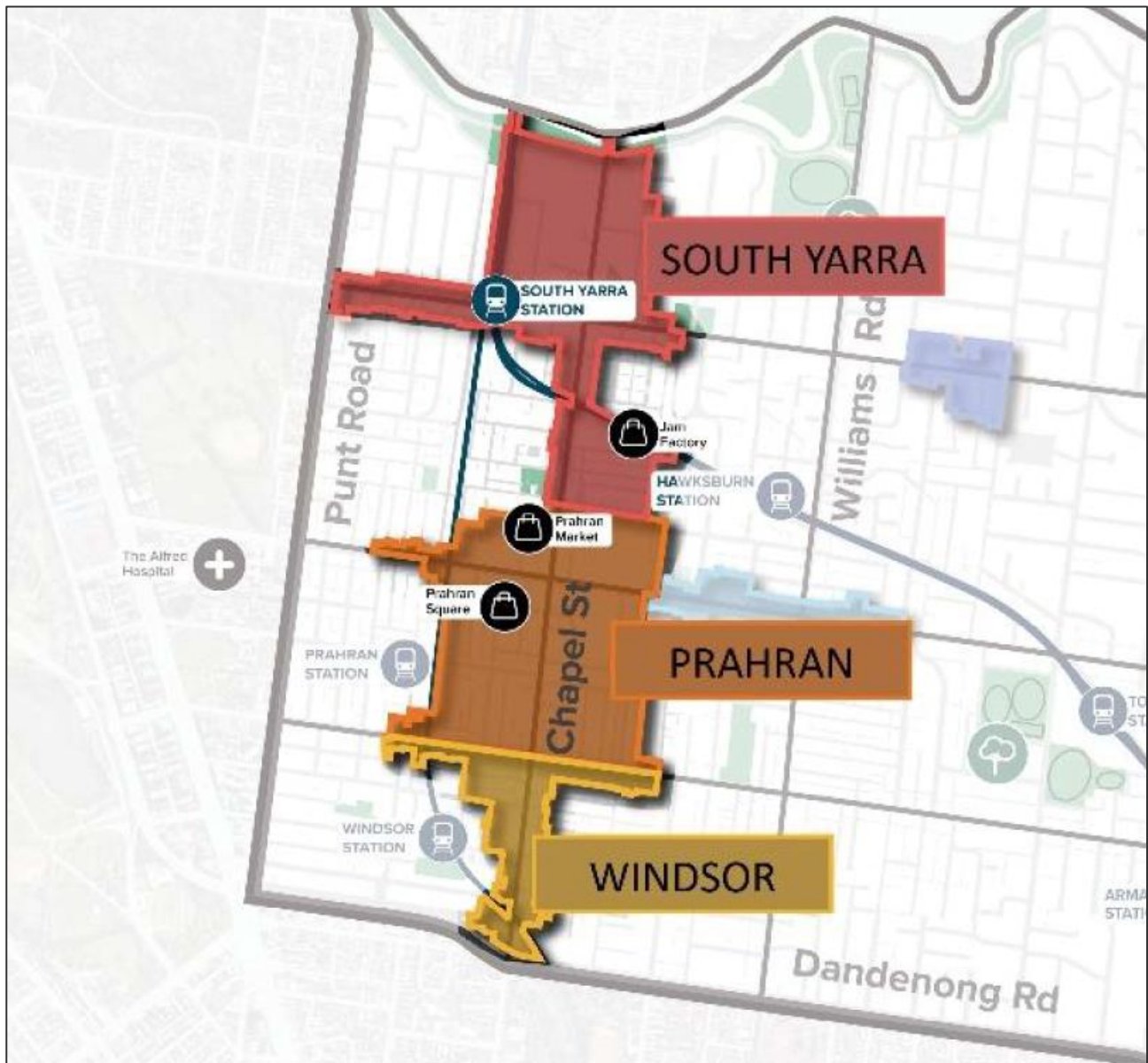
This report aims to provide a background of the existing car parking, traffic, pedestrian and cyclist data of the study area which can be utilised to assess the viability of various options as the project progresses.

3 STUDY AREA

3.1 General

For the purposes of the Transformation project, Chapel Street has been broken into three precincts - with South Yarra to the north, followed by Prahran and ending with Windsor to the south. Figure 1 below highlights the boundaries for each precinct, as well as the extent of Chapel Street and the surrounding streets in the study area.

Figure 1 Study Area



3.2 Road Network

3.2.1 Chapel Street

Chapel Street is generally aligned north-south and is nominated as a Transport Zone 2 (TRZ2, Principal Road Network) from Alexandra Avenue to Toorak Road and then nominated as a Transport Zone 3 (TRZ3, Significant Municipal Road) from Toorak Road to Dandenong Road within the study area.

Chapel Street provides two traffic lanes in each direction for the arterial section of Chapel Street (between Alexandra Avenue to Toorak Road) and provides clearways on both sides of the road during commuter peak times in this section of road. In contrast, Chapel Street between Toorak Road and Dandenong Road provides one traffic lane in each direction as well as a bicycle lane and a dedicated parking lane on both sides of the road – as well as kerb outstands in several locations which removes on-street parking.

For the entire stretch of Chapel Street in the study area the central lanes in both directions are shared between vehicles and trams.

Kerbside parking is generally restricted to either 1 or 2-hour parking during typical business hours and on Saturdays to provide high turnover spaces for the various retail tenancies along both sides of Chapel Street.

3.2.2 Alexandra Avenue

Alexandra Avenue is an arterial road generally aligned east-west and is nominated as a Transport Zone 2 (TRZ2, Principal Road Network) near Chapel Street. Alexandra Avenue provides a link along the Yarra River between Williams Road in the east and Yarra Bank Highway / Olympic Boulevard in the west.

Alexandra Avenue generally provides two lanes in each direction, with additional right turn lanes and a bus lane at the intersection with Chapel Street and the Church Street Bridge – with parking typically not permitted on either side of the road.

3.2.3 Toorak Road, Commercial Road / Malvern Road & High Street

Toorak Road, Commercial Road / Malvern Road and High Street are all arterial roads nominated as a Transport Zone 2 (TRZ2, Principal Road Network) that run east-west through the study area. All of these major east-west road provides two traffic lanes in each direction for the entire stretch within the study area, with the central lanes in both directions being shared between vehicles and trams and kerbside parking permitted on the outside lanes. Clearway restrictions are provided on both sides of the road at alternative commuter peak hours, with the south side (westbound traffic) being clear between 7am and 9am on weekdays and the north side (eastbound traffic) being clear between 4:30pm and 6:30pm on weekdays.

3.2.4 Dandenong Road

Dandenong Road is an arterial road nominated as a Transport Zone 2 (TRZ2, Principal Road Network) that provides a vehicle connection between Queens Parade into the City in the west to the outer south-eastern suburbs including Clayton, Dandenong and beyond in the east.

Dandenong Road provides five (5) traffic lanes on the north side of the road and four (4) traffic lanes on the south side of the road near the Chapel Street intersection, with opposing direction of travel separated by a 12-20 metre wide median which caters for a tram line.

3.3 Public Transport

3.3.1 Existing Public Transport

The full public transport provision with stations or stops that intersect with Chapel Street in the study area is shown in Figure 2 and detailed in Table 2 below.

Figure 2 Public Transport Provision

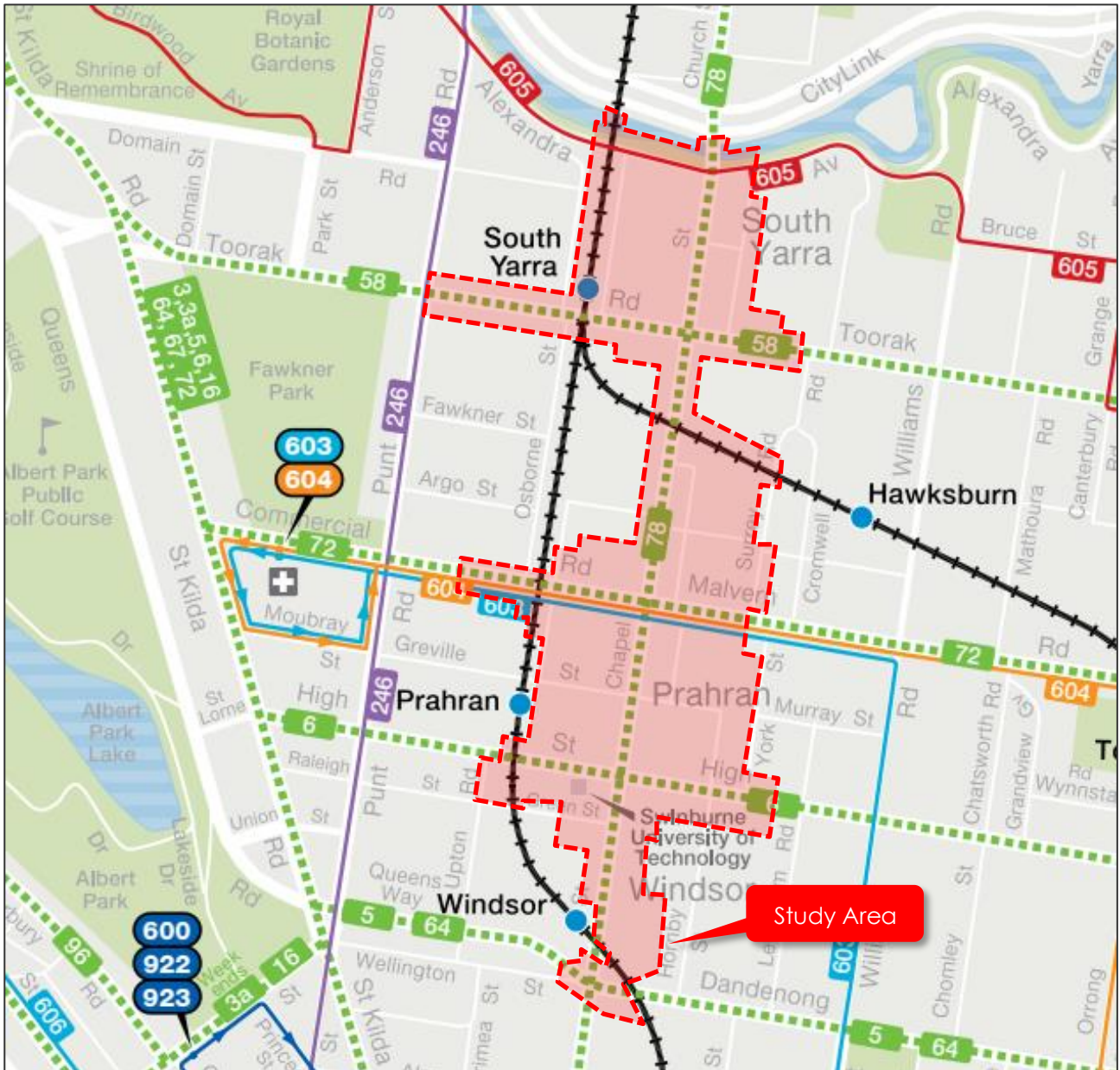


Table 2 Public Transport Provision

Mode	Route No.	Route Description	Nearest Stop/Station
Train		Cranbourne Line	*South Yarra & Hawksburn Station
		Frankston Line	
		Pakenham Line	
		Sandringham Line	South Yarra, Prahran & Windsor Station
Tram	5	Melbourne University - Malvern	Dandenong Road
	6	Moreland - Glen Iris	High Street
	58	West Coburg - Toorak	Toorak Road
	64	Melbourne University - East Brighton	Dandenong Road
	72	Melbourne University - Camberwell	Commercial Road / Malvern Road
	78	North Richmond - Balaclava via Prahran	Chapel Street
Bus	603	Brighton Beach - Alfred Hospital via Elsternwick Station	Commercial Road / Malvern Road
	604	Gardenvale - Alfred Hospital via Toorak Station	
	605	Gardenvale - City (Queen St)	Alexandra Avenue

*Until the Metro Tunnel project bypasses these stations on the Pakenham and Cranbourne lines post 2025.

3.3.2 Future Public Transport

It should also be noted that the study area is within close proximity to the currently under construction Metro Tunnel Project.

The Metro Tunnel Project aims to reduce train travel times by running the busy Cranbourne, Pakenham and Sunbury lines through a new tunnel and creating five (5) new railway stations. The Metro Tunnel Project is due to be complete by 2025.

In relation to the study area and in particular, South Yarra Railway Station, an underground entrance to the tunnel on the east side of South Yarra Railway Station is under construction so that the new rail lines can pass underneath the existing Sandringham and Frankston lines. The eastern tunnel entrance connects the Metro Tunnel to the Cranbourne/Pakenham Line with the next stop being Caulfield Station.

The Metro Tunnel Project does not include a new station in South Yarra or a connection from the existing station.

A map of the five (5) new railway stations as part of the Metro Tunnel Project and the proximity of the project to Chapel Street is shown in Figure 3 and a view of the eastern tunnel entrance is shown in Figure 4.

Figure 3 Metro Tunnel Project – New Train Stations

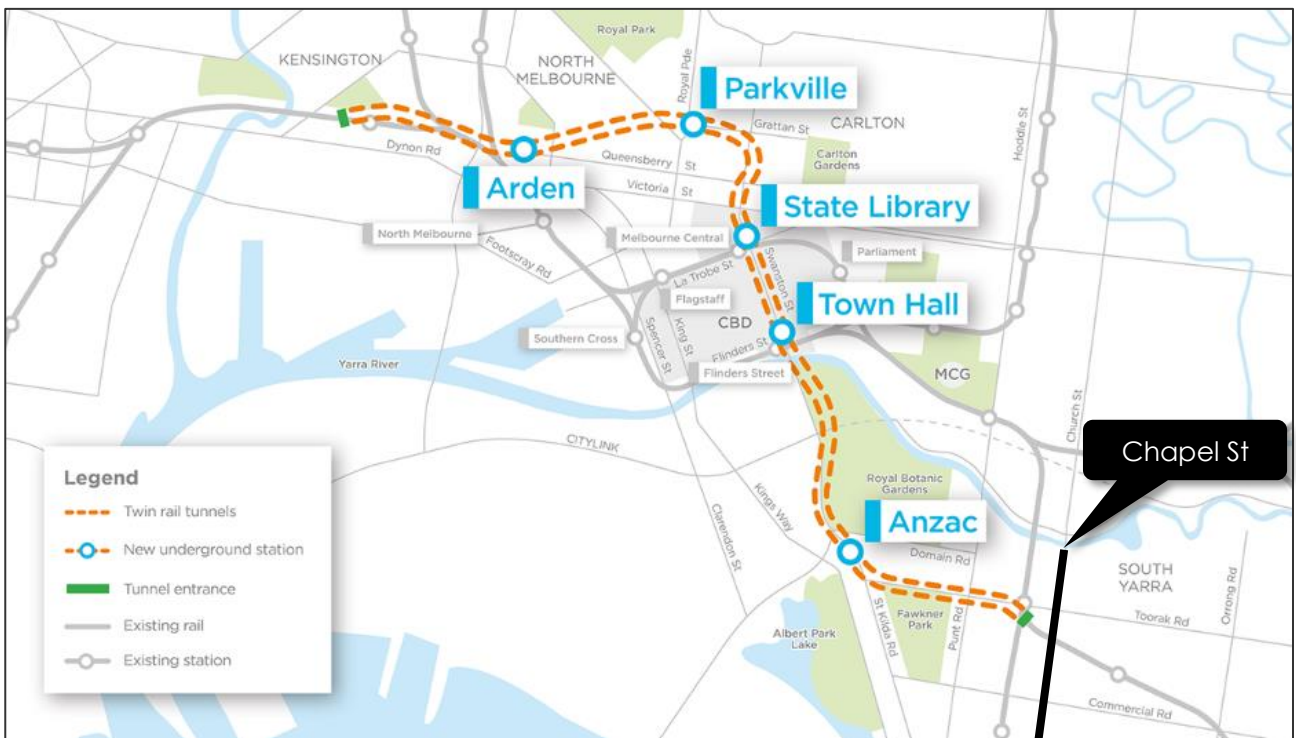
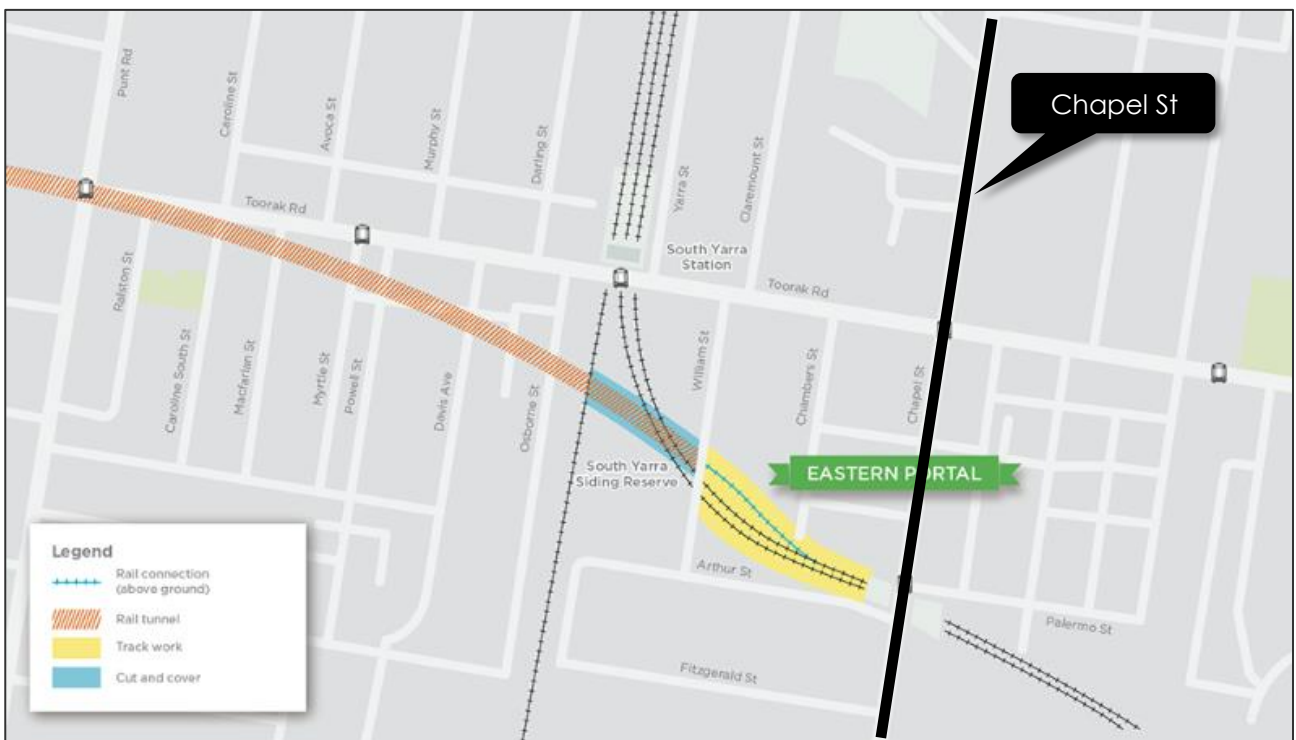


Figure 4 Metro Tunnel Project – Eastern Tunnel Entrance



3.4 Bicycle Network

3.4.1 Strategic Cycling Corridors

Department of Transport (DoT) state in their December 2020 Strategic Cycling Corridor Network Overview report:

“Strategic Cycling Corridors are important routes for cycling for transport and link up important destinations including the Central City, National Employment and Innovations Clusters, Metropolitan Activity Centres and other destinations of metropolitan and regional significance”.

Strategic Cycling Corridors (SCC) are considered to be the arterials for bicycles, and have been designed to provide connected, low stress and safe routes, intended primarily for the use of cyclists for transport (rather than recreation).

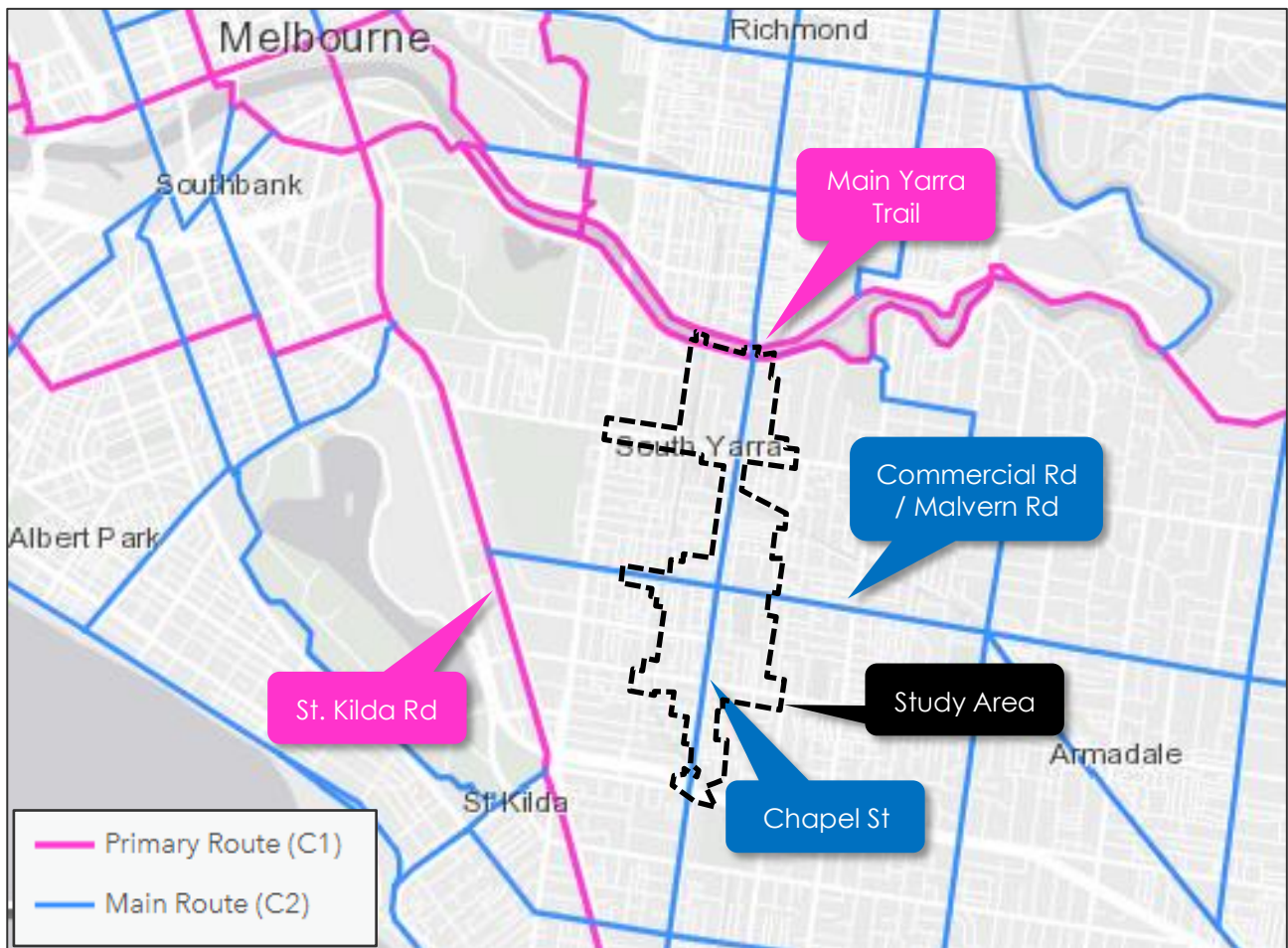
The network is made up of four movement and place ‘C’ classifications for cycling for transport, being C1 through to C4, as well as four ‘specialised cycling’ classifications. The SCC network is made up of the C1 and C2 classifications which are as follows:

- **Primary Routes (C1):** provide a core network of Strategic Cycling Corridors that connect places of state significance – the central city, Metropolitan Activity Centres (MACs) and National Employment and Innovation Centres (NEICs) within metropolitan Melbourne; and
- **Main Routes (C2):** are Strategic Cycling Corridors that provide additional connections to state significant destinations, as well as connections to major activity centres and key railway stations within metropolitan Melbourne.

The key SCC routes that are either within or in close proximity to the study are as follows and shown in Figure 5:

- Primary Routes (C1):
 - + Main Yarra Trail; and
 - + St. Kilda Road.
- Main Routes (C2):
 - + Chapel Street; and
 - + Malvern Road / Commercial Road.

Figure 5 Strategic Cycling Corridors



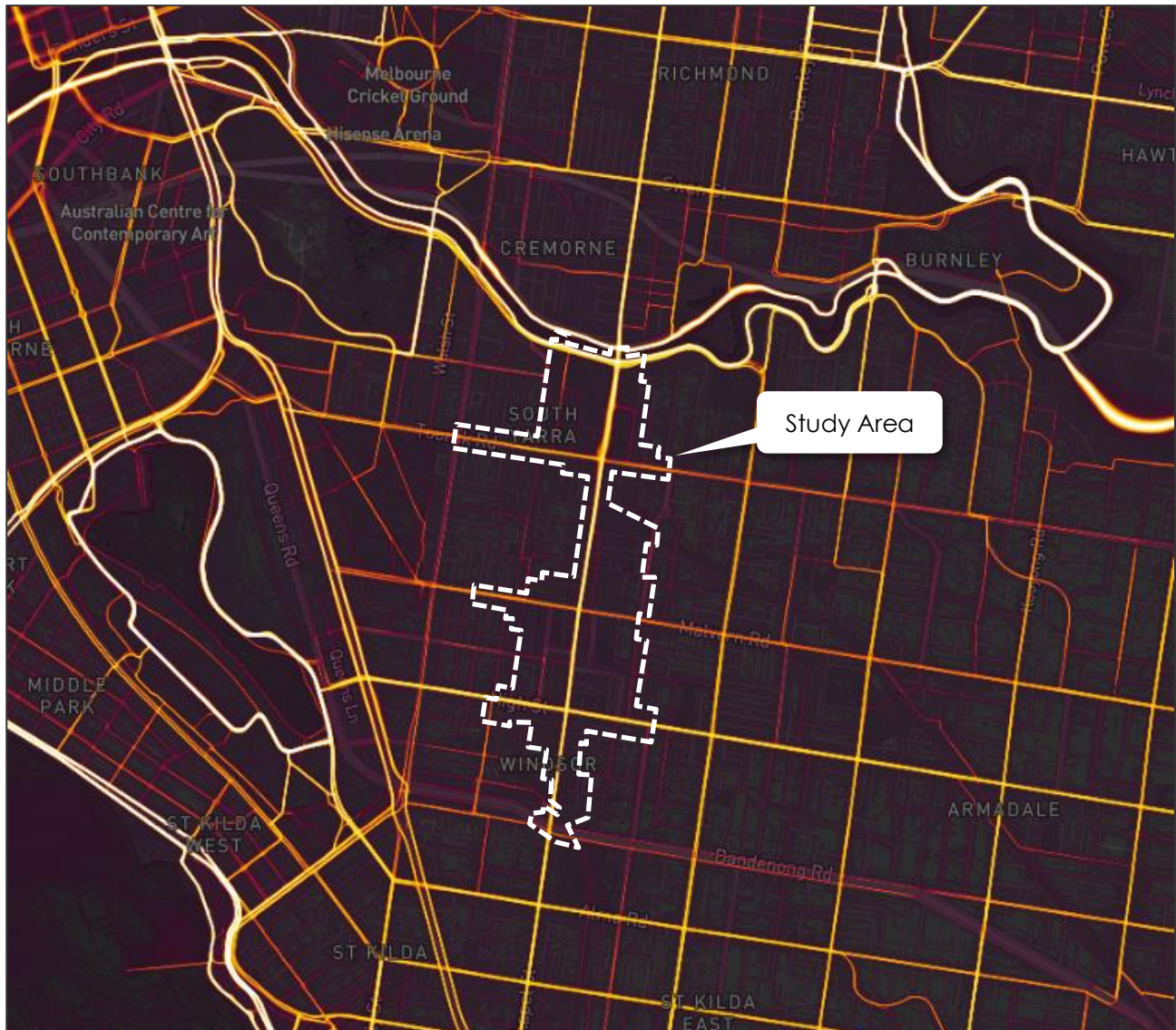
3.4.2 Cyclist Activity

Strava is a social network and training tool for cyclists, runners and swimmers. Users record their physical activity using a dedicated GPS device or utilise the mobile app and upload the file to their profile.

Strava anonymised this information and makes it available through their “Global Heatmap” tool, showing aggregated all public activities over the last two years across the world.

A view of the cycling heatmap in proximity to the study area is provided below in Figure 6. Routes of higher usage are brighter in colour.

Figure 6 Strava Cycling Heatmap



As shown above, primary routes in and out of the study area comprise of Chapel Street and High Street. It is also noted that the Main Yarra Trail that runs along the Yarra River connects to Chapel Street at the northern end of the study area and is seen to be heavily utilised by cyclists.

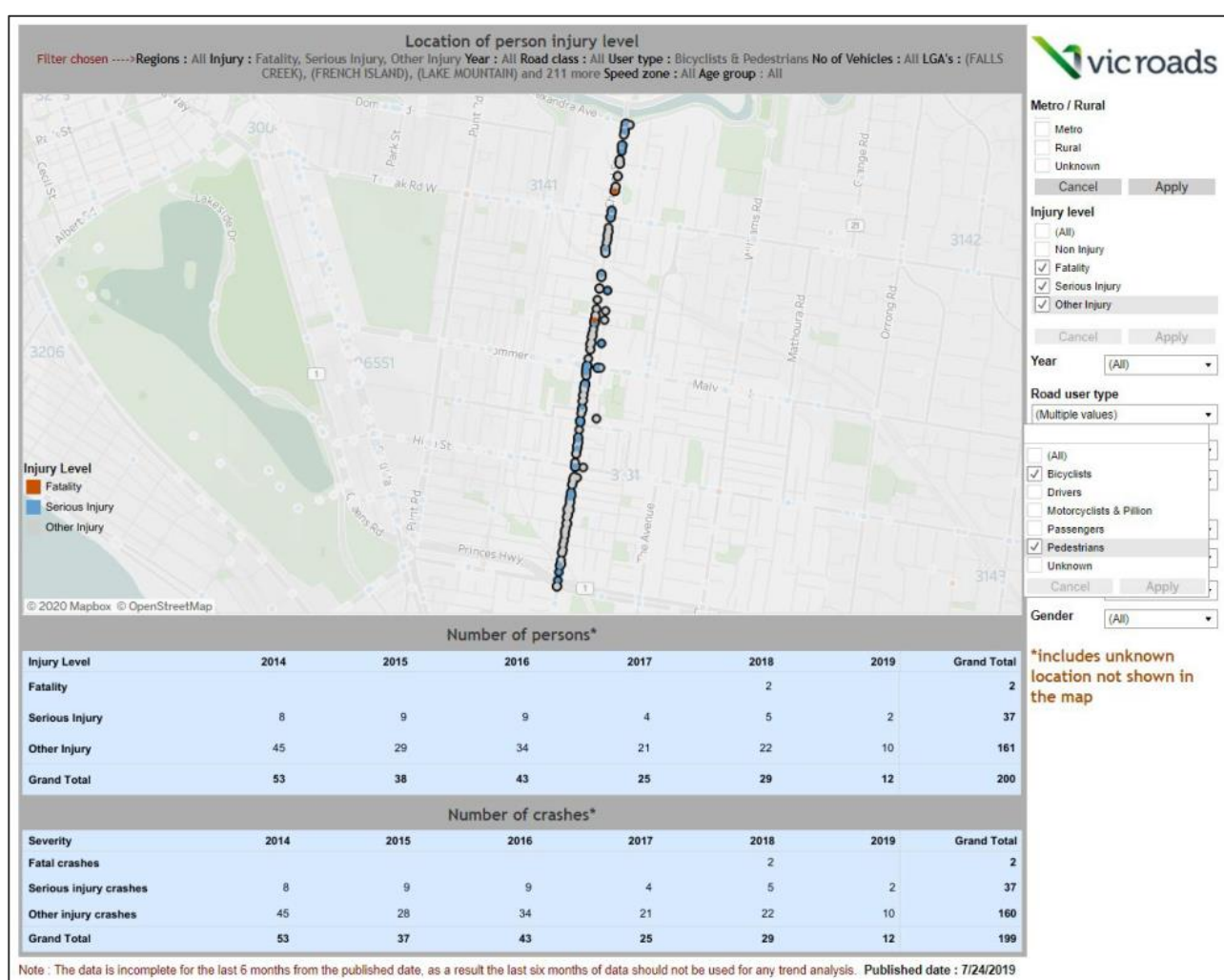
It is noted that this information includes all cycling activities recorded on the platform, inclusive of weekend trips, and all trips throughout the day. Additionally, the data is skewed towards sports cyclists, given that the bulk of commuter and recreational cyclists will not be tracking their rides.

3.4.3 Crashes History Involving Pedestrians & Cyclists

VicRoads provides road crash statistics data from all casualty accidents on Victorian roads. This data has been sourced from the last five years available (2015-2019 inclusive).

An extract of the crash stats involving pedestrians and cyclists along Chapel Street is provided in Figure 7 below, showing that there were 200 pedestrians and cyclists injured in the study area during that time, including 2 fatalities. This indicates a clear trend of pedestrian and cyclist incidents along Chapel Street and the City of Stonnington has identified that Chapel Street is regularly reported as one of the top ten locations involving cyclists in Melbourne (Integrated Transport Plan, January 2020).

Figure 7 Crash Stats Involving Pedestrians & Cyclists along Chapel Street



3.4.4 Bicycle Infrastructure

As previously mentioned, Chapel Street provides on-road bicycle lanes between Toorak Road and Dandenong Road in the study area. The on-road bicycle lanes are located between the through traffic lanes (shared with trams) and the kerbside parking lane on both sides of the road and typically measure approximately 1.2 metres in width with no additional buffers or separation between the parking or traffic lanes.

The bicycle lanes along Chapel Street are primarily the same colour as the roadway, with the exception of side road intersections where the bike lanes are painted green. Bicycle symbol line marking is provided periodically throughout the study area's stretch of Chapel Street and head start boxes are provided at all signalised intersections.

An aerial view of the on-road bicycle lanes along Chapel Street is provided in Figure 8 below.

Figure 8 Chapel Street On-Road Bicycle Lanes



Publicly available bicycle parking spaces are sporadically located along Chapel Street in the form of ground mounted hoops along the footpath and in kerb outstand areas as well as parking hoops attached to signage poles.

Stonnington City Council conducted a community survey between October 2021 and December 2021 which asked the public to identify locations where bicycle parking facilities should be provided / improved. The online survey contained the following statement and then allowed respondents to drop a pin on a map and add a comment describing their suggestion:

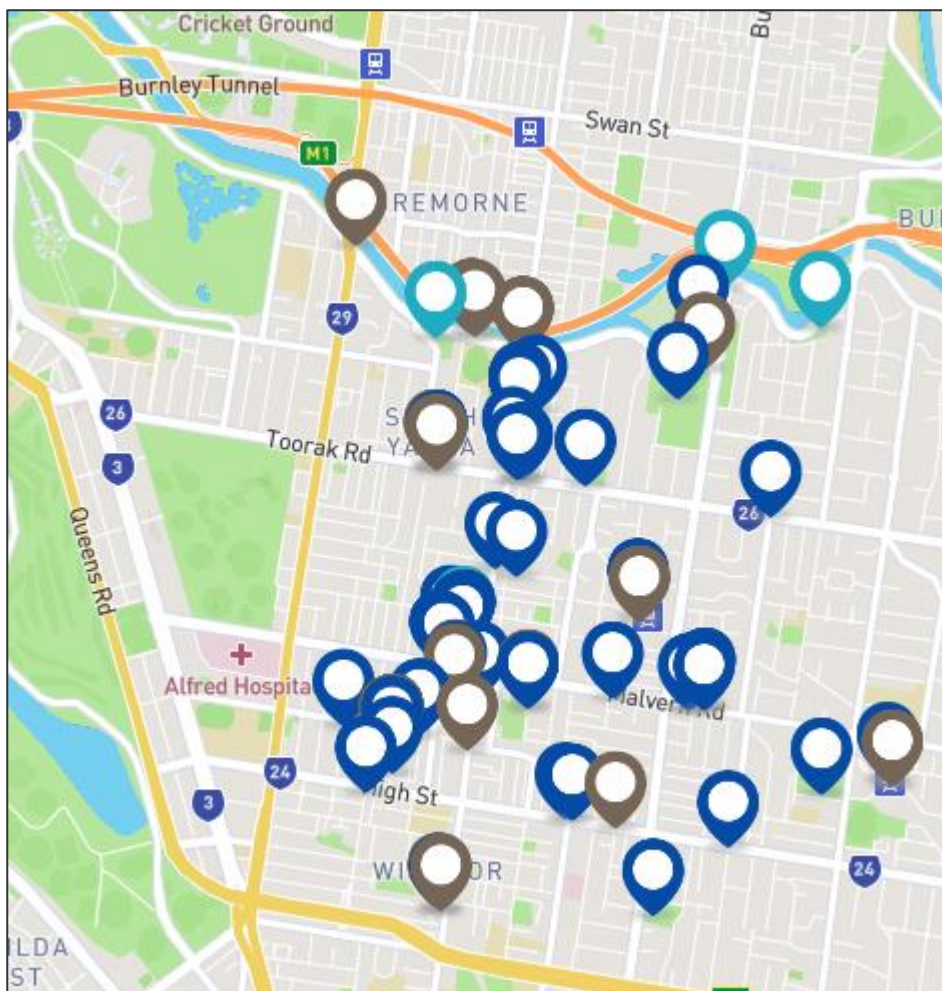
If you know somewhere in Stonnington that could do with bike parking facilities, a bike maintenance station or would make a convenient cyclist rest area, we would love to hear from you!

We're planning to build new bike facilities across the city to support the growing the number of people cycling for leisure, to commute, and to visit local shopping strips.

If you have suggestions on where we should be building new bike facilities, share your ideas by dropping a pin in the map below.

The survey received 142 responses, with sizeable portion of responses being within close proximity to Chapel Street. A view of the pins dropped on and around Chapel Street is provided in Figure 9, with most of the responses suggesting additional bicycle parking spaces (dark blue) and several others suggesting bicycle maintenance stations (grey).

Figure 9 Community Suggestions for Bike Facilities



Further to the above, Stonnington Bike User Groups issued a report to Stonnington Council in November 2020 titled '*The Chapel Street Realisation Project*' which proposed to make changes to enhance the safety and desirability of active travel along Chapel Street. These initiatives include recommendations such as:

- Removing parallel parking along Chapel Street;
- Expanding space for pedestrians, trees, street furniture and outdoor dining;
- Improving cycling and pedestrian infrastructure along Chapel Street;
- Reducing the speed limit along Chapel Street to 30km/h; and
- Closing Chapel Street off to through traffic at one point along its length.

3.5 Movement & Place

3.5.1 Overview

The Movement & Place framework was introduced by the Department of Transport (DoT) in February 2019 and provides a new approach to integrated transport planning in Victoria.

Three main principles underline the DoT's approach to transport planning within the movement and place framework.

1. People First – We put transport users at the centre of everything we do;
2. Outcomes Focused – We focus on outcomes that deliver more choice, connections and confidence in our travel; and
3. One System – We think as one system, not individual projects or modes.

The Movement & Place framework recognises that streets perform multiple roles and functions beyond moving people from A to B. It recognises the role of streets as places and destinations in their own right, and allows the organisation and classification of transport links by their place and movement roles as well as allowing for the development of performance measures and interventions.

3.5.2 Module 1 – Network Classifications

Streets are classified on a scale of local to state significance, as detailed below, and shown in Figure 10.

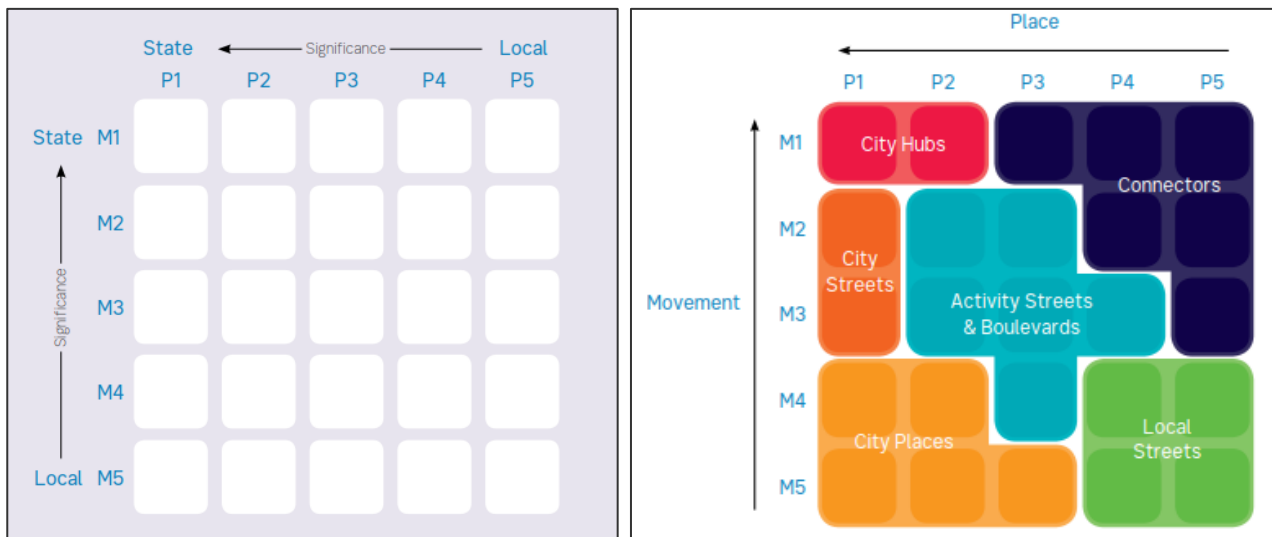
- Movement
 - + M1: Mass movement of people and/or goods on routes with a state or national-level movement function or provides primary access to state-level places.
 - + M2: Significant movement of people and/or goods on routes connecting across multiple municipalities or provides primary access to regional-level places.
 - + M3: Moderate movement of people and/or goods on routes connecting municipalities or provides primary access to municipal-level places.
 - + M4: Movement of people and/or goods within a municipality.
 - + M5: Local movement
- Place
 - + P1: Place of state or national significance.
 - + P2: Place of regional significance.
 - + P3: Place of municipal significance.
 - + P4: Place of neighbourhood significance.
 - + P5: Place of local significance.

Each of the 'Movement' and 'Place' categories have a series of sub-categories that can also be classified in terms of their importance. These include:

- Movement: Walking, Cycling, Bus, Tram, General Traffic.
- Place: Places of Street Activity.

The *Network Classifications – Module 1* technical appendix to the Movement & Place framework defines each of these sub-categories.

Figure 10 Movement and Place Framework Matrix



The Department of Transport has drafted Movement and Place classifications for the bulk of populated areas of Victoria's transport network, including the study area, though these are being refined and reviewed over time.

A summary of the pertinent classifications are provided in Table 3 below, with associated figures in Figure 11.

Figure 11 Movement and Place Classifications

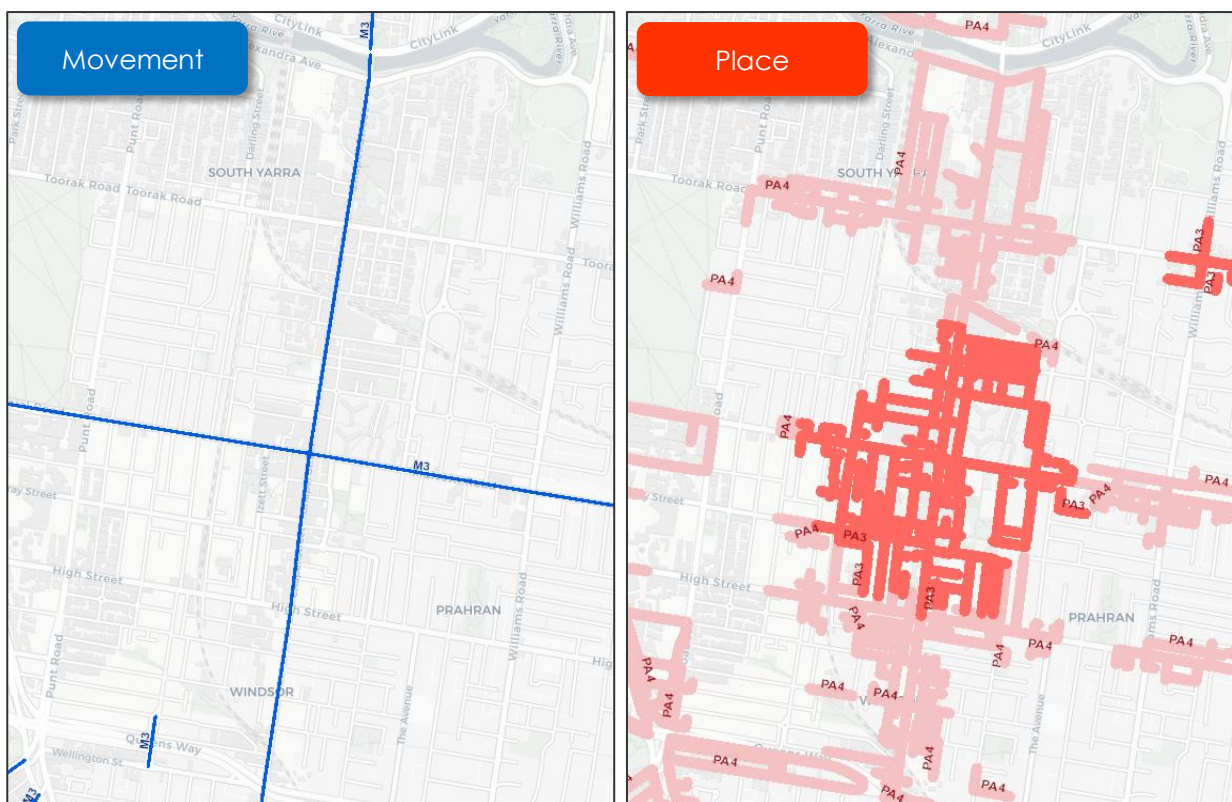


Table 3 Movement and Place Summary

<i>Road – Section</i>	<i>Movement Significance</i>	<i>Walking</i>	<i>Cycling</i>	<i>Tram</i>	<i>General Traffic</i>	<i>Place Significance</i>	<i>Network Classifications Matrix</i>
Chapel Street – Alexandra Avenue to Toorak Road	M3	W2/3	C2	T3	GT4	PA4	Activity Street & Boulevard
Chapel Street – Toorak Road to Malvern Road	M3	W2	C2	T3	GT4	PA3/4	Activity Street & Boulevard
Chapel Street – Malvern Road to High Street	M3	W2	C2	T3	GT4	PA3	Activity Street & Boulevard
Chapel Street – High Street to Dandenong Road	M3	W2	C2	T3	GT4	PA4	Activity Street & Boulevard

4 CAR PARKING

4.1 Total Car Parking Supply

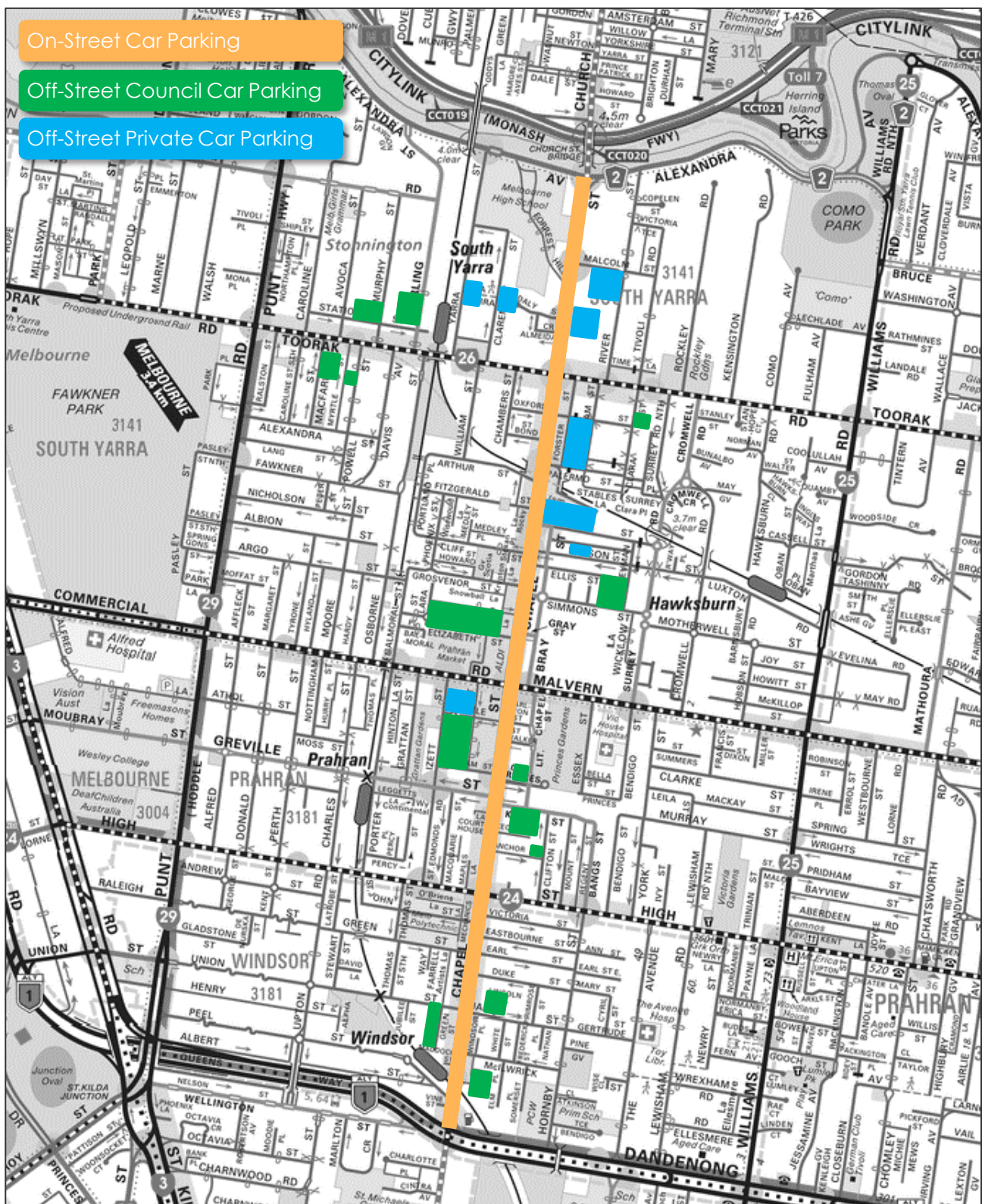
The car parking supply in the Chapel Street precinct is made up of on-street parking along Chapel Street and a number of off-street car parks – both Council and privately owned. A detailed breakdown of the car parking areas is provided in the subsequent sections, but an overview of the total car parking supply is outlined in Table 4 and the location of spaces are shown in Figure 12.

Table 4 Car Parking Supply

Car Parking Area		No. Of Spaces	% Of Total Spaces
Council On-Street		398	6.6%
Council Off-Street	Major Car Parks	1,807	35.0%
	Minor Car Parks	289	
Private Off-Street		3,500	58.4%
Total		5,994	100%

It is noted that this is not representative of every single parking space in the study area as it does not include on-street parking along streets other than Chapel Street and other smaller private car parking areas. However, it is anticipated that this does capture the vast majority of spaces utilised to access the Chapel Street precinct.

Figure 12 Overall Car Parking Supply Locations



4.2 Car Parking Surveys

4.2.1 Survey Details

In order to ascertain the availability of car parking spaces, both on-street and within several off-street Council car parks, **onemilegrid** commissioned Trans Traffic Surveys to undertake car parking surveys on the following day and time as outlined in Table 5 below.

Table 5 Car Parking Survey Date and Time

Day	Date	Time (inclusive*)	Interval
Wednesday	20/07/2022	7am – 7pm	1 hour
Friday	22/07/2022	11am – midnight	1 hour
Saturday	23/07/2022	11am – midnight	1 hour

The major Council off-street car parking areas were identified with assistance from Stonnington Council, and occupancy data for four (4) of the large Council owned and operated car parks was supplied by Council's traffic team for the same day as the other car parking surveys.

A view of the car parking survey area is shown in Figure 13. In addition, where the car parking areas fall in relation to the three precincts (South Yarra, Prahran and Windsor) is shown in Figure 14.

Figure 13 Car Parking Survey Area – Locations

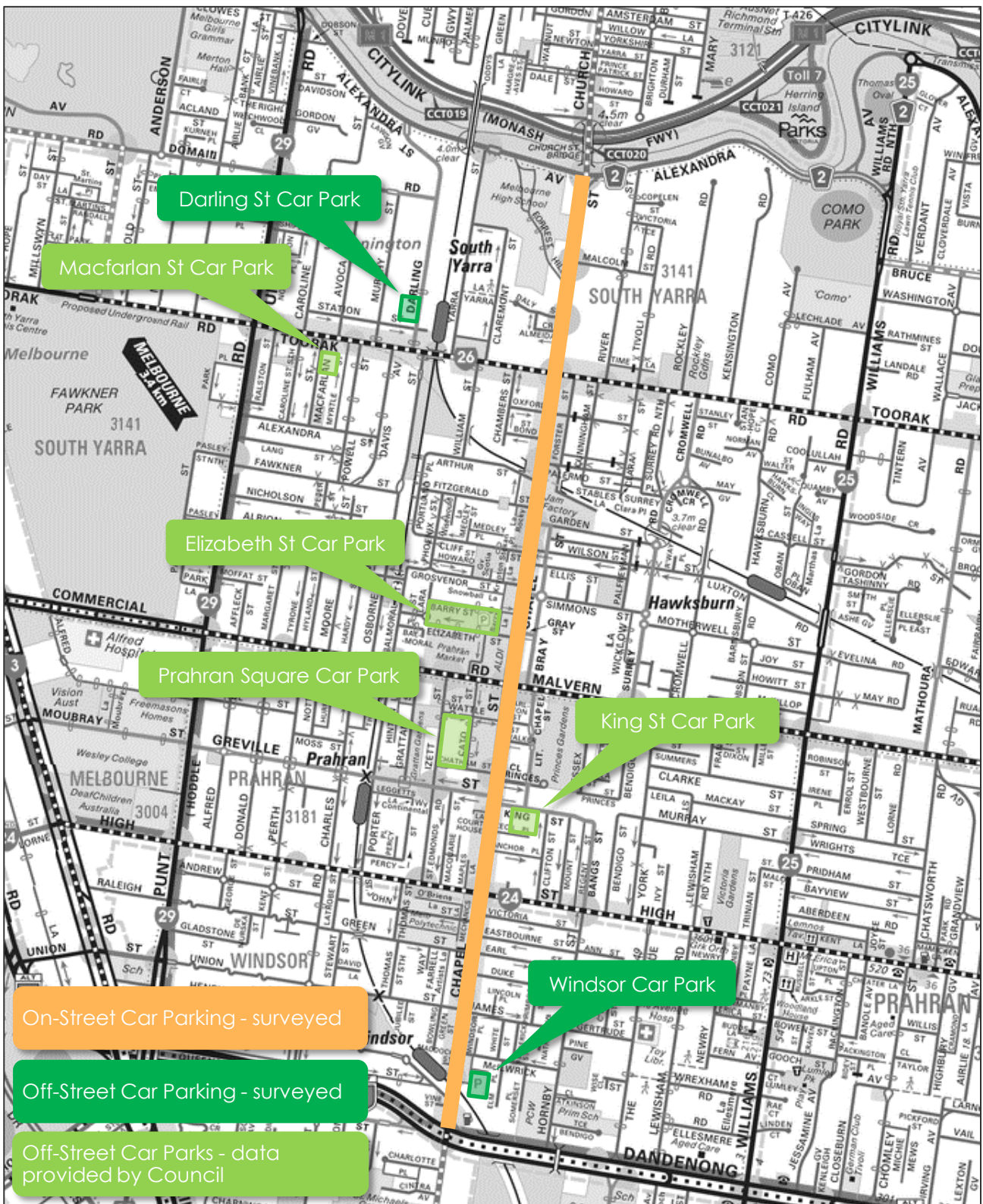
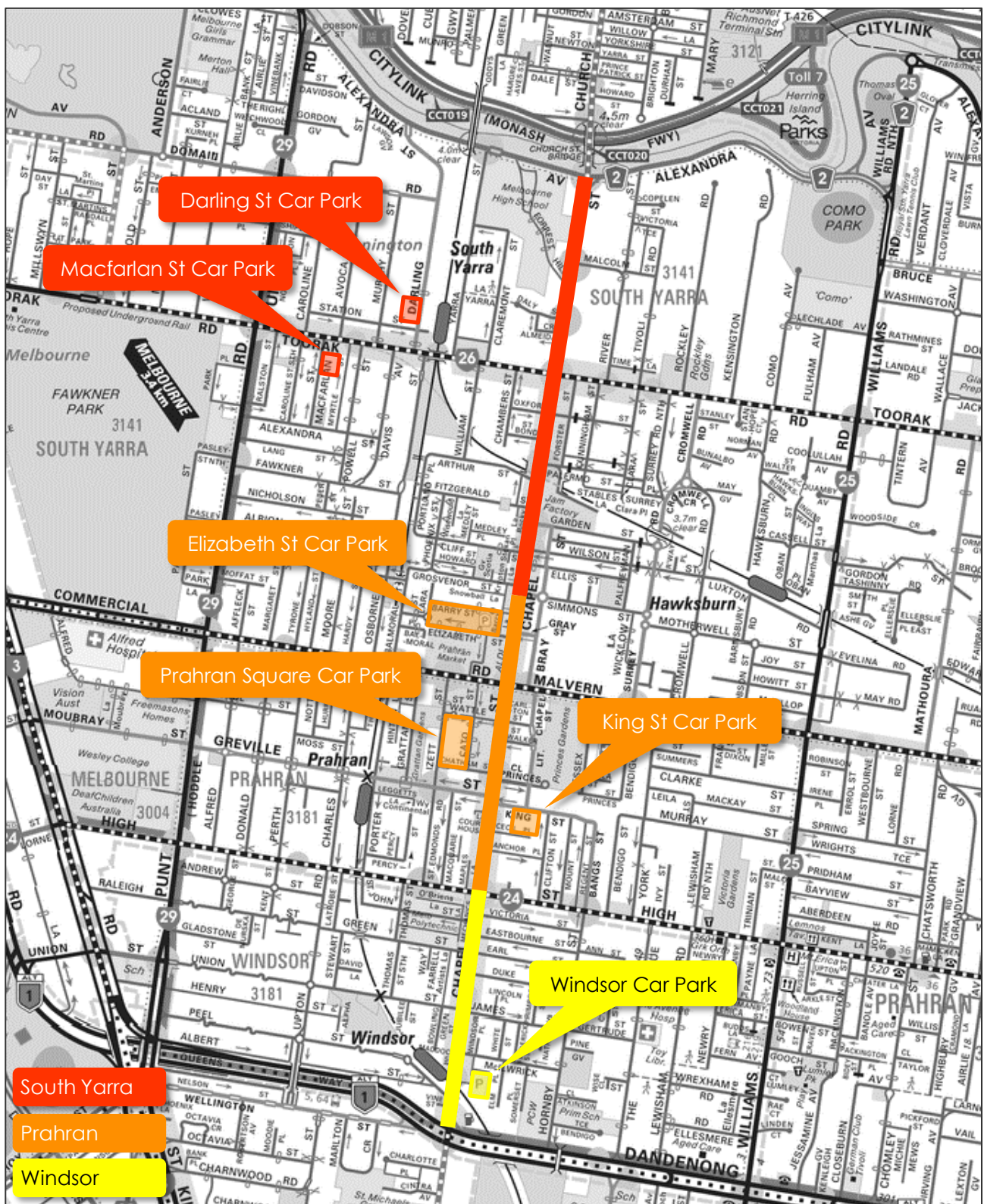


Figure 14 Car Parking Survey Area – Precincts



4.2.2 Survey Results – Key Takeaways

A detailed breakdown of various components of the car parking survey results and car parking areas are provided in the subsequent sections, but some key takeaways from the results of the surveys are as follows:

- On-street parking along Chapel Street is free of charge.
- Costs to park in the off-street Council car parks varies based on duration of stay, time of arrival / departure and day of the week. The exact pricing for each car park can be found online, with many of the car parks providing online bookings for parking.
- Each car parking area had a peak occupancy at different times individually, but the precinct as a whole observed peak car parking occupancy at 1pm on Friday.
- There is a supply of approximately 400 on-street car parking spaces along Chapel Street between Alexandra Avenue and Dandenong Road, with supply fluctuating throughout the day as a result of time restrictions on loading zones, taxi zones, clearway restrictions, etc.
- It was observed that of the 1,807 spaces in the six (6) major off-street car parks, 776 spaces were unoccupied and available for use at the peak time (Friday 1pm), equating to 195% of the supply of on-street spaces along Chapel Street between Alexandra Avenue and Dandenong Road (398 spaces).
- Majority of off-street available spaces at the peak time (Friday 1pm) were observed in the Elizabeth Street car park and the King Street car park in the Prahran Precinct.
- Traffic engineers at Stonnington Council have advised that the occupancy levels observed in the off-street car parks on the survey dates were representation of typical occupancy levels throughout the year, noting that the off-street car parks do reach full capacity on the busiest days of the year (pre-Christmas, Easter and some public/school holidays).

4.3 On-Street Car Parking

A total supply of 398 on-street spaces were observed at the peak time (1pm Friday) along the entire section of Chapel Street, with over 90% of spaces occupied at this time. The on-street spaces along Chapel Street are free of charge at all times and were primarily restricted to 1 and 2-hour parking during business hours (outside of clearway times) and on a Saturday. A precinct breakdown of the on-street car parking results at the peak time is provided in Table 6 below.

Table 6 On-Street Parking @ Peak Time

Precinct	*Primary Time Restriction	Supply	% Occupied	Occupancy
South Yarra	1 & 2hr	149	97%	145
Prahran	1 hr	141	91%	128
Windsor		108	92%	99
Total		398	93%	372

* Typically during business hours, outside of clearway restrictions during commuter peak times and on Saturdays.

4.4 Council Owned Off-Street Parking

4.4.1 Major Off-Street Car Parks

4.4.1.1 Survey Results

As previously mentioned, the major off-street car park consist of six (6) car parking areas identified with the assistance of Council prior to undertaking the surveys. The majority of off-street spaces from these car parks are located in the Prahran Precinct (81%), with the off-street spaces experiencing an occupancy of just under 60% at the peak time across the study area – leaving a total of 776 spaces available for use.

The off-street car parking are paid parking areas, with the costs associated with parking in each off-street car park varying based on duration of stay, time of arrival / departure and day of the week.

A precinct breakdown of the off-street car parking results at the peak time is provided in Table 7 below.

Table 7 Major Off-Street Parking Areas @ Peak Time

Precinct	Parking Area	Supply	% Occupied	Occupancy	Availability
South Yarra	Darling Street	51	78%	40	11
	Macfarlan Street	129	50%	65	64
Prahran	Elizabeth Street	636	44%	280	356
	Prahran Square	500	83%	415	85
	King Street	336	38%	128	208
Windsor	Windsor Car Park	155	66%	103	52
Total		1,807	57%	1,031	776

4.4.1.2 Comparison to On-Street Occupancy

It is understood that there is consideration being given to removing on-street parking along Chapel Street in lieu of other place making opportunities such as streetscape improvements, cycle paths, pedestrian areas, facilitate State-managed upgrades to trams stops to make them more accessible, etc.

Based on the on and off-street survey results at the peak time outlined above, the supply of on-street car parking spaces along Chapel Street in each precinct has been compared against the availability of parking spaces in the Council owned car parks in Table 8 below to determine if there is adequate spaces already present to cater for the removal of on-street spaces (should this option be explored further).

Table 8 Council Surveyed Car Parking Summary @ Peak Time

Precinct	On-Street Parking Supply	Off-Street Parking Availability	Surplus / Shortfall
South Yarra	149	75	-74
Prahran	141	649	+508
Windsor	108	52	-56
Total	398	776	+378

As shown above, at the peak time of 1pm on Friday there is an on-street supply of parking of 398 spaces along Chapel Street between Alexandra Avenue and Dandenong Road and an off-street parking availability of 776 spaces. Therefore, the availability of off-street spaces equates to 195% of the supply of on-street spaces along Chapel Street between Alexandra Avenue and Dandenong Road.

Whilst the overall study area indicates there is capacity to potential consider the removal of on-street spaces along Chapel Street in certain locations and have these demands relocated to off-street car parking facilities, there are several additional factors that need to be considered / explored further before determining the viability of the option:

- The off-street Council parking availability is concentrated primarily in the Elizabeth Street and King Street car park in the Prahran Precinct. Notably, the off-street parking availability in the South Yarra and Windsor Precincts were not observed to have surplus availability to cater for the removal of the on-street spaces along Chapel Street.
- The on-street car parking spaces are free of charge and are restricted to 1 and 2-hours and would therefore experience high turnover during the peak periods. The off-street car parks are paid parking areas which may experience an average duration of stay longer than that of on-street spaces. Therefore, whilst there may be adequate spaces available to cater for the removal of on-street spaces, the traffic generated by higher turnover spaces will need to be accounted for in any future modelling of the road network and/or the car park access points.
- The above conclusions are based on a car parking survey undertaken across three (3) days of the year in July and may not be representation of typical conditions (further explored below).

In regard to the last dot point above, **onemilegrid** has liaised with Stonnington Council's traffic engineers to understand the yearly parking patterns within the major off-street Council car parks. Council's engineers have confirmed that the results from the surveys undertaken in July 2022 were representative of typical car parking conditions throughout the course of a year. They did acknowledge that the busiest times for the off-street car parks was the weekend prior to Christmas and over the Easter weekend, however it is typically accepted practise to utilise the 85th percentile demand rather than the absolute peak demand for car parking areas as it is generally not practical to provide parking to these levels.

Regardless, in order to provide a sensitivity check and give a more conservative analysis, the car parking occupancy levels across the study area have been assessed based on the Elizabeth Street & King Street car parks being 60% occupied at the peak time (observed at 44% and 38% respectively). Under these conditions, the total availability of off-street car parking is reduced to 600 spaces.

Detailed graphs of the car parking profiles for on and off-street car parking areas across the three survey days for the overall study area as well as each precinct is provided in Appendix A.

4.4.2 Minor Off-Street Car Parks

In addition to the six (6) major off-street car parking areas, there are a number of smaller Council owned off-street car parks that were not included as part of the surveys. A list of all off-street car parks owned by Council were provided and an aerial review of the car parks in South Yarra, Prahran & Windsor was undertaken to determine the additional supply of off-street parking within the precinct.

A breakdown of the smaller Council owned car parking areas is outlined in Table 9 below.

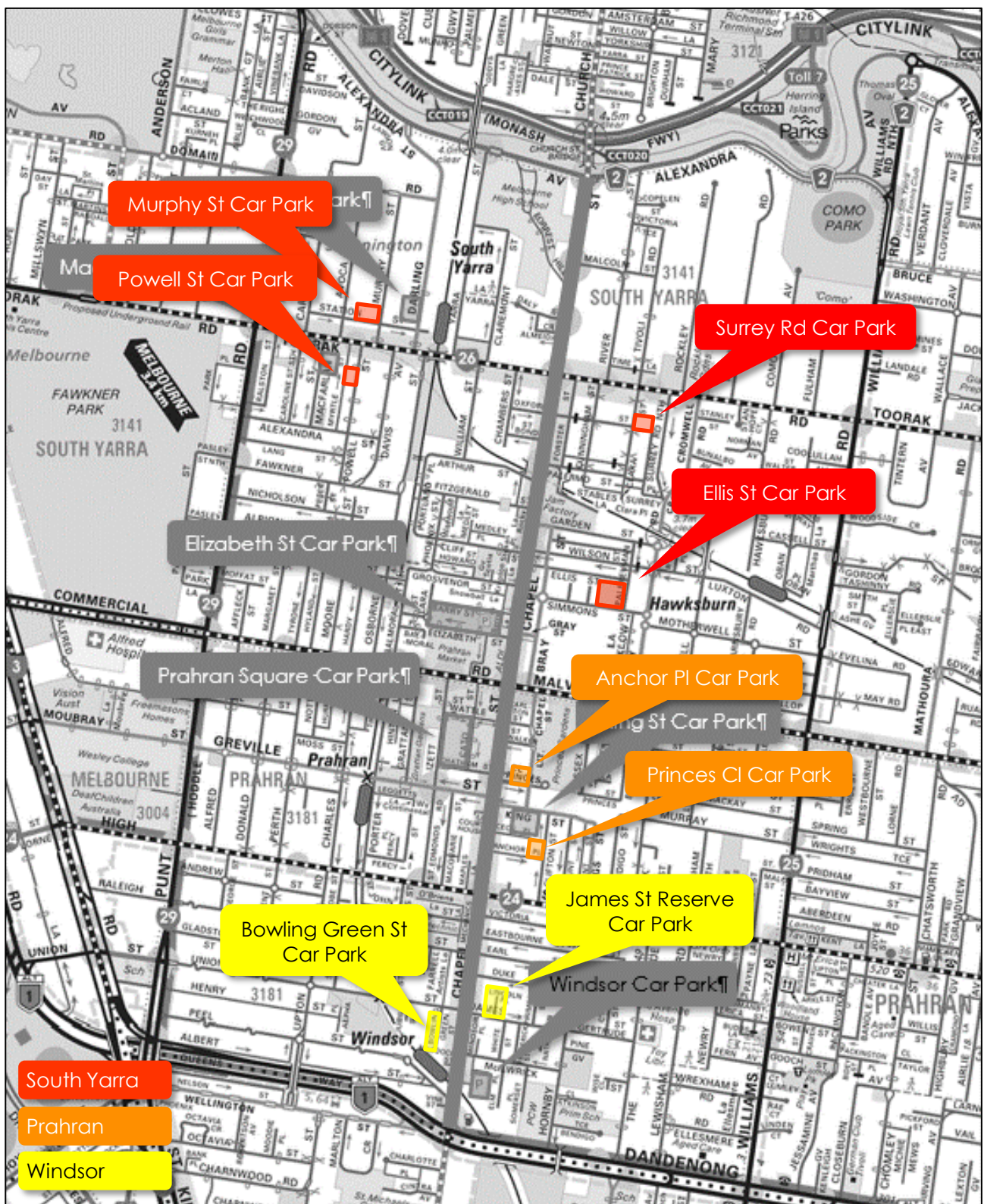
Table 9 Minor Council Off-Street Car Parks

<i>Precinct</i>	<i>Car Park Location</i>	<i>Car Parking Supply</i>
South Yarra	Ellis Street	38
	Murphy Street	25
	Powell Street	14
	Surrey Road	36
	Sub-Total	113 spaces
Prahran	Anchor Place	36
	Princes Close	50
	Sub-Total	86 spaces
Windsor	Bowling Green Street	17
	James Street Reserve	73
	Sub-Total	90 spaces
Total		289 spaces

Whilst no car parking surveys have been undertaken for these smaller off-street car parks, general observations made from aerial photography demonstrate these parking areas are well utilised during the day, which could be a result of the ease of access when compared with the major off-street car parks and the non-ticketed nature of the majority of the car parks.

A view of the location of the minor off-street Council car parks within the study area is shown in Figure 15 below.

Figure 15 Minor Council Off-Street Car Parking Areas



4.5 Privately Owned Off-Street Car Parking

There are a number of privately owned off-street car parks within the study, primarily located in South Yarra. The parking supply of each car park has been sourced via their respective website's and/or online parking information sites.

Parking within all privately owned off-street car parks is paid parking, with costs varying based on duration of stay as well as providing special early bird, night and weekend rates.

No occupancy information is currently available for the typical occupancy of the privately owned off-street car parks.

A breakdown of the privately owned off-street car parks is outlined in Table 10 below.

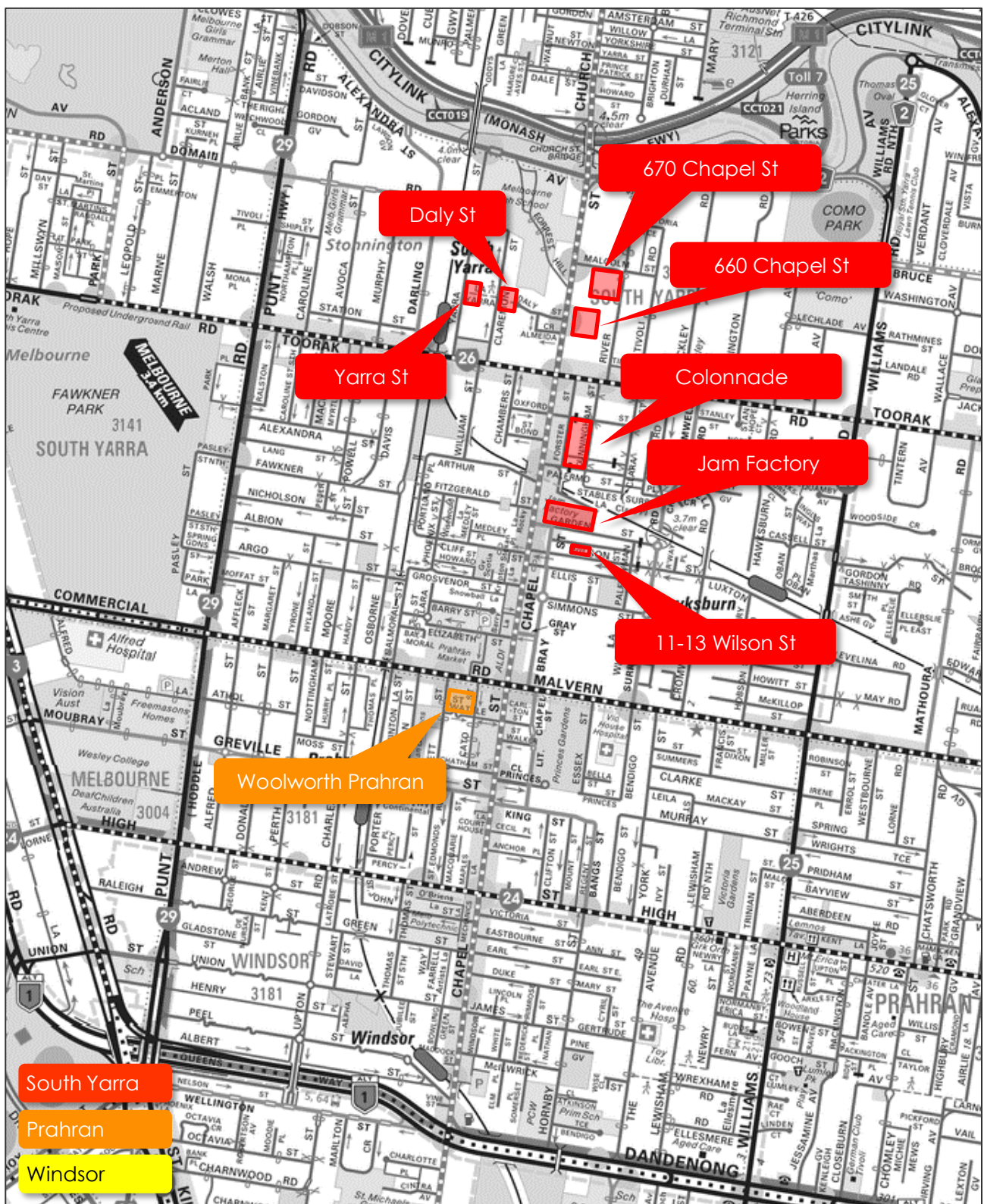
Table 10 Privately Owned Off-Street Car Parking

<i>Precinct</i>	<i>Car Parking</i>	<i>Car Parking Supply</i>
South Yarra	670 Chapel St (Woolworths South Yarra)	600
	660 Chapel St (Como Centre)	600
	Daly St (Care Park)	620
	Yarra St (Care Park)	100
	Colonnade Shopping Mall	370
	Jam Factory	970
	11-13 Wilson St	110
	Sub-Total	3,370 spaces
Prahran	Woolworths Prahran	130
	Sub-Total	130 spaces
Total		3,500 spaces

A view of the location of the privately owned off-street car parks within the study area is shown in Figure 16 below.

As previously mentioned, this is not representative of every single parking space in the study area as it does not include on-street parking along streets other than Chapel Street and other smaller private car parking areas. However, it is anticipated that this does capture the vast majority of spaces utilised to access the Chapel Street precinct.

Figure 16 Privately Owned Car Parking Locations



4.6 Precinct Car Parking Supply

Based on the above, the total car parking supply in the study area is detailed in Table 11 below.

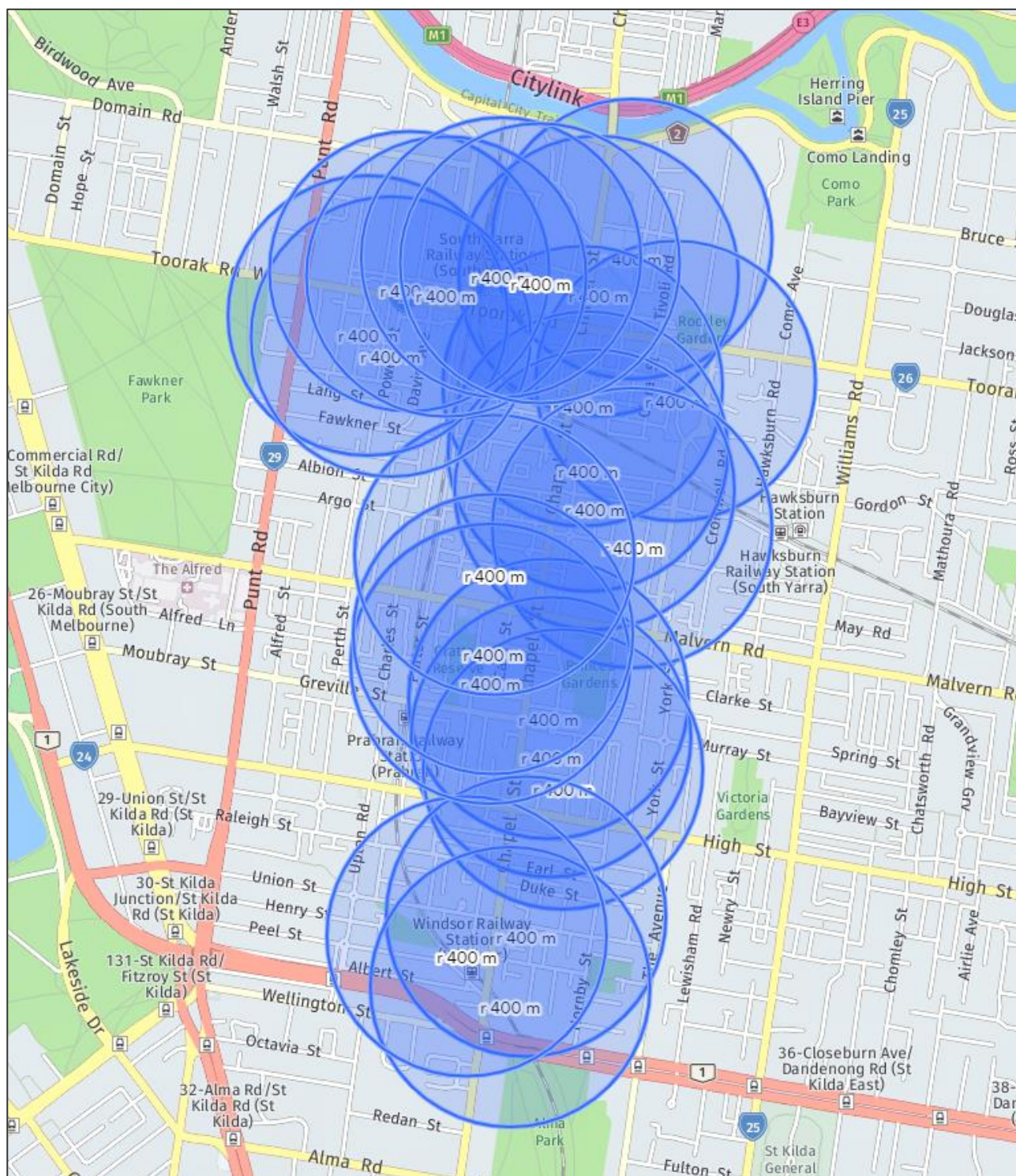
Table 11 Precinct Car Parking Supply

Precinct	Car Parking	Car Parking Supply
South Yarra	On-Street	149
	Major Off-Street (Council)	180
	Minor Off-Street (Council)	113
	670 Chapel St (Woolworths South Yarra)	600
	660 Chapel St (Como Centre)	600
	Daly St (Care Park)	620
	Yarra St (Care Park)	100
	Colonnade Shopping Mall	970
	Jam Factory	370
	11-13 Wilson St (private)	110
	Sub-Total	3,812 spaces
Prahran	On-Street	141
	Major Off-Street	1,472
	Minor Off-Street	86
	Woolworths Prahran	130
	Sub-Total	1,829 spaces
Windsor	On-Street	108
	Major Off-Street	155
	Minor Off-Street	90
	Sub-Total	353 spaces
Total		5,994 spaces

4.7 Pedestrian Catchment

Figure 17 shows a 400-metre radius around each of the off-street car parks (shown previously in Figure 12) to illustrate the pedestrian catchment of all off-street car parks. A 400-metre radius allows for a 5-minute walk from each of the car parking area based on a walking speed of 5km/h.

Figure 17 Pedestrian Car Park Catchment – 400m Radius



5 TRAFFIC

5.1 General

onemilegrid will undertake an independent traffic analysis of the impacts of any proposed alterations to Chapel Street between Alexandra Avenue and Dandenong Road on the surrounding road network. In order to establish a baseline for any future analysis, an existing conditions analysis for the intersections has been undertaken which utilises turning movement surveys in July 2022.

5.2 Intersection Volumes

In order to ascertain recent and accurate data, **onemilegrid** commissioned Trans Traffic Surveys to conduct traffic movement counts for the following 24 intersections that surround the subject site:

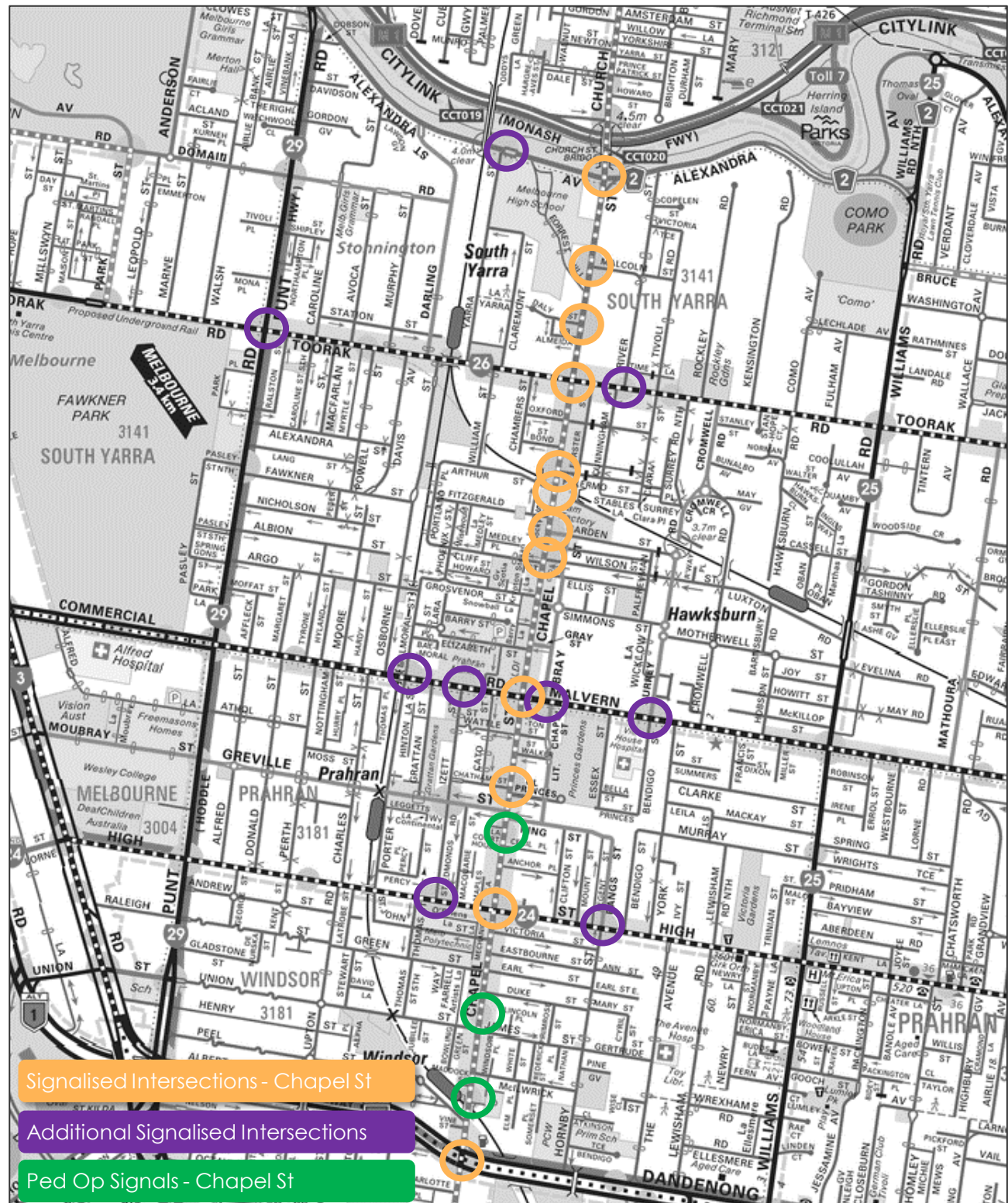
- Chapel Street Intersections (15 total):
 - + Alexandra Avenue;
 - + Malcolm Street;
 - + Daly Street;
 - + Toorak Road;
 - + Palermo Street;
 - + Arthur Street;
 - + Garden Street;
 - + Wilson Street;
 - + Commercial Road / Malvern Road;
 - + Chatham St;
 - + High Street;
 - + Dandenong Road; and
 - + Three (3) pedestrian operated signals.
- Additional intersections adjacent to Chapel Street within Study Area (9 total):
 - + Alexandra Avenue / Yarra Street;
 - + Toorak Road / Punt Road;
 - + Toorak Road / River Street;
 - + Commercial Road / Balmoral Street / Porter Street;
 - + Commercial Road / Izett Street;
 - + Malvern Road / Bray Street;
 - + Malvern Road / Surrey Road / Bendigo Street;
 - + High Street / St. Edmonds Road; and
 - + High Street / Bangs Street / Hornby Street.

The counts were undertaken and recorded in 15-minute blocks on the days and times as outlined in Table 12 and a view of the 24 intersections surveyed is shown in Figure 18.

Table 12 Turning Movement Survey Days & Times

Day	Date	Time 1	Time 2	Interval
Wednesday	20/07/2022	7am – midday	3:30pm – 6:30pm	15 minutes
Friday	22/07/2022	11am – 2pm	4pm – midnight	15 minutes
Saturday	23/07/2022	11am – 2pm	4pm – midnight	15 minutes

Figure 18 Surveyed Intersections



The survey results for each intersection were compiled together to determine the overall network peak hours instead of individual intersection peak hours. As such, it was determined that the peak hours of the overall network occurred during the following times:

- Weekday AM Commuter Peak: Wednesday, 8am – 9am
- Weekday PM Commuter Peak: Wednesday, 5:15pm – 6:15pm
- Retail Trade Peak: Saturday, 11:30am – 12:30pm

The results of the surveys during the peak hours are attached in Appendix B.

5.3 Intersection Operation

5.3.1 General

To assess the operation of the intersection the traffic volumes have been input into SIDRA Intersection, a traffic modelling software package.

The SIDRA Intersection software package has been developed to provide information on the capacity of an intersection with regard to a number of parameters. Those parameters considered relevant are, Degree of Saturation (DoS), 95th Percentile Queue, and Average Delay as described below.

Table 13 SIDRA Intersection Parameters

Parameter	Description														
Degree of Saturation (DoS)	The DoS represents the ratio of the traffic volume making a particular movement compared to the maximum capacity for that particular movement. The value of the DoS has a corresponding rating depending on the ratio as shown below.														
	<table><tr><th>Degree of Saturation</th><th>Rating</th></tr><tr><td>Up to 0.60</td><td>Excellent</td></tr><tr><td>0.61 – 0.70</td><td>Very Good</td></tr><tr><td>0.71 – 0.80</td><td>Good</td></tr><tr><td>0.81 – 0.90</td><td>Fair</td></tr><tr><td>0.91 – 1.00</td><td>Poor</td></tr><tr><td>Above 1.00</td><td>Very Poor</td></tr></table>	Degree of Saturation	Rating	Up to 0.60	Excellent	0.61 – 0.70	Very Good	0.71 – 0.80	Good	0.81 – 0.90	Fair	0.91 – 1.00	Poor	Above 1.00	Very Poor
	Degree of Saturation	Rating													
	Up to 0.60	Excellent													
	0.61 – 0.70	Very Good													
	0.71 – 0.80	Good													
	0.81 – 0.90	Fair													
	0.91 – 1.00	Poor													
Above 1.00	Very Poor														
It is noted that whilst the range of 0.91 – 1.00 is rated as 'poor', it is acceptable for critical movements at an intersection to be operating within this range during high peak periods, reflecting actual conditions in a significant number of suburban signalised intersections.															
Average Delay (seconds)	Average delay is the time delay that can be expected for all vehicles undertaking a particular movement in seconds.														
95th Percentile (95%ile) Queue	95%ile queue represents the maximum queue length in metres that can be expected in 95% of observed queue lengths in the peak hour														
Level of Service (LoS)	A qualitative measure of sign-controlled intersection performance, based on the average delay experienced by a driver. A LoS of A, B, C or D suggests acceptable intersection performance. A LoS of E or F suggests mitigation measures or upgrades may be warranted.														

For the signalised intersections, the signal phasing input into SIDRA Intersection for each individual intersection was sourced from VicRoads' OP SHEETS, which provide the existing signal phasing for each signalised intersection across Victoria. Therefore, the existing conditions analysis will utilise the existing signal phasing at each of the intersections.

When analysing intersections in SIDRA, intersections can be analysed as a standalone single intersection or as part of a Network Model of intersections that are coordinated together to better understand the spread of congestion between upstream and downstream intersections. The intersections surveyed for the investigation were combined into one Network Model within the SIDRA Intersection software.

A network phase time of between 70 and 80 seconds was adopted for all signalised intersections across the three peak hours investigated.

5.3.2 Degree of Saturation – All Intersections

A summary of results is provided in Table 14 below, with the full SIDRA outputs for each intersection is attached in Appendix C. It is noted that in the summary shown in Table 15 below, only the DoS for intersection as a whole is presented, rather than all data outputs such as level of service (LoS), queues and delays or a breakdown of each movement at the intersection. This allows for a high-level and clear comparison of the performance of each intersection across all three peak hours.

Refer to full detailed results attached in Appendix C for the LoS, 95th percentile queues and average delays experienced by motorists for each movement at all intersections across the three peak hours.

Table 14 SIDRA Analysis Results – Existing Conditions

Intersection		Degree of Saturation (DoS)		
		AM Commuter Peak	PM Commuter Peak	Retail Trade Peak
1	Yarra St / Alexandra Ave	0.64	0.71	0.68
2	Chapel St / Alexandra Ave	0.95	0.94	0.93
3	Chapel St / Malcolm St	0.94	0.81	0.85
4	Chapel St / Daly St	0.42	0.35	0.35
5	Punt Rd / Toorak Rd	1.00	0.96	0.89
6	Chapel St / Toorak Rd	0.59	0.49	0.71
7	River St / Toorak Rd	0.44	0.41	0.54
8	Chapel St / Palermo St	0.52	0.58	0.42
9	Chapel St / Arthur St	0.54	0.35	0.54
10	Chapel St / Garden St	0.69	0.46	0.51
11	Chapel St / Wilson St	0.21	0.21	0.23
12	Balmoral St / Commercial St	0.49	0.57	0.84
13	Izett St / Commercial St	0.57	0.85	0.81
14	Chapel St / Malvern Rd	0.51	0.54	0.65
15	Bray St / Malvern Rd	0.57	0.37	0.36
16	Surrey St / Malvern Rd	0.89	0.88	0.88
17	Chapel St / Chatham St	0.41	0.49	0.56
18	St. Edmonds Rd / High St	0.38	0.74	0.83
19	Chapel St / High St	0.73	0.94	0.98
20	Bangs St / High St	0.74	0.70	0.97
21	Chapel St / Dandenong Rd	0.91	0.90	0.89

As shown above, all intersections across all peak hours with the exception of the Punt Road / Toorak Road intersection were operating within their respective capacities under existing conditions.

The Punt Road / Toorak Road intersection is currently operating essentially at capacity, with a DoS at 1.00 and 0.96 in the morning commuter and evening commuter peak hours respectively. As outlined in Table 13, whilst the DoS range of 0.91 – 1.00 is rated as 'poor', it is acceptable for critical movements at an intersection to be operating within this range during high peak periods. The result of the analysis is expected for a busy road such as Punt Road in any peak hour.

6 DESIGN HOUR TRAFFIC CONDITIONS

To determine the appropriateness of the intersection volumes collected, it is important to explore a number of standard considerations that may impact the data collection whereby a subsequent adjustment may be required (road construction, road crashes, weather events, volumes not returning to pre-pandemic levels, etc.).

onemilegrid has adopted the methodology outlined in the Department of Transport's *Transport Modelling Guidelines, Volume 5: Intersection Modelling (June 2021)* to determine what is known as the 'design hour'.

The design hour is a model peak hour that determines an adjustment factor that can be applied to surveyed intersection volumes to provide more robust operation conditions, rather than relying solely on several survey days during the same week. The design hour helps adjust traffic volumes from a 'regular peak hour' to the '30th busiest peak hour of the year' – making it a more critical analysis of an intersections operation.

The intersection of Chapel Street / High Street was selected as the reference intersection to determine the design hour based on its location within the network.

The design hour for the peak periods has been identified by utilising SCATs data to derive the total vehicle volumes of the reference intersection on every day of 2019 (last pre-COVID year). The daily traffic volumes on each day of the year were then ranked from 1 (busiest day) to 365 (least busy day), with the 30th busiest day selected (as per DoT guidelines).

The through volume of traffic along Chapel Street from each of the three network design hours (AM Commuter Peak, PM Commuter Peak & Retail Trade Peak) on the 30th busiest day of 2019 were then compared against the SCATs volumes during those same peak hours on the peak survey date in July 2022 to determine the difference between the survey date and the design hour.

The analysis outlined above determined the design hour adjustment factor for each of the three peak hours, which are outlined in Table 15 below.

Table 15 Design Hour – Peak Hour Traffic Volume Adjustment Factor

Peak Hour	Design Hour Adjustment Factor
Weekday Morning Commuter Peak	1.4%
Weekday Evening Commuter Peak	6.1%
Retail Trade Peak	6.0%

To assess the operation of the intersections under the design hour conditions, the surveyed traffic volumes at all intersections were factored-up by the design hour adjustment factor and input into SIDRA Intersection, a traffic modelling software package.

The DoS for each intersection is outlined in Table 16 below. The results show that a total of four (4) intersections will exceed capacity during at least one of the peak hours under the design hour conditions.

Refer to full detailed results attached in Appendix D for the LoS, 95th percentile queues and average delays experienced by motorists for each movement at all intersections.

Table 16 SIDRA Analysis Results – Design Hour Conditions

Intersection		Degree of Saturation (DoS)					
		AM Commuter Peak		PM Commuter Peak		Retail Trade Peak	
		Existing	Design Hr	Existing	Design Hr	Existing	Design Hr
1	Yarra St / Alexandra Ave	0.64	0.64	0.71	0.77	0.68	0.72
2	Chapel St / Alexandra Ave	0.95	0.92	0.94	1.12	0.93	0.90
3	Chapel St / Malcolm St	0.94	0.86	0.81	0.86	0.85	0.90
4	Chapel St / Daly St	0.42	0.43	0.35	0.37	0.35	0.38
5	Punt Rd / Toorak Rd	1.00	1.02	0.96	0.89	0.89	0.92
6	Chapel St / Toorak Rd	0.59	0.57	0.49	0.53	0.71	0.77
7	River St / Toorak Rd	0.44	0.44	0.41	0.44	0.54	0.57
8	Chapel St / Palermo St	0.52	0.54	0.58	0.60	0.42	0.46
9	Chapel St / Arthur St	0.54	0.56	0.35	0.38	0.54	0.58
10	Chapel St / Garden St	0.69	0.70	0.46	0.49	0.51	0.54
11	Chapel St / Wilson St	0.21	0.21	0.21	0.23	0.23	0.25
12	Balmoral St / Commercial St	0.49	0.49	0.57	0.61	0.84	0.90
13	Izett St / Commercial St	0.57	0.58	0.85	0.90	0.81	0.86
14	Chapel St / Malvern Rd	0.51	0.51	0.54	0.58	0.65	0.67
15	Bray St / Malvern Rd	0.57	0.58	0.37	0.40	0.36	0.43
16	Surrey St / Malvern Rd	0.89	0.92	0.88	0.90	0.88	0.91
17	Chapel St / Chatham St	0.41	0.42	0.49	0.52	0.56	0.59
18	St. Edmonds Rd / High St	0.38	0.38	0.74	0.82	0.83	0.93
19	Chapel St / High St	0.73	0.76	0.94	0.99	0.98	1.03
20	Bangs St / High St	0.74	0.76	0.70	0.74	0.97	0.87
21	Chapel St / Dandenong Rd	0.91	0.92	0.90	1.35	0.89	0.87

Some intersections may see an improvement in performance (despite increased traffic volumes) as a result of changes to the phase timing or lane utilisations, which may change slightly from existing conditions analysis in order to improve the performance of the network as a whole. This is something the SIDRA Network model does on its own to balance out the performance of each leg at any given intersection.

7 PEDESTRIANS & CYCLISTS

7.1 Peak Hour Volumes

As part of the traffic surveys undertaken (outlined in Section 5.1), pedestrian and bicycle counts were also undertaken at each of the 24 intersections across the three (3) survey days.

The survey results for each intersection were compiled together to determine the overall network peak hours for pedestrians and cyclists. As such, it was determined that the peak hours of the overall network occurred during the following times:

- Pedestrians:
 - + Weekday AM Peak: Wednesday, 8:15am – 9:15am
 - + Weekday PM Peak: Friday, 5pm – 6pm
 - + Retail Trade Peak: Saturday, 12:15pm – 1:15pm
- Cyclists:
 - + Weekday AM Peak: Wednesday, 8am – 9am
 - + Weekday PM Peak: Wednesday, 5:15pm – 6:15pm

Pedestrian volumes were highest at the intersection of Chapel Street / Toorak Road in both the weekday morning and afternoon peak hours, whereas on the Saturday during the retail trade peak hour pedestrian volumes were highest at the intersection Chapel Street / Malvern Road / Commercial Road. Pedestrian volumes as a whole across the study area were observed to be at their highest during the middle of the day on a Friday and Saturday as well as on a weekday evening between 5pm and 6pm.

The cyclist volumes indicate that the primary route through the study area is north-south along Chapel Street, which majority of vehicles headed northbound (towards the city) in the morning peak hour and then southbound (away from the city) during the afternoon peak hour.

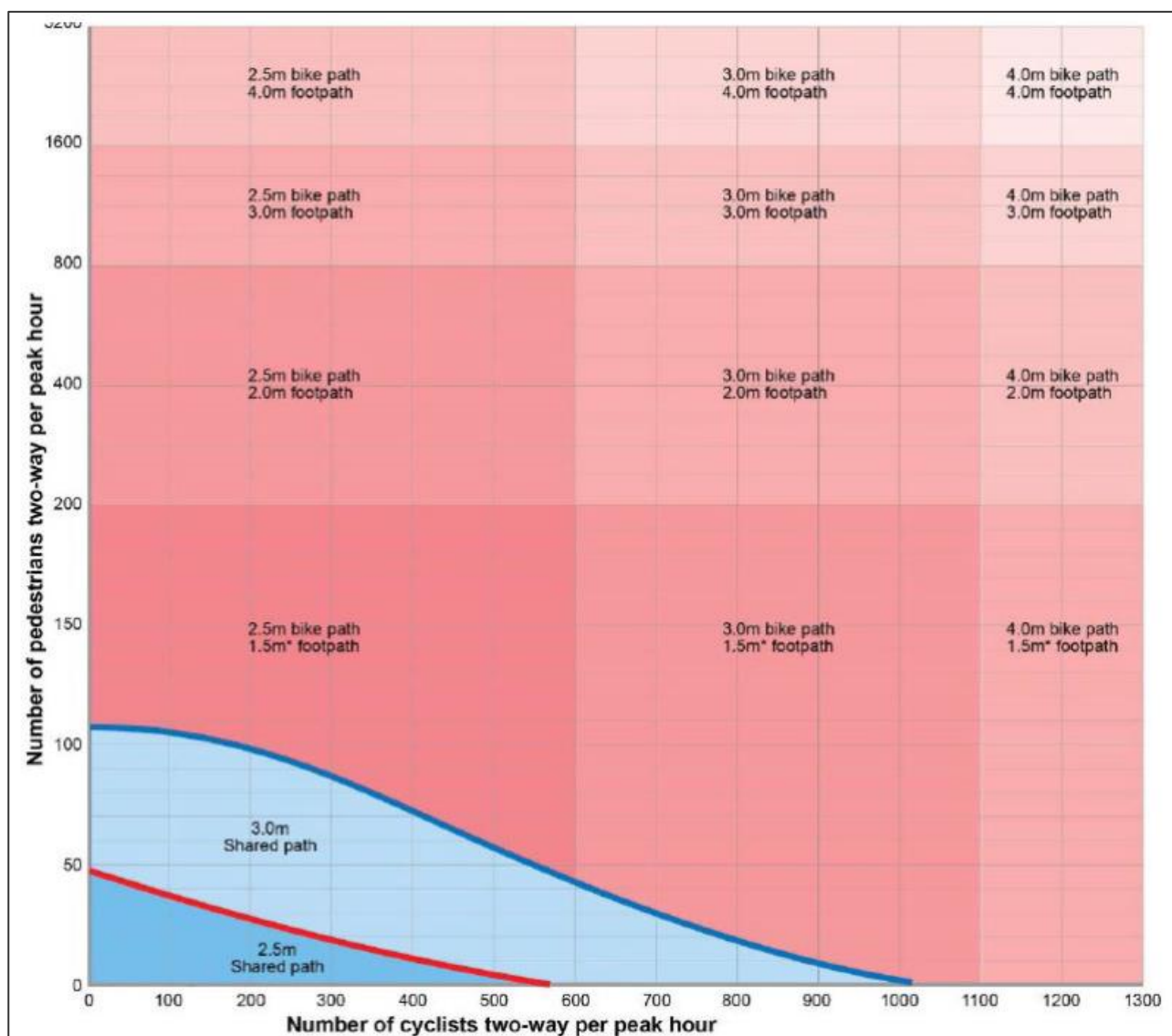
The results of the surveys for pedestrians and cyclists during the peak hours are attached in Appendix E and Appendix F.

7.2 Pedestrian Footpath Widths

The appropriateness of a footpath width is determined by how well it caters for the number of pedestrians on the footpath during the peak periods. As per *Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling*, the suggested minimum clear width (clear of signs, poles, seats, fences, street furniture, etc.) for a high volumes pedestrian footpath is 2.4m – but can be higher based on the volume of pedestrians.

The Austroads Guide also provides a graph illustrating the suggested path widths for both pedestrians and bicycles based on the volume of pedestrians and cyclists utilising the path. It is noted that this graph (Figure 19) is stated not be used for pedestrian paths only but does give a guide to the width of a pedestrian path required to cater for different pedestrian volumes during the peak hours.

Figure 19 Path Widths for 50/50 Directional Split



With Chapel Street seen to cater for up to 1,700 pedestrians between Malvern Road and High Street on the Saturday peak hour – the above graph suggests a clear path width of 4-metres could be required in some areas and between 2-3 metres in most other stretches within the study area.

Whilst the existing pedestrian network along Chapel Street does provide extended widths in certain areas (e.g. tram stop kerb outstand), the majority of Chapel Street is restricted due to outdoor dining, street furniture, signage, etc. and does not meet the suggested path widths to adequately cater for the observed pedestrian volumes.

7.3 Cyclist Lane Widths

A bicycle route is often judged in its entirety by the most stressful portion of the journey. As such, every effort should be made to ensure a continuous, low stress cycling route, suitable for use by cyclists of all ages and abilities.

A low-stress and comfortable route will ensure cycling is an attractive prospect and will encourage growth in cycling street usage by facilitating:

- Maintenance of speed when cycling;
- Safe passing distances by drivers;
- Space to ride two abreast;
- Space to ride clear of hazards (e.g., car doors opening, gutters); and
- Smooth riding surfaces.

As indicated in Figure 20, on-road segregated bicycle lanes are generally acceptable when daily traffic volumes are no more than 5,000 vehicles per day and vehicle operation speeds are between 30km/h and 50km/h. Figure 21 suggests protected on-road bicycle lanes are suitable when vehicle operating speeds are between 30 km/h and 60km/h regardless of the vehicle volumes.

Alternatively, as shown in Figure 22, Sustrans suggests that physical segregation is appropriate for very high vehicle volume streets with vehicle speeds of up to 60km/h.

When reviewing the figures below it is worth noting that Chapel Street has a speed limit of 40km/h, carries in excess of 12,000 vehicles per day and over 1,000 vehicles during the peak hours in certain sections.

Figure 20 Cycling Aspects of Austroads Guide (Austroads, 2017)

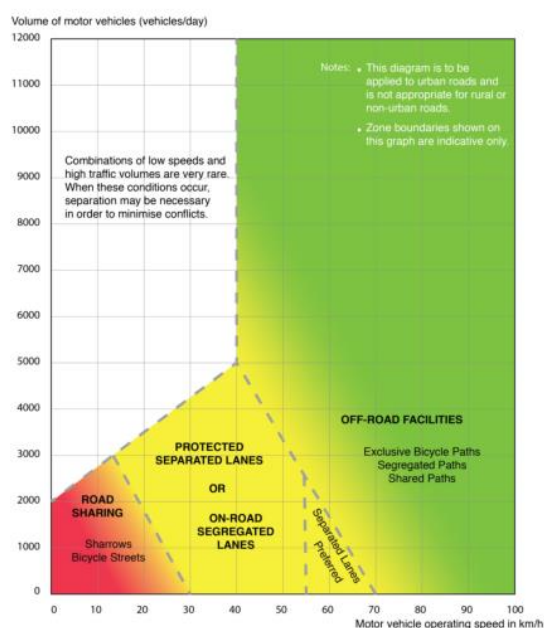


Figure 21 Movement and Place – The Cycling Guide (Victorian DoT, 2020)

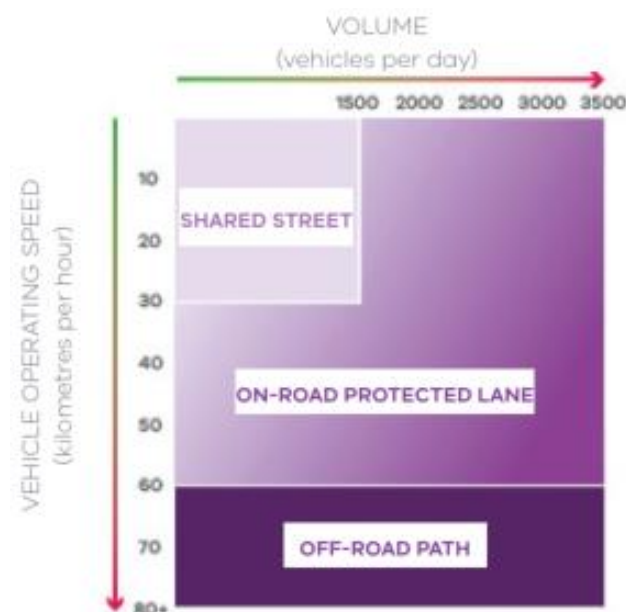
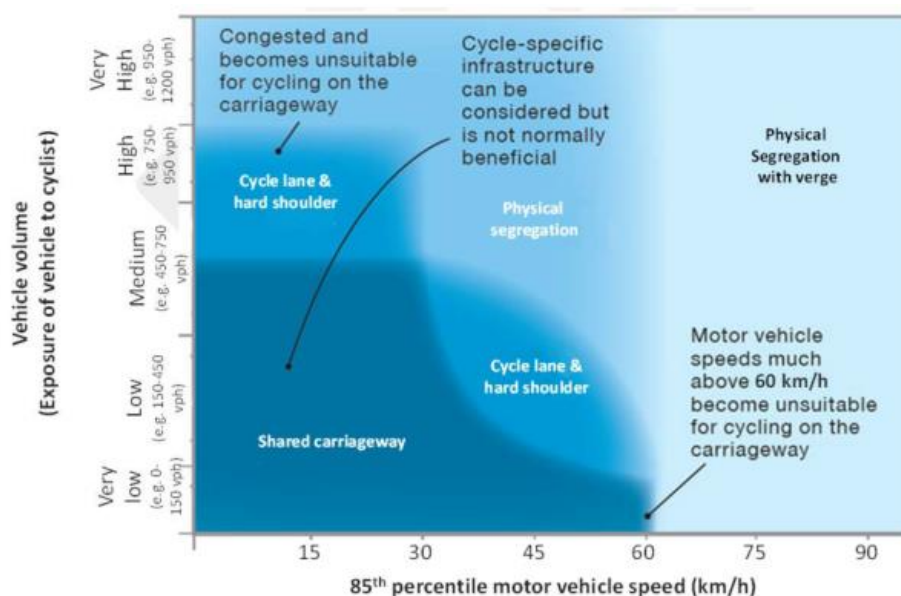


Figure 22 Guidance on the separation of cyclist and motor vehicles (Sustrans, 2014))



The above guidelines have general agreement that on-road cycle lanes should provide physical separation/protection for a 40km/h road with high vehicle volumes.

7.4 Cyclist Volumes Comparison

Department of Transport collect cyclist data at various strategic corridors across Melbourne on a daily basis. To provide a point of comparison, five other strategic cycle corridors that provide similar route profiles as Chapel Street were selected to compare the bicycle volumes on the same day as the surveys.

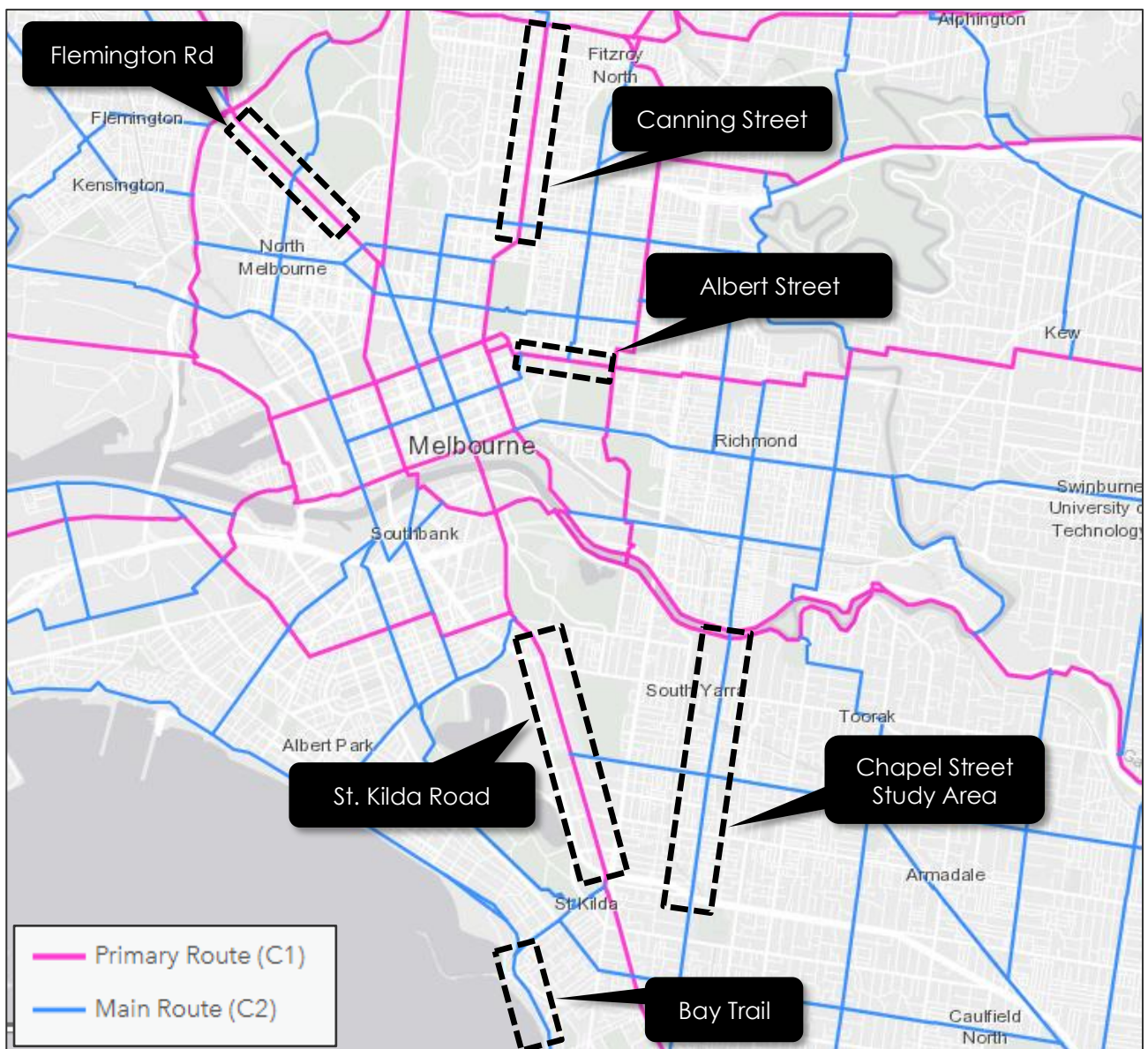
Unfortunately, the majority of locations where cyclist data is collected is along Primary Routes, and therefore there are very few Main Route volumes to compare against the Chapel Street volumes (which is also a Main Route). However, the four of the Primary Routes selected all provide on-road bike lanes and are not off-road cycle paths – providing a better comparison to Chapel Street. It is noted that the Bay Trail is an off-road cycle path but is nominated as a Main Route and in close proximity to Chapel Street and is therefore considered worthy of inclusion.

The five locations selected were:

- Canning Street in Carlton North – provides on-street bike lanes with conflict colour line marking at intersections and offsets from on-streets car parking spaces in some locations.
- Albert Street in East Melbourne – provides a protected kerbside bike lane, separated from the traffic lane by the car parking lane, with coloured pavement along the entire stretch of the bike lanes.
- Flemington Road in North Melbourne – provides on-street bike lanes located between the traffic lane and the kerbside parking lane in the service lane.
- St. Kilda Road in South Melbourne – provides on-street bike lanes located between the traffic lane and the kerbside parking lane in the service lane.
- Bay Trail in St. Kilda – off-road two-way bicycle path.

A view of the location of the comparison cycle corridors in relation to Chapel Street is provided in Figure 23 below.

Figure 23 Other Strategic Cycle Corridor Locations



Cyclist data has been sourced from Department of Transport for Canning Street, Albert Street, Flemington Road, St. Kilda Road and the Bay trail for the same time period as the surveys on Wednesday 20 July 2022 to compare against the through movements along Chapel Street. The results are provided in Table 17 below.

Table 17 Two-Way Bicycle Volumes

Strategic Cycle Corridor	Wednesday 20 July 2022	
	6:30am – 9:30am	3:30pm – 6:30pm
Chapel Street, South Yarra (near Palermo Street)	193	212
Canning Street, Carlton North (near Lee Street)	395	392
Albert Street, East Melbourne (near Morrison Place)	241	197
Flemington Road, North Melbourne (near Dryburgh Street)	146	150
St. Kilda Road, South Melbourne (near Coventry Street)	398*	398*
Bay Trail, St. Kilda (near 20 Marine Parade)	160	237

*Assumed two-way volume as only one-way volumes were available.

As shown above, Chapel Street provides similar two-way cycle movements to Albert Street (Primary Route) and the Bay Trail (off-road cycle path) as well providing greater movements than along Flemington Road (Primary Route). However, both Canning Street and St. Kilda Road routes experienced nearly double the cyclist numbers than that of Chapel Street on the survey date.

Appendix A Car Parking Profiles



CAR PARKING PROFILES – OVERALL STUDY AREA

Wednesday 20 July 2022

Figure A On-Street Car Parking Profile – Overall Study Area (Wednesday)

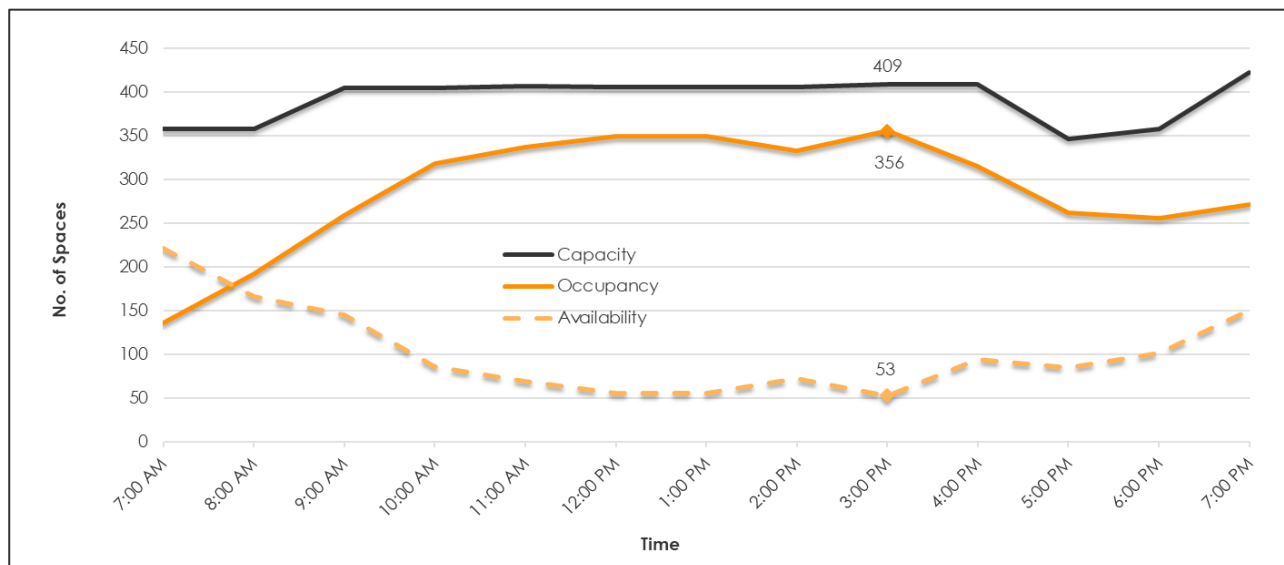
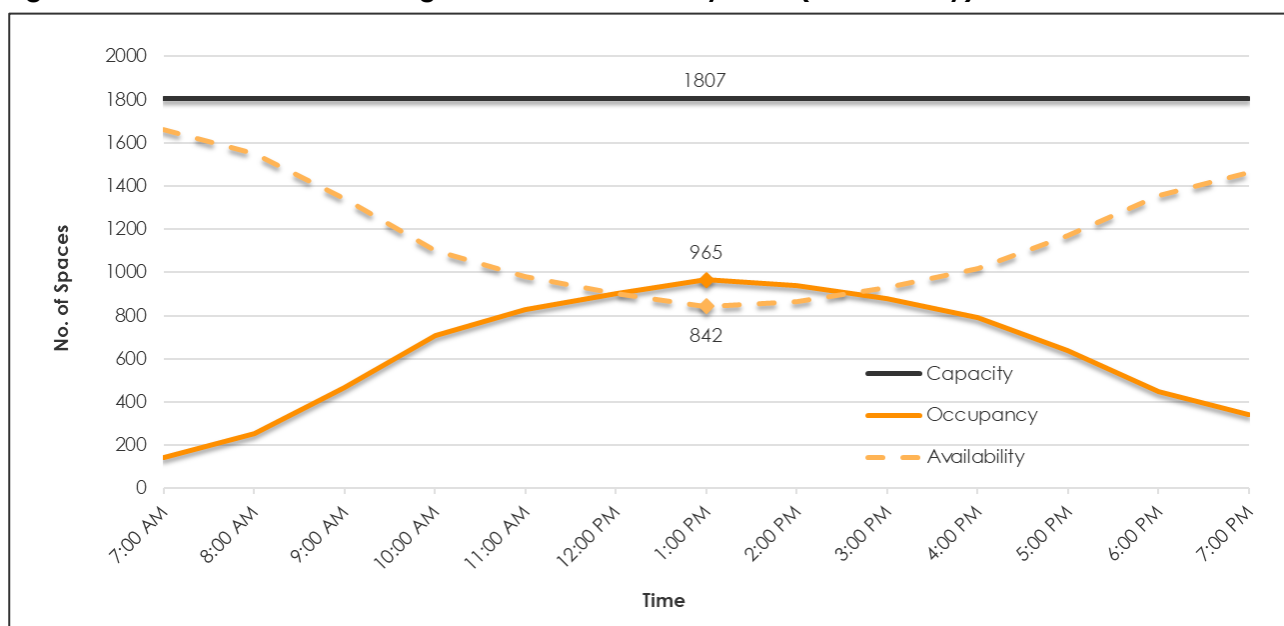


Figure B Off-Street Car Parking Profile – Overall Study Area (Wednesday)



Note: Six (6) major off-street car parks only.

Friday 22 July 2022

Figure C On-Street Car Parking Profile – Overall Study Area (Friday)

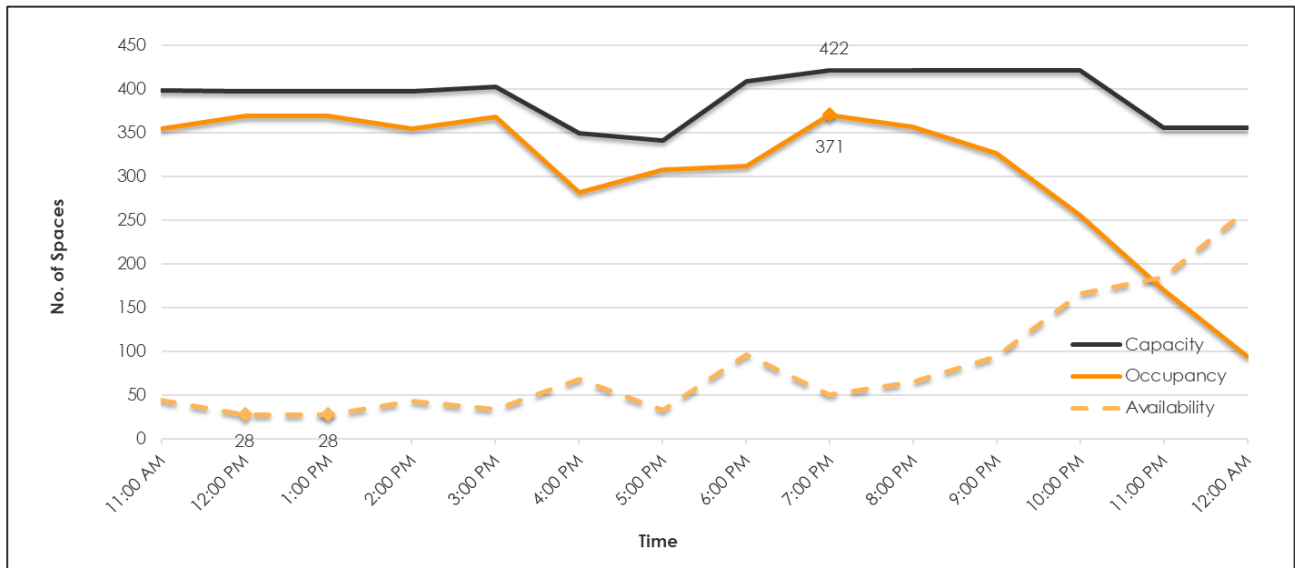
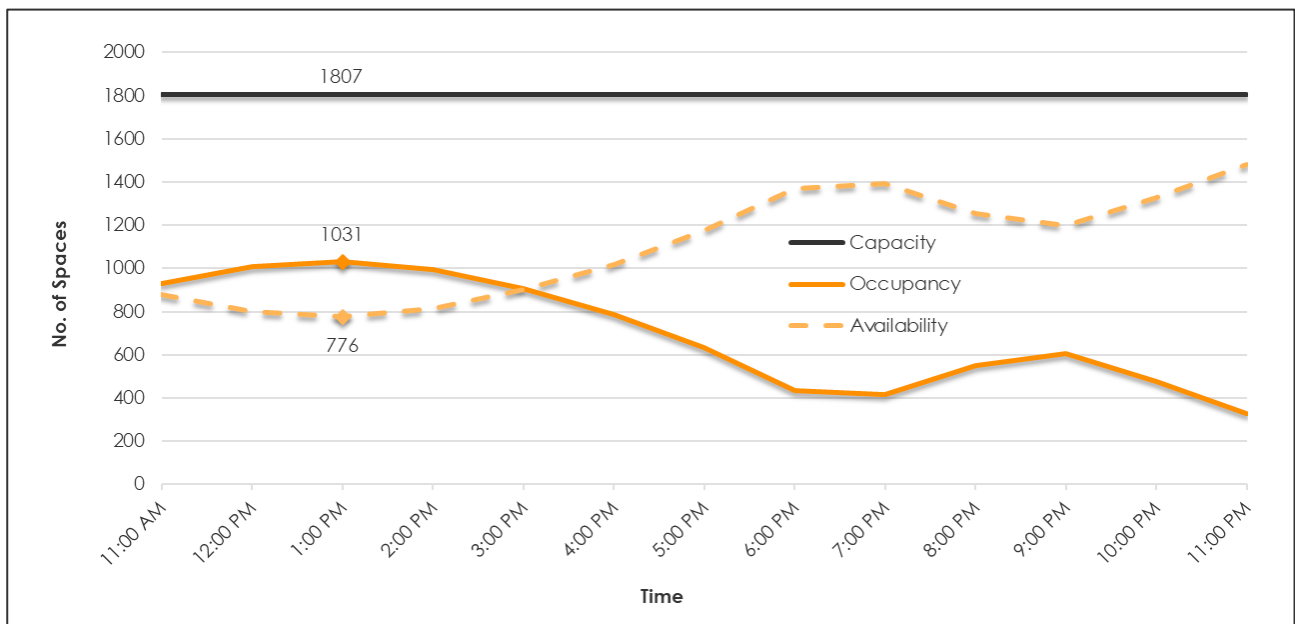


Figure D Off-Street Car Parking Profile – Overall Study Area (Friday)



Note: Six (6) major off-street car parks only.

Saturday 23 July 2022

Figure E On-Street Car Parking Profile – Overall Study Area (Saturday)

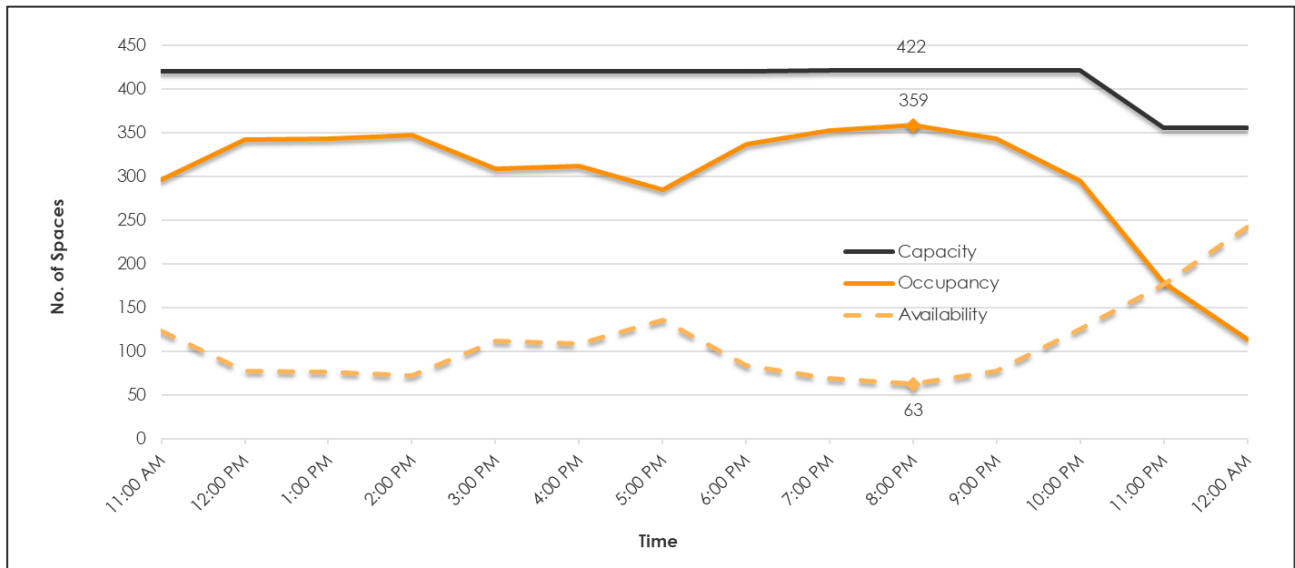
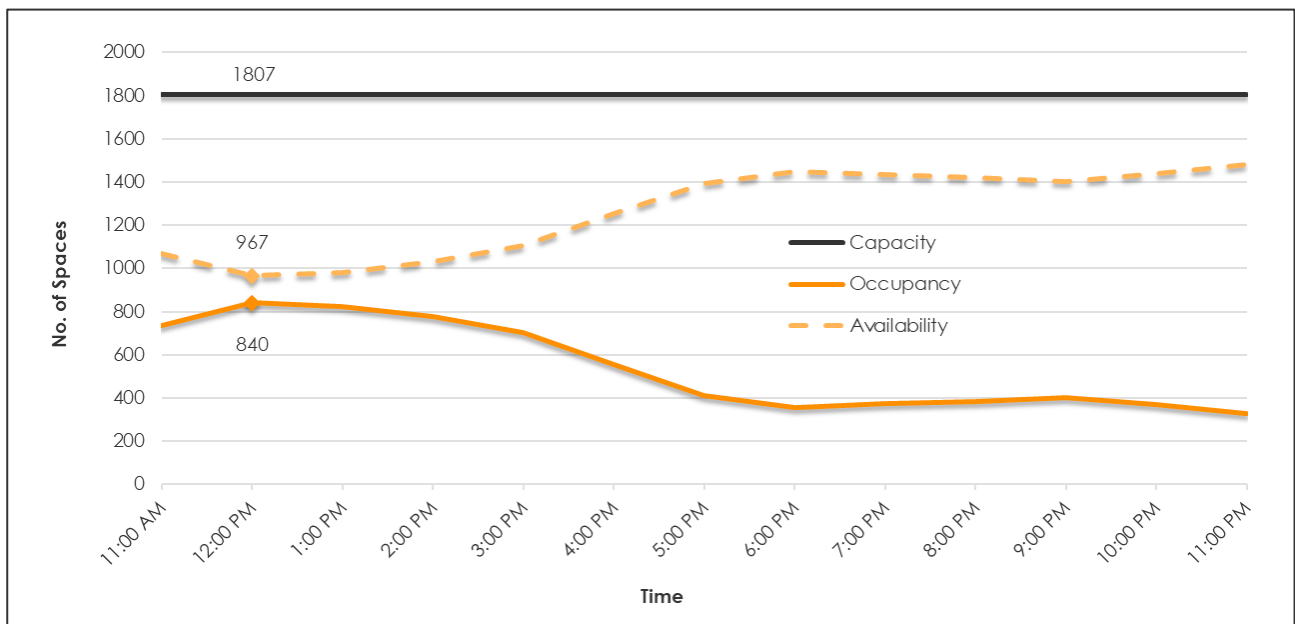


Figure F Off-Street Car Parking Profile – Overall Study Area (Saturday)



Note: Six (6) major off-street car parks only.

CAR PARKING PROFILES – SOUTH YARRA PRECINCT

Wednesday 20 July 2022

Figure G On-Street Car Parking Profile – South Yarra Precinct (Wednesday)

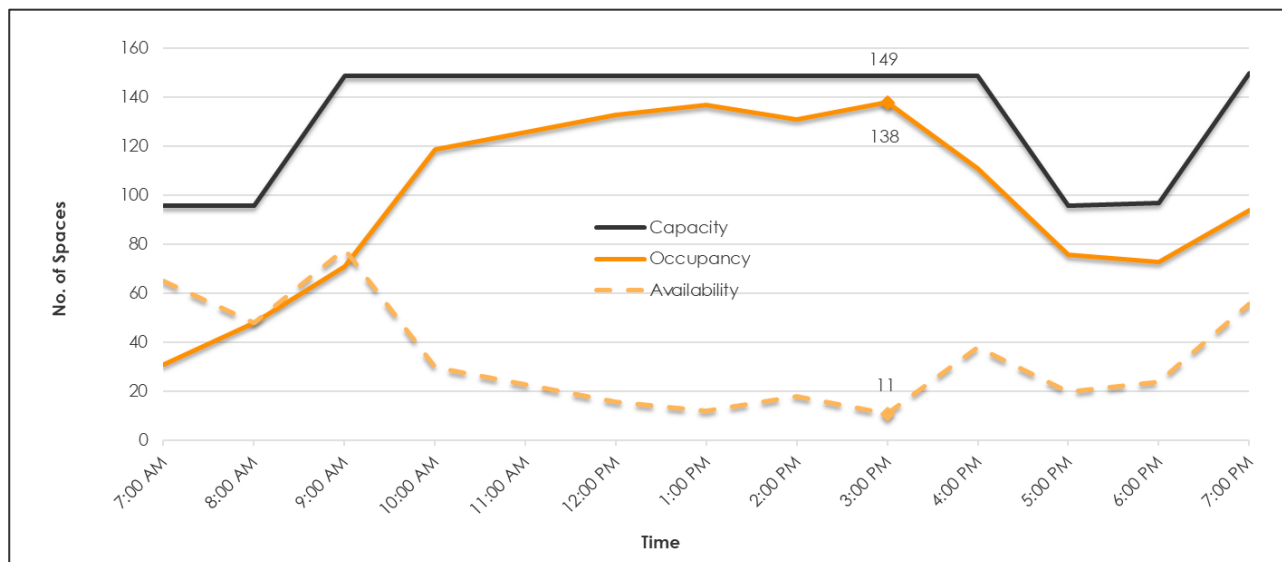
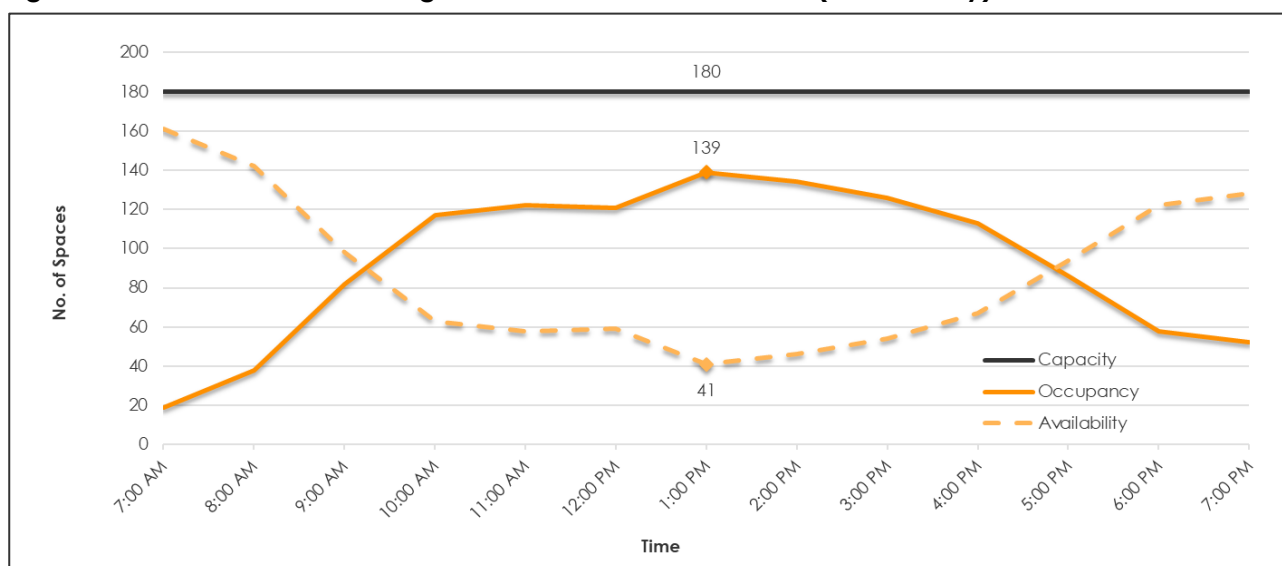


Figure H Off-Street Car Parking Profile – South Yarra Precinct (Wednesday)



Note: Six (6) major off-street car parks only.

Friday 22 July 2022

Figure I On-Street Car Parking Profile – South Yarra Precinct (Friday)

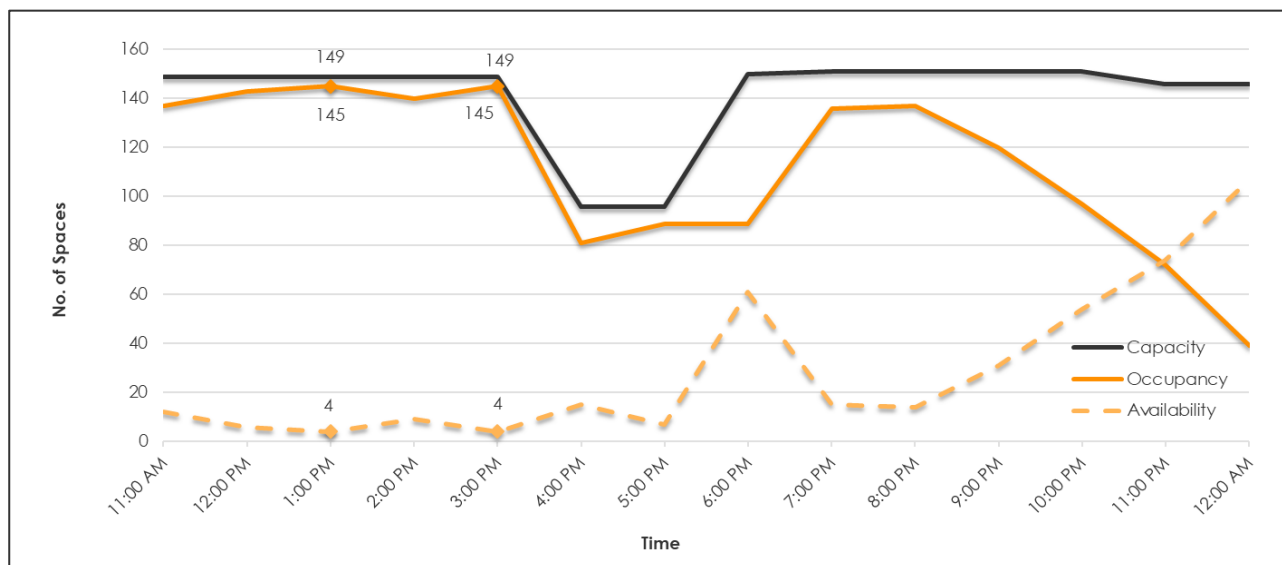
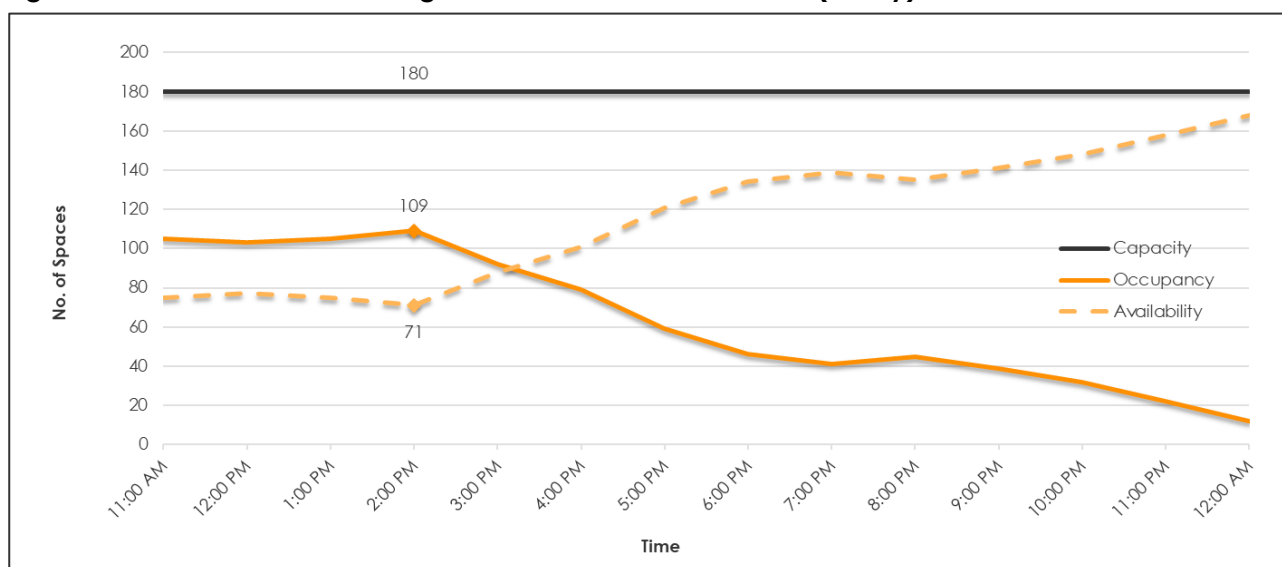


Figure J Off-Street Car Parking Profile – South Yarra Precinct (Friday)



Note: Six (6) major off-street car parks only.

Saturday 23 July 2022

Figure K On-Street Car Parking Profile – South Yarra Precinct (Saturday)

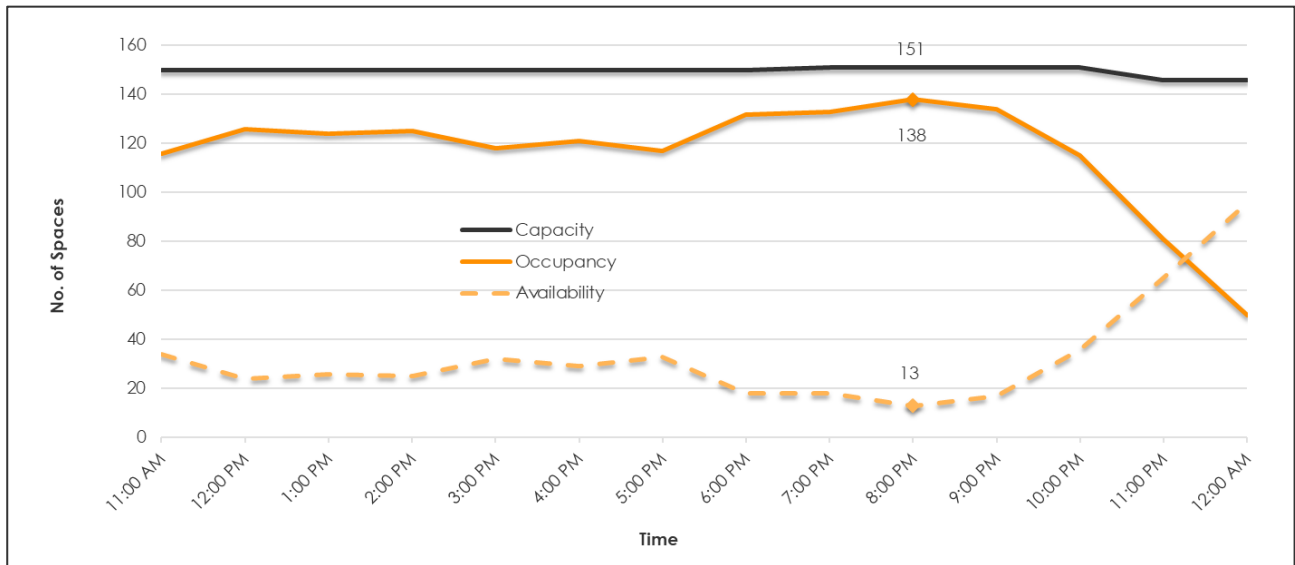
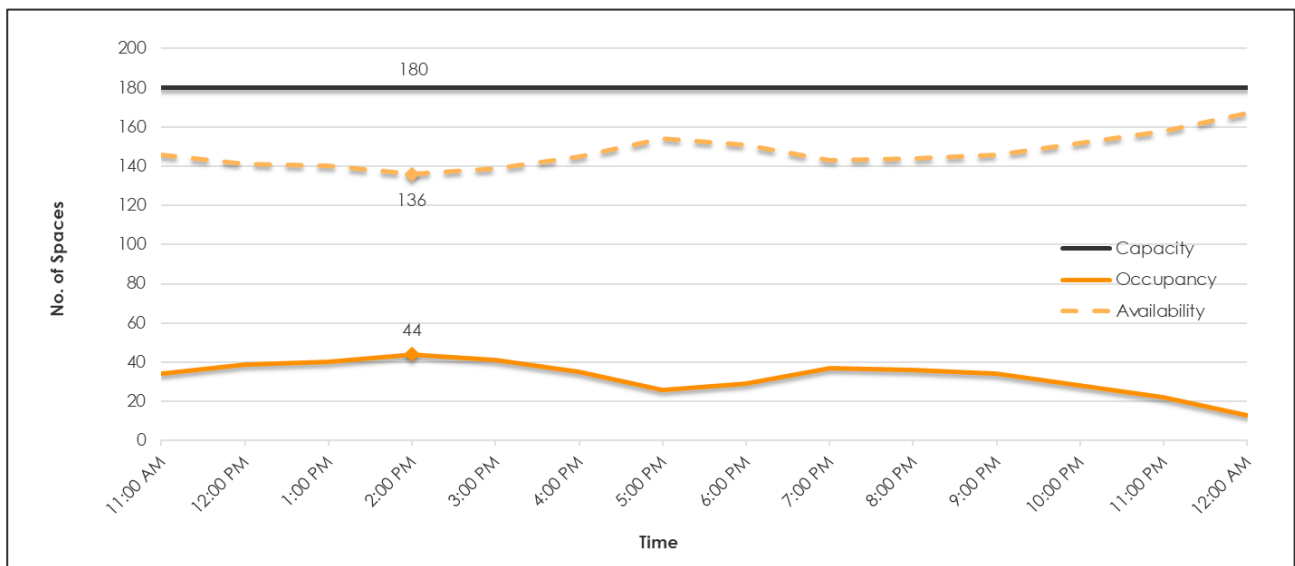


Figure L Off-Street Car Parking Profile – South Yarra Precinct (Saturday)



Note: Six (6) major off-street car parks only.

CAR PARKING PROFILES – PRAHRAN PRECINCT

Wednesday 20 July 2022

Figure M On-Street Car Parking Profile – Prahran Precinct (Wednesday)

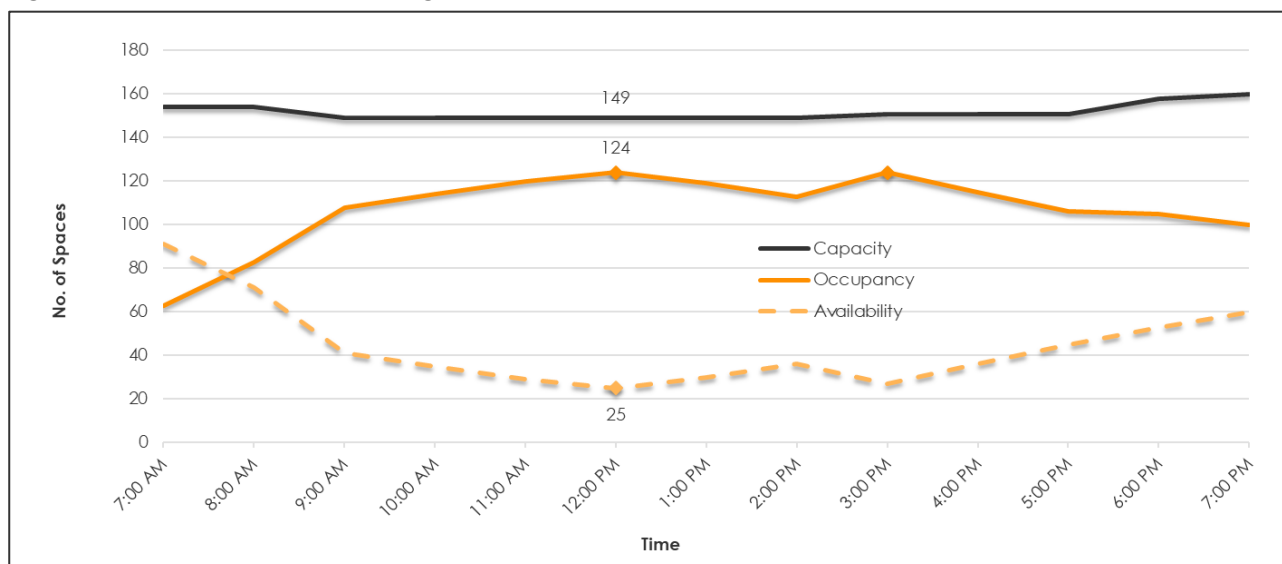
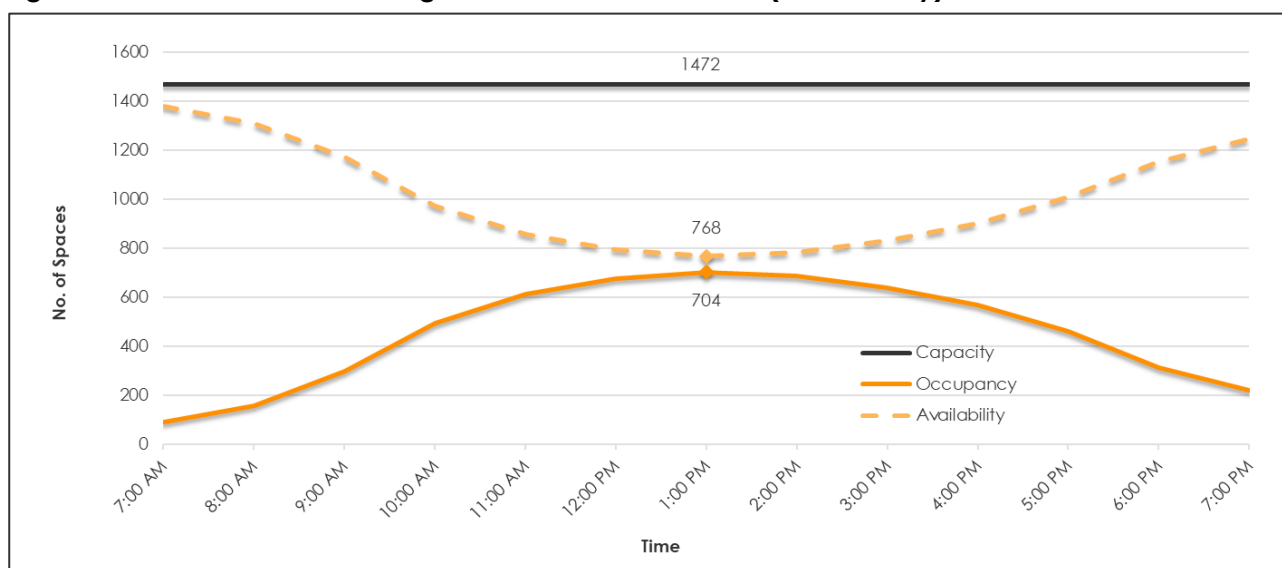


Figure N Off-Street Car Parking Profile – Prahran Precinct (Wednesday)



Note: Six (6) major off-street car parks only.

Friday 22 July 2022

Figure O On-Street Car Parking Profile – Prahran Precinct (Friday)

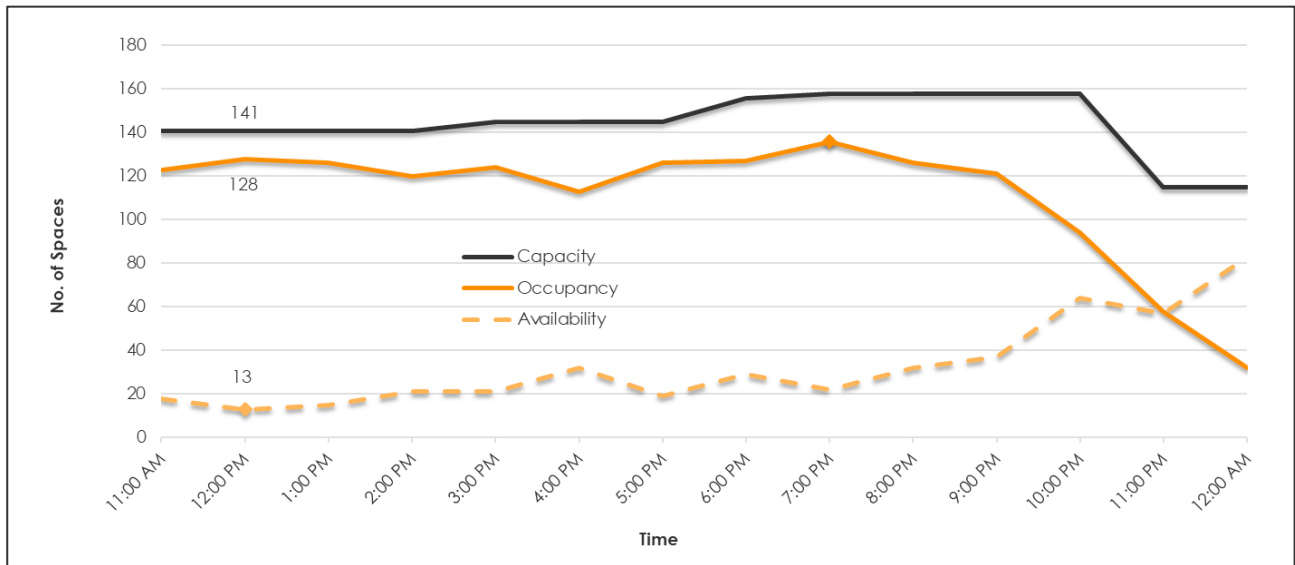
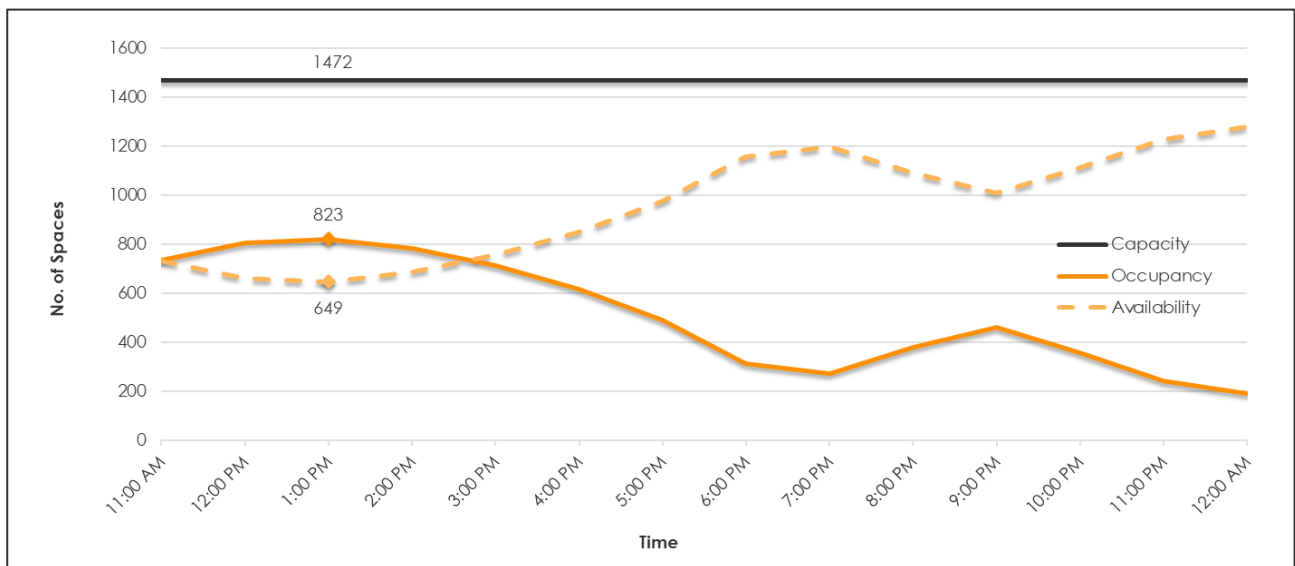


Figure P Off-Street Car Parking Profile – Prahran Precinct (Friday)



Note: Six (6) major off-street car parks only.

Saturday 23 July 2022

Figure Q On-Street Car Parking Profile – Prahran Precinct (Saturday)

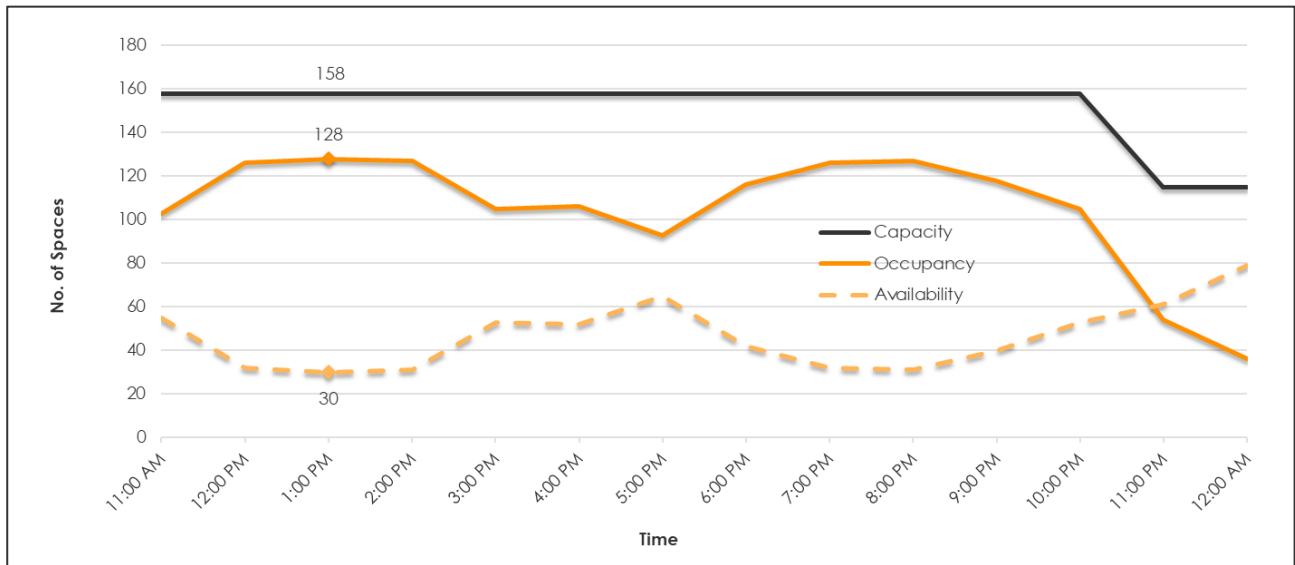
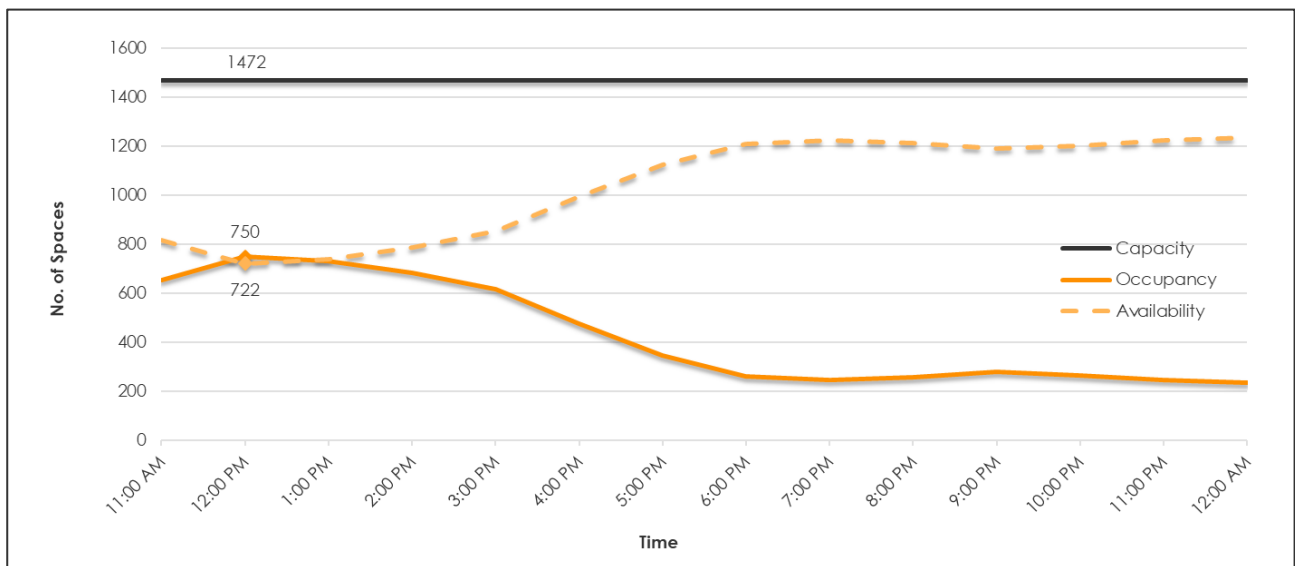


Figure R Off-Street Car Parking Profile – Prahran Precinct (Saturday)



Note: Six (6) major off-street car parks only.

CAR PARKING PROFILES – WINDSOR PRECINCT

Wednesday 20 July 2022

Figure S On-Street Car Parking Profile – Windsor Precinct (Wednesday)

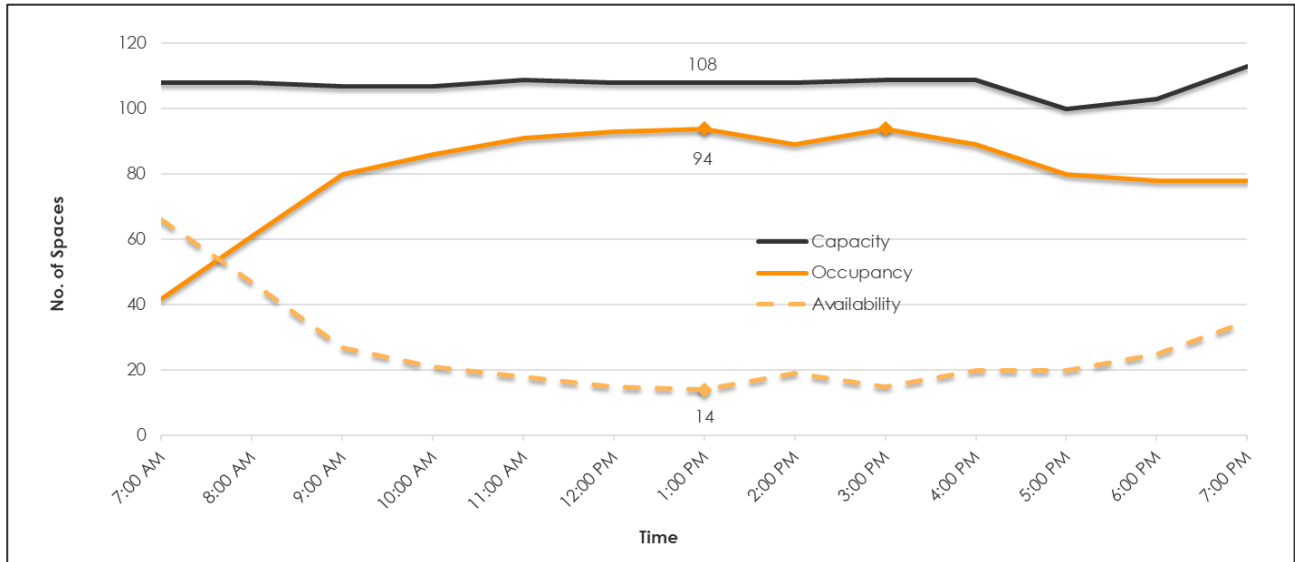
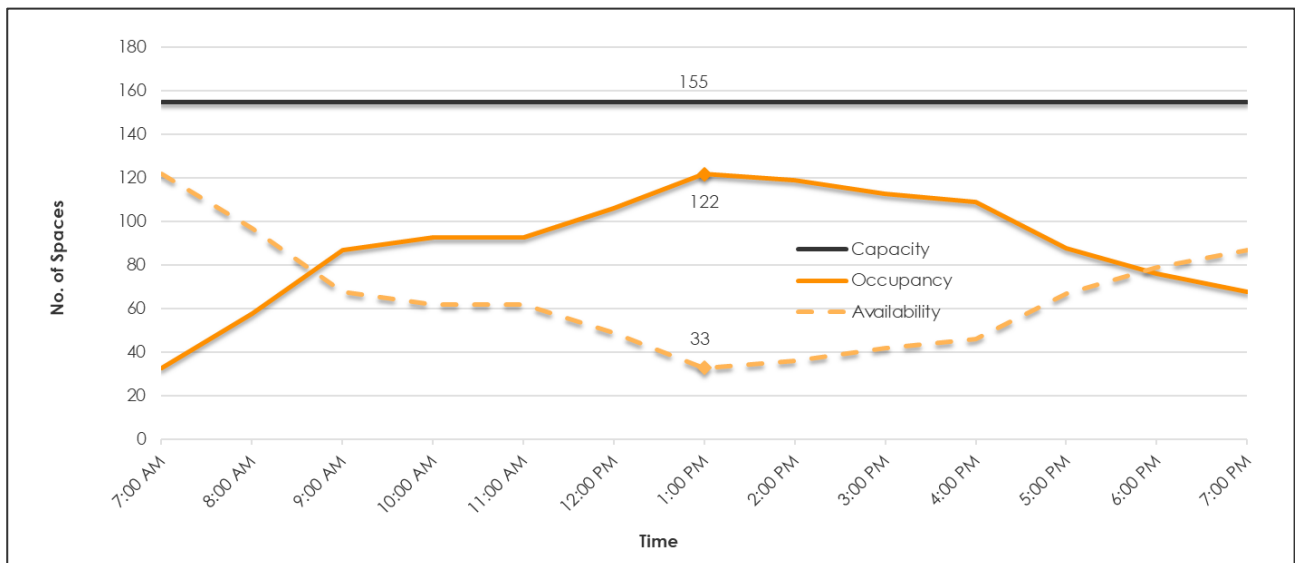


Figure T Off-Street Car Parking Profile – Windsor Precinct (Wednesday)



Note: Six (6) major off-street car parks only.

Friday 22 July 2022

Figure U On-Street Car Parking Profile – Windsor Precinct (Friday)

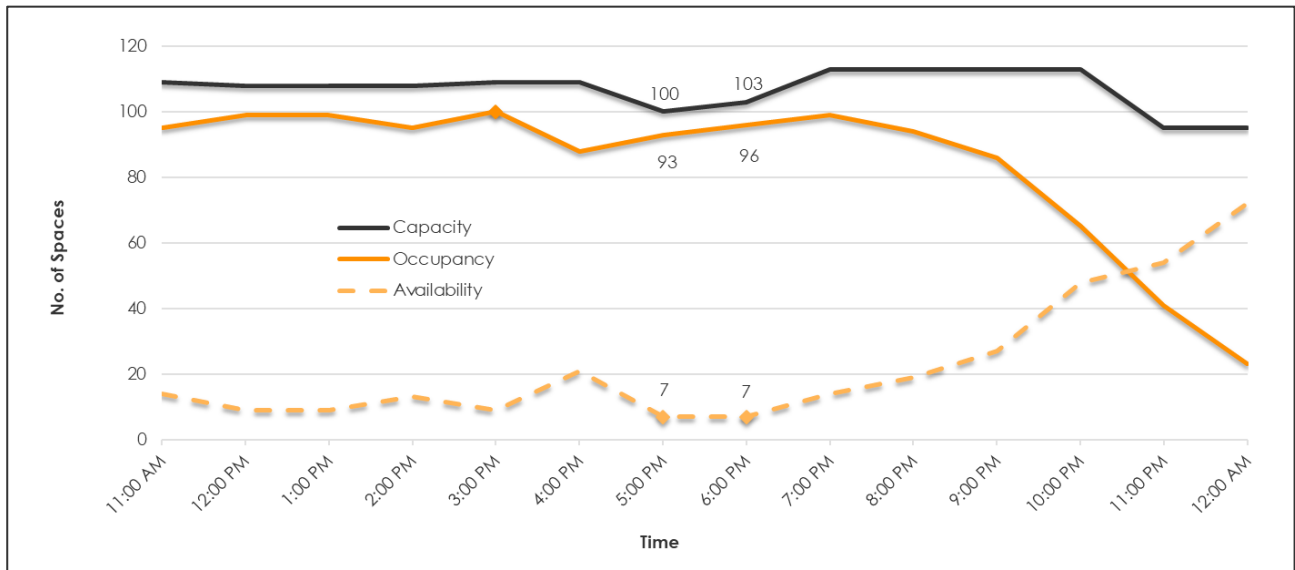
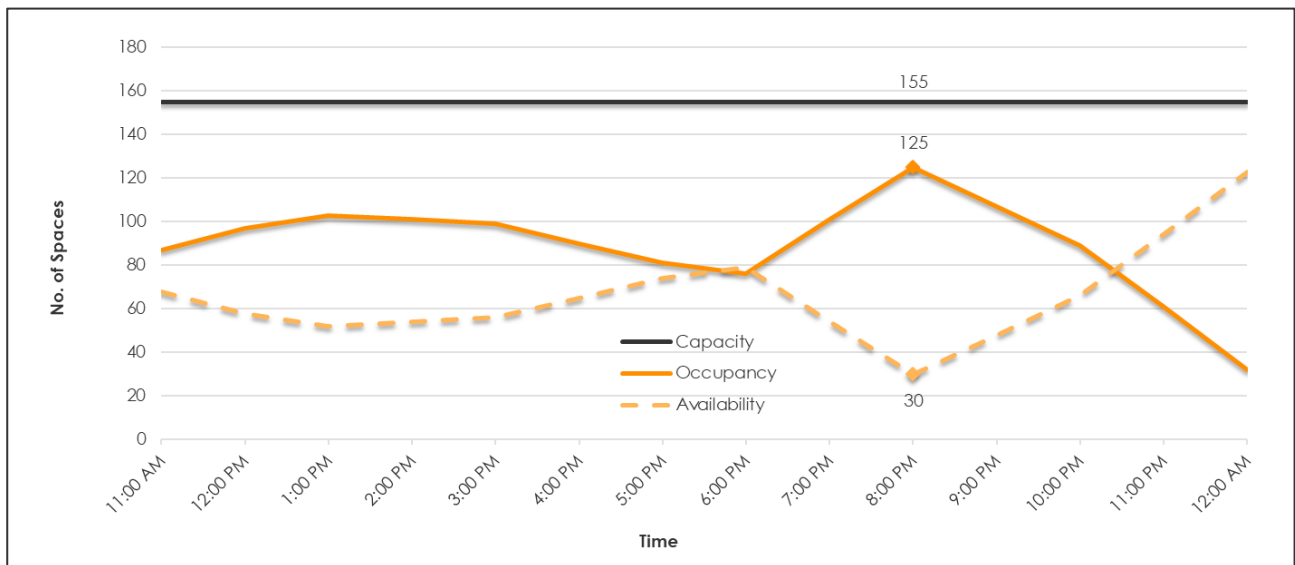


Figure V Off-Street Car Parking Profile – Windsor Precinct (Friday)



Note: Six (6) major off-street car parks only.

Saturday 23 July 2022

Figure W On-Street Car Parking Profile – Windsor Precinct (Saturday)

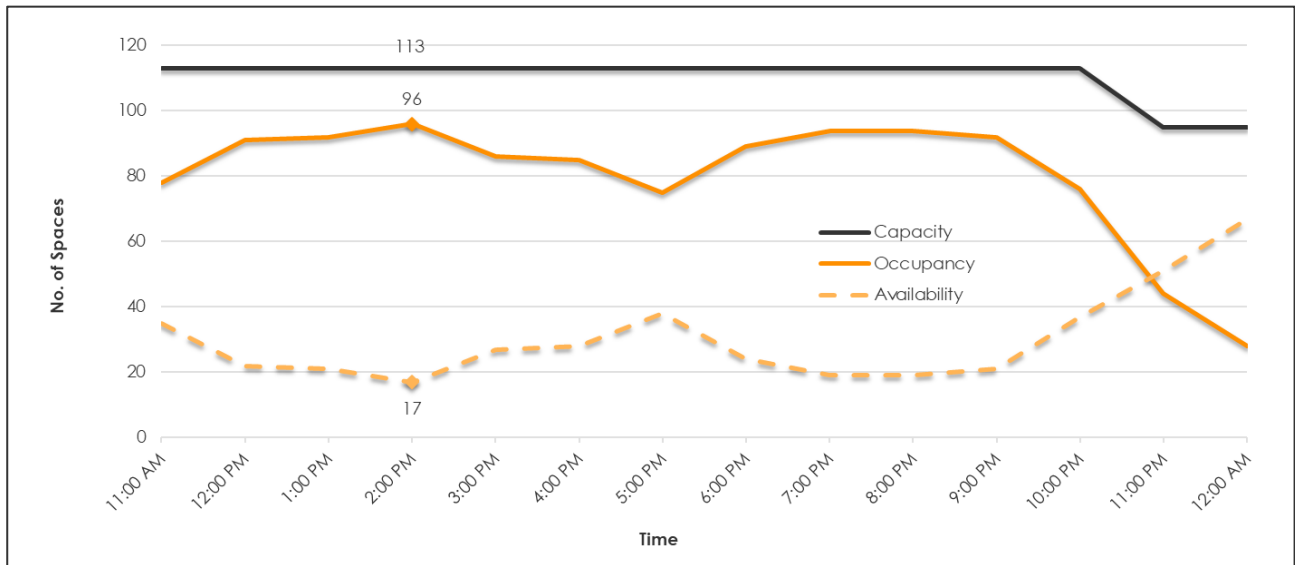
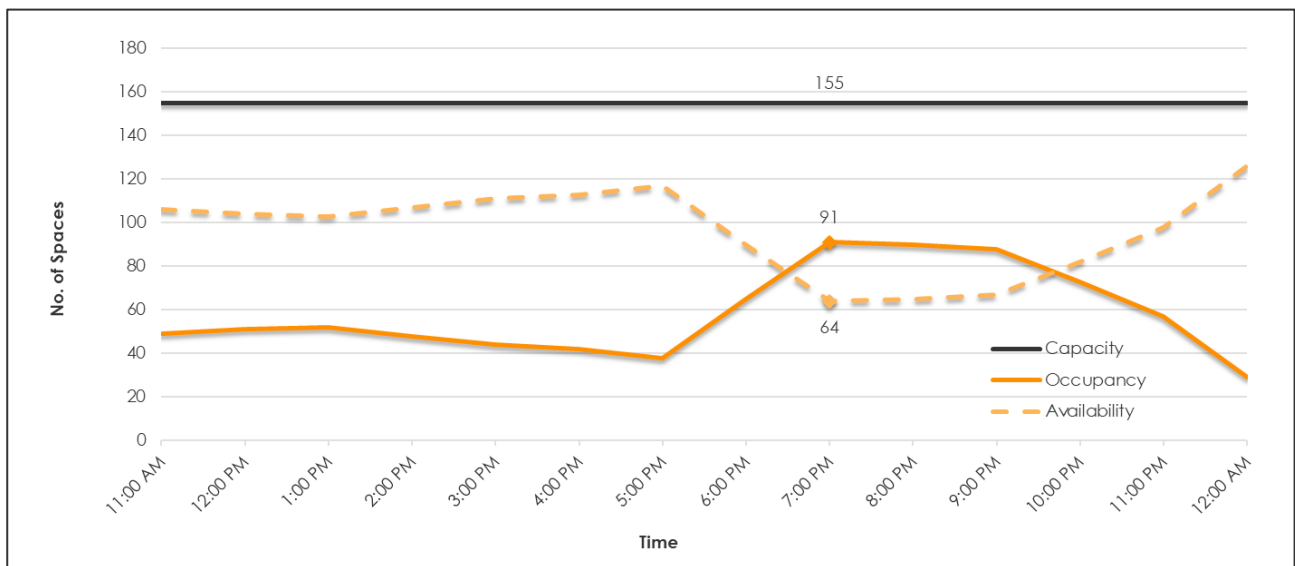


Figure X Off-Street Car Parking Profile – Windsor Precinct (Saturday)



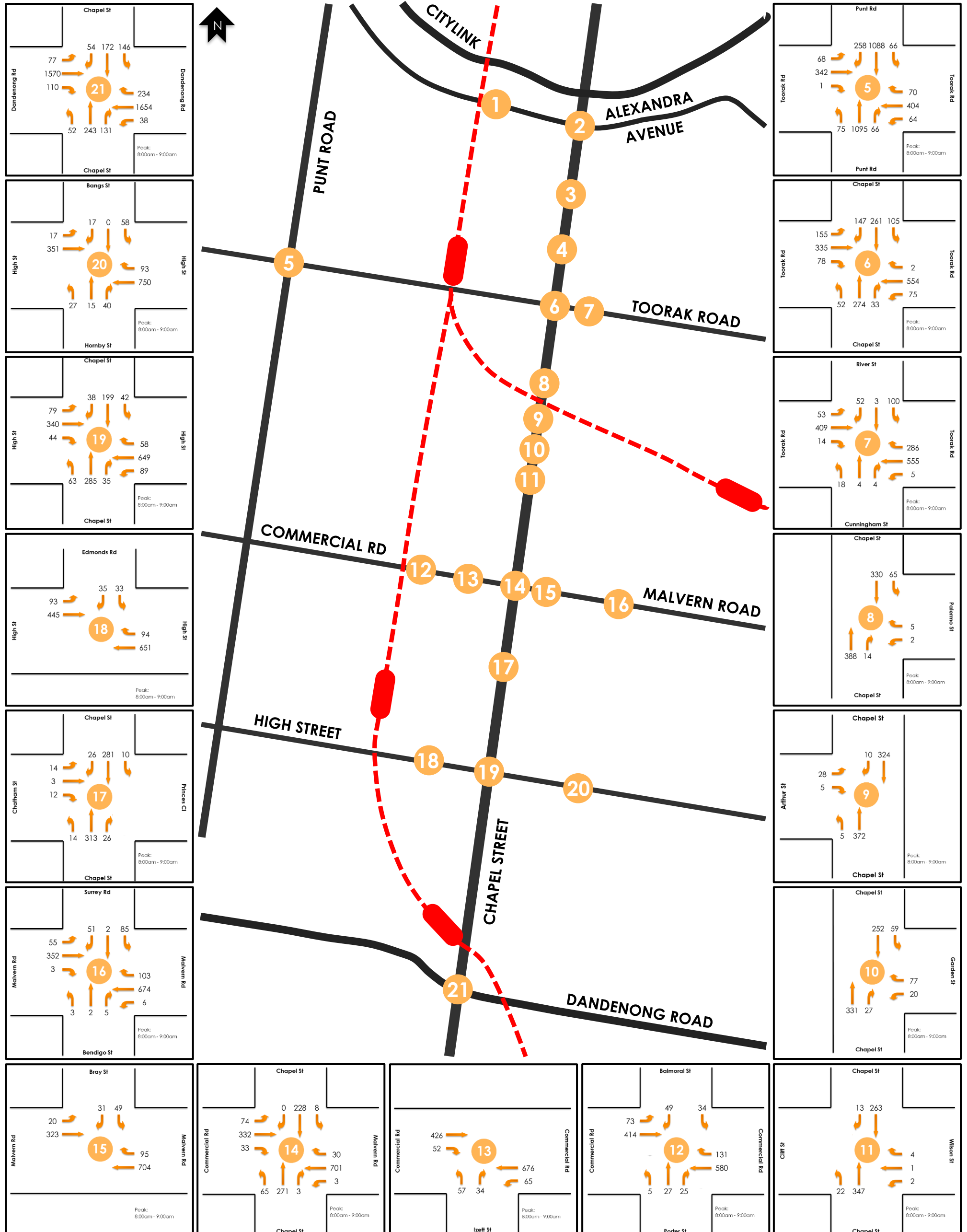
Note: Six (6) major off-street car parks only.

Appendix B Traffic Volumes – Existing Conditions



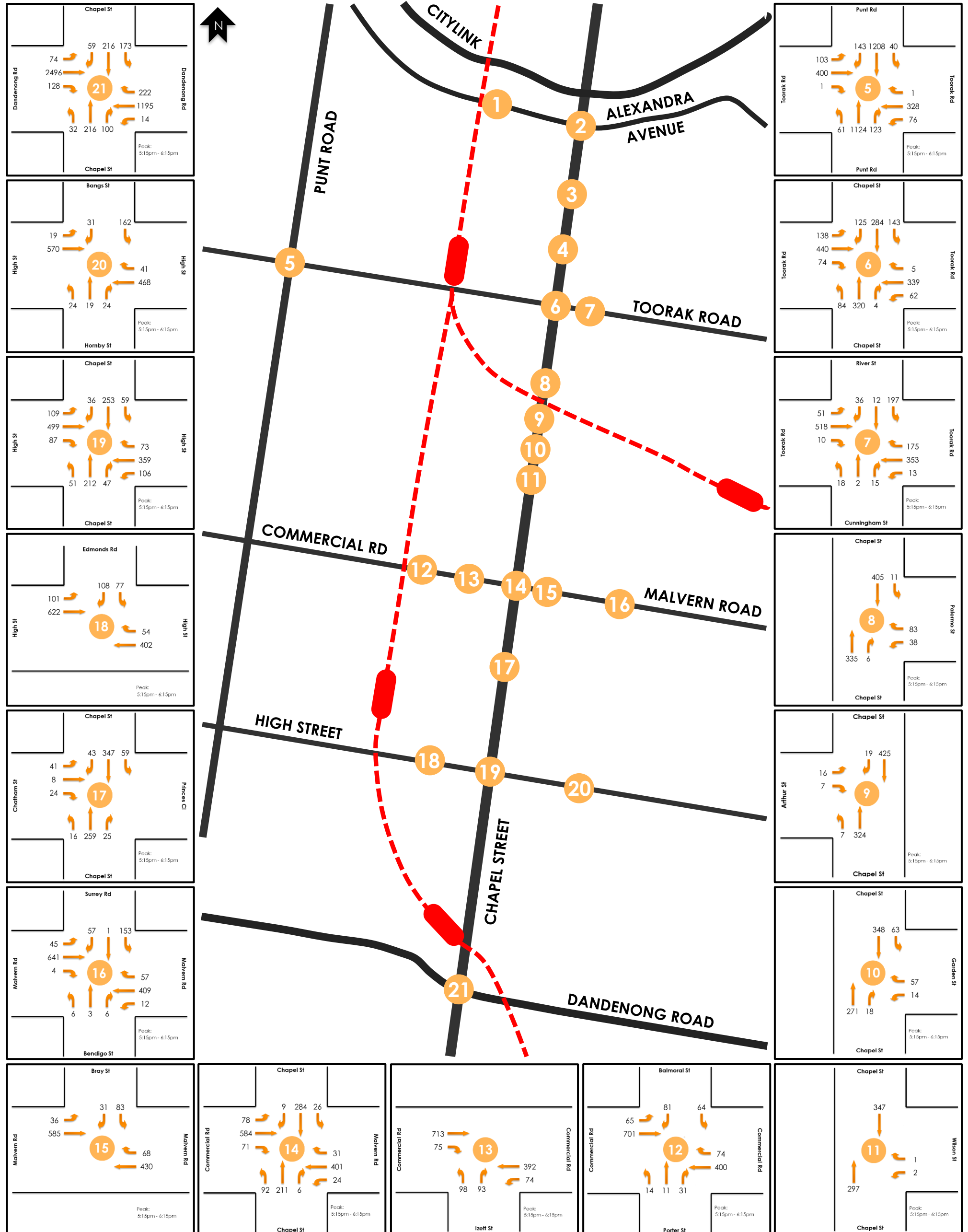
EXISTING TRAFFIC CONDITIONS

AM COMMUTER PEAK
8am – 9am
WED 20 JULY 2022



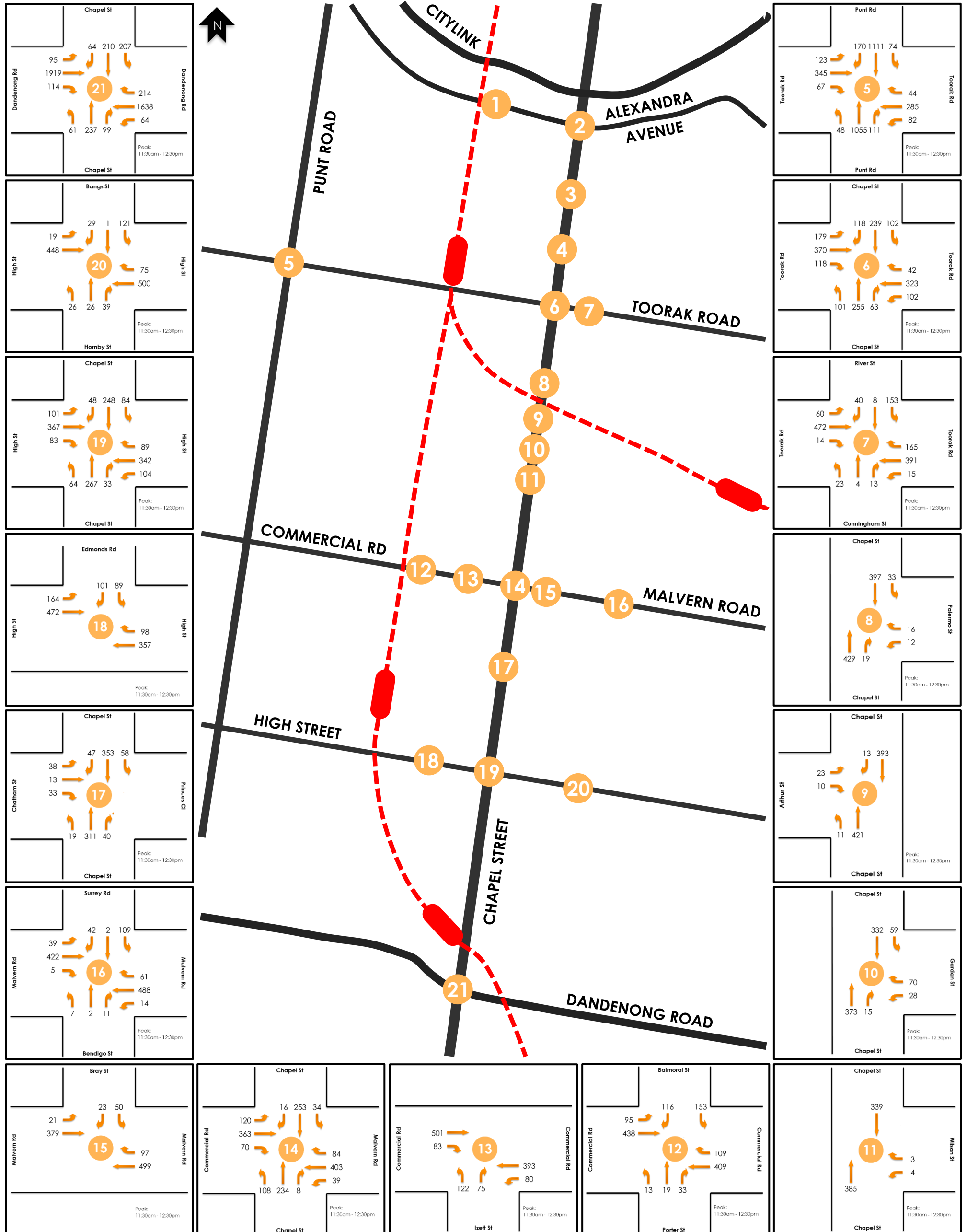
EXISTING TRAFFIC CONDITIONS

PM COMMUTER PEAK
5:15pm – 6:15pm
WED 20 JULY 2022

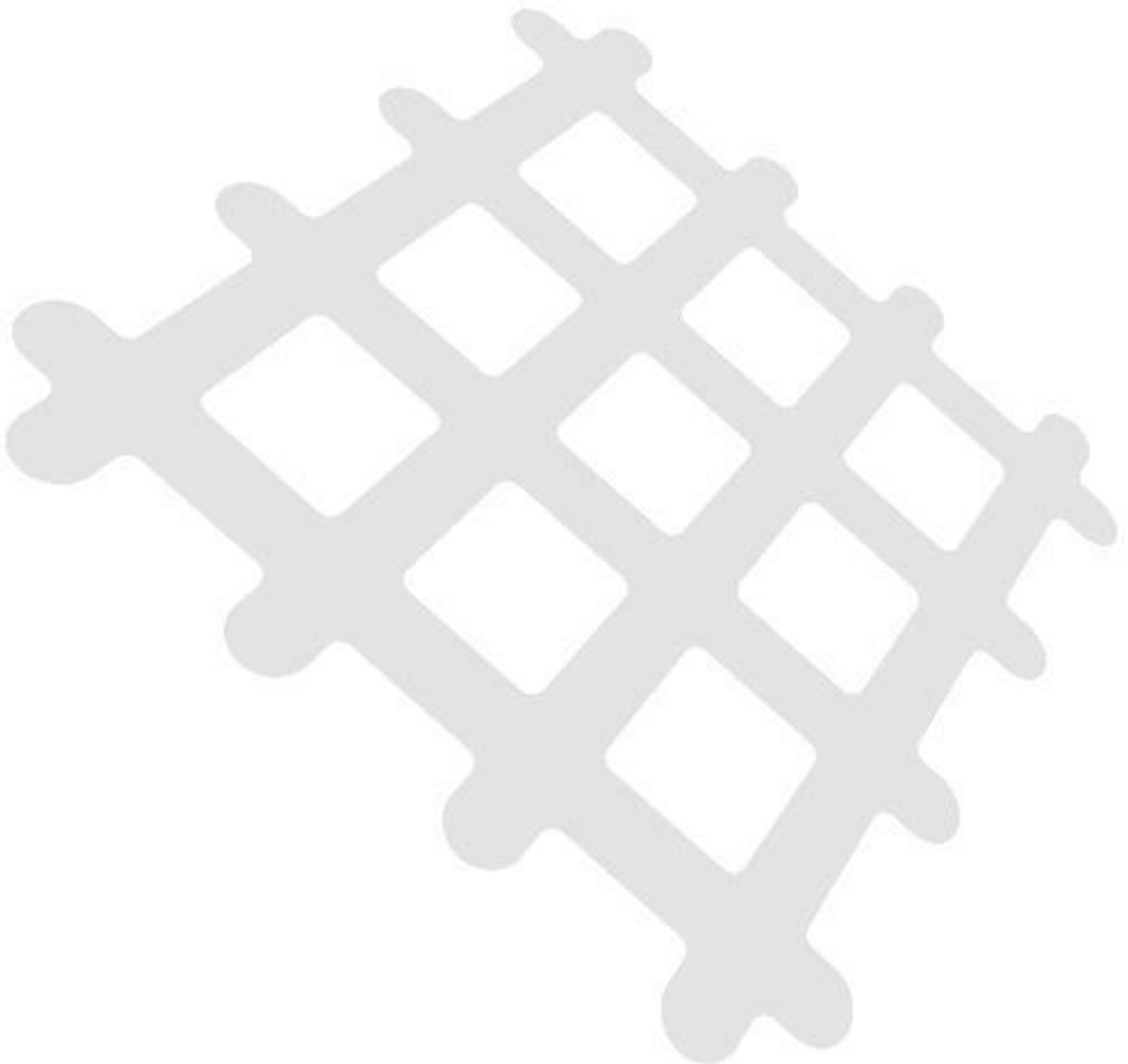


EXISTING TRAFFIC CONDITIONS

RETAIL TRADE PEAK
11:30am – 12:30pm
SAT 23 JULY 2022



Appendix C SIDRA Analysis – Existing Conditions



MOVEMENT SUMMARY

 Site: 001 [1. AlexYarraAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Alexandra Ave / Yarra St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Yarra Street														
1	L2	94	4.0	94	4.0	0.173	28.0	LOS A	2.7	19.7	0.77	0.74	0.77	40.2
3	R2	68	4.0	68	4.0	* 0.505	47.1	LOS A	2.8	20.2	1.00	0.76	1.01	23.7
Approach		162	4.0	162	4.0	0.505	36.1	LOS A	2.8	20.2	0.87	0.75	0.87	33.9
East: Alexandra Avenue														
4	L2	66	4.0	66	4.0	0.634	28.2	LOS B	19.2	139.0	0.95	0.85	0.95	38.7
5	T1	1044	4.0	1044	4.0	* 0.634	27.2	LOS B	21.4	155.1	0.98	0.87	0.98	37.5
Approach		1111	4.0	1111	4.0	0.634	27.3	LOS B	21.4	155.1	0.98	0.87	0.98	37.5
West: Alexandra Avenue														
11	T1	889	4.0	889	4.0	* 0.382	4.5	LOS A	5.4	39.0	0.54	0.47	0.54	52.4
12	R2	105	4.0	105	4.0	0.389	40.0	LOS A	3.9	28.0	0.95	0.78	0.95	35.5
Approach		995	4.0	995	4.0	0.389	8.3	LOS A	5.4	39.0	0.58	0.50	0.58	48.0
All Vehicles		2267	4.0	2267	4.0	0.634	19.6	LOS B	21.4	155.1	0.80	0.70	0.80	40.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Yarra Street											
P1	Full	91	7.7	LOS A	0.1	0.1	0.44	0.44	34.3	31.9	0.93
East: Alexandra Avenue											
P2	Full	57	14.9	LOS B	0.1	0.1	0.78	0.78	46.9	38.5	0.82
All Pedestrians		147	10.5	LOS B	0.1	0.1	0.57	0.57	39.2	34.4	0.88

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: 002 [2. ChapAlexAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Alexandra Ave

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	180	4.0	180	4.0	0.818	39.8	LOS C	16.5	119.7	0.99	0.96	1.15	15.9
2	T1	406	4.0	406	4.0	0.818	38.8	LOS C	16.5	119.7	0.99	0.96	1.19	30.9
3	R2	59	4.0	59	4.0	* 0.818	50.4	LOS C	10.4	75.4	1.00	0.97	1.25	28.6
Approach		645	4.0	645	4.0	0.818	40.1	LOS C	16.5	119.7	0.99	0.96	1.18	27.9
East: Alexandra Avenue														
4	L2	153	4.0	153	4.0	0.141	9.6	LOS A	1.9	13.4	0.41	0.66	0.41	45.9
5	T1	988	4.0	988	4.0	0.883	37.8	LOS C	22.6	163.3	0.96	1.04	1.26	27.0
6	R2	433	4.0	433	4.0	* 0.951	62.1	LOS E	23.3	169.0	1.00	1.11	1.61	29.3
Approach		1574	4.0	1574	4.0	0.951	41.7	LOS E	23.3	169.0	0.92	1.02	1.28	28.9
North: Church Street Bridge														
7	L2	141	4.0	141	4.0	0.501	31.6	LOS A	8.6	62.0	0.88	0.78	0.88	39.8
8	T1	325	4.0	325	4.0	0.501	27.6	LOS A	8.6	62.0	0.90	0.76	0.90	31.3
Approach		466	4.0	466	4.0	0.501	28.8	LOS A	8.6	62.0	0.89	0.77	0.89	34.7
West: Alexandra Avenue														
10	L2	163	4.0	163	4.0	0.877	51.9	LOS C	17.2	124.5	1.00	1.00	1.23	28.6
11	T1	601	4.0	601	4.0	* 0.877	42.2	LOS C	17.2	124.5	1.00	1.01	1.25	31.0
12	R2	199	4.0	199	4.0	0.588	38.7	LOS A	7.3	52.9	0.96	0.81	0.96	17.5
Approach		963	4.0	963	4.0	0.877	43.1	LOS C	17.2	124.5	0.99	0.96	1.19	28.7
All Vehicles		3648	4.0	3648	4.0	0.951	40.2	LOS E	23.3	169.0	0.95	0.96	1.19	29.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Chapel Street											
P1	Full	68	16.9	LOS B	0.1	0.1	0.65	0.65	46.3	35.2	0.76
East: Alexandra Avenue											
P2	Full	133	21.9	LOS C	0.2	0.2	0.74	0.74	54.0	38.5	0.71
North: Church Street Bridge											
P3	Full	53	22.5	LOS C	0.1	0.1	0.75	0.75	51.9	35.2	0.68

West: Alexandra Avenue											
P4	Full	248	22.0	LOS C	0.4	0.4	0.75	0.75	54.1	38.5	0.71
All Pedestrians		502	21.3	LOS C	0.4	0.4	0.73	0.73	52.7	37.7	0.71

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: 003 [3. ChapMalcAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Malcolm St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	429	4.0	429	4.0	0.227	1.8	LOS A	1.6	11.5	0.16	0.17	0.16	47.3
3	R2	59	4.0	59	4.0	* 0.227	10.5	LOS A	1.6	11.5	0.44	0.48	0.44	48.9
Approach		488	4.0	488	4.0	0.227	2.9	LOS A	1.6	11.5	0.20	0.20	0.20	47.9
East: Malcolm Street														
4	L2	111	4.0	111	4.0	0.158	22.8	LOS A	2.8	20.4	0.69	0.73	0.69	34.6
6	R2	191	4.0	191	4.0	* 0.938	61.9	LOS D	9.6	69.8	1.00	1.09	1.72	19.9
Approach		301	4.0	301	4.0	0.938	47.6	LOS D	9.6	69.8	0.89	0.96	1.34	23.6
North: Chapel Street														
7	L2	174	4.0	174	4.0	0.407	28.0	LOS A	12.6	91.1	0.94	0.83	0.94	36.8
8	T1	504	4.0	504	4.0	* 0.407	25.9	LOS A	12.6	91.1	0.98	0.85	0.98	19.3
Approach		678	4.0	678	4.0	0.407	26.5	LOS A	12.6	91.1	0.97	0.85	0.97	25.9
All Vehicles		1467	4.0	1467	4.0	0.938	22.9	LOS D	12.6	91.1	0.69	0.66	0.79	27.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	158	30.8	LOS D	0.3	0.3	0.88	0.88	60.2	35.2	0.59
East: Malcolm Street											
P2	Full	188	11.1	LOS B	0.2	0.2	0.53	0.53	37.7	31.9	0.85
All Pedestrians		346	20.1	LOS C	0.3	0.3	0.69	0.69	47.9	33.4	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.

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

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
					[Ped ped	Dist] m					
South: Chapel Street											
P1	Full	105	31.6	LOS D	0.2	0.2	0.89	0.89	61.0	35.2	0.58
East: Car Park Access											
P2	Full	224	2.0	LOS A	0.1	0.1	0.23	0.23	28.6	31.9	1.11
North: Chapel Street											

P3 Full	123	31.7	LOS D	0.2	0.2	0.89	0.89	61.0	35.2	0.58
West: Daly Street										
P4 Full	241	2.0	LOS A	0.1	0.1	0.23	0.23	28.6	31.9	1.11
All Pedestrians	694	11.8	LOS B	0.2	0.2	0.45	0.45	39.3	33.0	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.

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MOVEMENT SUMMARY

 Site: 005 [5. PuntToorAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Punt Rd / Toorak Rd

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Punt Road														
1	L2	79	4.0	79	4.0	0.899	44.5	LOS C	29.8	215.7	1.00	1.11	1.29	35.7
2	T1	1153	4.0	1153	4.0	* 0.899	38.8	LOS C	29.8	215.7	0.99	1.10	1.29	36.6
3	R2	69	4.0	69	4.0	0.513	47.1	LOS A	2.8	20.5	1.00	0.76	1.01	23.8
Approach		1301	4.0	1301	4.0	0.899	39.6	LOS C	29.8	215.7	0.99	1.08	1.28	36.0
East: Toorak Road														
4	L2	67	4.0	67	4.0	0.846	27.1	LOS C	14.6	105.5	0.89	0.85	1.01	42.9
5	T1	425	4.0	425	4.0	0.846	25.8	LOS C	14.6	105.5	0.91	0.86	1.05	41.6
6	R2	74	4.0	74	4.0	* 0.846	48.3	LOS C	7.0	50.4	1.00	0.91	1.22	34.0
Approach		566	4.0	566	4.0	0.846	28.9	LOS C	14.6	105.5	0.92	0.87	1.07	40.6
North: Punt Road														
7	L2	69	4.0	69	4.0	0.795	29.5	LOS C	24.4	176.4	0.92	0.88	0.99	34.0
8	T1	1145	4.0	1145	4.0	0.795	22.8	LOS C	24.4	176.4	0.88	0.85	0.96	43.5
9	R2	272	4.0	272	4.0	* 1.003	85.7	LOS F	17.0	123.1	1.00	1.24	2.00	24.6
Approach		1486	4.0	1486	4.0	1.003	34.6	LOS F	24.4	176.4	0.90	0.92	1.15	37.8
West: Toorak Road														
10	L2	72	4.0	72	4.0	0.152	25.6	LOS A	2.5	18.1	0.73	0.70	0.73	41.9
11	T1	360	4.0	360	4.0	0.762	32.1	LOS C	13.2	95.2	0.96	0.89	1.07	29.5
Approach		432	4.0	432	4.0	0.762	31.0	LOS C	13.2	95.2	0.92	0.86	1.01	32.1
All Vehicles		3785	4.0	3785	4.0	1.003	35.0	LOS F	29.8	215.7	0.94	0.96	1.17	37.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Punt Road											
P1	Full	254	22.0	LOS C	0.4	0.4	0.75	0.75	54.1	38.5	0.71
East: Toorak Road											
P2	Full	82	11.6	LOS B	0.1	0.1	0.54	0.54	40.9	35.2	0.86
North: Punt Road											
P3	Full	156	21.9	LOS C	0.3	0.3	0.74	0.74	54.0	38.5	0.71

West: Toorak Road											
P4	Full	74	15.1	LOS B	0.1	0.1	0.61	0.61	44.4	35.2	0.79
All Pedestrians		565	19.6	LOS B	0.4	0.4	0.70	0.70	50.9	37.6	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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Commuter Peak (Network
Folder: General)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Chapel Street											
P1	Full	151	17.0	LOS B	0.2	0.2	0.65	0.65	43.6	31.9	0.73
East: Toorak Road											
P2	Full	193	15.8	LOS B	0.3	0.3	0.63	0.63	45.1	35.2	0.78
North: Chapel Street											

P3	Full	423	10.2	LOS B	0.5	0.5	0.51	0.51	42.3	38.5	0.91
West: Toorak Road											
P4	Full	304	15.8	LOS B	0.4	0.4	0.63	0.63	47.9	38.5	0.80
All Pedestrians		1071	13.7	LOS B	0.5	0.5	0.59	0.59	44.6	37.0	0.83

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 007 [7. ToorRiveAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Toorak Rd / River St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Toorak Road														
5	T1	589	4.0	589	4.0	0.214	2.6	LOS A	3.3	23.6	0.29	0.25	0.29	55.4
6	R2	301	4.0	301	4.0	0.394	10.7	LOS A	4.6	33.2	0.55	0.73	0.55	49.7
Approach		891	4.0	891	4.0	0.394	5.3	LOS A	4.6	33.2	0.38	0.41	0.38	52.4
North: River Street														
7	L2	105	4.0	105	4.0	* 0.389	24.4	LOS A	2.0	14.6	0.94	0.76	0.94	42.3
9	R2	58	4.0	58	4.0	* 0.428	46.7	LOS A	2.3	16.9	0.99	0.75	0.99	23.9
Approach		163	4.0	163	4.0	0.428	32.3	LOS A	2.3	16.9	0.96	0.76	0.96	36.2
West: Toorak Road														
10	L2	60	4.0	60	4.0	0.090	8.0	LOS A	0.5	3.8	0.25	0.47	0.25	49.7
11	T1	435	4.0	435	4.0	* 0.436	3.4	LOS A	2.7	19.7	0.35	0.33	0.35	54.7
Approach		495	4.0	495	4.0	0.436	3.9	LOS A	2.7	19.7	0.34	0.34	0.34	54.1
All Vehicles		1548	4.0	1548	4.0	0.436	7.7	LOS A	4.6	33.2	0.43	0.43	0.43	49.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Toorak Road											
P2	Full	44	31.6	LOS D	0.1	0.1	0.89	0.89	63.6	38.5	0.60
North: River Street											
P3	Full	198	3.6	LOS A	0.1	0.1	0.43	0.43	30.2	31.9	1.06
All Pedestrians		242	8.7	LOS A	0.1	0.1	0.51	0.51	36.3	33.1	0.91

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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [PalermoArthur]

Network: N101 [AM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND	FLOWS	ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
Site: 008 [8. ChapPaleAMExE]														
South: Chapel Street														
2	T1	408	4.0	408	4.0	0.354	4.0	LOS A	3.7	26.6	0.26	0.24	0.26	20.1
3	R2	15	4.0	15	4.0	* 0.354	7.5	LOS A	3.7	26.6	0.32	0.30	0.32	30.6
Approach		423	4.0	423	4.0	0.354	4.1	LOS A	3.7	26.6	0.26	0.24	0.26	21.1
East: Palermo Street														
4	L2	2	4.0	2	4.0	0.005	31.2	LOS A	0.1	0.5	0.79	0.62	0.79	10.9
6	R2	5	4.0	5	4.0	0.013	31.4	LOS A	0.2	1.2	0.80	0.65	0.80	10.7
Approach		7	4.0	7	4.0	0.013	31.4	LOS A	0.2	1.2	0.80	0.64	0.80	10.7
North: Chapel Street														
7	L2	68	4.0	68	4.0	0.517	31.4	LOS A	7.6	55.0	0.93	0.78	0.93	23.1
8	T1	347	4.0	347	4.0	0.517	26.4	LOS A	7.6	55.0	0.94	0.78	0.94	20.1
Approach		416	4.0	416	4.0	0.517	27.3	LOS A	7.6	55.0	0.94	0.78	0.94	20.7
All Vehicles		846	4.0	846	4.0	0.517	15.7	LOS A	7.6	55.0	0.60	0.51	0.60	20.6
Site: 009 [9. ChapArthAMExE]														
South: Chapel Street														
1	L2	5	4.0	5	4.0	0.539	29.8	LOS A	6.5	46.9	0.77	0.64	0.77	35.3
2	T1	392	4.0	392	4.0	* 0.539	25.0	LOS A	6.5	46.9	0.79	0.66	0.79	13.8
Approach		397	4.0	397	4.0	0.539	25.0	LOS A	6.5	46.9	0.79	0.66	0.79	14.4
North: Chapel Street														
8	T1	341	4.0	341	4.0	0.301	0.5	LOS A	0.3	2.3	0.03	0.04	0.03	47.4
9	R2	11	4.0	11	4.0	* 0.301	3.0	LOS A	0.3	2.3	0.03	0.04	0.03	55.2
Approach		352	4.0	352	4.0	0.301	0.6	LOS A	0.3	2.3	0.03	0.04	0.03	49.9
West: Arthur Street														
10	L2	29	4.0	29	4.0	0.077	30.5	LOS A	1.0	7.6	0.80	0.71	0.80	30.2
12	R2	5	4.0	5	4.0	0.077	30.4	LOS A	1.0	7.6	0.80	0.71	0.80	30.2
Approach		35	4.0	35	4.0	0.077	30.5	LOS A	1.0	7.6	0.80	0.71	0.80	30.2
All Vehicles		783	4.0	783	4.0	0.539	14.3	LOS A	6.5	46.9	0.45	0.38	0.45	18.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
					[Ped	Dist]					

		ped/h	sec		ped	m			sec	m	m/sec
Site: 008 [8. ChapPaleAMExE]											
South: Chapel Street											
P1	Full	53	23.3	LOS C	0.1	0.1	0.76	0.76	52.6	35.2	0.67
East: Palermo Street											
P2	Full	180	19.0	LOS B	0.3	0.3	0.69	0.69	45.6	31.9	0.70
All Pedestrians		233	20.0	LOS C	0.3	0.3	0.71	0.71	47.2	32.6	0.69
Site: 009 [9. ChapArthAMExE]											
West: Arthur Street											
P4	Full	229	19.1	LOS B	0.4	0.4	0.69	0.69	42.9	28.6	0.67
All Pedestrians		229	19.1	LOS B	0.4	0.4	0.69	0.69	42.9	28.6	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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■ Network: N101 [AM
Commuter Peak (Network
Folder: General)]

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
Site: 010 [10. ChapGardAMExE]														
South: Chapel Street														
2	T1	348	4.0	348	4.0	0.257	0.4	LOS A	0.3	2.2	0.03	0.06	0.03	52.1
3	R2	28	4.0	28	4.0	0.257	4.1	LOS A	0.3	2.2	0.03	0.08	0.03	51.1
Approach		377	4.0	377	4.0	0.257	0.7	LOS A	0.3	2.2	0.03	0.06	0.03	51.8
East: Garden Street														
4	L2	21	4.0	21	4.0	*0.694	47.4	LOS B	3.8	27.7	1.00	0.88	1.18	15.1
6	R2	81	4.0	81	4.0	*0.694	47.0	LOS B	3.8	27.7	1.00	0.88	1.18	15.1
Approach		102	4.0	102	4.0	0.694	47.1	LOS B	3.8	27.7	1.00	0.88	1.18	15.1
North: Chapel Street														
7	L2	62	4.0	62	4.0	0.063	11.2	LOS A	0.8	5.5	0.65	0.70	0.65	37.7
8	T1	265	4.0	265	4.0	*0.291	6.6	LOS A	3.6	26.2	0.72	0.61	0.72	31.9
Approach		327	4.0	327	4.0	0.291	7.5	LOS A	3.6	26.2	0.71	0.63	0.71	34.1
All Vehicles		806	4.0	806	4.0	0.694	9.3	LOS B	3.8	27.7	0.43	0.40	0.45	28.2
Site: 011 [11. ChapWilsAMExE]														
South: Chapel Street														
2	T1	365	4.0	365	4.0	0.207	2.4	LOS A	2.6	18.6	0.23	0.20	0.23	54.2
Approach		365	4.0	365	4.0	0.207	2.4	LOS A	2.6	18.6	0.23	0.20	0.23	54.2
East: Wilson Street														
4	L2	3	4.0	3	4.0	0.045	42.0	LOS A	0.2	1.7	0.95	0.63	0.95	3.9
6	R2	4	4.0	4	4.0	0.045	42.0	LOS A	0.2	1.7	0.95	0.65	0.95	3.8
Approach		7	4.0	7	4.0	0.045	42.0	LOS A	0.2	1.7	0.95	0.64	0.95	3.9
North: Chapel Street														
8	T1	291	4.0	291	4.0	0.164	1.9	LOS A	1.6	11.6	0.18	0.15	0.18	39.8
Approach		291	4.0	291	4.0	0.164	1.9	LOS A	1.6	11.6	0.18	0.15	0.18	39.8
All Vehicles		663	4.0	663	4.0	0.207	2.6	LOS A	2.6	18.6	0.22	0.18	0.22	50.5

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist]			sec	m	m/sec
					ped	m					
Site: 010 [10. ChapGardAMExE]											

South: Chapel Street											
P1	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
East: Garden Street											
P2	Full	86	3.6	LOS A	0.0	0.0	0.43	0.43	27.5	28.6	1.04
North: Chapel Street											
P3	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
All Pedestrians		192	19.0	LOS B	0.1	0.1	0.68	0.68	45.8	32.2	0.70
Site: 011 [11. ChapWilsAMExE]											
East: Wilson Street											
P2	Full	101	1.8	LOS A	0.0	0.0	0.21	0.21	25.6	28.6	1.12
North: Chapel Street											
P3	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
All Pedestrians		154	12.0	LOS B	0.1	0.1	0.44	0.44	37.7	30.9	0.82

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: 012 [12. CommBalmAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Commercial Rd / Balmoral St / Porter St
AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Porter Street														
1	L2	5	4.0	5	4.0	0.486	47.3	LOS A	2.5	17.7	1.00	0.75	1.00	34.0
2	T1	28	4.0	28	4.0	* 0.486	41.7	LOS A	2.5	17.7	1.00	0.75	1.00	34.6
3	R2	26	4.0	26	4.0	0.486	47.2	LOS A	2.5	17.7	1.00	0.75	1.00	24.5
Approach		60	4.0	60	4.0	0.486	44.6	LOS A	2.5	17.7	1.00	0.75	1.00	31.0
East: Commercial Road														
5	T1	611	4.0	611	4.0	0.326	6.9	LOS A	11.4	82.4	0.71	0.63	0.71	50.3
6	R2	138	4.0	138	4.0	0.326	15.3	LOS A	6.3	45.4	0.87	0.78	0.87	43.7
Approach		748	4.0	748	4.0	0.326	8.5	LOS A	11.4	82.4	0.74	0.66	0.74	48.9
North: RoadName														
7	L2	36	4.0	36	4.0	* 0.132	23.5	LOS A	0.7	4.7	0.90	0.71	0.90	34.7
9	R2	52	4.0	52	4.0	0.414	47.7	LOS A	2.1	15.2	1.00	0.74	1.00	33.0
Approach		87	4.0	87	4.0	0.414	37.8	LOS A	2.1	15.2	0.96	0.73	0.96	33.4
West: Commercial Road														
10	L2	77	4.0	77	4.0	0.097	10.2	LOS A	0.9	6.6	0.50	0.63	0.50	50.8
11	T1	436	4.0	436	4.0	* 0.483	6.0	LOS A	5.0	36.4	0.63	0.56	0.63	50.0
Approach		513	4.0	513	4.0	0.483	6.6	LOS A	5.0	36.4	0.61	0.57	0.61	50.2
All Vehicles		1408	4.0	1408	4.0	0.486	11.1	LOS A	11.4	82.4	0.72	0.63	0.72	46.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Porter Street											
P1	Full	91	1.8	LOS A	0.0	0.0	0.21	0.21	22.9	25.3	1.10
East: Commercial Road											
P2	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
North: RoadName											
P3	Full	101	3.6	LOS A	0.0	0.0	0.43	0.43	30.2	31.9	1.06
All Pedestrians		244	9.0	LOS A	0.1	0.1	0.45	0.45	34.1	30.2	0.88

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

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MOVEMENT SUMMARY

 Site: 013 [13. CommIzetAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Commercial Rd / Izett St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Izett Street														
1	L2	60	4.0	60	4.0	0.454	42.6	LOS A	3.7	26.6	0.97	0.78	0.97	25.3
3	R2	36	4.0	36	4.0	* 0.454	42.5	LOS A	3.7	26.6	0.97	0.78	0.97	25.3
Approach		96	4.0	96	4.0	0.454	42.5	LOS A	3.7	26.6	0.97	0.78	0.97	25.3
East: Commercial Road														
4	L2	68	4.0	68	4.0	0.568	17.5	LOS A	9.0	65.4	0.59	0.55	0.59	43.5
5	T1	712	4.0	712	4.0	* 0.568	9.2	LOS A	9.0	65.4	0.48	0.44	0.48	28.5
Approach		780	4.0	780	4.0	0.568	9.9	LOS A	9.0	65.4	0.49	0.45	0.49	31.8
West: Commercial Road														
11	T1	448	4.0	448	4.0	0.369	1.4	LOS A	1.7	12.1	0.15	0.18	0.15	49.5
12	R2	55	4.0	55	4.0	* 0.369	6.8	LOS A	1.7	12.1	0.16	0.21	0.16	54.0
Approach		503	4.0	503	4.0	0.369	2.0	LOS A	1.7	12.1	0.15	0.19	0.15	51.0
All Vehicles		1379	4.0	1379	4.0	0.568	9.3	LOS A	9.0	65.4	0.40	0.38	0.40	34.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Izett Street											
P1	Full	72	14.4	LOS B	0.1	0.1	0.60	0.60	38.3	28.6	0.75
East: Commercial Road											
P2	Full	68	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
All Pedestrians		140	22.8	LOS C	0.1	0.1	0.74	0.74	49.3	31.8	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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG3 [ChapelBray]

Network: N101 [AM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
Site: 014 [14. ChapMalvAMExE]														
South: Chapel Street														
1	L2	68	4.0	68	4.0	0.100	30.7	LOS A	2.6	19.2	0.99	0.78	0.99	19.1
2	T1	285	4.0	285	4.0	0.499	29.6	LOS A	10.8	78.3	1.00	0.85	1.00	19.4
3	R2	3	4.0	3	4.0	*0.499	35.2	LOS A	10.8	78.3	1.00	0.85	1.00	19.4
Approach		357	4.0	357	4.0	0.499	29.8	LOS A	10.8	78.3	1.00	0.84	1.00	19.3
East: Malvern Road														
4	L2	3	4.0	3	4.0	0.506	4.3	LOS A	0.7	4.9	0.04	0.04	0.04	49.7
5	T1	738	4.0	738	4.0	0.506	1.8	LOS A	2.6	19.0	0.11	0.12	0.11	37.1
6	R2	32	4.0	32	4.0	*0.506	6.7	LOS A	2.6	19.0	0.21	0.22	0.21	27.4
Approach		773	4.0	773	4.0	0.506	2.0	LOS A	2.6	19.0	0.12	0.12	0.12	36.6
North: Chapel Street														
7	L2	8	4.0	8	4.0	0.061	14.2	LOS A	0.6	4.4	0.36	0.34	0.36	41.7
8	T1	240	4.0	240	4.0	0.305	9.7	LOS A	3.3	23.9	0.43	0.36	0.43	41.6
Approach		248	4.0	248	4.0	0.305	9.8	LOS A	3.3	23.9	0.42	0.36	0.42	41.6
West: Commercial Road														
10	L2	78	4.0	78	4.0	0.325	21.7	LOS A	7.4	53.6	0.74	0.67	0.74	20.8
11	T1	349	4.0	349	4.0	0.325	15.6	LOS A	7.4	53.6	0.73	0.66	0.73	20.9
12	R2	35	4.0	35	4.0	0.325	21.3	LOS A	5.1	37.3	0.73	0.65	0.73	21.1
Approach		462	4.0	462	4.0	0.325	17.1	LOS A	7.4	53.6	0.73	0.66	0.73	20.9
All Vehicles		1840	4.0	1840	4.0	0.506	12.2	LOS A	10.8	78.3	0.48	0.43	0.48	26.0
Site: 015 [15. MalvBrayAMExE]														
East: Malvern Road														
5	T1	741	4.0	741	4.0	0.569	17.9	LOS A	15.2	109.9	0.80	0.72	0.80	28.8
6	R2	100	4.0	100	4.0	0.569	22.0	LOS A	9.1	65.9	0.69	0.66	0.69	42.1
Approach		841	4.0	841	4.0	0.569	18.4	LOS A	15.2	109.9	0.79	0.71	0.79	31.5
North: Bray Street														
7	L2	52	4.0	52	4.0	0.071	22.0	LOS A	1.2	8.9	0.65	0.70	0.65	35.5
9	R2	33	4.0	33	4.0	0.045	21.2	LOS A	0.8	5.6	0.64	0.69	0.64	35.6
Approach		84	4.0	84	4.0	0.071	21.7	LOS A	1.2	8.9	0.64	0.70	0.64	35.5
West: Malvern Road														
10	L2	21	4.0	21	4.0	0.091	5.3	LOS A	0.3	1.9	0.09	0.21	0.09	52.4
11	T1	340	4.0	340	4.0	0.382	2.1	LOS A	1.2	8.7	0.11	0.12	0.11	34.6
Approach		361	4.0	361	4.0	0.382	2.3	LOS A	1.2	8.7	0.11	0.12	0.11	40.2
All Vehicles		1286	4.0	1286	4.0	0.569	14.1	LOS A	15.2	109.9	0.59	0.54	0.59	32.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist]			sec	m	m/sec
Site: 014 [14. ChapMalvAMExE]											
South: Chapel Street											
P1	Full	118	11.6	LOS B	0.1	0.1	0.54	0.54	40.9	35.2	0.86
East: Malvern Road											
P2	Full	133	13.9	LOS B	0.2	0.2	0.59	0.59	43.2	35.2	0.81
North: Chapel Street											
P3	Full	104	11.6	LOS B	0.1	0.1	0.54	0.54	40.9	35.2	0.86
West: Commercial Road											
P4	Full	204	13.9	LOS B	0.3	0.3	0.59	0.59	43.3	35.2	0.81
All Pedestrians		559	13.0	LOS B	0.3	0.3	0.57	0.57	42.3	35.2	0.83
Site: 015 [15. MalvBrayAMExE]											
North: Bray Street											
P3	Full	84	11.6	LOS B	0.1	0.1	0.54	0.54	38.2	31.9	0.84
West: Malvern Road											
P4	Full	53	13.8	LOS B	0.1	0.1	0.59	0.59	43.2	35.2	0.82
All Pedestrians		137	12.5	LOS B	0.1	0.1	0.56	0.56	40.1	33.2	0.83

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.

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
					[Ped	Dist]					
		ped/h	sec		ped	m			sec	m	m/sec
South: Bendigo Street											
P1	Full	53	16.3	LOS B	0.1	0.1	0.64	0.64	40.1	28.6	0.71
East: Malvern Road											
P2	Full	53	9.5	LOS A	0.1	0.1	0.49	0.49	38.9	35.2	0.91
North: Surrey Road											

P3	Full	53	16.3	LOS B	0.1	0.1	0.64	0.64	40.1	28.6	0.71
West: Malvern Road											
P4	Full	53	9.5	LOS A	0.1	0.1	0.49	0.49	38.9	35.2	0.91
All Pedestrians		211	12.9	LOS B	0.1	0.1	0.56	0.56	39.5	31.9	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.

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MOVEMENT SUMMARY

 Site: 017 [17. ChapChatAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Chatam St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	15	4.0	15	4.0	0.082	13.3	LOS A	0.8	5.6	0.33	0.35	0.33	35.9
2	T1	329	4.0	329	4.0	* 0.411	9.0	LOS A	4.6	33.3	0.43	0.37	0.43	26.9
Approach		344	4.0	344	4.0	0.411	9.2	LOS A	4.6	33.3	0.42	0.37	0.42	27.6
North: Chapel Street														
8	T1	306	4.0	306	4.0	0.220	1.9	LOS A	1.9	13.9	0.21	0.20	0.21	51.5
9	R2	27	4.0	27	4.0	* 0.220	7.7	LOS A	1.9	13.9	0.25	0.24	0.25	49.6
Approach		334	4.0	334	4.0	0.220	2.4	LOS A	1.9	13.9	0.21	0.20	0.21	51.3
West: Chatham Street														
10	L2	15	4.0	15	4.0	0.019	19.6	LOS A	0.3	2.3	0.59	0.66	0.59	20.6
12	R2	16	4.0	16	4.0	* 0.117	45.0	LOS A	0.6	4.4	0.96	0.69	0.96	10.7
Approach		31	4.0	31	4.0	0.117	32.8	LOS A	0.6	4.4	0.78	0.67	0.78	14.0
All Vehicles		708	4.0	708	4.0	0.411	7.0	LOS A	4.6	33.3	0.34	0.31	0.34	36.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
North: Chapel Street											
P3	Full	71	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
West: Chatham Street											
P4	Full	148	13.3	LOS B	0.2	0.2	0.58	0.58	39.9	31.9	0.80
All Pedestrians		219	19.2	LOS B	0.2	0.2	0.68	0.68	46.7	33.0	0.71

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: P001 [P1. PedXChap1AMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Pedestrian Crossing 12 on Chapel Street

AM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed	
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m					
South: Chapel Street															
2	T1	444	4.0	444	4.0	* 0.340	6.3	LOS A	11.2	80.8	0.70	0.62	0.70	39.3	
Approach		444	4.0	444	4.0	0.340	6.3	LOS A	11.2	80.8	0.70	0.62	0.70	39.3	
North: Chapel Street															
8	T1	322	4.0	322	4.0	0.247	3.0	LOS A	4.3	31.1	0.37	0.32	0.37	42.5	
Approach		322	4.0	322	4.0	0.247	3.0	LOS A	4.3	31.1	0.37	0.32	0.37	42.5	
All Vehicles		766	4.0	766	4.0	0.340	4.9	LOS A	11.2	80.8	0.56	0.50	0.56	40.2	

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	71	31.6	LOS D	0.1	0.1	0.89	0.89	55.4	28.6	0.52
All Pedestrians		71	31.6	LOS D	0.1	0.1	0.89	0.89	55.4	28.6	0.52

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 018 [18. HighStEdAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

High St / St. Edmonds Rd

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: High Street														
5	T1	685	4.0	685	4.0	0.340	0.9	LOS A	2.1	15.1	0.08	0.12	0.08	57.9
6	R2	99	4.0	99	4.0	* 0.340	7.9	LOS A	2.1	15.1	0.19	0.33	0.19	51.9
Approach		784	4.0	784	4.0	0.340	1.8	LOS A	2.1	15.1	0.09	0.14	0.09	57.0
North: St. Edmonds Road														
7	L2	35	4.0	35	4.0	0.192	44.0	LOS A	1.3	9.5	0.95	0.72	0.95	25.1
9	R2	37	4.0	37	4.0	* 0.204	43.1	LOS A	1.4	10.1	0.95	0.73	0.95	34.4
Approach		72	4.0	72	4.0	0.204	43.5	LOS A	1.4	10.1	0.95	0.72	0.95	30.7
West: High Street														
10	L2	98	4.0	98	4.0	0.075	8.4	LOS A	1.0	7.5	0.28	0.63	0.28	51.5
11	T1	468	4.0	468	4.0	0.376	3.7	LOS A	6.2	45.2	0.37	0.34	0.37	53.5
Approach		566	4.0	566	4.0	0.376	4.5	LOS A	6.2	45.2	0.36	0.39	0.36	52.9
All Vehicles		1422	4.0	1422	4.0	0.376	5.0	LOS A	6.2	45.2	0.24	0.27	0.24	52.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: High Street											
P2	Full	160	31.7	LOS D	0.3	0.3	0.89	0.89	61.1	35.2	0.58
North: St. Edmonds Road											
P3	Full	105	2.3	LOS A	0.1	0.1	0.24	0.24	28.8	31.9	1.11
All Pedestrians		265	20.0	LOS C	0.3	0.3	0.63	0.63	48.3	33.9	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.

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

■-■ Network: N101 [AM
Commuter Peak (Network
Folder: General)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist]			sec	m	m/sec
South: Chapel Street											
P1	Full	202	11.7	LOS B	0.2	0.2	0.54	0.54	41.0	35.2	0.86
East: High Street											
P2	Full	101	13.9	LOS B	0.1	0.1	0.59	0.59	43.2	35.2	0.81
North: Chapel Street											

P3 Full	88	11.6	LOS B	0.1	0.1	0.54	0.54	40.9	35.2	0.86
West: High Street										
P4 Full	105	13.9	LOS B	0.1	0.1	0.59	0.59	43.2	35.2	0.81
All Pedestrians	497	12.6	LOS B	0.2	0.2	0.56	0.56	41.9	35.2	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.

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MOVEMENT SUMMARY

 Site: 020 [20. HighBangAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Bangs St / Hornby St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Hornby St														
1	L2	28	4.0	28	4.0	0.741	50.5	LOS C	3.8	27.2	1.00	0.87	1.29	23.1
2	T1	16	4.0	16	4.0	* 0.741	44.9	LOS C	3.8	27.2	1.00	0.87	1.29	33.1
3	R2	42	4.0	42	4.0	0.741	50.4	LOS C	3.8	27.2	1.00	0.87	1.29	32.4
Approach		86	4.0	86	4.0	0.741	49.4	LOS C	3.8	27.2	1.00	0.87	1.29	30.1
East: High Street														
5	T1	789	4.0	789	4.0	0.350	3.0	LOS A	6.1	44.4	0.33	0.33	0.33	53.9
6	R2	98	4.0	98	4.0	* 0.350	8.6	LOS A	4.5	32.3	0.33	0.40	0.33	54.3
Approach		887	4.0	887	4.0	0.350	3.6	LOS A	6.1	44.4	0.33	0.34	0.33	54.0
North: Bangs St														
7	L2	61	4.0	61	4.0	0.478	46.9	LOS A	2.3	16.4	0.99	0.73	0.99	33.4
9	R2	18	4.0	18	4.0	0.478	47.4	LOS A	2.3	16.4	1.00	0.75	1.00	23.7
Approach		79	4.0	79	4.0	0.478	47.0	LOS A	2.3	16.4	0.99	0.74	0.99	31.7
West: High Street														
10	L2	18	4.0	18	4.0	0.076	6.9	LOS A	0.5	3.6	0.12	0.18	0.12	55.2
11	T1	369	4.0	369	4.0	0.215	1.6	LOS A	1.4	10.4	0.14	0.14	0.14	58.0
Approach		387	4.0	387	4.0	0.215	1.8	LOS A	1.4	10.4	0.14	0.14	0.14	57.8
All Vehicles		1440	4.0	1440	4.0	0.741	8.2	LOS C	6.1	44.4	0.36	0.34	0.37	49.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Hornby St											
P1	Full	85	1.8	LOS A	0.0	0.0	0.21	0.21	22.9	25.3	1.10
East: High Street											
P2	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
North: Bangs St											
P3	Full	63	1.8	LOS A	0.0	0.0	0.21	0.21	28.4	31.9	1.12
West: High Street											
P4	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58

All Pedestrians	254	14.2	LOS B	0.1	0.1	0.49	0.49	40.0	31.1	0.78
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Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: P002 [P2. PedXChap2AMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #2 on Chapel Street

AM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	583	4.0	583	4.0	* 0.454	3.3	LOS A	7.8	56.7	0.37	0.34	0.37	49.1
Approach		583	4.0	583	4.0	0.454	3.3	LOS A	7.8	56.7	0.37	0.34	0.37	49.1
North: Chapel Street														
8	T1	349	4.0	349	4.0	0.272	4.6	LOS A	6.6	47.9	0.53	0.46	0.53	45.8
Approach		349	4.0	349	4.0	0.272	4.6	LOS A	6.6	47.9	0.53	0.46	0.53	45.8
All Vehicles		933	4.0	933	4.0	0.454	3.8	LOS A	7.8	56.7	0.43	0.38	0.43	47.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	78	31.6	LOS D	0.2	0.2	0.89	0.89	55.4	28.6	0.52
All Pedestrians		78	31.6	LOS D	0.2	0.2	0.89	0.89	55.4	28.6	0.52

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: P003 [P3. PedXChap3AMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #3 on Chapel Street

AM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	583	4.0	583	4.0	* 0.469	5.0	LOS A	10.8	77.9	0.51	0.46	0.51	37.6
Approach		583	4.0	583	4.0	0.469	5.0	LOS A	10.8	77.9	0.51	0.46	0.51	37.6
North: Chapel Street														
8	T1	349	4.0	349	4.0	0.281	1.9	LOS A	2.2	15.9	0.17	0.15	0.17	53.2
Approach		349	4.0	349	4.0	0.281	1.9	LOS A	2.2	15.9	0.17	0.15	0.17	53.2
All Vehicles		933	4.0	933	4.0	0.469	3.8	LOS A	10.8	77.9	0.39	0.35	0.39	44.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	279	31.9	LOS D	0.6	0.6	0.90	0.90	55.7	28.6	0.51
All Pedestrians		279	31.9	LOS D	0.6	0.6	0.90	0.90	55.7	28.6	0.51

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 021 [21. ChapDandAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Dandenong Rd

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
1	L2	55	4.0	55	4.0	0.258	26.5	LOS A	4.5	32.4	0.77	0.68	0.77	42.9
2	T1	256	4.0	256	4.0	0.866	33.7	LOS C	13.2	95.4	0.90	0.90	1.12	28.4
3	R2	138	4.0	138	4.0	* 0.866	47.2	LOS C	13.2	95.4	0.98	1.05	1.36	34.8
Approach		448	4.0	448	4.0	0.866	36.9	LOS C	13.2	95.4	0.91	0.92	1.15	32.8
East: Dandenong Road														
4	L2	40	4.0	40	4.0	0.061	23.9	LOS A	1.0	7.3	0.68	0.70	0.68	42.4
5	T1	1741	4.0	1741	4.0	0.636	22.9	LOS B	14.3	103.8	0.88	0.77	0.88	43.6
6	R2	246	4.0	246	4.0	* 0.909	56.0	LOS D	11.9	86.1	1.00	1.08	1.54	21.6
Approach		2027	4.0	2027	4.0	0.909	27.0	LOS D	14.3	103.8	0.89	0.81	0.96	40.8
North: Chapel Street														
7	L2	154	4.0	154	4.0	0.180	11.4	LOS A	2.6	18.8	0.68	0.74	0.68	45.6
8	T1	181	4.0	181	4.0	0.656	30.6	LOS B	8.9	64.5	0.96	0.84	1.00	33.3
9	R2	57	4.0	57	4.0	0.656	36.3	LOS B	8.9	64.5	0.96	0.84	1.00	33.1
Approach		392	4.0	392	4.0	0.656	23.9	LOS B	8.9	64.5	0.85	0.80	0.88	37.2
West: Dandenong Road														
10	L2	81	4.0	81	4.0	0.585	31.7	LOS A	11.5	82.9	0.90	0.78	0.90	32.3
11	T1	1653	4.0	1653	4.0	* 0.585	25.3	LOS A	11.6	83.9	0.90	0.77	0.90	42.3
12	R2	116	4.0	116	4.0	0.641	46.1	LOS B	4.7	34.1	1.00	0.83	1.10	33.8
Approach		1849	4.0	1849	4.0	0.641	26.9	LOS B	11.6	83.9	0.90	0.77	0.91	41.4
All Vehicles		4717	4.0	4717	4.0	0.909	27.6	LOS D	14.3	103.8	0.90	0.80	0.95	40.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	53	15.7	LOS B	0.1	0.1	0.63	0.63	45.0	35.2	0.78
East: Dandenong Road											
P21	Stage 1	56	10.0	LOS B	0.1	0.1	0.50	0.50	44.0	40.8	0.93
P22	Stage 2	56	18.3	LOS B	0.1	0.1	0.68	0.68	49.5	37.5	0.76

North: Chapel Street											
P3 Full	68	18.3	LOS B	0.1	0.1	0.68	0.68	47.6	35.2	0.74	
West: Dandenong Road											
P41 Stage 1	318	8.2	LOS A	0.3	0.3	0.46	0.46	42.2	40.8	0.97	
P42 Stage 2	318	18.5	LOS B	0.5	0.5	0.68	0.68	47.0	34.2	0.73	
All Pedestrians	868	14.0	LOS B	0.5	0.5	0.58	0.58	45.1	37.4	0.83	

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 101 [1. AlexYarraPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Alexandra Ave / Yarra St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Yarra Street														
1	L2	93	1.9	93	1.9	0.147	22.8	LOS A	2.2	15.7	0.73	0.73	0.73	42.7
3	R2	74	1.9	74	1.9	* 0.469	41.1	LOS A	2.6	18.5	0.99	0.76	0.99	25.7
Approach		166	1.9	166	1.9	0.469	30.9	LOS A	2.6	18.5	0.84	0.74	0.84	35.9
East: Alexandra Avenue														
4	L2	54	1.9	54	1.9	0.703	25.1	LOS C	16.2	115.3	0.92	0.82	0.93	40.6
5	T1	1026	1.9	1026	1.9	* 0.703	24.4	LOS C	18.2	129.6	0.96	0.86	0.97	39.0
Approach		1080	1.9	1080	1.9	0.703	24.4	LOS C	18.2	129.6	0.96	0.86	0.97	39.1
West: Alexandra Avenue														
11	T1	1032	1.9	1032	1.9	* 0.469	5.1	LOS A	6.5	46.5	0.62	0.54	0.62	51.4
12	R2	62	1.9	62	1.9	0.198	33.3	LOS A	1.9	13.4	0.89	0.74	0.89	38.1
Approach		1094	1.9	1094	1.9	0.469	6.7	LOS A	6.5	46.5	0.64	0.55	0.64	49.6
All Vehicles		2340	1.9	2340	1.9	0.703	16.6	LOS C	18.2	129.6	0.80	0.71	0.81	42.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Yarra Street											
P1	Full	88	8.3	LOS A	0.1	0.1	0.49	0.49	34.9	31.9	0.91
East: Alexandra Avenue											
P2	Full	53	11.4	LOS B	0.1	0.1	0.74	0.74	43.5	38.5	0.89
All Pedestrians		141	9.5	LOS A	0.1	0.1	0.58	0.58	38.1	34.4	0.90

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 [2. ChapAlexPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Alexandra Ave

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	246	1.9	246	1.9	0.814	33.2	LOS C	18.4	130.8	0.97	0.96	1.14	18.2
2	T1	274	1.9	274	1.9	0.814	27.6	LOS C	18.4	130.8	0.97	0.96	1.14	35.3
3	R2	80	1.9	80	1.9	* 0.814	35.0	LOS C	2.9	20.6	0.96	0.78	1.09	32.7
Approach		600	1.9	600	1.9	0.814	30.9	LOS C	18.4	130.8	0.97	0.94	1.13	29.9
East: Alexandra Avenue														
4	L2	131	1.9	131	1.9	0.138	11.4	LOS A	1.8	12.8	0.51	0.68	0.51	43.9
5	T1	820	1.9	820	1.9	0.710	25.0	LOS C	13.1	93.4	0.95	0.85	1.00	33.2
6	R2	221	1.9	221	1.9	* 0.938	56.2	LOS D	10.0	71.4	1.00	1.13	1.77	30.7
Approach		1172	1.9	1172	1.9	0.938	29.3	LOS D	13.1	93.4	0.91	0.88	1.09	33.2
North: Church Street Bridge														
7	L2	551	1.9	551	1.9	0.789	26.8	LOS C	20.5	145.5	0.92	0.90	1.01	41.2
8	T1	500	1.9	500	1.9	0.789	26.9	LOS C	20.5	145.5	0.96	0.93	1.11	31.8
Approach		1051	1.9	1051	1.9	0.789	26.9	LOS C	20.5	145.5	0.94	0.92	1.06	37.7
West: Alexandra Avenue														
10	L2	115	1.9	115	1.9	0.905	49.3	LOS D	21.5	152.7	1.00	1.07	1.30	29.7
11	T1	881	1.9	881	1.9	* 0.905	40.7	LOS D	21.5	152.7	1.00	1.07	1.32	31.6
12	R2	172	1.9	172	1.9	0.728	40.9	LOS C	6.3	44.5	1.00	0.88	1.18	16.8
Approach		1167	1.9	1167	1.9	0.905	41.6	LOS D	21.5	152.7	1.00	1.04	1.30	29.9
All Vehicles		3989	1.9	3989	1.9	0.938	32.5	LOS D	21.5	152.7	0.95	0.95	1.15	32.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist] m					
South: Chapel Street											
P1	Full	58	16.5	LOS B	0.1	0.1	0.69	0.69	45.8	35.2	0.77
East: Alexandra Avenue											
P2	Full	200	15.9	LOS B	0.3	0.3	0.68	0.68	48.0	38.5	0.80
North: Church Street Bridge											
P3	Full	96	16.5	LOS B	0.1	0.1	0.69	0.69	45.9	35.2	0.77

West: Alexandra Avenue											
P4	Full	214	15.9	LOS B	0.3	0.3	0.68	0.68	48.0	38.5	0.80
All Pedestrians		567	16.1	LOS B	0.3	0.3	0.68	0.68	47.4	37.6	0.79

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 103 [3. ChapMalcPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Malcolm St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	449	1.9	449	1.9	0.282	3.2	LOS A	3.4	23.9	0.30	0.29	0.30	41.8
3	R2	117	1.9	117	1.9	* 0.282	10.1	LOS A	1.4	9.9	0.43	0.58	0.43	47.7
Approach		566	1.9	566	1.9	0.282	4.7	LOS A	3.4	23.9	0.32	0.35	0.32	44.8
East: Malcolm Street														
4	L2	120	1.9	120	1.9	0.158	19.4	LOS A	2.6	18.3	0.66	0.73	0.66	36.9
6	R2	171	1.9	171	1.9	* 0.814	44.3	LOS C	6.6	46.6	1.00	0.94	1.36	24.6
Approach		291	1.9	291	1.9	0.814	34.0	LOS C	6.6	46.6	0.86	0.85	1.07	28.5
North: Chapel Street														
7	L2	197	1.9	197	1.9	0.464	22.7	LOS A	10.8	77.1	0.87	0.79	0.87	39.8
8	T1	512	1.9	512	1.9	* 0.464	17.8	LOS A	10.8	77.1	0.87	0.77	0.87	24.3
Approach		708	1.9	708	1.9	0.464	19.2	LOS A	10.8	77.1	0.87	0.77	0.87	31.1
All Vehicles		1565	1.9	1565	1.9	0.814	16.7	LOS C	10.8	77.1	0.67	0.63	0.71	32.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	192	26.8	LOS C	0.3	0.3	0.88	0.88	56.1	35.2	0.63
East: Malcolm Street											
P2	Full	281	11.6	LOS B	0.3	0.3	0.58	0.58	38.1	31.9	0.84
All Pedestrians		473	17.7	LOS B	0.3	0.3	0.70	0.70	45.4	33.2	0.73

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.

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	117	26.7	LOS C	0.2	0.2	0.88	0.88	56.0	35.2	0.63
East: Car Park Access											
P2	Full	576	2.6	LOS A	0.3	0.3	0.28	0.28	29.2	31.9	1.09
North: Chapel Street											

P3	Full	388	27.0	LOS C	0.7	0.7	0.89	0.89	56.3	35.2	0.62
West: Daly Street											
P4	Full	316	2.6	LOS A	0.2	0.2	0.28	0.28	29.2	31.9	1.09
All Pedestrians		1397	11.4	LOS B	0.7	0.7	0.50	0.50	39.0	33.1	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.

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■-■ Network: N101 [PM
Commuter Peak (Network
Folder: General)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Punt Road											
P1	Full	178	21.0	LOS C	0.3	0.3	0.78	0.78	53.1	38.5	0.73
East: Toorak Road											
P2	Full	85	10.4	LOS B	0.1	0.1	0.54	0.54	39.7	35.2	0.89
North: Punt Road											
P3	Full	214	21.0	LOS C	0.3	0.3	0.78	0.78	53.1	38.5	0.73
West: Toorak Road											

P4 Full	53	10.3	LOS B	0.1	0.1	0.54	0.54	39.7	35.2	0.89
All Pedestrians	529	18.2	LOS B	0.3	0.3	0.72	0.72	49.6	37.6	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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Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Chapel Street											
P1	Full	258	9.9	LOS A	0.3	0.3	0.53	0.53	36.5	31.9	0.87
East: Toorak Road											
P2	Full	307	13.4	LOS B	0.4	0.4	0.62	0.62	42.7	35.2	0.82
North: Chapel Street											

P3	Full	566	10.0	LOS B	0.6	0.6	0.54	0.54	42.1	38.5	0.91
West: Toorak Road											
P4	Full	446	13.5	LOS B	0.6	0.6	0.63	0.63	45.5	38.5	0.85
All Pedestrians		1578	11.6	LOS B	0.6	0.6	0.58	0.58	42.3	36.8	0.87

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 107 [7. ToorRivePMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Toorak Rd / River St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Toorak Road														
5	T1	385	1.9	385	1.9	0.250	3.1	LOS A	3.3	23.7	0.33	0.28	0.33	54.8
6	R2	184	1.9	184	1.9	* 0.249	10.4	LOS A	1.9	13.2	0.56	0.72	0.56	50.0
Approach		569	1.9	569	1.9	0.250	5.4	LOS A	3.3	23.7	0.40	0.42	0.40	52.3
North: River Street														
7	L2	207	1.9	207	1.9	0.273	20.2	LOS A	4.7	33.5	0.70	0.76	0.70	44.1
9	R2	51	1.9	51	1.9	* 0.322	40.4	LOS A	1.7	12.4	0.98	0.74	0.98	26.0
Approach		258	1.9	258	1.9	0.322	24.2	LOS A	4.7	33.5	0.75	0.75	0.75	40.9
West: Toorak Road														
10	L2	56	1.9	56	1.9	0.412	20.6	LOS A	7.4	52.4	0.69	0.62	0.69	40.7
11	T1	561	1.9	561	1.9	* 0.412	11.9	LOS A	7.4	52.4	0.59	0.52	0.59	45.1
Approach		617	1.9	617	1.9	0.412	12.7	LOS A	7.4	52.4	0.60	0.53	0.60	44.6
All Vehicles		1444	1.9	1444	1.9	0.412	11.9	LOS A	7.4	52.4	0.55	0.53	0.55	46.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Toorak Road											
P2	Full	69	26.7	LOS C	0.1	0.1	0.87	0.87	58.7	38.5	0.66
North: River Street											
P3	Full	268	11.6	LOS B	0.3	0.3	0.58	0.58	38.1	31.9	0.84
All Pedestrians		338	14.7	LOS B	0.3	0.3	0.64	0.64	42.4	33.3	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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [PalermoArthur]

Network: N101 [PM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS	ARRIVAL FLOWS	Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed		
		[Total veh/h	HV %	[Total HV %			[Veh. veh	Dist] m						
					v/c	sec						km/h		
Site: 108 [8. ChapPalePMExE]														
South: Chapel Street														
2	T1	353	1.9	353	1.9	0.360	7.9	LOS A	4.5	31.9	0.43	0.37	0.43	12.3
3	R2	6	1.9	6	1.9	*0.360	11.8	LOS A	4.5	31.9	0.50	0.43	0.50	24.2
Approach		359	1.9	359	1.9	0.360	7.9	LOS A	4.5	31.9	0.43	0.37	0.43	12.7
East: Palermo Street														
4	L2	40	1.9	40	1.9	0.069	23.7	LOS A	1.0	6.8	0.73	0.70	0.73	13.6
6	R2	87	1.9	87	1.9	0.152	24.3	LOS A	2.2	15.5	0.75	0.74	0.75	13.1
Approach		127	1.9	127	1.9	0.152	24.1	LOS A	2.2	15.5	0.75	0.73	0.75	13.3
North: Chapel Street														
7	L2	12	1.9	12	1.9	0.576	30.4	LOS A	7.3	51.7	0.96	0.80	0.96	24.3
8	T1	426	1.9	426	1.9	*0.576	25.2	LOS A	7.3	51.7	0.96	0.80	0.96	21.1
Approach		438	1.9	438	1.9	0.576	25.3	LOS A	7.3	51.7	0.96	0.80	0.96	21.2
All Vehicles		924	1.9	924	1.9	0.576	18.4	LOS A	7.3	51.7	0.73	0.62	0.73	18.7
Site: 109 [9. ChapArthPMExE]														
South: Chapel Street														
1	L2	7	1.9	7	1.9	0.393	20.0	LOS A	4.2	29.8	0.62	0.52	0.62	41.7
2	T1	341	1.9	341	1.9	0.393	14.6	LOS A	4.2	29.8	0.62	0.51	0.62	20.3
Approach		348	1.9	348	1.9	0.393	14.7	LOS A	4.2	29.8	0.62	0.51	0.62	21.4
North: Chapel Street														
8	T1	447	1.9	447	1.9	0.351	0.7	LOS A	0.7	4.7	0.05	0.06	0.05	43.8
9	R2	20	1.9	20	1.9	*0.351	3.2	LOS A	0.7	4.7	0.05	0.07	0.05	55.0
Approach		467	1.9	467	1.9	0.351	0.8	LOS A	0.7	4.7	0.05	0.06	0.05	48.1
West: Arthur Street														
10	L2	17	1.9	17	1.9	0.084	33.5	LOS A	0.7	5.2	0.88	0.70	0.88	28.8
12	R2	7	1.9	7	1.9	0.084	33.5	LOS A	0.7	5.2	0.88	0.70	0.88	28.8
Approach		24	1.9	24	1.9	0.084	33.5	LOS A	0.7	5.2	0.88	0.70	0.88	28.8
All Vehicles		840	1.9	840	1.9	0.393	7.5	LOS A	4.2	29.8	0.31	0.27	0.31	26.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
					[Ped	Dist]					

		ped/h	sec		ped	m			sec	m	m/sec
Site: 108 [8. ChapPalePMEExE]											
South: Chapel Street											
P1	Full	100	15.8	LOS B	0.1	0.1	0.67	0.67	45.2	35.2	0.78
East: Palermo Street											
P2	Full	346	18.1	LOS B	0.5	0.5	0.72	0.72	44.7	31.9	0.71
All Pedestrians		446	17.6	LOS B	0.5	0.5	0.71	0.71	44.8	32.6	0.73
Site: 109 [9. ChapArthPMEExE]											
West: Arthur Street											
P4	Full	444	18.2	LOS B	0.6	0.6	0.73	0.73	42.0	28.6	0.68
All Pedestrians		444	18.2	LOS B	0.6	0.6	0.73	0.73	42.0	28.6	0.68

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.

■-■ Network: N101 [PM
Commuter Peak (Network
Folder: General)]

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist]			sec	m	m/sec
					ped	m					
Site: 110 [10. ChapGardPMExE]											

South: Chapel Street											
P1	Full	53	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
East: Garden Street											
P2	Full	213	4.2	LOS A	0.1	0.1	0.49	0.49	28.0	28.6	1.02
North: Chapel Street											
P3	Full	89	26.7	LOS C	0.2	0.2	0.87	0.87	56.0	35.2	0.63
All Pedestrians		355	13.2	LOS B	0.2	0.2	0.64	0.64	39.2	31.2	0.80
Site: 111 [11. ChapWilsPMExE]											
East: Wilson Street											
P2	Full	209	2.1	LOS A	0.1	0.1	0.24	0.24	25.9	28.6	1.10
North: Chapel Street											
P3	Full	58	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
All Pedestrians		267	7.4	LOS A	0.1	0.1	0.38	0.38	32.4	30.0	0.93

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: 112 [12. CommBalmPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Commercial Rd / Balmoral St / Porter St
PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Porter Street														
1	L2	15	1.9	15	1.9	0.421	42.0	LOS A	2.1	14.8	0.99	0.75	0.99	35.5
2	T1	12	1.9	12	1.9	0.421	35.6	LOS A	2.1	14.8	0.99	0.75	0.99	36.2
3	R2	33	1.9	33	1.9	0.421	41.1	LOS A	2.1	14.8	0.99	0.75	0.99	26.1
Approach		59	1.9	59	1.9	0.421	40.3	LOS A	2.1	14.8	0.99	0.75	0.99	31.3
East: Commercial Road														
5	T1	421	1.9	421	1.9	0.400	6.8	LOS A	8.2	58.1	0.72	0.61	0.72	50.2
6	R2	78	1.9	78	1.9	0.400	12.8	LOS A	8.2	58.1	0.79	0.67	0.79	47.3
Approach		499	1.9	499	1.9	0.400	7.7	LOS A	8.2	58.1	0.73	0.62	0.73	49.7
North: RoadName														
7	L2	67	1.9	67	1.9	* 0.214	20.1	LOS A	1.1	7.6	0.89	0.74	0.89	36.4
9	R2	85	1.9	85	1.9	* 0.566	42.5	LOS A	3.1	21.9	1.00	0.78	1.06	34.6
Approach		153	1.9	153	1.9	0.566	32.6	LOS A	3.1	21.9	0.95	0.76	0.99	35.1
West: Commercial Road														
10	L2	68	1.9	68	1.9	0.462	12.2	LOS A	5.0	35.8	0.71	0.64	0.71	52.0
11	T1	738	1.9	738	1.9	* 0.462	6.7	LOS A	5.0	35.8	0.71	0.62	0.71	48.7
Approach		806	1.9	806	1.9	0.462	7.1	LOS A	5.0	35.8	0.71	0.62	0.71	49.2
All Vehicles		1517	1.9	1517	1.9	0.566	11.2	LOS A	8.2	58.1	0.75	0.64	0.75	45.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Porter Street											
P1	Full	191	2.1	LOS A	0.1	0.1	0.24	0.24	23.2	25.3	1.09
East: Commercial Road											
P2	Full	104	26.7	LOS C	0.2	0.2	0.88	0.88	56.0	35.2	0.63
North: RoadName											
P3	Full	144	4.2	LOS A	0.1	0.1	0.49	0.49	30.7	31.9	1.04
All Pedestrians		439	8.6	LOS A	0.2	0.2	0.47	0.47	33.5	29.8	0.89

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: N:\Projects\2022\220353\Sidra\220353SID001A(Existing).sip9

MOVEMENT SUMMARY

 Site: 113 [13. CommIzetPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Commercial Rd / Izett St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Izett Street														
1	L2	103	1.9	103	1.9	* 0.847	46.1	LOS C	8.0	56.7	1.00	0.99	1.42	24.3
3	R2	98	1.9	98	1.9	0.847	45.2	LOS C	8.0	56.7	1.00	0.99	1.42	24.3
Approach		201	1.9	201	1.9	0.847	45.7	LOS C	8.0	56.7	1.00	0.99	1.42	24.3
East: Commercial Road														
4	L2	78	1.9	78	1.9	0.108	12.9	LOS A	1.1	7.7	0.38	0.62	0.38	44.1
5	T1	413	1.9	413	1.9	* 0.541	9.3	LOS A	7.3	51.7	0.55	0.49	0.55	28.8
Approach		491	1.9	491	1.9	0.541	9.9	LOS A	7.3	51.7	0.53	0.51	0.53	34.3
West: Commercial Road														
11	T1	751	1.9	751	1.9	0.359	4.2	LOS A	7.3	51.7	0.46	0.43	0.46	39.2
12	R2	79	1.9	79	1.9	0.359	9.8	LOS A	3.6	25.3	0.47	0.48	0.47	50.0
Approach		829	1.9	829	1.9	0.359	4.7	LOS A	7.3	51.7	0.46	0.44	0.46	42.1
All Vehicles		1521	1.9	1521	1.9	0.847	11.8	LOS C	8.0	56.7	0.55	0.53	0.61	33.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Izett Street											
P1	Full	167	10.4	LOS B	0.2	0.2	0.55	0.55	34.2	28.6	0.84
East: Commercial Road											
P2	Full	80	26.7	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
All Pedestrians		247	15.7	LOS B	0.2	0.2	0.65	0.65	41.3	30.7	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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG3 [ChapelBray]

Network: N101 [PM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%	v/c			sec	[Veh. veh				
Site: 114 [14. ChapMalvPMExE]														
South: Chapel Street														
1	L2	97	1.9	97	1.9	0.154	29.6	LOS A	3.0	21.4	0.95	0.78	0.95	19.7
2	T1	222	1.9	222	1.9	0.488	26.1	LOS A	7.4	52.7	0.99	0.82	0.99	21.0
3	R2	6	1.9	6	1.9	0.488	31.7	LOS A	7.4	52.7	0.99	0.82	0.99	21.0
Approach		325	1.9	325	1.9	0.488	27.3	LOS A	7.4	52.7	0.97	0.81	0.97	20.6
East: Malvern Road														
4	L2	25	1.9	25	1.9	0.116	4.3	LOS A	0.1	0.6	0.02	0.15	0.02	43.3
5	T1	422	1.9	422	1.9	0.537	2.3	LOS A	2.4	17.2	0.17	0.20	0.17	32.6
6	R2	33	1.9	33	1.9	* 0.537	5.9	LOS A	2.4	17.2	0.20	0.21	0.20	30.8
Approach		480	1.9	480	1.9	0.537	2.7	LOS A	2.4	17.2	0.16	0.20	0.16	32.9
North: Chapel Street														
7	L2	27	1.9	27	1.9	0.105	24.4	LOS A	1.9	13.4	0.84	0.69	0.84	30.6
8	T1	299	1.9	299	1.9	0.527	21.8	LOS A	8.2	58.3	0.92	0.78	0.92	29.9
9	R2	9	1.9	9	1.9	* 0.527	27.8	LOS A	8.2	58.3	0.93	0.79	0.93	29.7
Approach		336	1.9	336	1.9	0.527	22.2	LOS A	8.2	58.3	0.91	0.77	0.91	29.9
West: Commercial Road														
10	L2	82	1.9	82	1.9	0.484	19.1	LOS A	10.3	73.6	0.72	0.66	0.72	23.5
11	T1	615	1.9	615	1.9	0.484	14.6	LOS A	10.3	73.6	0.78	0.70	0.78	22.0
12	R2	75	1.9	75	1.9	0.484	22.3	LOS A	9.1	64.6	0.86	0.77	0.86	20.1
Approach		772	1.9	772	1.9	0.484	15.8	LOS A	10.3	73.6	0.78	0.70	0.78	22.0
All Vehicles		1913	1.9	1913	1.9	0.537	15.6	LOS A	10.3	73.6	0.68	0.61	0.68	24.5
Site: 115 [15. MalvBrayPMExE]														
East: Malvern Road														
5	T1	453	1.9	453	1.9	0.349	12.1	LOS A	6.9	49.2	0.66	0.58	0.66	34.4
6	R2	72	1.9	72	1.9	0.349	17.8	LOS A	4.3	30.5	0.66	0.63	0.66	44.7
Approach		524	1.9	524	1.9	0.349	12.9	LOS A	6.9	49.2	0.66	0.59	0.66	37.0
North: Bray Street														
7	L2	87	1.9	87	1.9	0.139	22.8	LOS A	2.1	14.8	0.72	0.73	0.72	34.6
9	R2	33	1.9	33	1.9	0.052	22.1	LOS A	0.7	5.3	0.70	0.70	0.70	35.0
Approach		120	1.9	120	1.9	0.139	22.6	LOS A	2.1	14.8	0.72	0.72	0.72	34.7
West: Malvern Road														
10	L2	38	1.9	38	1.9	0.374	6.1	LOS A	2.1	14.9	0.19	0.21	0.19	52.1
11	T1	616	1.9	616	1.9	0.374	2.3	LOS A	2.1	14.9	0.15	0.16	0.15	32.4
Approach		654	1.9	654	1.9	0.374	2.5	LOS A	2.1	14.9	0.16	0.16	0.16	38.4
All Vehicles		1298	1.9	1298	1.9	0.374	8.6	LOS A	6.9	49.2	0.41	0.39	0.41	36.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
Site: 114 [14. ChapMalvPMExE]											
South: Chapel Street											
P1	Full	228	8.8	LOS A	0.2	0.2	0.50	0.50	38.2	35.2	0.92
East: Malvern Road											
P2	Full	300	14.6	LOS B	0.4	0.4	0.65	0.65	44.0	35.2	0.80
North: Chapel Street											
P3	Full	249	8.8	LOS A	0.3	0.3	0.51	0.51	38.2	35.2	0.92
West: Commercial Road											
P4	Full	475	14.8	LOS B	0.6	0.6	0.66	0.66	44.1	35.2	0.80
All Pedestrians		1253	12.5	LOS B	0.6	0.6	0.60	0.60	41.8	35.2	0.84
Site: 115 [15. MalvBrayPMExE]											
North: Bray Street											
P3	Full	125	8.8	LOS A	0.1	0.1	0.50	0.50	35.4	31.9	0.90
West: Malvern Road											
P4	Full	57	14.5	LOS B	0.1	0.1	0.64	0.64	43.8	35.2	0.80
All Pedestrians		182	10.6	LOS B	0.1	0.1	0.55	0.55	38.0	32.9	0.87

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.

■-■ Network: N101 [PM
Commuter Peak (Network
Folder: General)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Bendigo Street											
P1	Full	97	13.9	LOS B	0.1	0.1	0.63	0.63	37.7	28.6	0.76
East: Malvern Road											
P2	Full	53	9.3	LOS A	0.1	0.1	0.52	0.52	38.6	35.2	0.91
North: Surrey Road											

P3	Full	76	13.9	LOS B	0.1	0.1	0.63	0.63	37.7	28.6	0.76
West: Malvern Road											
P4	Full	53	9.3	LOS A	0.1	0.1	0.52	0.52	38.6	35.2	0.91
All Pedestrians		278	12.1	LOS B	0.1	0.1	0.59	0.59	38.1	31.1	0.82

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 117 [17. ChapChatPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Chatam St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	17	1.9	17	1.9	0.099	18.5	LOS A	0.9	6.4	0.51	0.48	0.51	29.9
2	T1	273	1.9	273	1.9	* 0.494	14.7	LOS A	5.2	37.1	0.64	0.55	0.64	20.0
Approach		289	1.9	289	1.9	0.494	14.9	LOS A	5.2	37.1	0.64	0.54	0.64	20.8
North: Chapel Street														
8	T1	427	1.9	427	1.9	0.339	3.4	LOS A	3.5	25.1	0.34	0.31	0.34	47.1
9	R2	45	1.9	45	1.9	* 0.339	9.1	LOS A	3.5	25.1	0.38	0.36	0.38	47.3
Approach		473	1.9	473	1.9	0.339	3.9	LOS A	3.5	25.1	0.34	0.32	0.34	47.1
West: Chatham Street														
10	L2	43	1.9	43	1.9	0.043	13.9	LOS A	0.7	4.8	0.49	0.67	0.49	25.4
12	R2	34	1.9	34	1.9	* 0.161	37.2	LOS A	1.1	7.8	0.93	0.72	0.93	12.5
Approach		77	1.9	77	1.9	0.161	24.1	LOS A	1.1	7.8	0.68	0.69	0.68	17.6
All Vehicles		839	1.9	839	1.9	0.494	9.6	LOS A	5.2	37.1	0.48	0.43	0.48	33.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
North: Chapel Street											
P3	Full	192	26.8	LOS C	0.3	0.3	0.88	0.88	56.1	35.2	0.63
West: Chatham Street											
P4	Full	357	17.4	LOS B	0.5	0.5	0.71	0.71	44.0	31.9	0.73
All Pedestrians		548	20.7	LOS C	0.5	0.5	0.77	0.77	48.2	33.1	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.

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

MOVEMENT SUMMARY

 Site: P101 [P1. PedXChap1PMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Pedestrian Crossing 12 on Chapel Street

PM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
v/csec														
km/h														
South: Chapel Street														
2	T1	415	1.9	415	1.9	0.339	4.3	LOS A	6.2	44.3	0.47	0.42	0.47	44.1
Approach		415	1.9	415	1.9	0.339	4.3	LOS A	6.2	44.3	0.47	0.42	0.47	44.1
North: Chapel Street														
8	T1	461	1.9	461	1.9	* 0.377	4.5	LOS A	7.2	51.5	0.50	0.44	0.50	36.8
Approach		461	1.9	461	1.9	0.377	4.5	LOS A	7.2	51.5	0.50	0.44	0.50	36.8
All Vehicles		876	1.9	876	1.9	0.377	4.4	LOS A	7.2	51.5	0.49	0.43	0.49	40.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	131	26.7	LOS C	0.2	0.2	0.88	0.88	50.6	28.6	0.57
All Pedestrians		131	26.7	LOS C	0.2	0.2	0.88	0.88	50.6	28.6	0.57

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 118 [18. HighStEdPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

High St / St. Edmonds Rd

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: High Street														
5	T1	423	1.9	423	1.9	0.360	2.8	LOS A	3.2	22.7	0.25	0.27	0.25	55.5
6	R2	57	1.9	57	1.9	* 0.360	8.3	LOS A	3.2	22.7	0.27	0.31	0.27	52.7
Approach		480	1.9	480	1.9	0.360	3.4	LOS A	3.2	22.7	0.26	0.27	0.26	55.1
North: St. Edmonds Road														
7	L2	81	1.9	81	1.9	0.516	41.3	LOS A	2.9	20.5	1.00	0.77	1.01	25.7
9	R2	114	1.9	114	1.9	* 0.735	43.8	LOS C	4.3	30.3	1.00	0.87	1.26	34.2
Approach		195	1.9	195	1.9	0.735	42.8	LOS C	4.3	30.3	1.00	0.83	1.15	31.4
West: High Street														
10	L2	106	1.9	106	1.9	0.286	8.7	LOS A	4.5	31.7	0.35	0.41	0.35	54.3
11	T1	655	1.9	655	1.9	0.286	3.1	LOS A	4.5	31.7	0.35	0.35	0.35	53.4
Approach		761	1.9	761	1.9	0.286	3.9	LOS A	4.5	31.7	0.35	0.36	0.35	53.6
All Vehicles		1436	1.9	1436	1.9	0.735	9.0	LOS C	4.5	31.7	0.41	0.40	0.43	48.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: High Street											
P2	Full	53	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
North: St. Edmonds Road											
P3	Full	114	2.1	LOS A	0.1	0.1	0.24	0.24	28.7	31.9	1.11
All Pedestrians		166	9.8	LOS A	0.1	0.1	0.44	0.44	37.3	32.9	0.88

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.

■ ■ Network: N101 [PM
Commuter Peak (Network
Folder: General)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	143	7.8	LOS A	0.1	0.1	0.47	0.47	37.2	35.2	0.95
East: High Street											
P2	Full	223	15.9	LOS B	0.3	0.3	0.68	0.68	45.3	35.2	0.78
North: Chapel Street											

P3 Full	161	7.8	LOS A	0.2	0.2	0.47	0.47	37.2	35.2	0.95
West: High Street										
P4 Full	334	16.0	LOS B	0.5	0.5	0.68	0.68	45.3	35.2	0.78
All Pedestrians	861	13.1	LOS B	0.5	0.5	0.61	0.61	42.4	35.2	0.83

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 120 [20. HighBangPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Bangs St / Hornby St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Hornby St														
1	L2	25	1.9	25	1.9	0.643	45.1	LOS B	2.7	18.9	1.00	0.82	1.18	25.2
2	T1	20	1.9	20	1.9	0.643	38.7	LOS B	2.7	18.9	1.00	0.82	1.18	35.3
3	R2	25	1.9	25	1.9	0.643	44.2	LOS B	2.7	18.9	1.00	0.82	1.18	34.5
Approach		71	1.9	71	1.9	0.643	43.0	LOS B	2.7	18.9	1.00	0.82	1.18	32.1
East: High Street														
5	T1	493	1.9	493	1.9	0.389	3.5	LOS A	5.2	37.1	0.36	0.35	0.36	53.5
6	R2	43	1.9	43	1.9	* 0.389	9.0	LOS A	5.2	37.1	0.39	0.38	0.39	54.7
Approach		536	1.9	536	1.9	0.389	3.9	LOS A	5.2	37.1	0.37	0.35	0.37	53.7
North: Bangs St														
7	L2	171	1.9	171	1.9	* 0.699	43.4	LOS B	4.1	28.9	1.00	0.85	1.21	34.4
9	R2	33	1.9	33	1.9	0.699	43.8	LOS B	3.5	25.0	1.00	0.85	1.23	24.8
Approach		203	1.9	203	1.9	0.699	43.5	LOS B	4.1	28.9	1.00	0.85	1.21	33.3
West: High Street														
10	L2	20	1.9	20	1.9	0.232	7.2	LOS A	1.7	12.2	0.16	0.17	0.16	55.5
11	T1	600	1.9	600	1.9	0.232	1.8	LOS A	1.8	13.0	0.18	0.17	0.18	57.5
Approach		620	1.9	620	1.9	0.232	2.0	LOS A	1.8	13.0	0.18	0.17	0.18	57.5
All Vehicles		1429	1.9	1429	1.9	0.699	10.6	LOS B	5.2	37.1	0.41	0.37	0.45	47.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Hornby St											
P1	Full	111	2.1	LOS A	0.1	0.1	0.24	0.24	23.2	25.3	1.09
East: High Street											
P2	Full	53	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
North: Bangs St											
P3	Full	103	2.1	LOS A	0.1	0.1	0.24	0.24	28.7	31.9	1.11
West: High Street											
P4	Full	53	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63

All Pedestrians	319	10.2	LOS B	0.1	0.1	0.45	0.45	35.8	30.7	0.86
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Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: P102 [P2. PedXChap2PMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #2 on Chapel Street

PM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
2	T1	539	1.9	539	1.9	* 0.449	3.9	LOS A	6.1	43.4	0.36	0.32	0.36	47.6
Approach		539	1.9	539	1.9	0.449	3.9	LOS A	6.1	43.4	0.36	0.32	0.36	47.6
North: Chapel Street														
8	T1	469	1.9	469	1.9	0.391	4.9	LOS A	7.5	53.5	0.51	0.45	0.51	45.3
Approach		469	1.9	469	1.9	0.391	4.9	LOS A	7.5	53.5	0.51	0.45	0.51	45.3
All Vehicles		1008	1.9	1008	1.9	0.449	4.4	LOS A	7.5	53.5	0.43	0.38	0.43	46.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	214	26.8	LOS C	0.4	0.4	0.88	0.88	50.7	28.6	0.56
All Pedestrians		214	26.8	LOS C	0.4	0.4	0.88	0.88	50.7	28.6	0.56

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: P103 [P3. PedXChap3PMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #3 on Chapel Street

PM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	539	1.9	539	1.9	* 0.449	5.8	LOS A	10.0	71.1	0.59	0.52	0.59	35.4
Approach		539	1.9	539	1.9	0.449	5.8	LOS A	10.0	71.1	0.59	0.52	0.59	35.4
North: Chapel Street														
8	T1	491	1.9	491	1.9	0.409	4.0	LOS A	5.6	39.8	0.36	0.32	0.36	47.4
Approach		491	1.9	491	1.9	0.409	4.0	LOS A	5.6	39.8	0.36	0.32	0.36	47.4
All Vehicles		1029	1.9	1029	1.9	0.449	5.0	LOS A	10.0	71.1	0.48	0.43	0.48	42.0

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	178	26.8	LOS C	0.3	0.3	0.88	0.88	50.6	28.6	0.57
All Pedestrians		178	26.8	LOS C	0.3	0.3	0.88	0.88	50.6	28.6	0.57

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 121 [21. ChapDandPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Dandenong Rd

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
1	L2	34	1.9	34	1.9	0.249	25.8	LOS A	3.7	26.0	0.80	0.67	0.80	43.6
2	T1	227	1.9	227	1.9	0.834	29.9	LOS C	8.9	63.3	0.91	0.85	1.10	30.2
3	R2	105	1.9	105	1.9	0.834	43.2	LOS C	8.9	63.3	1.00	1.00	1.37	36.2
Approach		366	1.9	366	1.9	0.834	33.3	LOS C	8.9	63.3	0.92	0.88	1.15	33.9
East: Dandenong Road														
4	L2	15	1.9	15	1.9	0.026	24.0	LOS A	0.3	2.5	0.71	0.67	0.71	42.5
5	T1	1258	1.9	1258	1.9	0.519	21.6	LOS A	9.0	63.8	0.87	0.74	0.87	44.3
6	R2	234	1.9	234	1.9	* 0.893	48.8	LOS C	9.7	69.2	1.00	1.07	1.54	23.5
Approach		1506	1.9	1506	1.9	0.893	25.8	LOS C	9.7	69.2	0.89	0.79	0.97	41.2
North: Chapel Street														
7	L2	182	1.9	182	1.9	0.223	12.1	LOS A	3.2	22.7	0.60	0.68	0.60	45.5
8	T1	227	1.9	227	1.9	0.858	32.8	LOS C	10.0	71.4	0.96	0.93	1.18	32.2
9	R2	62	1.9	62	1.9	* 0.858	41.0	LOS C	10.0	71.4	1.00	0.96	1.24	31.1
Approach		472	1.9	472	1.9	0.858	25.9	LOS C	10.0	71.4	0.83	0.84	0.96	36.1
West: Dandenong Road														
10	L2	78	1.9	78	1.9	0.903	44.8	LOS D	23.1	164.6	1.00	1.13	1.39	26.4
11	T1	2627	1.9	2627	1.9	* 0.903	38.5	LOS D	23.3	165.6	1.00	1.13	1.39	36.7
12	R2	135	1.9	135	1.9	0.515	37.2	LOS A	4.5	32.0	0.97	0.79	0.97	36.9
Approach		2840	1.9	2840	1.9	0.903	38.6	LOS D	23.3	165.6	1.00	1.11	1.37	36.6
All Vehicles		5184	1.9	5184	1.9	0.903	33.3	LOS D	23.3	165.6	0.95	0.98	1.20	37.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	53	15.8	LOS B	0.1	0.1	0.67	0.67	45.1	35.2	0.78
East: Dandenong Road											
P21	Stage 1	82	7.8	LOS A	0.1	0.1	0.47	0.47	41.8	40.8	0.98
P22	Stage 2	82	17.2	LOS B	0.1	0.1	0.70	0.70	48.5	37.5	0.77

North: Chapel Street											
P3 Full	53	15.8	LOS B	0.1	0.1	0.67	0.67	45.1	35.2	0.78	
West: Dandenong Road											
P41 Stage 1	262	7.9	LOS A	0.2	0.2	0.48	0.48	41.9	40.8	0.97	
P42 Stage 2	262	17.3	LOS B	0.4	0.4	0.71	0.71	45.8	34.2	0.75	
All Pedestrians	794	13.0	LOS B	0.4	0.4	0.60	0.60	44.3	37.5	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.

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Project: N:\Projects\2022\220353\Sidra\220353SID001A(Existing).sip9

MOVEMENT SUMMARY

 Site: 201 [1. AlexYarraSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Alexandra Ave / Yarra St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Yarra Street														
1	L2	79	1.5	79	1.5	0.132	26.1	LOS A	2.2	15.5	0.74	0.73	0.74	41.2
3	R2	46	1.5	46	1.5	* 0.336	46.2	LOS A	1.8	13.1	0.98	0.74	0.98	24.0
Approach		125	1.5	125	1.5	0.336	33.5	LOS A	2.2	15.5	0.83	0.73	0.83	35.4
East: Alexandra Avenue														
4	L2	68	1.5	68	1.5	0.683	24.5	LOS B	17.6	125.0	0.82	0.74	0.82	40.9
5	T1	1116	1.5	1116	1.5	* 0.683	20.5	LOS B	20.4	144.3	0.88	0.79	0.88	41.2
Approach		1184	1.5	1184	1.5	0.683	20.8	LOS B	20.4	144.3	0.88	0.79	0.88	41.2
West: Alexandra Avenue														
11	T1	988	1.5	988	1.5	* 0.409	4.4	LOS A	6.1	43.3	0.54	0.47	0.54	52.5
12	R2	74	1.5	74	1.5	0.229	37.0	LOS A	2.5	18.0	0.90	0.75	0.90	36.7
Approach		1062	1.5	1062	1.5	0.409	6.6	LOS A	6.1	43.3	0.56	0.49	0.56	49.8
All Vehicles		2372	1.5	2372	1.5	0.683	15.1	LOS B	20.4	144.3	0.73	0.65	0.73	43.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Yarra Street											
P1	Full	64	8.1	LOS A	0.1	0.1	0.45	0.45	34.7	31.9	0.92
East: Alexandra Avenue											
P2	Full	53	14.5	LOS B	0.1	0.1	0.78	0.78	46.6	38.5	0.83
All Pedestrians		117	11.0	LOS B	0.1	0.1	0.60	0.60	40.1	34.9	0.87

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: 202 [2. ChapAlexSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Alexandra Ave

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
1	L2	228	1.5	228	1.5	0.725	30.7	LOS C	13.8	98.1	0.87	0.82	0.92	19.1
2	T1	272	1.5	272	1.5	0.725	28.6	LOS C	13.8	98.1	0.90	0.83	0.96	34.6
3	R2	94	1.5	94	1.5	* 0.725	41.9	LOS C	6.9	49.2	0.96	0.85	1.06	31.1
Approach		594	1.5	594	1.5	0.725	31.5	LOS C	13.8	98.1	0.90	0.83	0.96	30.0
East: Alexandra Avenue														
4	L2	128	1.5	128	1.5	0.117	11.5	LOS A	1.7	12.2	0.44	0.66	0.44	44.9
5	T1	880	1.5	880	1.5	* 0.740	27.3	LOS C	15.8	112.2	0.93	0.85	0.99	31.9
6	R2	234	1.5	234	1.5	* 0.925	58.7	LOS D	11.6	82.0	1.00	1.07	1.62	30.1
Approach		1242	1.5	1242	1.5	0.925	31.5	LOS D	15.8	112.2	0.89	0.87	1.05	32.1
North: Church Street Bridge														
7	L2	239	1.5	239	1.5	0.248	16.7	LOS A	5.1	35.9	0.58	0.73	0.58	46.1
8	T1	302	1.5	302	1.5	0.581	25.4	LOS A	10.2	72.0	0.89	0.76	0.89	33.2
9	R2	1	0.0	1	0.0	0.581	31.0	LOS A	10.2	72.0	0.89	0.76	0.89	33.2
Approach		542	1.5	542	1.5	0.581	21.6	LOS A	10.2	72.0	0.76	0.75	0.76	39.9
West: Alexandra Avenue														
10	L2	123	1.5	123	1.5	0.684	34.0	LOS B	15.6	110.6	0.99	0.86	1.00	35.4
11	T1	708	1.5	708	1.5	0.684	27.0	LOS B	15.6	110.6	0.97	0.84	0.97	37.5
12	R2	168	1.5	168	1.5	0.667	43.5	LOS B	6.7	47.6	1.00	0.84	1.08	16.1
Approach		1000	1.5	1000	1.5	0.684	30.6	LOS B	15.6	110.6	0.98	0.84	0.99	34.2
All Vehicles		3378	1.5	3378	1.5	0.925	29.7	LOS D	15.8	112.2	0.90	0.84	0.97	33.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	53	17.6	LOS B	0.1	0.1	0.66	0.66	46.9	35.2	0.75
East: Alexandra Avenue											
P2	Full	80	18.3	LOS B	0.1	0.1	0.68	0.68	50.4	38.5	0.76
North: Church Street Bridge											
P3	Full	53	17.6	LOS B	0.1	0.1	0.66	0.66	46.9	35.2	0.75

West: Alexandra Avenue											
P4	Full	86	18.3	LOS B	0.1	0.1	0.68	0.68	50.4	38.5	0.76
All Pedestrians		272	18.0	LOS B	0.1	0.1	0.67	0.67	49.0	37.2	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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Project: N:\Projects\2022\220353\Sidra\220353SID001A(Existing).sip9

MOVEMENT SUMMARY

 Site: 203 [3. ChapMalcSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Malcolm St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	437	1.5	437	1.5	0.502	5.1	LOS A	4.9	35.0	0.46	0.44	0.46	35.6
3	R2	126	1.5	126	1.5	* 0.502	11.7	LOS A	4.9	35.0	0.59	0.59	0.59	48.0
Approach		563	1.5	563	1.5	0.502	6.6	LOS A	4.9	35.0	0.49	0.48	0.49	41.7
East: Malcolm Street														
4	L2	127	1.5	127	1.5	0.154	20.3	LOS A	2.9	20.7	0.62	0.72	0.62	36.8
6	R2	156	1.5	156	1.5	* 0.848	51.7	LOS C	7.0	49.3	1.00	0.96	1.42	22.4
Approach		283	1.5	283	1.5	0.848	37.6	LOS C	7.0	49.3	0.83	0.85	1.06	27.2
North: Chapel Street														
7	L2	165	1.5	165	1.5	0.215	16.6	LOS A	4.1	28.8	0.67	0.74	0.67	42.0
8	T1	409	1.5	409	1.5	* 0.774	24.5	LOS C	14.5	102.8	0.87	0.83	0.99	20.6
Approach		575	1.5	575	1.5	0.774	22.2	LOS C	14.5	102.8	0.81	0.81	0.90	29.1
All Vehicles		1421	1.5	1421	1.5	0.848	19.1	LOS C	14.5	102.8	0.69	0.69	0.77	31.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	297	31.9	LOS D	0.6	0.6	0.90	0.90	61.2	35.2	0.57
East: Malcolm Street											
P2	Full	211	13.9	LOS B	0.3	0.3	0.59	0.59	40.5	31.9	0.79
All Pedestrians		507	24.4	LOS C	0.6	0.6	0.77	0.77	52.6	33.8	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: 204 [4. ChapDalySATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Daly St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	32	1.5	32	1.5	0.067	9.2	LOS A	1.4	9.7	0.39	0.44	0.39	42.2
2	T1	469	1.5	469	1.5	0.336	4.7	LOS A	7.3	51.8	0.48	0.44	0.48	37.6
3	R2	9	1.5	9	1.5	0.336	10.3	LOS A	7.3	51.8	0.49	0.44	0.49	43.2
Approach		511	1.5	511	1.5	0.336	5.1	LOS A	7.3	51.8	0.47	0.44	0.47	38.3
East: Car Park Access														
4	L2	6	1.5	6	1.5	0.034	42.4	LOS A	0.2	1.6	0.93	0.65	0.93	11.6
5	T1	1	1.5	1	1.5	0.092	38.3	LOS A	0.5	3.4	0.95	0.68	0.95	18.2
6	R2	12	1.5	12	1.5	0.092	43.8	LOS A	0.5	3.4	0.95	0.68	0.95	11.1
Approach		19	1.5	19	1.5	0.092	43.1	LOS A	0.5	3.4	0.94	0.67	0.94	11.7
North: Chapel Street														
7	L2	6	1.5	6	1.5	0.096	6.3	LOS A	0.3	2.5	0.07	0.08	0.07	51.6
8	T1	436	1.5	436	1.5	0.351	1.3	LOS A	1.4	9.8	0.09	0.15	0.09	49.7
9	R2	62	1.5	62	1.5	* 0.351	6.7	LOS A	1.4	9.8	0.10	0.18	0.10	49.0
Approach		504	1.5	504	1.5	0.351	2.0	LOS A	1.4	9.8	0.09	0.16	0.09	49.5
West: Daly Street														
10	L2	64	1.5	64	1.5	* 0.349	44.7	LOS A	2.5	17.6	0.97	0.75	0.97	11.1
11	T1	1	1.5	1	1.5	0.279	38.2	LOS A	1.8	12.6	0.96	0.74	0.96	18.1
12	R2	45	1.5	45	1.5	0.279	43.7	LOS A	1.8	12.6	0.96	0.74	0.96	11.0
Approach		111	1.5	111	1.5	0.349	44.2	LOS A	2.5	17.6	0.97	0.75	0.97	11.1
All Vehicles		1144	1.5	1144	1.5	0.351	8.1	LOS A	7.3	51.8	0.36	0.35	0.36	32.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist] m					
South: Chapel Street											
P1	Full	73	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
East: Car Park Access											
P2	Full	483	2.3	LOS A	0.3	0.3	0.24	0.24	28.9	31.9	1.10
North: Chapel Street											
P3	Full	283	31.9	LOS D	0.6	0.6	0.90	0.90	61.2	35.2	0.58

West: Daly Street											
P4 Full	260	2.3	LOS A	0.1	0.1	0.24	0.24	28.9	31.9	1.11	
All Pedestrians	1099	11.9	LOS B	0.6	0.6	0.45	0.45	39.3	33.0	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.

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Project: N:\Projects\2022\220353\Sidra\220353SID001A(Existing).sip9

MOVEMENT SUMMARY

 Site: 205 [5. PuntToorSATExE (Site Folder: Retail Trader Peak)]  Network: N101 [Retail Trader Peak (Network Folder: General)]

Punt Rd / Toorak Rd

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Punt Road														
1	L2	51	1.5	51	1.5	0.757	28.8	LOS C	21.3	151.1	0.91	0.84	0.95	42.8
2	T1	1111	1.5	1111	1.5	0.757	22.0	LOS C	21.3	151.1	0.88	0.82	0.93	44.0
3	R2	117	1.5	117	1.5	0.565	44.1	LOS A	4.6	32.6	0.99	0.79	1.01	24.8
Approach		1278	1.5	1278	1.5	0.757	24.3	LOS C	21.3	151.1	0.90	0.82	0.94	42.3
East: Toorak Road														
4	L2	86	1.5	86	1.5	0.130	22.6	LOS A	2.1	15.1	0.62	0.70	0.62	43.1
5	T1	300	1.5	300	1.5	0.652	30.3	LOS B	10.3	73.2	0.92	0.78	0.93	40.1
6	R2	1	0.0	1	0.0	0.652	36.1	LOS B	10.3	73.2	0.92	0.78	0.93	39.4
Approach		387	1.5	387	1.5	0.652	28.6	LOS B	10.3	73.2	0.85	0.76	0.86	40.7
North: Punt Road														
7	L2	78	1.5	78	1.5	0.820	32.8	LOS C	25.6	181.8	0.95	0.93	1.05	32.1
8	T1	1169	1.5	1169	1.5	* 0.820	26.0	LOS C	25.6	181.8	0.92	0.90	1.03	41.9
9	R2	179	1.5	179	1.5	* 0.866	52.3	LOS C	8.1	57.4	1.00	0.99	1.45	31.8
Approach		1426	1.5	1426	1.5	0.866	29.7	LOS C	25.6	181.8	0.93	0.92	1.09	39.9
West: Toorak Road														
10	L2	129	1.5	129	1.5	0.177	21.6	LOS A	3.3	23.2	0.67	0.73	0.67	43.4
11	T1	363	1.5	363	1.5	0.887	42.8	LOS C	16.4	116.4	1.00	1.07	1.37	25.3
12	R2	1	0.0	1	0.0	* 0.887	48.6	LOS C	16.4	116.4	1.00	1.07	1.38	34.8
Approach		494	1.5	494	1.5	0.887	37.3	LOS C	16.4	116.4	0.91	0.98	1.19	30.5
All Vehicles		3585	1.5	3585	1.5	0.887	28.7	LOS C	25.6	181.8	0.91	0.87	1.02	39.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist] m					
South: Punt Road											
P1	Full	76	22.6	LOS C	0.1	0.1	0.75	0.75	54.7	38.5	0.70
East: Toorak Road											
P2	Full	53	12.7	LOS B	0.1	0.1	0.56	0.56	42.0	35.2	0.84
North: Punt Road											
P3	Full	147	22.6	LOS C	0.3	0.3	0.75	0.75	54.7	38.5	0.70

West: Toorak Road											
P4	Full	53	12.7	LOS B	0.1	0.1	0.56	0.56	42.0	35.2	0.84
All Pedestrians		328	19.4	LOS B	0.3	0.3	0.69	0.69	50.6	37.4	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.

MOVEMENT SUMMARY

 Site: 206 [6. ChapToorSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Toorak Rd

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
1	L2	106	1.5	106	1.5	0.146	29.8	LOS A	3.7	26.6	0.95	0.79	0.95	19.5
2	T1	268	1.5	268	1.5	0.690	32.1	LOS B	12.9	91.7	1.00	0.88	1.02	17.8
3	R2	66	1.5	66	1.5	* 0.690	37.7	LOS B	12.9	91.7	1.00	0.88	1.02	17.8
Approach		441	1.5	441	1.5	0.690	32.4	LOS B	12.9	91.7	0.99	0.86	1.00	18.2
East: Toorak Road														
4	L2	107	1.5	107	1.5	0.150	21.8	LOS A	3.2	22.6	0.73	0.73	0.73	15.7
5	T1	340	1.5	340	1.5	0.708	22.9	LOS C	12.9	91.6	0.90	0.81	0.93	14.8
6	R2	44	1.5	44	1.5	* 0.708	28.6	LOS C	12.9	91.6	0.91	0.82	0.94	14.8
Approach		492	1.5	492	1.5	0.708	23.2	LOS C	12.9	91.6	0.87	0.80	0.89	15.0
North: Chapel Street														
7	L2	107	1.5	107	1.5	0.137	24.3	LOS A	3.2	22.5	0.80	0.76	0.80	15.9
8	T1	252	1.5	252	1.5	0.352	19.9	LOS A	8.0	56.6	0.86	0.73	0.86	18.2
9	R2	124	1.5	124	1.5	0.438	36.0	LOS A	4.6	32.8	0.96	0.81	0.96	11.6
Approach		483	1.5	483	1.5	0.438	25.0	LOS A	8.0	56.6	0.87	0.75	0.87	15.5
West: Toorak Road														
10	L2	188	1.5	188	1.5	0.241	13.3	LOS A	2.3	16.5	0.33	0.66	0.33	42.5
11	T1	389	1.5	389	1.5	0.544	8.4	LOS A	6.7	47.3	0.46	0.40	0.46	47.2
12	R2	124	1.5	124	1.5	0.459	35.1	LOS A	4.3	30.4	0.89	0.79	0.89	28.1
Approach		702	1.5	702	1.5	0.544	14.5	LOS A	6.7	47.3	0.50	0.54	0.50	41.1
All Vehicles		2118	1.5	2118	1.5	0.708	22.6	LOS C	12.9	91.7	0.77	0.71	0.78	25.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	266	12.8	LOS B	0.3	0.3	0.57	0.57	39.4	31.9	0.81
East: Toorak Road											
P2	Full	297	12.8	LOS B	0.4	0.4	0.57	0.57	42.1	35.2	0.84
North: Chapel Street											
P3	Full	412	12.9	LOS B	0.5	0.5	0.57	0.57	45.0	38.5	0.86

West: Toorak Road											
P4	Full	458	12.9	LOS B	0.6	0.6	0.57	0.57	45.0	38.5	0.86
All Pedestrians		1433	12.9	LOS B	0.6	0.6	0.57	0.57	43.3	36.6	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.

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MOVEMENT SUMMARY

 Site: 207 [7. ToorRiveSATExE (Site Folder: Retail Trader Peak)]  Network: N101 [Retail Trader Peak (Network Folder: General)]

Toorak Rd / River St
Retail Trader Peak, Existing Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Toorak Road														
5	T1	427	1.5	427	1.5	0.269	3.1	LOS A	4.0	28.2	0.31	0.27	0.31	54.8
6	R2	174	1.5	174	1.5	0.252	11.5	LOS A	2.6	18.6	0.55	0.72	0.55	49.3
Approach		601	1.5	601	1.5	0.269	5.5	LOS A	4.0	28.2	0.38	0.40	0.38	52.2
North: River Street														
7	L2	161	1.5	161	1.5	* 0.539	24.6	LOS A	3.2	22.7	0.96	0.79	0.96	42.4
9	R2	51	1.5	51	1.5	0.314	44.8	LOS A	2.0	14.0	0.97	0.74	0.97	24.4
Approach		212	1.5	212	1.5	0.539	29.4	LOS A	3.2	22.7	0.97	0.78	0.97	38.5
West: Toorak Road														
10	L2	67	1.5	67	1.5	0.106	9.0	LOS A	0.8	5.5	0.34	0.50	0.34	48.9
11	T1	511	1.5	511	1.5	* 0.513	5.3	LOS A	4.8	34.4	0.52	0.47	0.52	52.3
Approach		578	1.5	578	1.5	0.513	5.8	LOS A	4.8	34.4	0.50	0.48	0.50	51.8
All Vehicles		1391	1.5	1391	1.5	0.539	9.3	LOS A	4.8	34.4	0.52	0.49	0.52	48.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Toorak Road											
P2	Full	98	31.6	LOS D	0.2	0.2	0.89	0.89	63.7	38.5	0.60
North: River Street											
P3	Full	255	3.9	LOS A	0.1	0.1	0.44	0.44	30.5	31.9	1.05
All Pedestrians		353	11.6	LOS B	0.2	0.2	0.57	0.57	39.7	33.7	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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [PalermoArthur]

Network: N101 [Retail Trader Peak (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
Site: 208 [8. ChapPaleSATExE]														
South: Chapel Street														
2	T1	452	1.5	452	1.5	0.324	2.7	LOS A	3.5	25.1	0.25	0.23	0.25	26.0
3	R2	20	1.5	20	1.5	* 0.324	5.6	LOS A	3.5	25.1	0.29	0.28	0.29	34.8
Approach		472	1.5	472	1.5	0.324	2.8	LOS A	3.5	25.1	0.25	0.23	0.25	27.0
East: Palermo Street														
4	L2	13	1.5	13	1.5	0.069	42.1	LOS A	0.5	3.3	0.93	0.68	0.93	8.5
6	R2	17	1.5	17	1.5	0.092	42.3	LOS A	0.6	4.4	0.94	0.69	0.94	8.3
Approach		29	1.5	29	1.5	0.092	42.2	LOS A	0.6	4.4	0.94	0.69	0.94	8.4
North: Chapel Street														
7	L2	35	1.5	35	1.5	0.418	25.7	LOS A	7.5	53.3	0.86	0.73	0.86	26.6
8	T1	418	1.5	418	1.5	0.418	20.8	LOS A	7.5	53.3	0.87	0.74	0.87	23.5
Approach		453	1.5	453	1.5	0.418	21.2	LOS A	7.5	53.3	0.87	0.74	0.87	23.8
All Vehicles		954	1.5	954	1.5	0.418	12.7	LOS A	7.5	53.3	0.57	0.48	0.57	23.1
Site: 209 [9. ChapArthSATExE]														
South: Chapel Street														
1	L2	12	1.5	12	1.5	0.458	23.4	LOS A	6.8	48.2	0.73	0.62	0.73	39.2
2	T1	443	1.5	443	1.5	0.458	18.3	LOS A	6.8	48.2	0.75	0.63	0.75	17.3
Approach		455	1.5	455	1.5	0.458	18.5	LOS A	6.8	48.2	0.75	0.63	0.75	18.5
North: Chapel Street														
8	T1	414	1.5	414	1.5	0.539	2.7	LOS A	1.9	13.5	0.15	0.14	0.15	24.5
9	R2	14	1.5	14	1.5	* 0.539	4.9	LOS A	1.9	13.5	0.15	0.15	0.15	52.5
Approach		427	1.5	427	1.5	0.539	2.7	LOS A	1.9	13.5	0.15	0.14	0.15	30.5
West: Arthur Street														
10	L2	24	1.5	24	1.5	0.042	18.7	LOS A	0.8	5.3	0.58	0.68	0.58	37.4
12	R2	11	1.5	11	1.5	0.042	18.6	LOS A	0.8	5.3	0.58	0.68	0.58	37.4
Approach		35	1.5	35	1.5	0.042	18.7	LOS A	0.8	5.3	0.58	0.68	0.58	37.4
All Vehicles		917	1.5	917	1.5	0.539	11.1	LOS A	6.8	48.2	0.46	0.40	0.46	22.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec

Site: 208 [8. ChapPaleSATExE]											
South: Chapel Street											
P1	Full	162	31.7	LOS D	0.3	0.3	0.89	0.89	61.1	35.2	0.58
East: Palermo Street											
P2	Full	357	14.0	LOS B	0.5	0.5	0.60	0.60	40.6	31.9	0.79
All Pedestrians		519	19.5	LOS B	0.5	0.5	0.69	0.69	47.0	32.9	0.70
Site: 209 [9. ChapArthSATExE]											
West: Arthur Street											
P4	Full	700	14.2	LOS B	1.0	1.0	0.61	0.61	38.1	28.6	0.75
All Pedestrians		700	14.2	LOS B	1.0	1.0	0.61	0.61	38.1	28.6	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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG2 [GardenWilson]

■ Network: N101 [Retail Trader Peak (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
Site: 210 [10. ChapGardSATExE]														
South: Chapel Street														
2	T1	393	1.5	393	1.5	0.276	0.4	LOS A	0.3	2.3	0.03	0.04	0.03	53.5
3	R2	16	1.5	16	1.5	0.276	4.1	LOS A	0.3	2.3	0.03	0.05	0.03	52.4
Approach		408	1.5	408	1.5	0.276	0.6	LOS A	0.3	2.3	0.03	0.04	0.03	53.3
East: Garden Street														
4	L2	29	1.5	29	1.5	*0.512	40.0	LOS A	3.3	23.5	0.98	0.81	0.98	17.2
6	R2	74	1.5	74	1.5	*0.512	39.3	LOS A	3.3	23.5	0.98	0.81	0.98	17.2
Approach		103	1.5	103	1.5	0.512	39.5	LOS A	3.3	23.5	0.98	0.81	0.98	17.2
North: Chapel Street														
7	L2	62	1.5	62	1.5	0.076	10.6	LOS A	0.7	4.7	0.45	0.62	0.45	39.7
8	T1	349	1.5	349	1.5	*0.382	6.2	LOS A	3.8	26.7	0.56	0.49	0.56	32.5
Approach		412	1.5	412	1.5	0.382	6.9	LOS A	3.8	26.7	0.54	0.51	0.54	34.7
All Vehicles		923	1.5	923	1.5	0.512	7.7	LOS A	3.8	26.7	0.36	0.34	0.36	30.3
Site: 211 [11. ChapWilsSATExE]														
South: Chapel Street														
2	T1	405	1.5	405	1.5	0.233	3.5	LOS A	4.6	32.6	0.37	0.32	0.37	51.7
Approach		405	1.5	405	1.5	0.233	3.5	LOS A	4.6	32.6	0.37	0.32	0.37	51.7
East: Wilson Street														
4	L2	4	1.5	4	1.5	0.033	39.4	LOS A	0.2	1.6	0.92	0.63	0.92	4.2
6	R2	3	1.5	3	1.5	0.033	39.3	LOS A	0.2	1.6	0.93	0.65	0.93	4.1
Approach		7	1.5	7	1.5	0.033	39.4	LOS A	0.2	1.6	0.92	0.64	0.92	4.2
North: Chapel Street														
8	T1	357	1.5	357	1.5	0.205	1.8	LOS A	1.7	11.8	0.15	0.13	0.15	41.0
Approach		357	1.5	357	1.5	0.205	1.8	LOS A	1.7	11.8	0.15	0.13	0.15	41.0
All Vehicles		769	1.5	769	1.5	0.233	3.1	LOS A	4.6	32.6	0.27	0.23	0.27	48.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
Site: 210 [10. ChapGardSATExE]											
South: Chapel Street											

P1 Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
East: Garden Street										
P2 Full	360	4.1	LOS A	0.2	0.2	0.46	0.46	28.0	28.6	1.02
North: Chapel Street										
P3 Full	147	31.7	LOS D	0.3	0.3	0.89	0.89	61.0	35.2	0.58
All Pedestrians	560	14.0	LOS B	0.3	0.3	0.61	0.61	39.8	31.0	0.78
Site: 211 [11. ChapWilsSATExE]										
East: Wilson Street										
P2 Full	314	2.3	LOS A	0.2	0.2	0.24	0.24	26.1	28.6	1.09
North: Chapel Street										
P3 Full	136	31.7	LOS D	0.3	0.3	0.89	0.89	61.0	35.2	0.58
All Pedestrians	449	11.2	LOS B	0.3	0.3	0.44	0.44	36.7	30.6	0.83

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: 212 [12. CommBalmSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Commercial Rd / Balmoral St / Porter St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Porter Street														
1	L2	14	1.5	14	1.5	0.548	48.5	LOS A	2.8	20.0	1.00	0.78	1.05	33.6
2	T1	20	1.5	20	1.5	0.548	42.1	LOS A	2.8	20.0	1.00	0.78	1.05	34.2
3	R2	35	1.5	35	1.5	0.548	47.6	LOS A	2.8	20.0	1.00	0.78	1.05	24.1
Approach		68	1.5	68	1.5	0.548	46.2	LOS A	2.8	20.0	1.00	0.78	1.05	29.8
East: Commercial Road														
5	T1	431	1.5	431	1.5	0.447	5.3	LOS A	7.4	52.2	0.56	0.52	0.56	51.8
6	R2	115	1.5	115	1.5	* 0.447	11.1	LOS A	7.4	52.2	0.62	0.59	0.62	48.7
Approach		545	1.5	545	1.5	0.447	6.5	LOS A	7.4	52.2	0.57	0.53	0.57	51.1
North: RoadName														
7	L2	161	1.5	161	1.5	* 0.539	25.0	LOS A	3.6	25.4	0.96	0.79	0.96	33.8
9	R2	122	1.5	122	1.5	* 0.838	52.3	LOS C	5.4	38.5	1.00	0.95	1.44	31.7
Approach		283	1.5	283	1.5	0.838	36.8	LOS C	5.4	38.5	0.98	0.86	1.17	32.5
West: Commercial Road														
10	L2	100	1.5	100	1.5	0.109	10.5	LOS A	1.1	7.6	0.52	0.67	0.52	50.2
11	T1	461	1.5	461	1.5	* 0.545	6.5	LOS A	5.9	41.7	0.67	0.59	0.67	49.4
Approach		561	1.5	561	1.5	0.545	7.2	LOS A	5.9	41.7	0.64	0.60	0.64	49.7
All Vehicles		1458	1.5	1458	1.5	0.838	14.5	LOS C	7.4	52.2	0.70	0.63	0.74	43.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Porter Street											
P1	Full	206	2.0	LOS A	0.1	0.1	0.23	0.23	23.1	25.3	1.09
East: Commercial Road											
P2	Full	109	31.7	LOS D	0.2	0.2	0.89	0.89	61.0	35.2	0.58
North: RoadName											
P3	Full	196	3.9	LOS A	0.1	0.1	0.44	0.44	30.4	31.9	1.05
All Pedestrians		512	9.1	LOS A	0.2	0.2	0.45	0.45	34.0	29.9	0.88

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

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MOVEMENT SUMMARY

 Site: 213 [13. CommIzetSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Commercial Rd / Izett St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Izett Street														
1	L2	128	1.5	128	1.5	0.807	47.9	LOS C	8.9	63.0	1.00	0.93	1.27	23.8
3	R2	79	1.5	79	1.5	* 0.807	47.1	LOS C	8.9	63.0	1.00	0.93	1.27	23.8
Approach		207	1.5	207	1.5	0.807	47.6	LOS C	8.9	63.0	1.00	0.93	1.27	23.8
East: Commercial Road														
4	L2	84	1.5	84	1.5	0.128	19.6	LOS A	1.8	12.6	0.51	0.66	0.51	39.2
5	T1	414	1.5	414	1.5	* 0.640	17.7	LOS B	10.7	75.8	0.71	0.62	0.71	19.7
Approach		498	1.5	498	1.5	0.640	18.0	LOS B	10.7	75.8	0.68	0.63	0.68	25.8
West: Commercial Road														
11	T1	527	1.5	527	1.5	0.481	4.8	LOS A	6.5	46.1	0.52	0.48	0.52	37.5
12	R2	87	1.5	87	1.5	* 0.481	10.4	LOS A	6.5	46.1	0.57	0.55	0.57	49.7
Approach		615	1.5	615	1.5	0.481	5.6	LOS A	6.5	46.1	0.53	0.49	0.53	41.9
All Vehicles		1320	1.5	1320	1.5	0.807	16.9	LOS C	10.7	75.8	0.66	0.61	0.70	29.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Izett Street											
P1	Full	266	14.0	LOS B	0.4	0.4	0.59	0.59	37.8	28.6	0.76
East: Commercial Road											
P2	Full	823	32.6	LOS D	1.7	1.7	0.92	0.92	62.0	35.2	0.57
All Pedestrians		1089	28.1	LOS C	1.7	1.7	0.84	0.84	56.1	33.6	0.60

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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG3 [ChapelBray]

Network: N101 [Retail Trader Peak (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
Site: 214 [14. ChapMalvSATExE]														
South: Chapel Street														
1	L2	114	1.5	114	1.5	0.280	37.6	LOS A	4.4	30.9	1.00	0.80	1.00	16.6
2	T1	246	1.5	246	1.5	0.650	35.6	LOS B	10.1	71.4	1.00	0.85	1.01	17.0
3	R2	8	1.5	8	1.5	*0.650	41.1	LOS B	10.1	71.4	1.00	0.85	1.01	17.0
Approach		368	1.5	368	1.5	0.650	36.3	LOS B	10.1	71.4	1.00	0.83	1.01	16.9
East: Malvern Road														
4	L2	41	1.5	41	1.5	0.128	4.3	LOS A	0.1	0.8	0.02	0.19	0.02	41.0
5	T1	424	1.5	424	1.5	0.593	1.9	LOS A	2.6	18.4	0.14	0.23	0.14	32.8
6	R2	88	1.5	88	1.5	*0.593	5.5	LOS A	2.6	18.4	0.17	0.25	0.17	31.0
Approach		554	1.5	554	1.5	0.593	2.7	LOS A	2.6	18.4	0.13	0.23	0.13	33.0
North: Chapel Street														
7	L2	36	1.5	36	1.5	0.113	14.0	LOS A	0.7	5.2	0.31	0.47	0.31	39.3
8	T1	266	1.5	266	1.5	0.567	10.1	LOS A	4.7	33.4	0.47	0.44	0.47	40.3
9	R2	17	1.5	17	1.5	0.567	15.8	LOS A	4.7	33.4	0.49	0.43	0.49	40.5
Approach		319	1.5	319	1.5	0.567	10.9	LOS A	4.7	33.4	0.45	0.44	0.45	40.2
West: Commercial Road														
10	L2	126	1.5	126	1.5	0.336	19.4	LOS A	9.4	66.9	0.74	0.70	0.74	22.4
11	T1	382	1.5	382	1.5	0.336	13.7	LOS A	9.4	66.9	0.75	0.69	0.75	22.1
12	R2	74	1.5	74	1.5	0.336	19.9	LOS A	6.4	45.7	0.75	0.69	0.75	21.6
Approach		582	1.5	582	1.5	0.336	15.7	LOS A	9.4	66.9	0.75	0.69	0.75	22.1
All Vehicles		1823	1.5	1823	1.5	0.650	15.1	LOS B	10.1	71.4	0.56	0.54	0.56	24.8
Site: 215 [15. MalvBraySATExE]														
East: Malvern Road														
5	T1	525	1.5	525	1.5	0.363	13.6	LOS A	10.2	72.2	0.75	0.67	0.75	32.7
6	R2	102	1.5	102	1.5	0.363	19.4	LOS A	7.1	50.4	0.76	0.71	0.76	43.5
Approach		627	1.5	627	1.5	0.363	14.5	LOS A	10.2	72.2	0.75	0.68	0.75	35.8
North: Bray Street														
7	L2	53	1.5	53	1.5	0.095	28.0	LOS A	1.5	10.5	0.75	0.72	0.75	31.9
9	R2	24	1.5	24	1.5	0.044	26.9	LOS A	0.7	4.7	0.74	0.69	0.74	32.1
Approach		77	1.5	77	1.5	0.095	27.6	LOS A	1.5	10.5	0.75	0.71	0.75	31.9
West: Malvern Road														
10	L2	22	1.5	22	1.5	0.084	6.0	LOS A	0.5	3.6	0.16	0.24	0.16	51.6
11	T1	395	1.5	395	1.5	0.355	2.5	LOS A	1.8	12.7	0.15	0.15	0.15	32.2
Approach		417	1.5	417	1.5	0.355	2.7	LOS A	1.8	12.7	0.15	0.15	0.15	37.8
All Vehicles		1121	1.5	1121	1.5	0.363	11.0	LOS A	10.2	72.2	0.53	0.48	0.53	35.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist]			sec	m	m/sec
Site: 214 [14. ChapMalvSATExE]											
South: Chapel Street											
P1	Full	334	7.8	LOS A	0.3	0.3	0.44	0.44	37.1	35.2	0.95
East: Malvern Road											
P2	Full	454	19.3	LOS B	0.7	0.7	0.70	0.70	48.6	35.2	0.72
North: Chapel Street											
P3	Full	398	7.8	LOS A	0.4	0.4	0.44	0.44	37.1	35.2	0.95
West: Commercial Road											
P4	Full	712	19.5	LOS B	1.1	1.1	0.71	0.71	48.8	35.2	0.72
All Pedestrians		1897	14.9	LOS B	1.1	1.1	0.60	0.60	44.3	35.2	0.80
Site: 215 [15. MalvBraySATExE]											
North: Bray Street											
P3	Full	173	7.7	LOS A	0.2	0.2	0.44	0.44	34.3	31.9	0.93
West: Malvern Road											
P4	Full	53	18.9	LOS B	0.1	0.1	0.69	0.69	48.3	35.2	0.73
All Pedestrians		225	10.3	LOS B	0.2	0.2	0.50	0.50	37.6	32.7	0.87

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: 216 [16. MalvSurrSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Malvern Rd / Surrey Rd / Bendigo St
Retail Trader Peak, Existing Conditions
Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bendigo Street														
1	L2	7	1.5	7	1.5	0.035	21.4	LOS A	0.5	3.5	0.62	0.66	0.62	36.4
2	T1	2	1.5	2	1.5	0.035	15.0	LOS A	0.5	3.5	0.62	0.66	0.62	45.2
3	R2	12	1.5	12	1.5	0.035	20.5	LOS A	0.5	3.5	0.62	0.66	0.62	44.0
Approach		21	1.5	21	1.5	0.035	20.3	LOS A	0.5	3.5	0.62	0.66	0.62	42.3
East: Malvern Road														
4	L2	15	1.5	15	1.5	0.177	20.9	LOS A	3.5	24.8	0.66	0.56	0.66	46.5
5	T1	514	1.5	514	1.5	0.884	34.2	LOS C	20.9	147.9	0.91	0.96	1.16	28.1
6	R2	64	1.5	64	1.5	* 0.884	45.8	LOS C	20.9	147.9	1.00	1.09	1.33	35.1
Approach		593	1.5	593	1.5	0.884	35.1	LOS C	20.9	147.9	0.92	0.96	1.17	29.8
North: Surrey Road														
7	L2	115	1.5	115	1.5	0.225	22.2	LOS A	4.0	28.4	0.67	0.74	0.67	43.5
8	T1	2	1.5	2	1.5	* 0.225	15.8	LOS A	4.0	28.4	0.67	0.74	0.67	44.5
9	R2	44	1.5	44	1.5	0.225	21.3	LOS A	4.0	28.4	0.67	0.74	0.67	35.6
Approach		161	1.5	161	1.5	0.225	21.8	LOS A	4.0	28.4	0.67	0.74	0.67	42.0
West: Malvern Road														
10	L2	41	1.5	41	1.5	0.122	21.6	LOS A	2.6	18.7	0.73	0.65	0.73	42.0
11	T1	444	1.5	444	1.5	0.609	20.3	LOS B	12.8	90.9	0.86	0.75	0.86	41.7
12	R2	5	1.5	5	1.5	0.609	26.4	LOS B	12.8	90.9	0.88	0.77	0.88	40.2
Approach		491	1.5	491	1.5	0.609	20.5	LOS B	12.8	90.9	0.85	0.75	0.85	41.7
All Vehicles		1265	1.5	1265	1.5	0.884	27.5	LOS C	20.9	147.9	0.85	0.84	0.97	36.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist] m					
South: Bendigo Street											
P1	Full	96	12.7	LOS B	0.1	0.1	0.56	0.56	36.5	28.6	0.78
East: Malvern Road											
P2	Full	53	12.7	LOS B	0.1	0.1	0.56	0.56	42.0	35.2	0.84
North: Surrey Road											
P3	Full	85	12.7	LOS B	0.1	0.1	0.56	0.56	36.5	28.6	0.78

West: Malvern Road											
P4	Full	53	12.7	LOS B	0.1	0.1	0.56	0.56	42.0	35.2	0.84
All Pedestrians		286	12.7	LOS B	0.1	0.1	0.56	0.56	38.6	31.0	0.80

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 **Site: 217 [17. ChapChatSATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Chapel St / Chatam St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	20	1.5	20	1.5	0.113	18.3	LOS A	1.2	8.3	0.47	0.46	0.47	30.2
2	T1	327	1.5	327	1.5	* 0.563	14.8	LOS A	6.7	47.8	0.62	0.53	0.62	19.8
Approach		347	1.5	347	1.5	0.563	15.0	LOS A	6.7	47.8	0.61	0.53	0.61	20.7
North: Chapel Street														
8	T1	433	1.5	433	1.5	0.360	3.5	LOS A	4.9	34.5	0.41	0.36	0.41	46.7
9	R2	49	1.5	49	1.5	* 0.360	9.3	LOS A	4.9	34.5	0.49	0.44	0.49	46.7
Approach		482	1.5	482	1.5	0.360	4.1	LOS A	4.9	34.5	0.42	0.37	0.42	46.7
West: Chatham Street														
10	L2	40	1.5	40	1.5	0.041	15.3	LOS A	0.7	5.1	0.49	0.67	0.49	24.1
12	R2	48	1.5	48	1.5	* 0.264	43.4	LOS A	1.8	13.1	0.96	0.74	0.96	11.1
Approach		88	1.5	88	1.5	0.264	30.7	LOS A	1.8	13.1	0.75	0.71	0.75	14.7
All Vehicles		918	1.5	918	1.5	0.563	10.8	LOS A	6.7	47.8	0.52	0.46	0.52	31.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
North: Chapel Street											
P3	Full	267	31.9	LOS D	0.5	0.5	0.90	0.90	61.2	35.2	0.58
West: Chatham Street											
P4	Full	662	18.7	LOS B	1.0	1.0	0.69	0.69	45.3	31.9	0.70
All Pedestrians		929	22.5	LOS C	1.0	1.0	0.75	0.75	49.9	32.8	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.

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

MOVEMENT SUMMARY

 **Site: P201 [P1. PedXChap1SATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Pedestrian Crossing 12 on Chapel Street

Retail Trader Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	481	1.5	481	1.5	* 0.381	6.2	LOS A	10.5	74.5	0.61	0.54	0.61	39.6
Approach		481	1.5	481	1.5	0.381	6.2	LOS A	10.5	74.5	0.61	0.54	0.61	39.6
North: Chapel Street														
8	T1	481	1.5	481	1.5	0.381	3.1	LOS A	4.9	34.7	0.28	0.25	0.28	41.9
Approach		481	1.5	481	1.5	0.381	3.1	LOS A	4.9	34.7	0.28	0.25	0.28	41.9
All Vehicles		962	1.5	962	1.5	0.381	4.6	LOS A	10.5	74.5	0.45	0.40	0.45	40.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	204	31.8	LOS D	0.4	0.4	0.90	0.90	55.6	28.6	0.51
All Pedestrians		204	31.8	LOS D	0.4	0.4	0.90	0.90	55.6	28.6	0.51

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: 218 [18. HighStEdSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

High St / St. Edmonds Rd

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: High Street														
5	T1	376	1.5	376	1.5	0.383	0.6	LOS A	0.5	3.3	0.03	0.14	0.03	57.9
6	R2	103	1.5	103	1.5	* 0.383	5.9	LOS A	0.5	3.3	0.04	0.20	0.04	54.7
Approach		479	1.5	479	1.5	0.383	1.7	LOS A	0.5	3.3	0.03	0.15	0.03	57.2
North: St. Edmonds Road														
7	L2	94	1.5	94	1.5	0.680	49.7	LOS B	3.9	28.0	1.00	0.83	1.17	23.3
9	R2	106	1.5	106	1.5	* 0.834	52.3	LOS C	4.7	33.5	1.00	0.94	1.47	31.7
Approach		200	1.5	200	1.5	0.834	51.1	LOS C	4.7	33.5	1.00	0.89	1.33	28.5
West: High Street														
10	L2	173	1.5	173	1.5	0.121	7.9	LOS A	1.6	11.6	0.26	0.64	0.26	51.8
11	T1	497	1.5	497	1.5	0.381	3.1	LOS A	6.1	43.5	0.34	0.31	0.34	54.6
Approach		669	1.5	669	1.5	0.381	4.3	LOS A	6.1	43.5	0.32	0.39	0.32	53.4
All Vehicles		1348	1.5	1348	1.5	0.834	10.3	LOS C	6.1	43.5	0.32	0.38	0.37	47.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
East: High Street											
P2	Full	77	31.6	LOS D	0.2	0.2	0.89	0.89	60.9	35.2	0.58
North: St. Edmonds Road											
P3	Full	91	1.8	LOS A	0.0	0.0	0.21	0.21	28.4	31.9	1.12
All Pedestrians		167	15.5	LOS B	0.2	0.2	0.52	0.52	43.3	33.4	0.77

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: 219 [19. ChapHighSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / High St

Retail Trader Peak. Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
1	L2	67	1.5	67	1.5	0.493	36.1	LOS A	5.6	39.5	0.91	0.76	0.91	19.3
2	T1	281	1.5	281	1.5	* 0.985	59.7	LOS E	13.3	94.3	0.97	1.10	1.62	12.1
3	R2	35	1.5	35	1.5	0.985	80.0	LOS E	13.3	94.3	1.00	1.28	1.98	10.2
Approach		383	1.5	383	1.5	0.985	57.4	LOS E	13.3	94.3	0.96	1.06	1.53	12.7
East: High Street														
4	L2	109	1.5	109	1.5	0.475	33.4	LOS A	8.1	57.4	0.92	0.79	0.92	21.4
5	T1	360	1.5	360	1.5	* 0.949	47.9	LOS D	18.0	127.4	0.97	1.07	1.41	15.0
6	R2	94	1.5	94	1.5	0.949	64.3	LOS D	18.0	127.4	1.00	1.23	1.68	12.9
Approach		563	1.5	563	1.5	0.949	47.8	LOS D	18.0	127.4	0.96	1.04	1.36	15.5
North: Chapel Street														
7	L2	88	1.5	88	1.5	0.282	23.8	LOS A	3.9	27.6	0.62	0.63	0.62	22.5
8	T1	261	1.5	261	1.5	0.564	17.6	LOS A	6.2	43.8	0.73	0.66	0.73	23.5
9	R2	51	1.5	51	1.5	* 0.564	22.9	LOS A	6.2	43.8	0.78	0.67	0.78	24.0
Approach		400	1.5	400	1.5	0.564	19.6	LOS A	6.2	43.8	0.71	0.65	0.71	23.3
West: High Street														
10	L2	106	1.5	106	1.5	0.294	18.3	LOS A	5.4	38.1	0.54	0.57	0.54	23.7
11	T1	386	1.5	386	1.5	0.587	14.8	LOS A	7.7	54.5	0.70	0.66	0.70	21.8
12	R2	87	1.5	87	1.5	* 0.587	21.9	LOS A	7.7	54.5	0.83	0.73	0.83	20.6
Approach		580	1.5	580	1.5	0.587	16.5	LOS A	7.7	54.5	0.69	0.65	0.69	21.9
All Vehicles		1926	1.5	1926	1.5	0.985	34.5	LOS E	18.0	127.4	0.83	0.85	1.06	16.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	183	21.2	LOS C	0.3	0.3	0.73	0.73	50.5	35.2	0.70
East: High Street											
P2	Full	348	15.2	LOS B	0.5	0.5	0.62	0.62	44.6	35.2	0.79
North: Chapel Street											
P3	Full	204	10.6	LOS B	0.2	0.2	0.52	0.52	39.9	35.2	0.88

West: High Street											
P4	Full	475	26.1	LOS C	0.9	0.9	0.82	0.82	55.4	35.2	0.63
All Pedestrians		1211	19.6	LOS B	0.9	0.9	0.70	0.70	49.0	35.2	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: 220 [20. HighBangSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Bangs St / Hornby St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Hornby St														
1	L2	27	1.5	27	1.5	0.967	71.3	LOS E	5.1	36.4	1.00	1.11	2.05	18.6
2	T1	27	1.5	27	1.5	* 0.967	64.8	LOS E	5.1	36.4	1.00	1.11	2.05	28.2
3	R2	41	1.5	41	1.5	0.967	70.3	LOS E	5.1	36.4	1.00	1.11	2.05	27.7
Approach		96	1.5	96	1.5	0.967	69.0	LOS E	5.1	36.4	1.00	1.11	2.05	25.7
East: High Street														
5	T1	526	1.5	526	1.5	0.443	3.2	LOS A	6.2	43.6	0.33	0.34	0.33	53.6
6	R2	79	1.5	79	1.5	* 0.443	8.8	LOS A	6.2	43.6	0.36	0.39	0.36	54.6
Approach		605	1.5	605	1.5	0.443	3.9	LOS A	6.2	43.6	0.34	0.35	0.34	53.8
North: Bangs St														
7	L2	127	1.5	127	1.5	0.942	58.0	LOS D	5.6	40.0	0.99	0.96	1.55	30.4
9	R2	31	1.5	31	1.5	0.942	64.3	LOS D	5.6	40.0	1.00	1.09	1.88	19.5
Approach		158	1.5	158	1.5	0.942	59.2	LOS D	5.6	40.0	1.00	0.98	1.61	28.7
West: High Street														
10	L2	20	1.5	20	1.5	0.095	6.6	LOS A	0.5	3.7	0.10	0.16	0.10	55.7
11	T1	472	1.5	472	1.5	0.268	1.4	LOS A	1.6	11.1	0.12	0.12	0.12	58.3
Approach		492	1.5	492	1.5	0.268	1.6	LOS A	1.6	11.1	0.12	0.12	0.12	58.2
All Vehicles		1351	1.5	1351	1.5	0.967	14.2	LOS E	6.2	43.6	0.38	0.39	0.53	44.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Hornby St											
P1	Full	113	1.8	LOS A	0.1	0.1	0.21	0.21	22.9	25.3	1.10
East: High Street											
P2	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
North: Bangs St											
P3	Full	89	1.8	LOS A	0.0	0.0	0.21	0.21	28.4	31.9	1.12
West: High Street											
P4	Full	53	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58

All Pedestrians	307	12.0	LOS B	0.1	0.1	0.44	0.44	37.5	30.6	0.82
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Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 **Site: P202 [P2. PedXChap2SATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Pedestrian Crossing #2 on Chapel Street

Retail Trader Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	575	1.5	575	1.5	* 0.455	4.5	LOS A	9.8	69.8	0.48	0.43	0.48	46.0
Approach		575	1.5	575	1.5	0.455	4.5	LOS A	9.8	69.8	0.48	0.43	0.48	46.0
North: Chapel Street														
8	T1	458	1.5	458	1.5	0.363	2.8	LOS A	4.3	30.3	0.26	0.23	0.26	50.4
Approach		458	1.5	458	1.5	0.363	2.8	LOS A	4.3	30.3	0.26	0.23	0.26	50.4
All Vehicles		1033	1.5	1033	1.5	0.455	3.8	LOS A	9.8	69.8	0.38	0.34	0.38	47.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	162	31.7	LOS D	0.3	0.3	0.89	0.89	55.6	28.6	0.51
All Pedestrians		162	31.7	LOS D	0.3	0.3	0.89	0.89	55.6	28.6	0.51

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: N:\Projects\2022\220353\Sidra\220353SID001A(Existing).sip9

MOVEMENT SUMMARY

 Site: P203 [P3. PedXChap3SATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Pedestrian Crossing #3 on Chapel Street

Retail Trader Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	575	1.5	575	1.5	* 0.448	3.6	LOS A	8.0	56.8	0.39	0.35	0.39	41.8
Approach		575	1.5	575	1.5	0.448	3.6	LOS A	8.0	56.8	0.39	0.35	0.39	41.8
North: Chapel Street														
8	T1	458	1.5	458	1.5	0.357	4.4	LOS A	7.8	55.4	0.47	0.42	0.47	46.5
Approach		458	1.5	458	1.5	0.357	4.4	LOS A	7.8	55.4	0.47	0.42	0.47	46.5
All Vehicles		1033	1.5	1033	1.5	0.448	4.0	LOS A	8.0	56.8	0.43	0.38	0.43	44.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	120	31.7	LOS D	0.2	0.2	0.89	0.89	55.5	28.6	0.52
All Pedestrians		120	31.7	LOS D	0.2	0.2	0.89	0.89	55.5	28.6	0.52

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.

Site: 221 [21. ChapDandSATExE (Site Folder: Retail Trader Peak)] Network: N101 [Retail Trader Peak (Network Folder: General)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	60	17.6	LOS B	0.1	0.1	0.66	0.66	46.9	35.2	0.75
East: Dandenong Road											
P21	Stage 1	164	8.6	LOS A	0.2	0.2	0.47	0.47	42.6	40.8	0.96
P22	Stage 2	164	16.4	LOS B	0.2	0.2	0.64	0.64	47.6	37.5	0.79
North: Chapel Street											

P3 Full	53	19.6	LOS B	0.1	0.1	0.70	0.70	49.0	35.2	0.72
West: Dandenong Road										
P41 Stage 1	166	7.3	LOS A	0.2	0.2	0.43	0.43	41.3	40.8	0.99
P42 Stage 2	166	16.4	LOS B	0.2	0.2	0.64	0.64	44.9	34.2	0.76
All Pedestrians	774	13.1	LOS B	0.2	0.2	0.56	0.56	44.6	37.9	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.

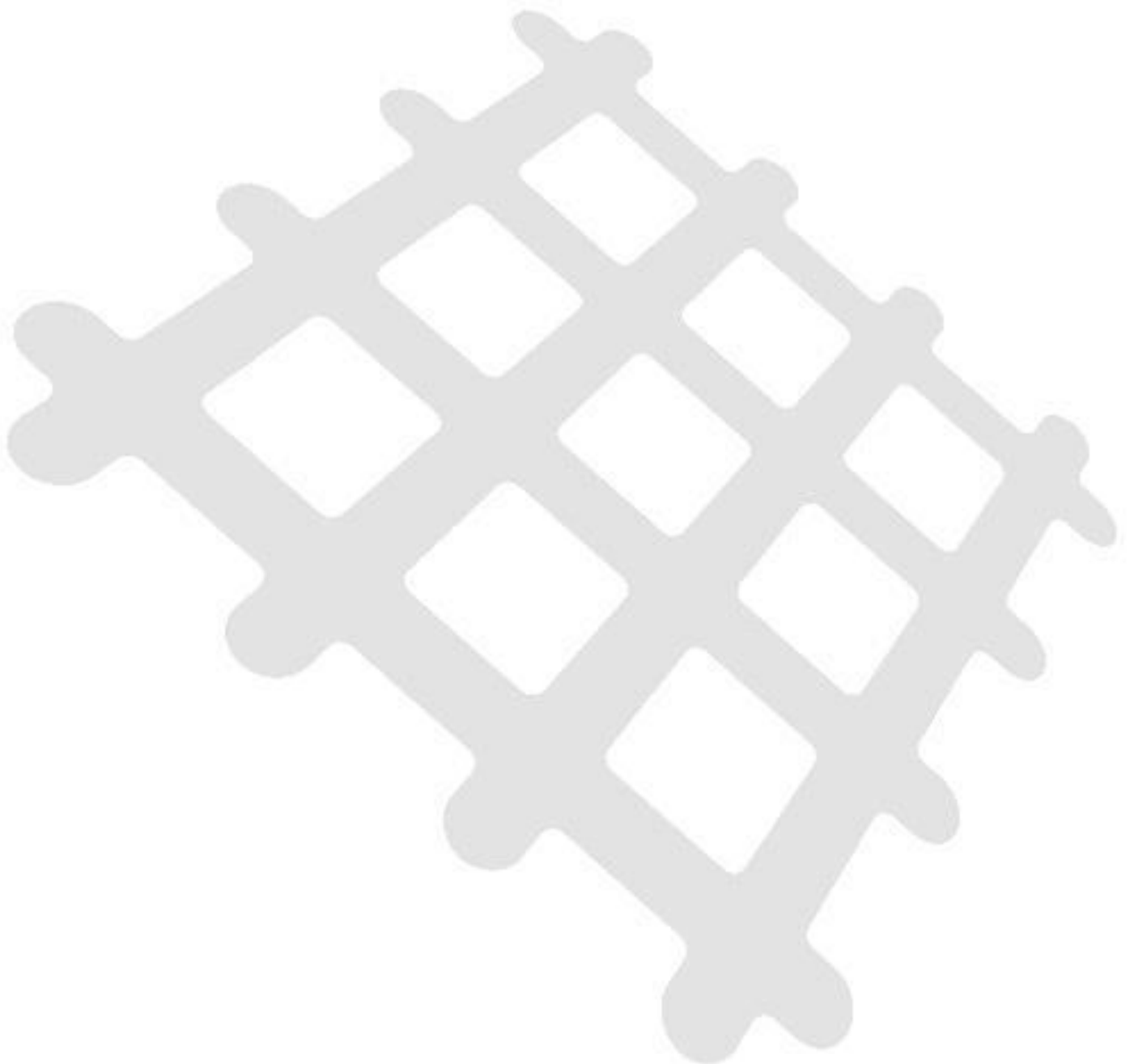
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Appendix D SIDRA Analysis – Design Hour Conditions



MOVEMENT SUMMARY

 Site: 001 [1. AlexYarraAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Alexandra Ave / Yarra St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Yarra Street														
1	L2	95	4.0	95	4.0	0.175	28.1	LOS A	2.8	20.0	0.78	0.74	0.78	40.2
3	R2	69	4.0	69	4.0	* 0.512	47.1	LOS A	2.8	20.5	1.00	0.76	1.01	23.7
Approach		164	4.0	164	4.0	0.512	36.1	LOS A	2.8	20.5	0.87	0.75	0.88	33.9
East: Alexandra Avenue														
4	L2	67	4.0	67	4.0	0.643	28.3	LOS B	19.5	141.4	0.95	0.85	0.95	38.6
5	T1	1059	4.0	1059	4.0	* 0.643	27.4	LOS B	21.7	157.3	0.98	0.87	0.98	37.4
Approach		1126	4.0	1126	4.0	0.643	27.4	LOS B	21.7	157.3	0.98	0.87	0.98	37.5
West: Alexandra Avenue														
11	T1	902	4.0	902	4.0	* 0.387	4.5	LOS A	5.5	39.7	0.54	0.47	0.54	52.3
12	R2	107	4.0	107	4.0	0.394	40.1	LOS A	3.9	28.4	0.95	0.78	0.95	35.5
Approach		1009	4.0	1009	4.0	0.394	8.3	LOS A	5.5	39.7	0.58	0.50	0.58	48.0
All Vehicles		2299	4.0	2299	4.0	0.643	19.6	LOS B	21.7	157.3	0.80	0.70	0.80	40.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Yarra Street											
P1	Full	92	7.7	LOS A	0.1	0.1	0.44	0.44	34.3	31.9	0.93
East: Alexandra Avenue											
P2	Full	58	14.9	LOS B	0.1	0.1	0.78	0.78	46.9	38.5	0.82
All Pedestrians		150	10.5	LOS B	0.1	0.1	0.57	0.57	39.2	34.4	0.88

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.

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	70	16.9	LOS B	0.1	0.1	0.65	0.65	46.3	35.2	0.76
East: Alexandra Avenue											
P2	Full	135	22.6	LOS C	0.2	0.2	0.75	0.75	54.7	38.5	0.70
North: Church Street Bridge											

P3 Full	54	22.6	LOS C	0.1	0.1	0.75	0.75	51.9	35.2	0.68
West: Alexandra Avenue										
P4 Full	253	22.7	LOS C	0.4	0.4	0.76	0.76	54.8	38.5	0.70
All Pedestrians	512	21.9	LOS C	0.4	0.4	0.74	0.74	53.3	37.7	0.71

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 003 [3. ChapMalcAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Malcolm St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	435	4.0	435	4.0	0.236	2.2	LOS A	1.7	12.5	0.19	0.19	0.19	45.7
3	R2	60	4.0	60	4.0	* 0.236	11.2	LOS A	1.7	12.5	0.48	0.51	0.48	48.1
Approach		495	4.0	495	4.0	0.236	3.3	LOS A	1.7	12.5	0.22	0.22	0.22	46.6
East: Malcolm Street														
4	L2	112	4.0	112	4.0	0.155	22.1	LOS A	2.8	20.2	0.67	0.73	0.67	35.0
6	R2	193	4.0	193	4.0	* 0.856	51.1	LOS C	8.7	62.7	1.00	0.97	1.41	22.6
Approach		305	4.0	305	4.0	0.856	40.4	LOS C	8.7	62.7	0.88	0.88	1.14	26.0
North: Chapel Street														
7	L2	176	4.0	176	4.0	0.424	28.7	LOS A	12.8	92.9	0.95	0.84	0.95	36.5
8	T1	511	4.0	511	4.0	* 0.424	26.7	LOS A	12.8	92.9	0.98	0.85	0.98	19.0
Approach		687	4.0	687	4.0	0.424	27.2	LOS A	12.8	92.9	0.97	0.85	0.97	25.6
All Vehicles		1488	4.0	1488	4.0	0.856	21.9	LOS C	12.8	92.9	0.70	0.65	0.76	28.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	161	30.0	LOS C	0.3	0.3	0.87	0.87	59.3	35.2	0.59
East: Malcolm Street											
P2	Full	192	11.6	LOS B	0.2	0.2	0.54	0.54	38.2	31.9	0.83
All Pedestrians		353	20.0	LOS B	0.3	0.3	0.69	0.69	47.8	33.4	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.

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

MOVEMENT SUMMARY

 Site: 004 [4. ChapDalyAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Daly St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	42	4.0	42	4.0	0.178	6.9	LOS A	1.2	8.5	0.13	0.19	0.13	48.1
2	T1	409	4.0	409	4.0	0.178	2.3	LOS A	2.9	21.0	0.25	0.27	0.25	44.1
3	R2	14	4.0	14	4.0	0.178	9.0	LOS A	2.9	21.0	0.38	0.35	0.38	44.9
Approach		464	4.0	464	4.0	0.178	3.0	LOS A	2.9	21.0	0.24	0.26	0.24	44.8
East: Car Park Access														
4	L2	3	4.0	3	4.0	0.020	42.7	LOS A	0.1	0.9	0.93	0.63	0.93	11.3
5	T1	1	4.0	1	4.0	0.035	38.9	LOS A	0.2	1.2	0.95	0.63	0.95	18.3
6	R2	3	4.0	3	4.0	0.035	44.5	LOS A	0.2	1.2	0.95	0.63	0.95	11.2
Approach		7	4.0	7	4.0	0.035	42.9	LOS A	0.2	1.2	0.94	0.63	0.94	12.4
North: Chapel Street														
7	L2	45	4.0	45	4.0	0.243	6.6	LOS A	1.3	9.1	0.10	0.16	0.10	49.4
8	T1	476	4.0	476	4.0	0.243	0.8	LOS A	1.3	9.1	0.07	0.17	0.07	49.7
9	R2	70	4.0	70	4.0	* 0.243	5.9	LOS A	0.2	1.8	0.03	0.19	0.03	49.0
Approach		591	4.0	591	4.0	0.243	1.8	LOS A	1.3	9.1	0.07	0.17	0.07	49.5
West: Daly Street														
10	L2	62	4.0	62	4.0	0.392	45.3	LOS A	2.4	17.7	0.98	0.75	0.98	10.8
11	T1	1	4.0	1	4.0	* 0.428	40.1	LOS A	2.5	18.2	0.99	0.75	0.99	17.5
12	R2	62	4.0	62	4.0	0.428	45.7	LOS A	2.5	18.2	0.99	0.75	0.99	10.6
Approach		125	4.0	125	4.0	0.428	45.4	LOS A	2.5	18.2	0.98	0.75	0.98	10.8
All Vehicles		1188	4.0	1188	4.0	0.428	7.1	LOS A	2.9	21.0	0.24	0.27	0.24	34.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	107	31.6	LOS D	0.2	0.2	0.89	0.89	61.0	35.2	0.58
East: Car Park Access											
P2	Full	229	2.0	LOS A	0.1	0.1	0.23	0.23	28.6	31.9	1.11

North: Chapel Street											
P3	Full	126	31.7	LOS D	0.3	0.3	0.89	0.89	61.0	35.2	0.58
West: Daly Street											
P4	Full	246	2.0	LOS A	0.1	0.1	0.23	0.23	28.6	31.9	1.11
All Pedestrians		708	11.8	LOS B	0.3	0.3	0.45	0.45	39.3	33.0	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.

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MOVEMENT SUMMARY

 Site: 005 [5. PuntToorAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Punt Rd / Toorak Rd

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Punt Road														
1	L2	80	4.0	80	4.0	0.912	47.0	LOS D	31.3	226.6	1.00	1.14	1.33	34.8
2	T1	1169	4.0	1169	4.0	* 0.912	41.3	LOS D	31.3	226.6	0.99	1.13	1.33	35.6
3	R2	70	4.0	70	4.0	0.520	47.2	LOS A	2.9	20.8	1.00	0.76	1.02	23.8
Approach		1319	4.0	1319	4.0	0.912	42.0	LOS D	31.3	226.6	0.99	1.11	1.32	35.1
East: Toorak Road														
4	L2	68	4.0	68	4.0	0.863	29.2	LOS C	15.6	112.7	0.92	0.89	1.06	41.9
5	T1	431	4.0	431	4.0	0.863	27.5	LOS C	15.6	112.7	0.94	0.90	1.10	40.8
6	R2	75	4.0	75	4.0	* 0.863	49.1	LOS C	7.0	51.0	1.00	0.92	1.26	33.7
Approach		574	4.0	574	4.0	0.863	30.5	LOS C	15.6	112.7	0.94	0.90	1.11	39.8
North: Punt Road														
7	L2	70	4.0	70	4.0	0.806	30.3	LOS C	25.2	182.7	0.93	0.90	1.01	33.5
8	T1	1161	4.0	1161	4.0	0.806	23.6	LOS C	25.2	182.7	0.88	0.86	0.98	43.1
9	R2	275	4.0	275	4.0	* 1.017	93.1	LOS F ¹¹	18.1	131.4	1.00	1.27	2.08	23.3
Approach		1507	4.0	1507	4.0	1.017	36.6	LOS F ¹¹	25.2	182.7	0.91	0.94	1.18	37.0
West: Toorak Road														
10	L2	73	4.0	73	4.0	0.155	25.6	LOS A	2.5	18.4	0.73	0.70	0.73	41.9
11	T1	365	4.0	365	4.0	0.775	32.7	LOS C	13.5	97.7	0.96	0.90	1.09	29.2
Approach		438	4.0	438	4.0	0.775	31.5	LOS C	13.5	97.7	0.92	0.87	1.03	31.9
All Vehicles		3838	4.0	3838	4.0	1.017	37.0	LOS F ¹¹	31.3	226.6	0.94	0.98	1.20	36.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Punt Road											
P1	Full	259	22.0	LOS C	0.4	0.4	0.75	0.75	54.1	38.5	0.71
East: Toorak Road											
P2	Full	84	11.6	LOS B	0.1	0.1	0.54	0.54	40.9	35.2	0.86

North: Punt Road											
P3	Full	159	21.9	LOS C	0.3	0.3	0.74	0.74	54.0	38.5	0.71
West: Toorak Road											
P4	Full	75	15.1	LOS B	0.1	0.1	0.61	0.61	44.4	35.2	0.79
All Pedestrians		577	19.6	LOS B	0.4	0.4	0.70	0.70	50.9	37.6	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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MOVEMENT SUMMARY

 Site: 006 [6. ChapToorAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Toorak Rd

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	56	4.0	56	4.0	0.494	27.6	LOS A	8.0	57.7	0.88	0.75	0.88	22.6
2	T1	292	4.0	292	4.0	0.494	26.3	LOS A	8.0	57.7	0.92	0.77	0.92	20.2
3	R2	35	4.0	35	4.0	0.494	39.8	LOS A	5.5	39.6	1.00	0.81	1.00	16.9
Approach		383	4.0	383	4.0	0.494	27.7	LOS A	8.0	57.7	0.92	0.77	0.92	20.2
East: Toorak Road														
4	L2	80	4.0	80	4.0	0.566	29.2	LOS A	11.6	84.2	0.87	0.77	0.87	14.2
5	T1	591	4.0	591	4.0	* 0.566	23.9	LOS A	11.6	84.2	0.89	0.77	0.89	14.4
6	R2	2	4.0	2	4.0	0.566	29.6	LOS A	10.7	77.5	0.91	0.78	0.91	14.7
Approach		674	4.0	674	4.0	0.566	24.5	LOS A	11.6	84.2	0.89	0.77	0.89	14.4
North: Chapel Street														
7	L2	112	4.0	112	4.0	0.171	31.1	LOS A	3.8	27.5	0.91	0.78	0.91	13.1
8	T1	279	4.0	279	4.0	0.475	28.5	LOS A	10.1	73.0	0.97	0.83	0.97	14.0
9	R2	157	4.0	157	4.0	* 0.568	44.1	LOS A	6.3	45.9	1.00	0.83	1.00	9.8
Approach		548	4.0	548	4.0	0.568	33.5	LOS A	10.1	73.0	0.97	0.82	0.97	12.3
West: Toorak Road														
10	L2	165	4.0	165	4.0	0.188	10.4	LOS A	1.5	11.0	0.25	0.64	0.25	44.9
11	T1	358	4.0	358	4.0	0.443	5.7	LOS A	4.4	31.6	0.33	0.29	0.33	50.8
12	R2	83	4.0	83	4.0	* 0.256	20.9	LOS A	1.7	12.2	0.73	0.72	0.73	35.8
Approach		606	4.0	606	4.0	0.443	9.1	LOS A	4.4	31.6	0.36	0.44	0.36	46.5
All Vehicles		2211	4.0	2211	4.0	0.568	23.1	LOS A	11.6	84.2	0.77	0.69	0.77	24.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Chapel Street											
P1	Full	154	17.0	LOS B	0.2	0.2	0.65	0.65	43.6	31.9	0.73
East: Toorak Road											
P2	Full	196	15.8	LOS B	0.3	0.3	0.63	0.63	45.1	35.2	0.78

North: Chapel Street											
P3	Full	432	10.2	LOS B	0.5	0.5	0.51	0.51	42.3	38.5	0.91
West: Toorak Road											
P4	Full	310	15.8	LOS B	0.4	0.4	0.63	0.63	47.9	38.5	0.80
All Pedestrians		1092	13.7	LOS B	0.5	0.5	0.59	0.59	44.6	37.0	0.83

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: N:\Projects\2022\220353\Sidra\220353SID002A(DesignHour).sip9

MOVEMENT SUMMARY

 Site: 007 [7. ToorRiveAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Toorak Rd / River St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Toorak Road														
5	T1	598	4.0	598	4.0	0.217	2.6	LOS A	3.3	24.0	0.29	0.25	0.29	55.4
6	R2	305	4.0	305	4.0	0.409	10.8	LOS A	4.8	34.4	0.55	0.74	0.55	49.6
Approach		903	4.0	903	4.0	0.409	5.4	LOS A	4.8	34.4	0.38	0.41	0.38	52.3
North: River Street														
7	L2	107	4.0	107	4.0	* 0.394	24.4	LOS A	2.1	14.9	0.94	0.77	0.94	42.3
9	R2	59	4.0	59	4.0	* 0.433	46.7	LOS A	2.4	17.1	0.99	0.75	0.99	23.9
Approach		165	4.0	165	4.0	0.433	32.3	LOS A	2.4	17.1	0.96	0.76	0.96	36.2
West: Toorak Road														
10	L2	61	4.0	61	4.0	0.091	8.3	LOS A	0.6	4.4	0.29	0.49	0.29	49.3
11	T1	441	4.0	441	4.0	* 0.442	4.1	LOS A	3.3	23.7	0.42	0.38	0.42	53.8
Approach		502	4.0	502	4.0	0.442	4.6	LOS A	3.3	23.7	0.40	0.40	0.40	53.2
All Vehicles		1570	4.0	1570	4.0	0.442	8.0	LOS A	4.8	34.4	0.45	0.45	0.45	49.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Toorak Road											
P2	Full	45	31.6	LOS D	0.1	0.1	0.89	0.89	63.6	38.5	0.60
North: River Street											
P3	Full	202	3.6	LOS A	0.1	0.1	0.43	0.43	30.2	31.9	1.06
All Pedestrians		247	8.7	LOS A	0.1	0.1	0.51	0.51	36.3	33.1	0.91

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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [PalermoArthur]

Network: N101 [AM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
Site: 008 [8. ChapPaleAMExE]														
South: Chapel Street														
2	T1	414	4.0	414	4.0	0.359	3.9	LOS A	3.7	26.7	0.26	0.23	0.26	20.3
3	R2	15	4.0	15	4.0	*0.359	7.4	LOS A	3.7	26.7	0.32	0.29	0.32	30.7
Approach		429	4.0	429	4.0	0.359	4.1	LOS A	3.7	26.7	0.26	0.24	0.26	21.2
East: Palermo Street														
4	L2	2	4.0	2	4.0	0.005	31.2	LOS A	0.1	0.5	0.79	0.62	0.79	10.9
6	R2	5	4.0	5	4.0	0.013	31.4	LOS A	0.2	1.2	0.80	0.65	0.80	10.7
Approach		7	4.0	7	4.0	0.013	31.4	LOS A	0.2	1.2	0.80	0.64	0.80	10.7
North: Chapel Street														
7	L2	69	4.0	69	4.0	0.537	35.4	LOS A	8.1	58.5	0.97	0.81	0.97	21.4
8	T1	352	4.0	352	4.0	0.537	30.5	LOS A	8.1	58.5	0.98	0.81	0.98	18.3
Approach		422	4.0	422	4.0	0.537	31.3	LOS A	8.1	58.5	0.98	0.81	0.98	18.9
All Vehicles		858	4.0	858	4.0	0.537	17.7	LOS A	8.1	58.5	0.62	0.52	0.62	19.1
Site: 009 [9. ChapArthAMExE]														
South: Chapel Street														
1	L2	5	4.0	5	4.0	0.559	29.9	LOS A	6.6	47.5	0.77	0.64	0.77	35.2
2	T1	397	4.0	397	4.0	*0.559	25.1	LOS A	6.6	47.5	0.79	0.66	0.79	13.8
Approach		402	4.0	402	4.0	0.559	25.1	LOS A	6.6	47.5	0.79	0.66	0.79	14.3
North: Chapel Street														
8	T1	346	4.0	346	4.0	0.305	0.5	LOS A	0.3	2.3	0.03	0.04	0.03	47.3
9	R2	11	4.0	11	4.0	*0.305	3.0	LOS A	0.3	2.3	0.03	0.05	0.03	55.2
Approach		357	4.0	357	4.0	0.305	0.6	LOS A	0.3	2.3	0.03	0.04	0.03	49.8
West: Arthur Street														
10	L2	30	4.0	30	4.0	0.078	30.5	LOS A	1.1	7.7	0.80	0.71	0.80	30.2
12	R2	5	4.0	5	4.0	0.078	30.5	LOS A	1.1	7.7	0.80	0.71	0.80	30.2
Approach		35	4.0	35	4.0	0.078	30.5	LOS A	1.1	7.7	0.80	0.71	0.80	30.2
All Vehicles		794	4.0	794	4.0	0.559	14.4	LOS A	6.6	47.5	0.45	0.38	0.45	18.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop	Travel Time	Travel Dist.	Aver. Speed

		ped/h	sec		[Ped ped	Dist] m		Rate		sec	m	m/sec
Site: 008 [8. ChapPaleAMExE]												
South: Chapel Street												
P1	Full	54	23.3	LOS C	0.1	0.1	0.76	0.76	52.6	35.2	0.67	
East: Palermo Street												
P2	Full	184	19.1	LOS B	0.3	0.3	0.69	0.69	45.6	31.9	0.70	
All Pedestrians		237	20.0	LOS C	0.3	0.3	0.71	0.71	47.2	32.6	0.69	
Site: 009 [9. ChapArthAMExE]												
West: Arthur Street												
P4	Full	234	19.1	LOS B	0.4	0.4	0.69	0.69	42.9	28.6	0.67	
All Pedestrians		234	19.1	LOS B	0.4	0.4	0.69	0.69	42.9	28.6	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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CCG MOVEMENT SUMMARY

Common Control Group: CCG2 [GardenWilson]

Network: N101 [AM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND	FLOWS	ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
Site: 010 [10. ChapGardAMExE]														
South: Chapel Street														
2	T1	353	4.0	353	4.0	0.261	0.4	LOS A	0.3	2.2	0.03	0.06	0.03	52.1
3	R2	29	4.0	29	4.0	0.261	4.1	LOS A	0.3	2.2	0.03	0.08	0.03	51.1
Approach		382	4.0	382	4.0	0.261	0.7	LOS A	0.3	2.2	0.03	0.06	0.03	51.8
East: Garden Street														
4	L2	21	4.0	21	4.0	* 0.704	47.7	LOS C	3.9	28.3	1.00	0.88	1.19	15.1
6	R2	82	4.0	82	4.0	* 0.704	47.2	LOS C	3.9	28.3	1.00	0.88	1.19	15.1
Approach		104	4.0	104	4.0	0.704	47.3	LOS C	3.9	28.3	1.00	0.88	1.19	15.1
North: Chapel Street														
7	L2	63	4.0	63	4.0	0.063	11.6	LOS A	0.8	5.9	0.69	0.71	0.69	37.3
8	T1	269	4.0	269	4.0	* 0.311	7.1	LOS A	3.9	28.0	0.76	0.64	0.76	30.9
Approach		332	4.0	332	4.0	0.311	7.9	LOS A	3.9	28.0	0.75	0.66	0.75	33.3
All Vehicles		818	4.0	818	4.0	0.704	9.5	LOS C	3.9	28.3	0.44	0.41	0.47	27.9
Site: 011 [11. ChapWilsAMExE]														
South: Chapel Street														
2	T1	370	4.0	370	4.0	0.210	2.3	LOS A	2.5	18.3	0.22	0.19	0.22	54.3
Approach		370	4.0	370	4.0	0.210	2.3	LOS A	2.5	18.3	0.22	0.19	0.22	54.3
East: Wilson Street														
4	L2	3	4.0	3	4.0	0.046	42.0	LOS A	0.2	1.7	0.95	0.63	0.95	3.9
6	R2	4	4.0	4	4.0	0.046	42.0	LOS A	0.2	1.7	0.95	0.65	0.95	3.8
Approach		7	4.0	7	4.0	0.046	42.0	LOS A	0.2	1.7	0.95	0.64	0.95	3.9
North: Chapel Street														
8	T1	295	4.0	295	4.0	0.167	1.9	LOS A	1.6	11.7	0.18	0.15	0.18	39.8
Approach		295	4.0	295	4.0	0.167	1.9	LOS A	1.6	11.7	0.18	0.15	0.18	39.8
All Vehicles		672	4.0	672	4.0	0.210	2.6	LOS A	2.5	18.3	0.21	0.18	0.21	50.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec

Site: 010 [10. ChapGardAMExE]											
South: Chapel Street											
P1 Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58	
East: Garden Street											
P2 Full	88	3.6	LOS A	0.0	0.0	0.43	0.43	27.5	28.6	1.04	
North: Chapel Street											
P3 Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58	
All Pedestrians	195	19.0	LOS B	0.1	0.1	0.68	0.68	45.8	32.2	0.70	
Site: 011 [11. ChapWilsAMExE]											
East: Wilson Street											
P2 Full	103	1.8	LOS A	0.0	0.0	0.21	0.21	25.6	28.6	1.12	
North: Chapel Street											
P3 Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58	
All Pedestrians	157	12.0	LOS B	0.1	0.1	0.44	0.44	37.7	30.9	0.82	

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: 012 [12. CommBalmAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Commercial Rd / Balmoral St / Porter St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Porter Street														
1	L2	5	4.0	5	4.0	0.494	47.3	LOS A	2.5	18.0	1.00	0.75	1.00	34.0
2	T1	29	4.0	29	4.0	* 0.494	41.7	LOS A	2.5	18.0	1.00	0.75	1.00	34.6
3	R2	27	4.0	27	4.0	0.494	47.2	LOS A	2.5	18.0	1.00	0.75	1.00	24.5
Approach		61	4.0	61	4.0	0.494	44.6	LOS A	2.5	18.0	1.00	0.75	1.00	30.9
East: Commercial Road														
5	T1	619	4.0	619	4.0	0.331	6.7	LOS A	11.3	81.8	0.69	0.62	0.69	50.5
6	R2	140	4.0	140	4.0	0.331	15.1	LOS A	6.2	45.2	0.86	0.77	0.86	43.9
Approach		759	4.0	759	4.0	0.331	8.3	LOS A	11.3	81.8	0.72	0.65	0.72	49.1
North: RoadName														
7	L2	36	4.0	36	4.0	* 0.134	23.5	LOS A	0.7	4.8	0.90	0.71	0.90	34.7
9	R2	52	4.0	52	4.0	0.421	47.7	LOS A	2.1	15.4	1.00	0.74	1.00	33.0
Approach		89	4.0	89	4.0	0.421	37.8	LOS A	2.1	15.4	0.96	0.73	0.96	33.4
West: Commercial Road														
10	L2	78	4.0	78	4.0	0.098	10.3	LOS A	0.9	6.7	0.50	0.63	0.50	50.8
11	T1	442	4.0	442	4.0	* 0.491	6.0	LOS A	5.1	37.0	0.64	0.56	0.64	50.0
Approach		520	4.0	520	4.0	0.491	6.6	LOS A	5.1	37.0	0.62	0.57	0.62	50.2
All Vehicles		1428	4.0	1428	4.0	0.494	11.1	LOS A	11.3	81.8	0.71	0.63	0.71	46.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist] m					
South: Porter Street											
P1	Full	92	1.8	LOS A	0.0	0.0	0.21	0.21	22.9	25.3	1.10
East: Commercial Road											
P2	Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
North: RoadName											
P3	Full	103	3.6	LOS A	0.0	0.0	0.43	0.43	30.2	31.9	1.06

All Pedestrians	249	9.0	LOS A	0.1	0.1	0.45	0.45	34.1	30.2	0.88
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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: N:\Projects\2022\220353\Sidra\220353SID002A(DesignHour).sip9

MOVEMENT SUMMARY

 Site: 013 [13. CommIzetAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Commercial Rd / Izett St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Izett Street														
1	L2	61	4.0	61	4.0	0.461	42.6	LOS A	3.7	27.0	0.97	0.78	0.97	25.2
3	R2	36	4.0	36	4.0	* 0.461	42.6	LOS A	3.7	27.0	0.97	0.78	0.97	25.2
Approach		97	4.0	97	4.0	0.461	42.6	LOS A	3.7	27.0	0.97	0.78	0.97	25.2
East: Commercial Road														
4	L2	69	4.0	69	4.0	0.576	19.0	LOS A	10.0	72.2	0.64	0.59	0.64	42.3
5	T1	722	4.0	722	4.0	* 0.576	10.2	LOS A	10.0	72.2	0.52	0.47	0.52	27.0
Approach		791	4.0	791	4.0	0.576	11.0	LOS A	10.0	72.2	0.53	0.48	0.53	30.3
West: Commercial Road														
11	T1	455	4.0	455	4.0	0.377	1.4	LOS A	1.7	12.3	0.15	0.18	0.15	49.5
12	R2	56	4.0	56	4.0	* 0.377	6.8	LOS A	1.7	12.3	0.17	0.21	0.17	54.0
Approach		510	4.0	510	4.0	0.377	2.0	LOS A	1.7	12.3	0.15	0.19	0.15	51.0
All Vehicles		1398	4.0	1398	4.0	0.576	9.9	LOS A	10.0	72.2	0.43	0.40	0.43	33.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Izett Street											
P1	Full	73	14.4	LOS B	0.1	0.1	0.60	0.60	38.3	28.6	0.75
East: Commercial Road											
P2	Full	70	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
All Pedestrians		143	22.8	LOS C	0.1	0.1	0.74	0.74	49.3	31.8	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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG3 [ChapelBray]

Network: N101 [AM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV] veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
Site: 014 [14. ChapMalvAMExE]														
South: Chapel Street														
1	L2	69	4.0	69	4.0	0.101	30.8	LOS A	2.7	19.5	0.99	0.78	0.99	19.0
2	T1	289	4.0	289	4.0	0.506	29.7	LOS A	11.0	79.5	1.00	0.85	1.00	19.4
3	R2	3	4.0	3	4.0	* 0.506	35.3	LOS A	11.0	79.5	1.00	0.85	1.00	19.4
Approach		362	4.0	362	4.0	0.506	29.9	LOS A	11.0	79.5	1.00	0.84	1.00	19.3
East: Malvern Road														
4	L2	3	4.0	3	4.0	0.514	4.3	LOS A	0.7	5.0	0.04	0.04	0.04	49.7
5	T1	748	4.0	748	4.0	0.514	1.9	LOS A	2.9	20.8	0.12	0.12	0.12	36.2
6	R2	32	4.0	32	4.0	* 0.514	6.9	LOS A	2.9	20.8	0.23	0.24	0.23	26.3
Approach		783	4.0	783	4.0	0.514	2.1	LOS A	2.9	20.8	0.12	0.13	0.12	35.7
North: Chapel Street														
7	L2	9	4.0	9	4.0	0.062	15.4	LOS A	0.7	5.1	0.41	0.38	0.41	40.1
8	T1	243	4.0	243	4.0	0.310	11.0	LOS A	3.8	27.2	0.48	0.41	0.48	39.9
Approach		252	4.0	252	4.0	0.310	11.2	LOS A	3.8	27.2	0.48	0.41	0.48	39.9
West: Commercial Road														
10	L2	79	4.0	79	4.0	0.330	21.7	LOS A	7.5	54.5	0.74	0.67	0.74	20.8
11	T1	354	4.0	354	4.0	0.330	15.7	LOS A	7.5	54.5	0.74	0.66	0.74	20.9
12	R2	35	4.0	35	4.0	0.330	21.4	LOS A	5.2	37.8	0.74	0.65	0.74	21.0
Approach		469	4.0	469	4.0	0.330	17.1	LOS A	7.5	54.5	0.74	0.66	0.74	20.9
All Vehicles		1866	4.0	1866	4.0	0.514	12.5	LOS A	11.0	79.5	0.49	0.44	0.49	25.6
Site: 015 [15. MalvBrayAMExE]														
East: Malvern Road														
5	T1	751	4.0	751	4.0	0.578	17.4	LOS A	15.3	110.5	0.79	0.71	0.79	29.2
6	R2	101	4.0	101	4.0	0.578	21.4	LOS A	9.0	65.2	0.68	0.65	0.68	42.5
Approach		853	4.0	853	4.0	0.578	17.9	LOS A	15.3	110.5	0.77	0.70	0.77	31.9
North: Bray Street														
7	L2	52	4.0	52	4.0	0.072	22.0	LOS A	1.3	9.1	0.65	0.70	0.65	35.5
9	R2	33	4.0	33	4.0	0.046	21.2	LOS A	0.8	5.7	0.64	0.69	0.64	35.6
Approach		85	4.0	85	4.0	0.072	21.7	LOS A	1.3	9.1	0.64	0.70	0.64	35.5
West: Malvern Road														
10	L2	21	4.0	21	4.0	0.092	6.0	LOS A	0.4	2.6	0.12	0.23	0.12	51.4
11	T1	345	4.0	345	4.0	0.387	2.9	LOS A	1.7	12.4	0.16	0.15	0.16	29.7
Approach		366	4.0	366	4.0	0.387	3.1	LOS A	1.7	12.4	0.15	0.16	0.15	35.9
All Vehicles		1304	4.0	1304	4.0	0.578	14.0	LOS A	15.3	110.5	0.59	0.55	0.59	32.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
Site: 014 [14. ChapMalvAMExE]											
South: Chapel Street											
P1	Full	120	11.6	LOS B	0.1	0.1	0.54	0.54	40.9	35.2	0.86
East: Malvern Road											
P2	Full	135	13.9	LOS B	0.2	0.2	0.59	0.59	43.2	35.2	0.81
North: Chapel Street											
P3	Full	106	11.6	LOS B	0.1	0.1	0.54	0.54	40.9	35.2	0.86
West: Commercial Road											
P4	Full	208	13.9	LOS B	0.3	0.3	0.59	0.59	43.3	35.2	0.81
All Pedestrians		570	13.0	LOS B	0.3	0.3	0.57	0.57	42.3	35.2	0.83
Site: 015 [15. MalvBrayAMExE]											
North: Bray Street											
P3	Full	86	11.6	LOS B	0.1	0.1	0.54	0.54	38.2	31.9	0.84
West: Malvern Road											
P4	Full	54	13.8	LOS B	0.1	0.1	0.59	0.59	43.2	35.2	0.82
All Pedestrians		140	12.5	LOS B	0.1	0.1	0.56	0.56	40.1	33.2	0.83

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: 016 [16. MalvSurrAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Malvern Rd / Surrey Rd / Bendigo St
AM Commuter Peak, Existing Conditions
Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bendigo Street														
1	L2	3	4.0	3	4.0	0.014	16.8	LOS A	0.2	1.5	0.53	0.60	0.53	39.8
2	T1	2	4.0	2	4.0	0.014	11.2	LOS A	0.2	1.5	0.53	0.60	0.53	47.7
3	R2	5	4.0	5	4.0	0.014	16.8	LOS A	0.2	1.5	0.53	0.60	0.53	46.4
Approach		11	4.0	11	4.0	0.014	15.7	LOS A	0.2	1.5	0.53	0.60	0.53	45.4
East: Malvern Road														
4	L2	6	4.0	6	4.0	0.915	48.7	LOS D	29.8	215.6	1.00	1.14	1.36	34.4
5	T1	719	4.0	719	4.0	* 0.915	44.7	LOS D	29.8	215.6	1.00	1.14	1.40	24.2
6	R2	110	4.0	110	4.0	0.915	58.6	LOS D	11.6	83.8	1.00	1.13	1.61	30.7
Approach		836	4.0	836	4.0	0.915	46.6	LOS D	29.8	215.6	1.00	1.14	1.42	25.6
North: Surrey Road														
7	L2	91	4.0	91	4.0	0.181	18.1	LOS A	3.2	22.8	0.58	0.72	0.58	45.6
8	T1	2	4.0	2	4.0	* 0.181	11.8	LOS A	3.2	22.8	0.58	0.72	0.58	46.7
9	R2	54	4.0	54	4.0	0.181	17.4	LOS A	3.2	22.8	0.58	0.72	0.58	38.5
Approach		147	4.0	147	4.0	0.181	17.7	LOS A	3.2	22.8	0.58	0.72	0.58	43.8
West: Malvern Road														
10	L2	59	4.0	59	4.0	0.133	25.0	LOS A	2.5	17.9	0.78	0.70	0.78	39.1
11	T1	376	4.0	376	4.0	0.666	25.2	LOS B	12.5	90.3	0.93	0.81	0.94	38.8
12	R2	3	4.0	3	4.0	0.666	31.2	LOS B	12.5	90.3	0.95	0.82	0.95	37.6
Approach		438	4.0	438	4.0	0.666	25.3	LOS B	12.5	90.3	0.91	0.80	0.92	38.9
All Vehicles		1431	4.0	1431	4.0	0.915	36.9	LOS D	29.8	215.6	0.93	0.99	1.18	31.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Bendigo Street											
P1	Full	54	16.3	LOS B	0.1	0.1	0.64	0.64	40.1	28.6	0.71
East: Malvern Road											
P2	Full	54	9.5	LOS A	0.1	0.1	0.49	0.49	38.9	35.2	0.91

North: Surrey Road											
P3	Full	54	16.3	LOS B	0.1	0.1	0.64	0.64	40.1	28.6	0.71
West: Malvern Road											
P4	Full	54	9.5	LOS A	0.1	0.1	0.49	0.49	38.9	35.2	0.91
All Pedestrians		215	12.9	LOS B	0.1	0.1	0.56	0.56	39.5	31.9	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.

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MOVEMENT SUMMARY

 Site: 017 [17. ChapChatAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Chatam St

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	15	4.0	15	4.0	0.083	13.5	LOS A	0.8	5.9	0.34	0.35	0.34	35.6
2	T1	334	4.0	334	4.0	* 0.416	9.3	LOS A	4.8	34.8	0.44	0.39	0.44	26.5
Approach		349	4.0	349	4.0	0.416	9.4	LOS A	4.8	34.8	0.44	0.38	0.44	27.1
North: Chapel Street														
8	T1	311	4.0	311	4.0	0.223	1.9	LOS A	1.9	14.1	0.21	0.20	0.21	51.5
9	R2	28	4.0	28	4.0	* 0.223	7.7	LOS A	1.9	14.1	0.25	0.24	0.25	49.6
Approach		338	4.0	338	4.0	0.223	2.4	LOS A	1.9	14.1	0.21	0.20	0.21	51.3
West: Chatham Street														
10	L2	15	4.0	15	4.0	0.019	19.6	LOS A	0.3	2.4	0.59	0.66	0.59	20.6
12	R2	16	4.0	16	4.0	* 0.118	45.0	LOS A	0.6	4.5	0.96	0.69	0.96	10.7
Approach		31	4.0	31	4.0	0.118	32.8	LOS A	0.6	4.5	0.78	0.67	0.78	14.0
All Vehicles		718	4.0	718	4.0	0.416	7.1	LOS A	4.8	34.8	0.34	0.31	0.34	36.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
North: Chapel Street											
P3	Full	72	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
West: Chatham Street											
P4	Full	151	13.3	LOS B	0.2	0.2	0.58	0.58	39.9	31.9	0.80
All Pedestrians		223	19.2	LOS B	0.2	0.2	0.68	0.68	46.7	33.0	0.71

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: P001 [P1. PedXChap1AMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Pedestrian Crossing 12 on Chapel Street

AM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	450	4.0	450	4.0	* 0.345	6.0	LOS A	10.8	77.9	0.66	0.59	0.66	40.1
Approach		450	4.0	450	4.0	0.345	6.0	LOS A	10.8	77.9	0.66	0.59	0.66	40.1
North: Chapel Street														
8	T1	327	4.0	327	4.0	0.250	3.3	LOS A	4.8	34.8	0.41	0.36	0.41	41.1
Approach		327	4.0	327	4.0	0.250	3.3	LOS A	4.8	34.8	0.41	0.36	0.41	41.1
All Vehicles		777	4.0	777	4.0	0.345	4.8	LOS A	10.8	77.9	0.56	0.49	0.56	40.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	72	31.6	LOS D	0.1	0.1	0.89	0.89	55.4	28.6	0.52
All Pedestrians		72	31.6	LOS D	0.1	0.1	0.89	0.89	55.4	28.6	0.52

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 018 [18. HighStEdAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

High St / St. Edmonds Rd

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: High Street														
5	T1	695	4.0	695	4.0	0.346	0.9	LOS A	2.1	15.4	0.08	0.12	0.08	57.8
6	R2	100	4.0	100	4.0	* 0.346	8.0	LOS A	2.1	15.4	0.19	0.33	0.19	51.9
Approach		795	4.0	795	4.0	0.346	1.8	LOS A	2.1	15.4	0.09	0.14	0.09	57.0
North: St. Edmonds Road														
7	L2	35	4.0	35	4.0	0.195	44.0	LOS A	1.3	9.6	0.95	0.72	0.95	25.1
9	R2	37	4.0	37	4.0	* 0.207	43.1	LOS A	1.4	10.2	0.95	0.73	0.95	34.4
Approach		73	4.0	73	4.0	0.207	43.5	LOS A	1.4	10.2	0.95	0.72	0.95	30.7
West: High Street														
10	L2	99	4.0	99	4.0	0.077	8.4	LOS A	1.1	7.6	0.28	0.62	0.28	51.5
11	T1	475	4.0	475	4.0	0.383	3.7	LOS A	6.4	46.0	0.37	0.34	0.37	53.5
Approach		574	4.0	574	4.0	0.383	4.5	LOS A	6.4	46.0	0.36	0.39	0.36	52.9
All Vehicles		1442	4.0	1442	4.0	0.383	5.0	LOS A	6.4	46.0	0.24	0.27	0.24	52.7

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: High Street											
P2	Full	163	31.7	LOS D	0.3	0.3	0.89	0.89	61.1	35.2	0.58
North: St. Edmonds Road											
P3	Full	107	2.3	LOS A	0.1	0.1	0.24	0.24	28.8	31.9	1.11
All Pedestrians		271	20.0	LOS C	0.3	0.3	0.63	0.63	48.3	33.9	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.

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

MOVEMENT SUMMARY

 Site: 019 [19. ChapHighAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / High St

AM Commuter Peak. Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	67	4.0	67	4.0	0.152	23.4	LOS A	3.0	22.0	0.75	0.69	0.75	25.2
2	T1	304	4.0	304	4.0	0.760	33.5	LOS C	12.0	86.6	0.97	0.87	1.03	18.5
3	R2	37	4.0	37	4.0	* 0.760	41.4	LOS C	12.0	86.6	1.00	0.89	1.07	17.8
Approach		409	4.0	409	4.0	0.760	32.5	LOS C	12.0	86.6	0.93	0.84	0.99	19.3
East: High Street														
4	L2	95	4.0	95	4.0	0.624	23.5	LOS B	15.4	111.7	0.78	0.71	0.78	28.3
5	T1	693	4.0	693	4.0	0.624	19.7	LOS B	15.4	111.7	0.79	0.72	0.79	26.7
6	R2	62	4.0	62	4.0	0.624	29.2	LOS B	9.4	68.1	0.82	0.72	0.82	24.1
Approach		850	4.0	850	4.0	0.624	20.8	LOS B	15.4	111.7	0.79	0.72	0.79	26.7
North: Chapel Street														
7	L2	45	4.0	45	4.0	0.129	29.6	LOS A	3.1	22.5	0.90	0.75	0.90	19.3
8	T1	212	4.0	212	4.0	0.646	32.1	LOS B	7.9	57.1	0.98	0.82	1.00	16.2
9	R2	41	4.0	41	4.0	0.646	40.1	LOS B	7.9	57.1	1.00	0.85	1.03	15.5
Approach		298	4.0	298	4.0	0.646	32.8	LOS B	7.9	57.1	0.97	0.81	0.99	16.5
West: High Street														
10	L2	84	4.0	84	4.0	0.143	19.0	LOS A	2.3	16.6	0.51	0.62	0.51	21.6
11	T1	363	4.0	363	4.0	0.713	19.4	LOS C	11.1	80.5	0.75	0.70	0.78	18.9
12	R2	47	4.0	47	4.0	* 0.713	25.6	LOS C	11.1	80.5	0.78	0.71	0.81	18.7
Approach		494	4.0	494	4.0	0.713	19.9	LOS C	11.1	80.5	0.72	0.69	0.73	19.3
All Vehicles		2050	4.0	2050	4.0	0.760	24.7	LOS C	15.4	111.7	0.83	0.75	0.85	21.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	206	11.1	LOS B	0.2	0.2	0.53	0.53	40.5	35.2	0.87
East: High Street											
P2	Full	103	14.5	LOS B	0.1	0.1	0.60	0.60	43.8	35.2	0.80

North: Chapel Street											
P3	Full	90	11.1	LOS B	0.1	0.1	0.53	0.53	40.4	35.2	0.87
West: High Street											
P4	Full	107	14.5	LOS B	0.1	0.1	0.60	0.60	43.8	35.2	0.80
All Pedestrians		507	12.5	LOS B	0.2	0.2	0.56	0.56	41.8	35.2	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.

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Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped Dist]		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		ped	m			sec	m	m/sec
South: Hornby St											
P1	Full	87	1.8	LOS A	0.0	0.0	0.21	0.21	22.9	25.3	1.10
East: High Street											
P2	Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
North: Bangs St											
P3	Full	64	1.8	LOS A	0.0	0.0	0.21	0.21	28.4	31.9	1.12
West: High Street											

P4 Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
All Pedestrians	259	14.2	LOS B	0.1	0.1	0.49	0.49	40.0	31.1	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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MOVEMENT SUMMARY

 Site: P002 [P2. PedXChap2AMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #2 on Chapel Street

AM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	[Veh. veh			Dist] m	v/c				
South: Chapel Street														
2	T1	591	4.0	591	4.0	* 0.460	3.3	LOS A	7.8	56.8	0.37	0.33	0.37	49.2
Approach		591	4.0	591	4.0	0.460	3.3	LOS A	7.8	56.8	0.37	0.33	0.37	49.2
North: Chapel Street														
8	T1	354	4.0	354	4.0	0.276	4.2	LOS A	6.1	44.1	0.48	0.42	0.48	46.9
Approach		354	4.0	354	4.0	0.276	4.2	LOS A	6.1	44.1	0.48	0.42	0.48	46.9
All Vehicles		946	4.0	946	4.0	0.460	3.6	LOS A	7.8	56.8	0.41	0.37	0.41	48.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	79	31.6	LOS D	0.2	0.2	0.89	0.89	55.4	28.6	0.52
All Pedestrians		79	31.6	LOS D	0.2	0.2	0.89	0.89	55.4	28.6	0.52

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: P003 [P3. PedXChap3AMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #3 on Chapel Street

AM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	591	4.0	591	4.0	* 0.476	5.2	LOS A	11.3	81.5	0.53	0.48	0.53	37.1
Approach		591	4.0	591	4.0	0.476	5.2	LOS A	11.3	81.5	0.53	0.48	0.53	37.1
North: Chapel Street														
8	T1	354	4.0	354	4.0	0.285	1.6	LOS A	1.9	14.1	0.15	0.13	0.15	54.1
Approach		354	4.0	354	4.0	0.285	1.6	LOS A	1.9	14.1	0.15	0.13	0.15	54.1
All Vehicles		946	4.0	946	4.0	0.476	3.9	LOS A	11.3	81.5	0.39	0.35	0.39	44.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	285	31.9	LOS D	0.6	0.6	0.90	0.90	55.7	28.6	0.51
All Pedestrians		285	31.9	LOS D	0.6	0.6	0.90	0.90	55.7	28.6	0.51

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 021 [21. ChapDandAMExE (Site Folder: Weekday AM Commuter Peak)]

 Network: N101 [AM Commuter Peak (Network Folder: General)]

Chapel St / Dandenong Rd

AM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	56	4.0	56	4.0	0.266	26.5	LOS A	4.6	33.5	0.77	0.68	0.77	42.9
2	T1	259	4.0	259	4.0	0.893	36.1	LOS C	14.0	101.0	0.90	0.93	1.18	27.4
3	R2	140	4.0	140	4.0	* 0.893	51.7	LOS C	14.0	101.0	1.00	1.10	1.46	33.4
Approach		455	4.0	455	4.0	0.893	39.7	LOS C	14.0	101.0	0.92	0.95	1.22	31.8
East: Dandenong Road														
4	L2	41	4.0	41	4.0	0.062	23.9	LOS A	1.0	7.4	0.68	0.70	0.68	42.4
5	T1	1765	4.0	1765	4.0	0.645	23.0	LOS B	14.6	105.7	0.89	0.77	0.89	43.5
6	R2	250	4.0	250	4.0	* 0.922	58.1	LOS D	12.4	89.5	1.00	1.11	1.59	21.1
Approach		2056	4.0	2056	4.0	0.922	27.3	LOS D	14.6	105.7	0.90	0.81	0.97	40.6
North: Chapel Street														
7	L2	156	4.0	156	4.0	0.183	11.8	LOS A	2.8	20.3	0.73	0.75	0.73	45.2
8	T1	184	4.0	184	4.0	0.695	32.0	LOS B	9.3	67.2	0.98	0.86	1.04	32.7
9	R2	58	4.0	58	4.0	0.695	37.7	LOS B	9.3	67.2	0.98	0.86	1.04	32.5
Approach		397	4.0	397	4.0	0.695	24.9	LOS B	9.3	67.2	0.88	0.82	0.92	36.6
West: Dandenong Road														
10	L2	82	4.0	82	4.0	0.593	31.8	LOS A	11.7	84.4	0.90	0.78	0.90	32.2
11	T1	1676	4.0	1676	4.0	* 0.593	25.4	LOS A	11.8	85.4	0.90	0.77	0.90	42.3
12	R2	117	4.0	117	4.0	0.650	46.3	LOS B	4.8	34.7	1.00	0.83	1.11	33.8
Approach		1875	4.0	1875	4.0	0.650	27.0	LOS B	11.8	85.4	0.90	0.78	0.91	41.3
All Vehicles		4783	4.0	4783	4.0	0.922	28.2	LOS D	14.6	105.7	0.90	0.81	0.97	39.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	54	15.7	LOS B	0.1	0.1	0.63	0.63	45.0	35.2	0.78
East: Dandenong Road											
P21	Stage 1	57	10.0	LOS B	0.1	0.1	0.50	0.50	44.0	40.8	0.93

P22 Stage 2	57	18.3	LOS B	0.1	0.1	0.68	0.68	49.5	37.5	0.76
North: Chapel Street										
P3 Full	70	18.3	LOS B	0.1	0.1	0.68	0.68	47.6	35.2	0.74
West: Dandenong Road										
P41 Stage 1	324	8.2	LOS A	0.3	0.3	0.46	0.46	42.2	40.8	0.97
P42 Stage 2	324	18.5	LOS B	0.5	0.5	0.68	0.68	47.0	34.2	0.73
All Pedestrians	886	14.0	LOS B	0.5	0.5	0.58	0.58	45.1	37.4	0.83

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 101 [1. AlexYarraPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Alexandra Ave / Yarra St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
South: Yarra Street														
1	L2	98	1.9	98	1.9	0.150	22.1	LOS A	2.3	16.3	0.71	0.73	0.71	43.1
3	R2	78	1.9	78	1.9	* 0.498	41.2	LOS A	2.8	19.7	0.99	0.76	0.99	25.7
Approach		176	1.9	176	1.9	0.498	30.6	LOS A	2.8	19.7	0.84	0.74	0.84	36.1
East: Alexandra Avenue														
4	L2	57	1.9	57	1.9	0.773	28.0	LOS C	18.6	132.3	0.96	0.89	1.02	38.9
5	T1	1089	1.9	1089	1.9	* 0.773	27.3	LOS C	20.3	144.3	0.98	0.91	1.04	37.4
Approach		1146	1.9	1146	1.9	0.773	27.4	LOS C	20.3	144.3	0.98	0.91	1.04	37.5
West: Alexandra Avenue														
11	T1	1095	1.9	1095	1.9	* 0.497	5.2	LOS A	7.1	50.3	0.64	0.56	0.64	51.3
12	R2	66	1.9	66	1.9	0.194	32.3	LOS A	2.0	14.0	0.88	0.74	0.88	38.5
Approach		1160	1.9	1160	1.9	0.497	6.8	LOS A	7.1	50.3	0.65	0.57	0.65	49.5
All Vehicles		2483	1.9	2483	1.9	0.773	18.0	LOS C	20.3	144.3	0.82	0.74	0.85	41.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Yarra Street											
P1	Full	90	8.8	LOS A	0.1	0.1	0.50	0.50	35.4	31.9	0.90
East: Alexandra Avenue											
P2	Full	54	11.1	LOS B	0.1	0.1	0.74	0.74	43.2	38.5	0.89
All Pedestrians		144	9.7	LOS A	0.1	0.1	0.59	0.59	38.3	34.4	0.90

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 [2. ChapAlexPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Alexandra Ave

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	261	1.9	261	1.9	0.853	36.5	LOS C	20.9	148.8	1.00	1.03	1.24	16.9
2	T1	290	1.9	290	1.9	0.853	31.2	LOS C	20.9	148.8	1.00	1.02	1.24	33.6
3	R2	85	1.9	85	1.9	* 0.853	48.5	LOS C	3.6	25.7	1.00	0.86	1.32	28.1
Approach		637	1.9	637	1.9	0.853	35.7	LOS C	20.9	148.8	1.00	1.00	1.25	27.8
East: Alexandra Avenue														
4	L2	138	1.9	138	1.9	0.151	12.3	LOS A	2.1	14.8	0.54	0.69	0.54	43.0
5	T1	870	1.9	870	1.9	0.725	24.6	LOS C	14.1	100.3	0.94	0.86	1.00	33.4
6	R2	235	1.9	235	1.9	* 1.120	160.6	LOS F ¹¹	20.6	146.5	1.00	1.65	3.05	16.1
Approach		1243	1.9	1243	1.9	1.120	48.9	LOS F ¹¹	20.6	146.5	0.91	0.99	1.34	25.4
North: Church Street Bridge														
7	L2	584	1.9	584	1.9	0.841	31.0	LOS C	24.1	171.5	0.96	0.96	1.13	39.3
8	T1	531	1.9	531	1.9	0.841	30.8	LOS C	24.1	171.5	0.99	1.01	1.23	29.9
Approach		1115	1.9	1115	1.9	0.841	30.9	LOS C	24.1	171.5	0.97	0.98	1.17	35.7
West: Alexandra Avenue														
10	L2	122	1.9	122	1.9	0.921	47.5	LOS D	23.8	169.6	1.00	1.11	1.36	30.3
11	T1	935	1.9	935	1.9	* 0.921	40.0	LOS D	23.8	169.6	1.00	1.11	1.38	31.9
12	R2	182	1.9	182	1.9	0.869	41.3	LOS C	6.9	49.0	1.00	0.92	1.28	16.7
Approach		1239	1.9	1239	1.9	0.921	40.9	LOS D	23.8	169.6	1.00	1.09	1.36	30.2
All Vehicles		4233	1.9	4233	1.9	1.120	39.8	LOS F ¹¹	24.1	171.5	0.97	1.02	1.29	29.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Chapel Street											
P1	Full	59	15.8	LOS B	0.1	0.1	0.67	0.67	45.2	35.2	0.78
East: Alexandra Avenue											
P2	Full	204	15.9	LOS B	0.3	0.3	0.68	0.68	48.0	38.5	0.80

North: Church Street Bridge											
P3	Full	98	15.8	LOS B	0.1	0.1	0.67	0.67	45.2	35.2	0.78
West: Alexandra Avenue											
P4	Full	218	15.9	LOS B	0.3	0.3	0.68	0.68	48.0	38.5	0.80
All Pedestrians		579	15.9	LOS B	0.3	0.3	0.68	0.68	47.2	37.6	0.80

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 103 [3. ChapMalcPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Malcolm St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	477	1.9	473	1.9	0.299	3.1	LOS A	3.4	24.4	0.28	0.28	0.28	42.4
3	R2	124	1.9	123	1.9	* 0.299	9.9	LOS A	1.4	9.9	0.42	0.58	0.42	47.8
Approach		601	1.9	595 ^{N1}	1.9	0.299	4.5	LOS A	3.4	24.4	0.31	0.34	0.31	45.1
East: Malcolm Street														
4	L2	127	1.9	127	1.9	0.168	19.5	LOS A	2.7	19.5	0.66	0.73	0.66	36.8
6	R2	181	1.9	181	1.9	* 0.864	47.0	LOS C	7.3	51.6	1.00	1.00	1.49	23.7
Approach		308	1.9	308	1.9	0.864	35.7	LOS C	7.3	51.6	0.86	0.89	1.15	27.8
North: Chapel Street														
7	L2	209	1.9	209	1.9	0.492	22.9	LOS A	11.6	82.4	0.88	0.80	0.88	39.7
8	T1	543	1.9	543	1.9	* 0.492	18.1	LOS A	11.6	82.4	0.88	0.78	0.88	24.1
Approach		752	1.9	752	1.9	0.492	19.4	LOS A	11.6	82.4	0.88	0.78	0.88	30.9
All Vehicles		1661	1.9	1655 ^{N1}	1.9	0.864	17.1	LOS C	11.6	82.4	0.67	0.64	0.73	32.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	195	26.8	LOS C	0.3	0.3	0.88	0.88	56.1	35.2	0.63
East: Malcolm Street											
P2	Full	287	11.6	LOS B	0.3	0.3	0.58	0.58	38.2	31.9	0.84
All Pedestrians		482	17.7	LOS B	0.3	0.3	0.70	0.70	45.4	33.2	0.73

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: 104 [4. ChapDalyPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Daly St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	20	1.9	20	1.9	0.203	10.7	LOS A	4.7	33.1	0.53	0.47	0.53	42.1
2	T1	485	1.9	485	1.9	0.203	7.4	LOS A	6.6	46.9	0.69	0.61	0.69	31.2
3	R2	8	1.9	8	1.9	0.203	15.5	LOS A	6.6	46.9	0.88	0.76	0.88	35.4
Approach		513	1.9	513	1.9	0.203	7.6	LOS A	6.6	46.9	0.69	0.60	0.69	32.0
East: Car Park Access														
4	L2	22	1.9	22	1.9	0.107	36.9	LOS A	0.7	5.1	0.93	0.70	0.93	12.7
5	T1	2	1.9	2	1.9	0.220	33.5	LOS A	1.2	8.3	0.95	0.72	0.95	19.6
6	R2	32	1.9	32	1.9	0.220	39.0	LOS A	1.2	8.3	0.95	0.72	0.95	12.1
Approach		57	1.9	57	1.9	0.220	38.0	LOS A	1.2	8.3	0.94	0.71	0.94	12.7
North: Chapel Street														
7	L2	12	1.9	12	1.9	0.292	6.9	LOS A	1.6	11.3	0.13	0.13	0.13	50.4
8	T1	520	1.9	520	1.9	0.292	1.1	LOS A	1.6	11.3	0.10	0.16	0.10	49.6
9	R2	99	1.9	99	1.9	* 0.292	5.9	LOS A	0.2	1.6	0.03	0.27	0.03	47.5
Approach		632	1.9	632	1.9	0.292	2.0	LOS A	1.6	11.3	0.09	0.18	0.09	49.0
West: Daly Street														
10	L2	73	1.9	73	1.9	0.347	38.3	LOS A	2.4	17.3	0.96	0.76	0.96	12.4
11	T1	1	1.9	1	1.9	* 0.370	33.0	LOS A	2.3	16.7	0.96	0.76	0.96	19.7
12	R2	68	1.9	68	1.9	0.370	38.6	LOS A	2.3	16.7	0.96	0.76	0.96	12.2
Approach		142	1.9	142	1.9	0.370	38.4	LOS A	2.4	17.3	0.96	0.76	0.96	12.4
All Vehicles		1344	1.9	1343	1.9	0.370	9.5	LOS A	6.6	46.9	0.45	0.42	0.45	29.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	119	26.7	LOS C	0.2	0.2	0.88	0.88	56.0	35.2	0.63
East: Car Park Access											
P2	Full	587	2.6	LOS A	0.3	0.3	0.28	0.28	29.2	31.9	1.09

North: Chapel Street											
P3	Full	396	27.0	LOS C	0.7	0.7	0.89	0.89	56.4	35.2	0.62
West: Daly Street											
P4	Full	322	2.6	LOS A	0.2	0.2	0.28	0.28	29.2	31.9	1.09
All Pedestrians		1425	11.4	LOS B	0.7	0.7	0.50	0.50	39.0	33.1	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.

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MOVEMENT SUMMARY

 Site: 105 [5. PuntToorPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Punt Rd / Toorak Rd

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Punt Road														
1	L2	68	1.9	68	1.9	0.856	33.8	LOS C	26.1	185.4	0.97	1.01	1.16	40.5
2	T1	1255	1.9	1255	1.9	0.856	27.0	LOS C	26.1	185.4	0.94	0.99	1.15	41.5
3	R2	137	1.9	137	1.9	0.750	43.2	LOS C	5.1	36.5	1.00	0.89	1.25	25.1
Approach		1461	1.9	1461	1.9	0.856	28.8	LOS C	26.1	185.4	0.95	0.98	1.16	40.1
East: Toorak Road														
4	L2	85	1.9	85	1.9	0.170	23.8	LOS A	2.6	18.5	0.79	0.73	0.79	42.7
5	T1	366	1.9	366	1.9	* 0.850	35.0	LOS C	13.6	96.5	0.99	1.01	1.29	38.1
Approach		451	1.9	451	1.9	0.850	32.9	LOS C	13.6	96.5	0.95	0.96	1.19	38.9
North: Punt Road														
7	L2	45	1.9	45	1.9	0.893	37.7	LOS C	30.0	213.2	1.00	1.10	1.28	29.3
8	T1	1349	1.9	1349	1.9	* 0.893	32.1	LOS C	30.0	213.2	0.97	1.08	1.26	39.2
9	R2	160	1.9	160	1.9	* 0.872	48.2	LOS C	6.5	46.0	1.00	1.01	1.55	33.0
Approach		1554	1.9	1554	1.9	0.893	33.9	LOS C	30.0	213.2	0.97	1.07	1.29	38.3
West: Toorak Road														
10	L2	115	1.9	115	1.9	0.660	32.7	LOS B	9.4	66.6	0.96	0.84	0.99	39.8
11	T1	447	1.9	447	1.9	0.660	28.0	LOS B	9.4	66.6	0.96	0.83	1.00	31.1
Approach		562	1.9	562	1.9	0.660	29.0	LOS B	9.4	66.6	0.96	0.83	1.00	33.6
All Vehicles		4027	1.9	4027	1.9	0.893	31.2	LOS C	30.0	213.2	0.96	0.99	1.19	38.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Punt Road											
P1	Full	181	21.0	LOS C	0.3	0.3	0.78	0.78	53.1	38.5	0.73
East: Toorak Road											
P2	Full	87	10.9	LOS B	0.1	0.1	0.56	0.56	40.2	35.2	0.87
North: Punt Road											
P3	Full	218	21.0	LOS C	0.3	0.3	0.78	0.78	53.1	38.5	0.73

West: Toorak Road											
P4	Full	54	10.9	LOS B	0.1	0.1	0.56	0.56	40.2	35.2	0.88
All Pedestrians		540	18.4	LOS B	0.3	0.3	0.72	0.72	49.7	37.6	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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Project: N:\Projects\2022\220353\Sidra\220353SID002A(DesignHour).sip9

■-■ Network: N101 [PM
Commuter Peak (Network
Folder: General)]

Design Life Analysis (Final Year): Results for 1 years

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	263	9.9	LOS A	0.3	0.3	0.53	0.53	36.5	31.9	0.87
East: Toorak Road											

P2 Full	314	13.4	LOS B	0.4	0.4	0.62	0.62	42.7	35.2	0.82
North: Chapel Street										
P3 Full	578	10.0	LOS B	0.6	0.6	0.54	0.54	42.1	38.5	0.91
West: Toorak Road										
P4 Full	455	13.5	LOS B	0.6	0.6	0.63	0.63	45.5	38.5	0.85
All Pedestrians	1609	11.6	LOS B	0.6	0.6	0.58	0.58	42.3	36.8	0.87

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: 107 [7. ToorRivePMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Toorak Rd / River St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
East: Toorak Road														
5	T1	409	1.9	409	1.9	0.265	3.1	LOS A	3.6	25.5	0.33	0.28	0.33	54.7
6	R2	195	1.9	195	1.9	* 0.270	10.5	LOS A	2.0	14.1	0.57	0.72	0.57	49.9
Approach		604	1.9	604	1.9	0.270	5.5	LOS A	3.6	25.5	0.41	0.43	0.41	52.3
North: River Street														
7	L2	220	1.9	220	1.9	0.290	20.4	LOS A	5.0	35.8	0.71	0.76	0.71	44.0
9	R2	54	1.9	54	1.9	* 0.341	40.5	LOS A	1.9	13.2	0.98	0.74	0.98	25.9
Approach		274	1.9	274	1.9	0.341	24.3	LOS A	5.0	35.8	0.76	0.76	0.76	40.9
West: Toorak Road														
10	L2	59	1.9	59	1.9	0.437	20.8	LOS A	7.9	56.1	0.70	0.63	0.70	40.5
11	T1	595	1.9	595	1.9	* 0.437	12.0	LOS A	7.9	56.1	0.59	0.52	0.59	45.0
Approach		654	1.9	654	1.9	0.437	12.8	LOS A	7.9	56.1	0.60	0.53	0.60	44.6
All Vehicles		1532	1.9	1532	1.9	0.437	12.0	LOS A	7.9	56.1	0.55	0.53	0.55	46.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Toorak Road											
P2	Full	71	26.7	LOS C	0.1	0.1	0.87	0.87	58.7	38.5	0.66
North: River Street											
P3	Full	274	11.6	LOS B	0.3	0.3	0.58	0.58	38.1	31.9	0.84
All Pedestrians		345	14.7	LOS B	0.3	0.3	0.64	0.64	42.4	33.3	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.

Pedestrian Movement Performance (CCG)										
Mov	Dem	Aver	Level of	AVERAGE BACK OF	Prop	Effective	Travel	Travel	Aver	

ID	Crossing	Flow	Delay	Service	QUEUE		Que	Stop Rate	Time	Dist.	Speed
		ped/h	sec		[Ped	Dist]					
ped m											
Site: 108 [8. ChapPalePMExE]											
South: Chapel Street											
P1	Full	102	15.8	LOS B	0.1	0.1	0.67	0.67	45.2	35.2	0.78
East: Palermo Street											
P2	Full	353	17.4	LOS B	0.5	0.5	0.71	0.71	44.0	31.9	0.73
All Pedestrians		455	17.1	LOS B	0.5	0.5	0.70	0.70	44.3	32.6	0.74
Site: 109 [9. ChapArthPMExE]											
West: Arthur Street											
P4	Full	453	17.5	LOS B	0.6	0.6	0.71	0.71	41.3	28.6	0.69
All Pedestrians		453	17.5	LOS B	0.6	0.6	0.71	0.71	41.3	28.6	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.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

CCG MOVEMENT SUMMARY

Common Control Group: CCG2 [GardenWilson]

Network: N101 [PM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS	ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed	
		[Total veh/h	HV] %	[Total HV] veh/h	%	v/c	sec	[Veh. veh	Dist] m				km/h	
Site: 110 [10. ChapGardPMExE]														
South: Chapel Street														
2	T1	303	1.9	288	1.9	0.217	0.7	LOS A	0.5	3.6	0.06	0.08	0.06	49.2
3	R2	20	1.9	19	1.9	0.217	4.5	LOS A	0.5	3.6	0.07	0.10	0.07	51.1
Approach		323	1.9	308 ^{N1}	1.9	0.217	0.9	LOS A	0.5	3.6	0.06	0.08	0.06	49.6
East: Garden Street														
4	L2	16	1.9	16	1.9	* 0.467	38.0	LOS A	2.3	16.5	0.99	0.79	0.99	17.9
6	R2	64	1.9	64	1.9	* 0.467	37.3	LOS A	2.3	16.5	0.99	0.79	0.99	17.9
Approach		79	1.9	79	1.9	0.467	37.4	LOS A	2.3	16.5	0.99	0.79	0.99	17.9
North: Chapel Street														
7	L2	70	1.9	70	1.9	0.098	10.9	LOS A	0.8	5.9	0.57	0.65	0.57	39.6
8	T1	389	1.9	389	1.9	* 0.490	6.6	LOS A	4.4	31.0	0.70	0.60	0.70	31.5
Approach		459	1.9	459	1.9	0.490	7.3	LOS A	4.4	31.0	0.68	0.61	0.68	33.9
All Vehicles		861	1.9	846 ^{N1}	1.9	0.490	7.8	LOS A	4.4	31.0	0.48	0.43	0.48	31.0
Site: 111 [11. ChapWilsPMExE]														
South: Chapel Street														
2	T1	332	1.9	316	1.9	0.184	2.6	LOS A	2.1	14.8	0.24	0.21	0.24	53.8
Approach		332	1.9	316 ^{N1}	1.9	0.184	2.6	LOS A	2.1	14.8	0.24	0.21	0.24	53.8
East: Wilson Street														
4	L2	2	1.9	2	1.9	0.018	36.1	LOS A	0.1	0.6	0.93	0.60	0.93	4.6
6	R2	1	1.9	1	1.9	0.018	35.9	LOS A	0.1	0.6	0.94	0.62	0.94	4.5
Approach		3	1.9	3	1.9	0.018	36.1	LOS A	0.1	0.6	0.93	0.61	0.93	4.6
North: Chapel Street														
8	T1	388	1.9	388	1.9	0.226	2.0	LOS A	2.0	14.5	0.19	0.17	0.19	38.9
Approach		388	1.9	388	1.9	0.226	2.0	LOS A	2.0	14.5	0.19	0.17	0.19	38.9
All Vehicles		723	1.9	707 ^{N1}	1.9	0.226	2.4	LOS A	2.1	14.8	0.22	0.19	0.22	49.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
					[Ped	Dist]					

		ped/h	sec		ped	m			sec	m	m/sec
Site: 110 [10. ChapGardPMExE]											
South: Chapel Street											
P1	Full	54	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
East: Garden Street											
P2	Full	217	4.2	LOS A	0.1	0.1	0.49	0.49	28.0	28.6	1.02
North: Chapel Street											
P3	Full	91	26.7	LOS C	0.2	0.2	0.87	0.87	56.0	35.2	0.63
All Pedestrians		362	13.2	LOS B	0.2	0.2	0.64	0.64	39.2	31.2	0.80
Site: 111 [11. ChapWilsPMExE]											
East: Wilson Street											
P2	Full	214	2.1	LOS A	0.1	0.1	0.25	0.25	25.9	28.6	1.10
North: Chapel Street											
P3	Full	59	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
All Pedestrians		273	7.4	LOS A	0.1	0.1	0.38	0.38	32.4	30.0	0.93

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: 112 [12. CommBalmPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Commercial Rd / Balmoral St / Porter St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Porter Street														
1	L2	16	1.9	16	1.9	0.450	42.2	LOS A	2.2	15.8	0.99	0.75	0.99	35.5
2	T1	12	1.9	12	1.9	0.450	35.8	LOS A	2.2	15.8	0.99	0.75	0.99	36.1
3	R2	35	1.9	35	1.9	0.450	41.3	LOS A	2.2	15.8	0.99	0.75	0.99	26.0
Approach		63	1.9	63	1.9	0.450	40.4	LOS A	2.2	15.8	0.99	0.75	0.99	31.3
East: Commercial Road														
5	T1	447	1.9	442	1.9	0.421	5.5	LOS A	7.3	52.1	0.61	0.53	0.61	51.7
6	R2	83	1.9	82	1.9	0.421	11.4	LOS A	7.3	52.1	0.67	0.59	0.67	48.7
Approach		529	1.9	524 ^{N1}	1.9	0.421	6.4	LOS A	7.3	52.1	0.62	0.54	0.62	51.2
North: RoadName														
7	L2	71	1.9	71	1.9	* 0.228	20.1	LOS A	1.1	8.1	0.90	0.74	0.90	36.4
9	R2	90	1.9	90	1.9	* 0.606	42.8	LOS B	3.3	23.4	1.00	0.80	1.10	34.5
Approach		162	1.9	162	1.9	0.606	32.8	LOS B	3.3	23.4	0.95	0.77	1.01	35.0
West: Commercial Road														
10	L2	73	1.9	73	1.9	0.491	12.3	LOS A	5.4	38.7	0.72	0.65	0.72	51.9
11	T1	783	1.9	783	1.9	* 0.491	6.8	LOS A	5.4	38.7	0.72	0.63	0.72	48.6
Approach		856	1.9	856	1.9	0.491	7.3	LOS A	5.4	38.7	0.72	0.63	0.72	49.1
All Vehicles		1609	1.9	1604 ^{N1}	1.9	0.606	10.9	LOS B	7.3	52.1	0.72	0.62	0.73	46.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist] m					
South: Porter Street											
P1	Full	194	2.1	LOS A	0.1	0.1	0.24	0.24	23.2	25.3	1.09
East: Commercial Road											
P2	Full	106	26.7	LOS C	0.2	0.2	0.88	0.88	56.0	35.2	0.63
North: RoadName											
P3	Full	147	4.2	LOS A	0.1	0.1	0.49	0.49	30.7	31.9	1.04

All Pedestrians	448	8.6	LOS A	0.2	0.2	0.47	0.47	33.5	29.8	0.89
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Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 113 [13. CommIzetPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Commercial Rd / Izett St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Izett Street														
1	L2	109	1.9	109	1.9	* 0.899	51.0	LOS C	9.1	64.5	1.00	1.06	1.60	22.9
3	R2	104	1.9	104	1.9	0.899	50.1	LOS C	9.1	64.5	1.00	1.06	1.60	22.9
Approach		213	1.9	213	1.9	0.899	50.5	LOS C	9.1	64.5	1.00	1.06	1.60	22.9
East: Commercial Road														
4	L2	83	1.9	82	1.9	0.123	13.6	LOS A	1.2	8.6	0.39	0.62	0.39	43.6
5	T1	438	1.9	432	1.9	* 0.616	10.3	LOS B	8.3	59.1	0.60	0.53	0.60	27.4
Approach		520	1.9	514 ^{N1}	1.9	0.616	10.8	LOS B	8.3	59.1	0.57	0.55	0.57	33.0
West: Commercial Road														
11	T1	796	1.9	796	1.9	0.382	3.5	LOS A	5.8	41.4	0.35	0.34	0.35	41.5
12	R2	84	1.9	84	1.9	0.382	8.6	LOS A	2.7	19.1	0.35	0.40	0.35	51.4
Approach		880	1.9	880	1.9	0.382	3.9	LOS A	5.8	41.4	0.35	0.34	0.35	44.2
All Vehicles		1614	1.9	1607 ^{N1}	1.9	0.899	12.3	LOS C	9.1	64.5	0.51	0.50	0.58	32.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Izett Street											
P1	Full	171	11.5	LOS B	0.2	0.2	0.58	0.58	35.3	28.6	0.81
East: Commercial Road											
P2	Full	82	26.7	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
All Pedestrians		252	16.4	LOS B	0.2	0.2	0.67	0.67	42.0	30.7	0.73

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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG3 [ChapelBray]

Network: N101 [PM
Commuter Peak (Network
Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS [Total veh/h	ARRIVAL FLOWS HV] %	[Total HV] veh/h	%	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh Dist] m		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Site: 114 [14. ChapMalvPMExE]														
South: Chapel Street														
1	L2	103	1.9	95	1.9	0.152	29.4	LOS A	2.9	20.9	0.94	0.78	0.94	19.8
2	T1	236	1.9	219	1.9	0.481	25.8	LOS A	7.3	51.6	0.98	0.82	0.98	21.2
3	R2	7	1.9	6	1.9	0.481	31.4	LOS A	7.3	51.6	0.98	0.82	0.98	21.2
Approach		345	1.9	320 ^{N1}	1.9	0.481	27.0	LOS A	7.3	51.6	0.97	0.81	0.97	20.8
East: Malvern Road														
4	L2	27	1.9	27	1.9	0.125	4.4	LOS A	0.1	0.6	0.02	0.15	0.02	43.4
5	T1	448	1.9	448	1.9	0.577	2.4	LOS A	2.8	19.6	0.18	0.21	0.18	32.1
6	R2	35	1.9	35	1.9	* 0.577	6.1	LOS A	2.8	19.6	0.21	0.23	0.21	30.2
Approach		509	1.9	509	1.9	0.577	2.8	LOS A	2.8	19.6	0.17	0.21	0.17	32.4
North: Chapel Street														
7	L2	29	1.9	29	1.9	0.112	24.4	LOS A	2.0	14.3	0.84	0.69	0.84	30.6
8	T1	317	1.9	317	1.9	0.562	22.0	LOS A	8.7	62.2	0.92	0.78	0.92	29.7
9	R2	10	1.9	10	1.9	* 0.562	28.0	LOS A	8.7	62.2	0.94	0.80	0.94	29.6
Approach		356	1.9	356	1.9	0.562	22.4	LOS A	8.7	62.2	0.92	0.77	0.92	29.8
West: Commercial Road														
10	L2	87	1.9	87	1.9	0.519	19.4	LOS A	11.4	80.8	0.74	0.67	0.74	23.2
11	T1	652	1.9	652	1.9	0.519	14.9	LOS A	11.4	80.8	0.79	0.72	0.79	21.7
12	R2	79	1.9	79	1.9	0.519	22.7	LOS A	9.6	68.6	0.88	0.78	0.88	19.8
Approach		819	1.9	819	1.9	0.519	16.1	LOS A	11.4	80.8	0.79	0.72	0.79	21.7
All Vehicles		2029	1.9	2005 ^{N1}	1.9	0.577	15.6	LOS A	11.4	80.8	0.69	0.61	0.69	24.5
Site: 115 [15. MalvBrayPMExE]														
East: Malvern Road														
5	T1	480	1.9	480	1.9	0.374	12.3	LOS A	7.5	53.6	0.67	0.59	0.67	34.2
6	R2	76	1.9	76	1.9	0.374	18.0	LOS A	4.5	32.3	0.67	0.64	0.67	44.5
Approach		556	1.9	556	1.9	0.374	13.1	LOS A	7.5	53.6	0.67	0.60	0.67	36.8
North: Bray Street														
7	L2	93	1.9	93	1.9	0.148	22.8	LOS A	2.2	15.7	0.73	0.73	0.73	34.5
9	R2	35	1.9	35	1.9	0.055	22.1	LOS A	0.8	5.6	0.70	0.70	0.70	34.9
Approach		127	1.9	127	1.9	0.148	22.6	LOS A	2.2	15.7	0.72	0.72	0.72	34.6
West: Malvern Road														
10	L2	40	1.9	40	1.9	0.397	6.1	LOS A	2.3	16.2	0.19	0.22	0.19	52.1
11	T1	653	1.9	653	1.9	0.397	2.3	LOS A	2.3	16.2	0.16	0.16	0.16	32.3
Approach		694	1.9	693 ^{N1}	1.9	0.397	2.5	LOS A	2.3	16.2	0.16	0.17	0.16	38.3
All Vehicles		1377	1.9	1377	1.9	0.397	8.6	LOS A	7.5	53.6	0.42	0.39	0.42	36.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
Site: 114 [14. ChapMalvPMExE]											
South: Chapel Street											
P1	Full	233	8.8	LOS A	0.2	0.2	0.50	0.50	38.2	35.2	0.92
East: Malvern Road											
P2	Full	306	14.7	LOS B	0.4	0.4	0.65	0.65	44.0	35.2	0.80
North: Chapel Street											
P3	Full	254	8.8	LOS A	0.3	0.3	0.51	0.51	38.2	35.2	0.92
West: Commercial Road											
P4	Full	484	14.8	LOS B	0.6	0.6	0.66	0.66	44.1	35.2	0.80
All Pedestrians		1278	12.5	LOS B	0.6	0.6	0.60	0.60	41.8	35.2	0.84
Site: 115 [15. MalvBrayPMExE]											
North: Bray Street											
P3	Full	128	8.8	LOS A	0.1	0.1	0.50	0.50	35.4	31.9	0.90
West: Malvern Road											
P4	Full	58	14.5	LOS B	0.1	0.1	0.64	0.64	43.8	35.2	0.80
All Pedestrians		186	10.6	LOS B	0.1	0.1	0.55	0.55	38.0	32.9	0.87

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.

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Bendigo Street											
P1	Full	99	13.3	LOS B	0.1	0.1	0.62	0.62	37.1	28.6	0.77
East: Malvern Road											

P2 Full	54	9.8	LOS A	0.1	0.1	0.53	0.53	39.1	35.2	0.90
North: Surrey Road										
P3 Full	77	13.2	LOS B	0.1	0.1	0.62	0.62	37.1	28.6	0.77
West: Malvern Road										
P4 Full	54	9.8	LOS A	0.1	0.1	0.53	0.53	39.1	35.2	0.90
All Pedestrians	283	11.9	LOS B	0.1	0.1	0.58	0.58	37.9	31.1	0.82

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: 117 [17. ChapChatPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Chatam St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	18	1.9	17	1.9	0.103	15.8	LOS A	0.7	5.0	0.40	0.42	0.40	32.5
2	T1	289	1.9	271	1.9	* 0.515	11.7	LOS A	4.4	31.5	0.55	0.47	0.55	23.1
Approach		307	1.9	288 ^{N1}	1.9	0.515	11.9	LOS A	4.4	31.5	0.54	0.46	0.54	23.9
North: Chapel Street														
8	T1	453	1.9	453	1.9	0.357	3.2	LOS A	3.5	25.1	0.31	0.29	0.31	47.8
9	R2	48	1.9	48	1.9	* 0.357	8.7	LOS A	3.5	25.1	0.34	0.33	0.34	47.8
Approach		501	1.9	501	1.9	0.357	3.7	LOS A	3.5	25.1	0.31	0.29	0.31	47.8
West: Chatham Street														
10	L2	46	1.9	46	1.9	0.045	13.4	LOS A	0.7	5.0	0.47	0.67	0.47	26.0
12	R2	36	1.9	36	1.9	* 0.171	37.3	LOS A	1.2	8.3	0.94	0.72	0.94	12.5
Approach		82	1.9	82	1.9	0.171	23.9	LOS A	1.2	8.3	0.68	0.69	0.68	17.7
All Vehicles		890	1.9	870 ^{N1}	1.9	0.515	8.3	LOS A	4.4	31.5	0.42	0.39	0.42	35.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
North: Chapel Street											
P3	Full	195	26.8	LOS C	0.3	0.3	0.88	0.88	56.1	35.2	0.63
West: Chatham Street											
P4	Full	364	18.1	LOS B	0.5	0.5	0.73	0.73	44.7	31.9	0.71
All Pedestrians		559	21.2	LOS C	0.5	0.5	0.78	0.78	48.7	33.1	0.68

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: P101 [P1. PedXChap1PMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Pedestrian Crossing 12 on Chapel Street

PM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	440	1.9	412	1.9	0.336	6.5	LOS A	8.7	61.7	0.66	0.59	0.66	38.9
Approach		440	1.9	412 ^{N1}	1.9	0.336	6.5	LOS A	8.7	61.7	0.66	0.59	0.66	38.9
North: Chapel Street														
8	T1	489	1.9	489	1.9	* 0.400	4.5	LOS A	7.6	53.8	0.49	0.43	0.49	37.1
Approach		489	1.9	489	1.9	0.400	4.5	LOS A	7.6	53.8	0.49	0.43	0.49	37.1
All Vehicles		929	1.9	901 ^{N1}	2.0	0.400	5.4	LOS A	8.7	61.7	0.57	0.50	0.57	38.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	133	26.7	LOS C	0.2	0.2	0.88	0.88	50.6	28.6	0.57
All Pedestrians		133	26.7	LOS C	0.2	0.2	0.88	0.88	50.6	28.6	0.57

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: N:\Projects\2022\220353\Sidra\220353SID002A(DesignHour).sip9

MOVEMENT SUMMARY

 Site: 118 [18. HighStEdPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

High St / St. Edmonds Rd

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: High Street														
5	T1	449	1.9	424	1.9	0.365	2.1	LOS A	2.3	16.1	0.18	0.21	0.18	56.5
6	R2	60	1.9	57	1.9	* 0.365	7.5	LOS A	2.3	16.1	0.19	0.25	0.19	53.6
Approach		509	1.9	481 ^{N1}	1.9	0.365	2.7	LOS A	2.3	16.1	0.18	0.21	0.18	56.1
North: St. Edmonds Road														
7	L2	86	1.9	86	1.9	0.548	41.6	LOS A	3.1	21.8	1.00	0.78	1.04	25.6
9	R2	121	1.9	121	1.9	* 0.815	45.8	LOS C	4.7	33.2	1.00	0.94	1.43	33.6
Approach		207	1.9	207	1.9	0.815	44.0	LOS C	4.7	33.2	1.00	0.87	1.27	31.0
West: High Street														
10	L2	113	1.9	113	1.9	0.304	8.7	LOS A	4.8	34.2	0.36	0.41	0.36	54.3
11	T1	695	1.9	695	1.9	0.304	3.2	LOS A	4.8	34.2	0.36	0.36	0.36	53.3
Approach		807	1.9	807	1.9	0.304	4.0	LOS A	4.8	34.2	0.36	0.37	0.36	53.5
All Vehicles		1523	1.9	1495 ^{N1}	1.9	0.815	9.1	LOS C	4.8	34.2	0.39	0.39	0.43	48.1

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: High Street											
P2	Full	54	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
North: St. Edmonds Road											
P3	Full	116	2.1	LOS A	0.1	0.1	0.24	0.24	28.7	31.9	1.11
All Pedestrians		170	9.8	LOS A	0.1	0.1	0.44	0.44	37.3	32.9	0.88

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: 119 [19. ChapHighPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / High St

PM Commuter Peak. Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	57	1.9	51	1.9	0.172	26.8	LOS A	2.5	17.9	0.83	0.71	0.83	23.7
2	T1	237	1.9	210	1.9	0.859	34.5	LOS C	8.5	60.4	0.97	0.93	1.26	17.9
3	R2	52	1.9	47	1.9	0.859	43.5	LOS C	8.5	60.4	1.00	0.99	1.36	16.9
Approach		346	1.9	307 ^{N1}	1.9	0.859	34.6	LOS C	8.5	60.4	0.95	0.91	1.20	18.5
East: High Street														
4	L2	118	1.9	118	1.9	0.200	15.0	LOS A	3.2	22.9	0.49	0.59	0.49	34.8
5	T1	401	1.9	401	1.9	* 0.987	50.2	LOS E ¹¹	20.5	146.2	0.81	1.11	1.46	14.6
6	R2	82	1.9	82	1.9	0.987	66.7	LOS E ¹¹	20.5	146.2	0.90	1.25	1.72	12.6
Approach		601	1.9	601	1.9	0.987	45.5	LOS E ¹¹	20.5	146.2	0.76	1.02	1.30	16.1
North: Chapel Street														
7	L2	66	1.9	66	1.9	0.198	27.2	LOS A	3.1	21.7	0.88	0.74	0.88	19.8
8	T1	283	1.9	283	1.9	* 0.988	58.8	LOS E ¹¹	15.0	106.9	0.98	1.19	1.75	10.3
9	R2	40	1.9	40	1.9	0.988	70.3	LOS E ¹¹	15.0	106.9	1.00	1.27	1.89	9.5
Approach		389	1.9	389	1.9	0.988	54.7	LOS E ¹¹	15.0	106.9	0.97	1.12	1.62	11.1
West: High Street														
10	L2	122	1.9	122	1.9	0.634	16.2	LOS B	13.1	92.9	0.63	0.60	0.63	27.3
11	T1	557	1.9	557	1.9	0.634	11.3	LOS B	13.1	92.9	0.64	0.61	0.64	25.7
12	R2	97	1.9	97	1.9	0.634	43.0	LOS B	4.5	32.1	1.00	0.82	1.07	10.9
Approach		776	1.9	776	1.9	0.634	16.0	LOS B	13.1	92.9	0.68	0.64	0.69	22.2
All Vehicles		2112	1.9	2073 ^{N1}	1.9	0.988	34.6	LOS E ¹¹	20.5	146.2	0.80	0.88	1.12	16.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	146	6.9	LOS A	0.1	0.1	0.45	0.45	36.2	35.2	0.97

East: High Street											
P2	Full	228	17.3	LOS B	0.3	0.3	0.71	0.71	46.6	35.2	0.75
North: Chapel Street											
P3	Full	164	6.9	LOS A	0.1	0.1	0.45	0.45	36.2	35.2	0.97
West: High Street											
P4	Full	340	17.4	LOS B	0.5	0.5	0.71	0.71	46.7	35.2	0.75
All Pedestrians		878	13.7	LOS B	0.5	0.5	0.62	0.62	43.0	35.2	0.82

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: 120 [20. HighBangPMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Chapel St / Bangs St / Hornby St

PM Commuter Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hornby St														
1	L2	27	1.9	27	1.9	0.692	45.9	LOS B	2.9	20.3	1.00	0.84	1.25	25.0
2	T1	21	1.9	21	1.9	0.692	39.4	LOS B	2.9	20.3	1.00	0.84	1.25	35.0
3	R2	27	1.9	27	1.9	0.692	44.9	LOS B	2.9	20.3	1.00	0.84	1.25	34.3
Approach		75	1.9	75	1.9	0.692	43.7	LOS B	2.9	20.3	1.00	0.84	1.25	31.9
East: High Street														
5	T1	523	1.9	523	1.9	0.421	3.6	LOS A	5.7	40.2	0.37	0.35	0.37	53.4
6	R2	46	1.9	46	1.9	* 0.421	9.1	LOS A	5.7	40.2	0.40	0.39	0.40	54.6
Approach		568	1.9	568	1.9	0.421	4.0	LOS A	5.7	40.2	0.37	0.36	0.37	53.6
North: Bangs St														
7	L2	181	1.9	181	1.9	* 0.742	44.2	LOS C	4.4	31.2	1.00	0.88	1.28	34.2
9	R2	35	1.9	35	1.9	0.742	44.6	LOS C	3.8	26.9	1.00	0.88	1.30	24.6
Approach		216	1.9	216	1.9	0.742	44.3	LOS C	4.4	31.2	1.00	0.88	1.28	33.0
West: High Street														
10	L2	21	1.9	21	1.9	0.244	5.8	LOS A	0.3	2.2	0.03	0.06	0.03	57.0
11	T1	637	1.9	631	1.9	0.244	1.2	LOS A	2.0	14.6	0.12	0.12	0.12	58.3
Approach		658	1.9	652 ^{N1}	1.9	0.244	1.3	LOS A	2.0	14.6	0.11	0.12	0.11	58.3
All Vehicles		1517	1.9	1511 ^{N1} ₁	1.9	0.742	10.6	LOS C	5.7	40.2	0.38	0.35	0.43	48.0

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Hornby St											
P1	Full	113	2.1	LOS A	0.1	0.1	0.24	0.24	23.2	25.3	1.09
East: High Street											
P2	Full	54	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
North: Bangs St											
P3	Full	105	2.1	LOS A	0.1	0.1	0.24	0.24	28.7	31.9	1.11

West: High Street											
P4	Full	54	26.6	LOS C	0.1	0.1	0.87	0.87	56.0	35.2	0.63
All Pedestrians		325	10.2	LOS B	0.1	0.1	0.45	0.45	35.8	30.7	0.86

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: P102 [P2. PedXChap2PMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #2 on Chapel Street

PM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
2	T1	572	1.9	507	1.9	* 0.423	3.4	LOS A	5.1	36.3	0.32	0.28	0.32	48.8
Approach		572	1.9	507 ^{N1}	1.9	0.423	3.4	LOS A	5.1	36.3	0.32	0.28	0.32	48.8
North: Chapel Street														
8	T1	498	1.9	498	1.9	0.415	4.4	LOS A	6.9	49.0	0.44	0.39	0.44	46.5
Approach		498	1.9	498	1.9	0.415	4.4	LOS A	6.9	49.0	0.44	0.39	0.44	46.5
All Vehicles		1070	1.9	1005 ^{N1}	2.0	0.423	3.9	LOS A	6.9	49.0	0.38	0.34	0.38	47.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	218	26.8	LOS C	0.4	0.4	0.88	0.88	50.7	28.6	0.56
All Pedestrians		218	26.8	LOS C	0.4	0.4	0.88	0.88	50.7	28.6	0.56

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: P103 [P3. PedXChap3PMExE (Site Folder: Weekday PM Commuter Peak)]

 Network: N101 [PM Commuter Peak (Network Folder: General)]

Pedestrian Crossing #3 on Chapel Street

PM Commuter Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	HV %	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist m]				km/h
South: Chapel Street														
2	T1	572	1.9	507	1.9	0.423	4.8	LOS A	8.1	57.3	0.50	0.45	0.50	38.2
Approach		572	1.9	507 ^{N1}	1.9	0.423	4.8	LOS A	8.1	57.3	0.50	0.45	0.50	38.2
North: Chapel Street														
8	T1	520	1.9	520	1.9	* 0.434	5.4	LOS A	9.1	64.7	0.55	0.49	0.55	44.1
Approach		520	1.9	520	1.9	0.434	5.4	LOS A	9.1	64.7	0.55	0.49	0.55	44.1
All Vehicles		1092	1.9	1028 ^{N1}	2.0	0.434	5.1	LOS A	9.1	64.7	0.53	0.47	0.53	41.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	181	26.8	LOS C	0.3	0.3	0.88	0.88	50.6	28.6	0.57
All Pedestrians		181	26.8	LOS C	0.3	0.3	0.88	0.88	50.6	28.6	0.57

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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■-■ Network: N101 [PM
Commuter Peak (Network
Folder: General)]

Design Life Analysis (Final Year): Results for 1 years

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped ped Dist] ped m		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec						sec	m	m/sec
South: Chapel Street											
P1	Full	54	16.5	LOS B	0.1	0.1	0.69	0.69	45.8	35.2	0.77
East: Dandenong Road											

P21 Stage 1	84	7.3	LOS A	0.1	0.1	0.46	0.46	41.3	40.8	0.99
P22 Stage 2	84	15.8	LOS B	0.1	0.1	0.67	0.67	47.1	37.5	0.80
North: Chapel Street										
P3 Full	54	15.1	LOS B	0.1	0.1	0.66	0.66	44.5	35.2	0.79
West: Dandenong Road										
P41 Stage 1	267	8.4	LOS A	0.3	0.3	0.49	0.49	42.4	40.8	0.96
P42 Stage 2	267	16.0	LOS B	0.4	0.4	0.68	0.68	44.5	34.2	0.77
All Pedestrians	810	12.5	LOS B	0.4	0.4	0.59	0.59	43.8	37.5	0.86

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: 201 [1. AlexYarraSATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Alexandra Ave / Yarra St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Yarra Street														
1	L2	84	1.5	84	1.5	0.140	26.2	LOS A	2.3	16.4	0.74	0.73	0.74	41.1
3	R2	49	1.5	49	1.5	* 0.356	46.3	LOS A	2.0	13.9	0.99	0.74	0.99	24.0
Approach		133	1.5	133	1.5	0.356	33.6	LOS A	2.3	16.4	0.83	0.73	0.83	35.3
East: Alexandra Avenue														
4	L2	73	1.5	73	1.5	0.724	25.0	LOS C	19.0	134.5	0.83	0.75	0.83	40.6
5	T1	1183	1.5	1183	1.5	* 0.724	20.4	LOS C	21.5	152.2	0.89	0.80	0.89	41.3
Approach		1255	1.5	1255	1.5	0.724	20.7	LOS C	21.5	152.2	0.88	0.79	0.88	41.3
West: Alexandra Avenue														
11	T1	1048	1.5	1048	1.5	* 0.434	4.5	LOS A	6.6	46.9	0.55	0.48	0.55	52.4
12	R2	78	1.5	78	1.5	0.243	37.1	LOS A	2.7	19.2	0.90	0.75	0.90	36.6
Approach		1126	1.5	1126	1.5	0.434	6.7	LOS A	6.6	46.9	0.57	0.50	0.57	49.6
All Vehicles		2514	1.5	2514	1.5	0.724	15.1	LOS C	21.5	152.2	0.74	0.66	0.74	43.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Yarra Street											
P1	Full	65	8.1	LOS A	0.1	0.1	0.45	0.45	34.7	31.9	0.92
East: Alexandra Avenue											
P2	Full	54	14.5	LOS B	0.1	0.1	0.78	0.78	46.6	38.5	0.83
All Pedestrians		119	11.0	LOS B	0.1	0.1	0.60	0.60	40.1	34.9	0.87

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.

Site: 202 [2. ChapAlexSATExE (Site Folder: Retail Trader Peak)] Network: N101 [Retail Trader Peak (Network Folder: General)]

Design Life Analysis (Final Year): Results for 1 years

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist]			sec	m	m/sec
					ped	m					
South: Chapel Street											
P1	Full	54	17.6	LOS B	0.1	0.1	0.66	0.66	46.9	35.2	0.75
East: Alexandra Avenue											
P2	Full	82	19.0	LOS B	0.1	0.1	0.69	0.69	51.1	38.5	0.75
North: Church Street Bridge											

P3	Full	54	17.6	LOS B	0.1	0.1	0.66	0.66	46.9	35.2	0.75
West: Alexandra Avenue											
P4	Full	88	19.0	LOS B	0.1	0.1	0.69	0.69	51.1	38.5	0.75
All Pedestrians		277	18.4	LOS B	0.1	0.1	0.68	0.68	49.5	37.2	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.

MOVEMENT SUMMARY

 **Site: 203 [3. ChapMalcSATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Chapel St / Malcolm St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
South: Chapel Street														
2	T1	463	1.5	463	1.5	0.544	5.5	LOS A	5.4	38.5	0.48	0.46	0.48	34.7
3	R2	134	1.5	134	1.5	* 0.544	12.4	LOS A	5.4	38.5	0.64	0.63	0.64	47.3
Approach		597	1.5	597	1.5	0.544	7.1	LOS A	5.4	38.5	0.52	0.50	0.52	40.8
East: Malcolm Street														
4	L2	135	1.5	135	1.5	0.168	21.1	LOS A	3.2	22.6	0.64	0.73	0.64	36.3
6	R2	165	1.5	165	1.5	* 0.899	55.9	LOS C	7.8	55.1	1.00	1.03	1.59	21.3
Approach		300	1.5	300	1.5	0.899	40.2	LOS C	7.8	55.1	0.84	0.89	1.16	26.2
North: Chapel Street														
7	L2	175	1.5	175	1.5	0.245	16.3	LOS A	4.3	30.6	0.68	0.74	0.68	42.2
8	T1	434	1.5	434	1.5	* 0.800	25.6	LOS C	15.9	113.0	0.88	0.86	1.03	20.0
Approach		609	1.5	609	1.5	0.800	22.9	LOS C	15.9	113.0	0.82	0.83	0.93	28.7
All Vehicles		1506	1.5	1506	1.5	0.899	20.1	LOS C	15.9	113.0	0.70	0.71	0.81	30.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	303	31.9	LOS D	0.6	0.6	0.90	0.90	61.2	35.2	0.57
East: Malcolm Street											
P2	Full	215	13.3	LOS B	0.3	0.3	0.58	0.58	39.9	31.9	0.80
All Pedestrians		518	24.2	LOS C	0.6	0.6	0.77	0.77	52.4	33.8	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: 204 [4. ChapDalySATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Daly St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	33	1.5	33	1.5	0.071	9.8	LOS A	1.7	11.8	0.45	0.47	0.45	41.2
2	T1	498	1.5	496	1.5	0.355	5.5	LOS A	8.8	62.7	0.55	0.50	0.55	35.4
3	R2	10	1.5	10	1.5	0.355	11.1	LOS A	8.8	62.7	0.56	0.50	0.56	41.8
Approach		541	1.5	539 ^{N1}	1.5	0.355	5.9	LOS A	8.8	62.7	0.54	0.50	0.54	36.2
East: Car Park Access														
4	L2	7	1.5	7	1.5	0.036	42.5	LOS A	0.2	1.7	0.93	0.65	0.93	11.5
5	T1	1	1.5	1	1.5	0.099	38.4	LOS A	0.5	3.6	0.95	0.68	0.95	18.1
6	R2	12	1.5	12	1.5	0.099	43.9	LOS A	0.5	3.6	0.95	0.68	0.95	11.0
Approach		20	1.5	20	1.5	0.099	43.2	LOS A	0.5	3.6	0.94	0.67	0.94	11.7
North: Chapel Street														
7	L2	7	1.5	7	1.5	0.104	6.3	LOS A	0.4	2.7	0.07	0.08	0.07	51.6
8	T1	462	1.5	462	1.5	0.379	1.4	LOS A	1.6	11.2	0.10	0.16	0.10	49.2
9	R2	66	1.5	66	1.5	* 0.379	6.9	LOS A	1.6	11.2	0.11	0.19	0.11	48.6
Approach		534	1.5	534	1.5	0.379	2.1	LOS A	1.6	11.2	0.10	0.16	0.10	49.1
West: Daly Street														
10	L2	68	1.5	68	1.5	* 0.370	44.9	LOS A	2.6	18.7	0.97	0.75	0.97	11.1
11	T1	1	1.5	1	1.5	0.296	38.3	LOS A	1.9	13.4	0.96	0.74	0.96	18.1
12	R2	48	1.5	48	1.5	0.296	43.8	LOS A	1.9	13.4	0.96	0.74	0.96	11.0
Approach		117	1.5	117	1.5	0.370	44.4	LOS A	2.6	18.7	0.97	0.75	0.97	11.1
All Vehicles		1213	1.5	1211 ^{N1}	1.5	0.379	8.6	LOS A	8.8	62.7	0.39	0.38	0.39	31.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	74	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
East: Car Park Access											
P2	Full	493	2.3	LOS A	0.3	0.3	0.24	0.24	28.9	31.9	1.10

North: Chapel Street											
P3	Full	289	31.9	LOS D	0.6	0.6	0.90	0.90	61.2	35.2	0.57
West: Daly Street											
P4	Full	265	2.3	LOS A	0.1	0.1	0.24	0.24	28.9	31.9	1.11
All Pedestrians		1121	11.9	LOS B	0.6	0.6	0.45	0.45	39.3	33.0	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.

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MOVEMENT SUMMARY

 Site: 205 [5. PuntToorSATExE (Site Folder: Retail Trader Peak)]  Network: N101 [Retail Trader Peak (Network Folder: General)]

Punt Rd / Toorak Rd

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Punt Road														
1	L2	54	1.5	54	1.5	0.826	34.0	LOS C	25.6	181.3	0.96	0.95	1.08	40.3
2	T1	1177	1.5	1177	1.5	0.826	27.2	LOS C	25.6	181.3	0.93	0.92	1.06	41.4
3	R2	124	1.5	124	1.5	0.599	44.4	LOS A	4.9	34.9	1.00	0.81	1.04	24.6
Approach		1355	1.5	1355	1.5	0.826	29.1	LOS C	25.6	181.3	0.94	0.91	1.06	40.0
East: Toorak Road														
4	L2	91	1.5	91	1.5	0.131	21.9	LOS A	2.2	15.5	0.61	0.70	0.61	43.4
5	T1	318	1.5	318	1.5	0.657	29.5	LOS B	10.6	75.3	0.89	0.76	0.90	40.4
6	R2	1	0.0	1	0.0	0.657	35.3	LOS B	10.6	75.3	0.90	0.76	0.90	39.8
Approach		411	1.5	410 ^{N1}	1.5	0.657	27.8	LOS B	10.6	75.3	0.83	0.75	0.84	41.1
North: Punt Road														
7	L2	83	1.5	83	1.5	0.894	42.6	LOS C	32.4	229.5	1.00	1.09	1.25	27.5
8	T1	1240	1.5	1240	1.5	* 0.894	35.9	LOS C	32.4	229.5	0.96	1.06	1.24	37.6
9	R2	190	1.5	190	1.5	* 0.918	58.0	LOS D	9.2	65.3	1.00	1.07	1.63	30.3
Approach		1512	1.5	1512	1.5	0.918	39.0	LOS D	32.4	229.5	0.97	1.06	1.29	36.1
West: Toorak Road														
10	L2	137	1.5	137	1.5	0.181	21.0	LOS A	3.4	24.1	0.66	0.73	0.66	43.8
11	T1	385	1.5	385	1.5	* 0.907	45.4	LOS D	18.1	128.3	0.99	1.11	1.43	24.4
12	R2	1	0.0	1	0.0	0.907	51.2	LOS D	18.1	128.3	1.00	1.11	1.44	33.9
Approach		523	1.5	523	1.5	0.907	39.0	LOS D	18.1	128.3	0.91	1.01	1.23	29.8
All Vehicles		3800	1.5	3800	1.5	0.918	34.3	LOS D	32.4	229.5	0.93	0.97	1.15	37.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Punt Road											
P1	Full	77	21.8	LOS C	0.1	0.1	0.74	0.74	53.9	38.5	0.71
East: Toorak Road											
P2	Full	54	13.3	LOS B	0.1	0.1	0.58	0.58	42.6	35.2	0.83

North: Punt Road											
P3	Full	150	21.9	LOS C	0.3	0.3	0.74	0.74	54.0	38.5	0.71
West: Toorak Road											
P4	Full	54	13.3	LOS B	0.1	0.1	0.58	0.58	42.6	35.2	0.83
All Pedestrians		335	19.1	LOS B	0.3	0.3	0.69	0.69	50.3	37.4	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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Site: 206 [6. ChapToorSATExE (Site Folder: Retail Trader Peak)] Network: N101 [Retail Trader Peak (Network Folder: General)]

Design Life Analysis (Final Year): Results for 1 years

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	272	12.8	LOS B	0.4	0.4	0.57	0.57	39.4	31.9	0.81
East: Toorak Road											
P2	Full	303	12.8	LOS B	0.4	0.4	0.57	0.57	42.2	35.2	0.84
North: Chapel Street											

P3 Full	420	12.9	LOS B	0.5	0.5	0.57	0.57	45.0	38.5	0.86
West: Toorak Road										
P4 Full	467	12.9	LOS B	0.6	0.6	0.57	0.57	45.0	38.5	0.86
All Pedestrians	1461	12.9	LOS B	0.6	0.6	0.57	0.57	43.4	36.6	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: 207 [7. ToorRiveSATExE (Site Folder: Retail Trader Peak)]  Network: N101 [Retail Trader Peak (Network Folder: General)]

Toorak Rd / River St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
East: Toorak Road														
5	T1	453	1.5	453	1.5	0.285	3.1	LOS A	4.3	30.4	0.31	0.27	0.31	54.7
6	R2	184	1.5	184	1.5	0.278	12.2	LOS A	2.9	20.9	0.59	0.73	0.59	48.8
Approach		637	1.5	637	1.5	0.285	5.7	LOS A	4.3	30.4	0.39	0.40	0.39	51.9
North: River Street														
7	L2	171	1.5	171	1.5	* 0.572	24.8	LOS A	3.4	24.3	0.97	0.79	0.97	42.3
9	R2	54	1.5	54	1.5	0.333	44.9	LOS A	2.1	14.9	0.98	0.74	0.98	24.4
Approach		224	1.5	224	1.5	0.572	29.6	LOS A	3.4	24.3	0.97	0.78	0.97	38.5
West: Toorak Road														
10	L2	71	1.5	71	1.5	0.112	9.2	LOS A	0.9	6.3	0.37	0.52	0.37	48.6
11	T1	541	1.5	541	1.5	* 0.543	6.0	LOS A	5.7	40.3	0.58	0.52	0.58	51.5
Approach		613	1.5	612 ^{N1}	1.5	0.543	6.4	LOS A	5.7	40.3	0.55	0.52	0.55	51.1
All Vehicles		1474	1.5	1473 ^{N1}	1.5	0.572	9.7	LOS A	5.7	40.3	0.55	0.51	0.55	48.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Toorak Road											
P2	Full	100	31.6	LOS D	0.2	0.2	0.89	0.89	63.7	38.5	0.60
North: River Street											
P3	Full	260	3.9	LOS A	0.1	0.1	0.44	0.44	30.5	31.9	1.05
All Pedestrians		360	11.6	LOS B	0.2	0.2	0.57	0.57	39.7	33.7	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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [PalermoArthur]

Network: N101 [Retail Trader Peak (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)
Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
Site: 208 [8. ChapPaleSATExE]														
South: Chapel Street														
2	T1	479	1.5	479	1.5	0.345	3.0	LOS A	4.2	29.9	0.29	0.26	0.29	24.2
3	R2	21	1.5	21	1.5	*0.345	6.1	LOS A	4.2	29.9	0.35	0.32	0.35	33.7
Approach		500	1.5	500	1.5	0.345	3.1	LOS A	4.2	29.9	0.29	0.27	0.29	25.2
East: Palermo Street														
4	L2	13	1.5	13	1.5	0.073	42.1	LOS A	0.5	3.5	0.93	0.68	0.93	8.5
6	R2	18	1.5	18	1.5	0.097	42.3	LOS A	0.7	4.7	0.94	0.69	0.94	8.3
Approach		31	1.5	31	1.5	0.097	42.2	LOS A	0.7	4.7	0.94	0.69	0.94	8.4
North: Chapel Street														
7	L2	37	1.5	37	1.5	0.458	26.0	LOS A	8.1	57.3	0.87	0.74	0.87	26.4
8	T1	443	1.5	443	1.5	0.458	21.2	LOS A	8.1	57.3	0.88	0.74	0.88	23.3
Approach		480	1.5	480	1.5	0.458	21.6	LOS A	8.1	57.3	0.88	0.74	0.88	23.6
All Vehicles		1011	1.5	1011	1.5	0.458	13.1	LOS A	8.1	57.3	0.59	0.51	0.59	22.7
Site: 209 [9. ChapArthSATExE]														
South: Chapel Street														
1	L2	12	1.5	12	1.5	0.569	23.8	LOS A	7.4	52.2	0.71	0.60	0.71	39.0
2	T1	470	1.5	470	1.5	0.569	19.1	LOS A	7.4	52.2	0.74	0.63	0.74	16.9
Approach		482	1.5	482	1.5	0.569	19.2	LOS A	7.4	52.2	0.73	0.63	0.73	18.0
North: Chapel Street														
8	T1	439	1.5	439	1.5	0.577	1.7	LOS A	1.3	9.1	0.10	0.10	0.10	31.1
9	R2	15	1.5	15	1.5	*0.577	3.9	LOS A	1.3	9.1	0.10	0.10	0.10	54.0
Approach		453	1.5	453	1.5	0.577	1.8	LOS A	1.3	9.1	0.10	0.10	0.10	36.8
West: Arthur Street														
10	L2	26	1.5	26	1.5	0.045	18.7	LOS A	0.8	5.6	0.59	0.68	0.59	37.4
12	R2	11	1.5	11	1.5	0.045	18.6	LOS A	0.8	5.6	0.59	0.68	0.59	37.4
Approach		37	1.5	37	1.5	0.045	18.7	LOS A	0.8	5.6	0.59	0.68	0.59	37.4
All Vehicles		972	1.5	972	1.5	0.577	11.1	LOS A	7.4	52.2	0.43	0.38	0.43	22.4

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
					[Ped	Dist]					

		ped/h	sec		ped	m			sec	m	m/sec
Site: 208 [8. ChapPaleSATExE]											
South: Chapel Street											
P1	Full	165	31.7	LOS D	0.3	0.3	0.89	0.89	61.1	35.2	0.58
East: Palermo Street											
P2	Full	364	14.0	LOS B	0.5	0.5	0.60	0.60	40.6	31.9	0.79
All Pedestrians		529	19.5	LOS B	0.5	0.5	0.69	0.69	47.0	32.9	0.70
Site: 209 [9. ChapArthSATExE]											
West: Arthur Street											
P4	Full	714	14.2	LOS B	1.0	1.0	0.61	0.61	38.1	28.6	0.75
All Pedestrians		714	14.2	LOS B	1.0	1.0	0.61	0.61	38.1	28.6	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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CCG MOVEMENT SUMMARY

Common Control Group: CCG2 [GardenWilson]

■ Network: N101 [Retail Trader Peak (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND	Flows	ARRIVAL FLOWS	Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed	
		[Total veh/h	HV] %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				
Site: 210 [10. ChapGardSATExE]														
South: Chapel Street														
2	T1	416	1.5	416	1.5	0.293	0.5	LOS A	0.4	2.5	0.03	0.04	0.03	53.5
3	R2	17	1.5	17	1.5	0.293	4.2	LOS A	0.4	2.5	0.03	0.05	0.03	52.3
Approach		433	1.5	433	1.5	0.293	0.6	LOS A	0.4	2.5	0.03	0.05	0.03	53.3
East: Garden Street														
4	L2	31	1.5	31	1.5	*0.543	40.6	LOS A	3.6	25.3	0.99	0.82	0.99	17.0
6	R2	78	1.5	78	1.5	*0.543	39.9	LOS A	3.6	25.3	0.99	0.82	0.99	17.0
Approach		109	1.5	109	1.5	0.543	40.1	LOS A	3.6	25.3	0.99	0.82	0.99	17.0
North: Chapel Street														
7	L2	66	1.5	66	1.5	0.085	10.7	LOS A	0.8	5.7	0.49	0.62	0.49	39.9
8	T1	370	1.5	370	1.5	*0.425	6.3	LOS A	4.3	30.2	0.60	0.52	0.60	32.2
Approach		436	1.5	436	1.5	0.425	7.0	LOS A	4.3	30.2	0.58	0.54	0.58	34.5
All Vehicles		979	1.5	979	1.5	0.543	7.9	LOS A	4.3	30.2	0.38	0.35	0.38	30.1
Site: 211 [11. ChapWilsSATExE]														
South: Chapel Street														
2	T1	430	1.5	430	1.5	0.247	3.3	LOS A	4.2	29.9	0.32	0.27	0.32	52.3
Approach		430	1.5	430	1.5	0.247	3.3	LOS A	4.2	29.9	0.32	0.27	0.32	52.3
East: Wilson Street														
4	L2	4	1.5	4	1.5	0.035	39.5	LOS A	0.2	1.7	0.92	0.63	0.92	4.2
6	R2	3	1.5	3	1.5	0.035	39.3	LOS A	0.2	1.7	0.93	0.65	0.93	4.1
Approach		8	1.5	8	1.5	0.035	39.4	LOS A	0.2	1.7	0.93	0.64	0.93	4.2
North: Chapel Street														
8	T1	378	1.5	378	1.5	0.218	1.7	LOS A	1.7	12.0	0.14	0.12	0.14	41.5
Approach		378	1.5	378	1.5	0.218	1.7	LOS A	1.7	12.0	0.14	0.12	0.14	41.5
All Vehicles		816	1.5	816	1.5	0.247	2.9	LOS A	4.2	29.9	0.24	0.21	0.24	49.5

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped	Dist]			sec	m	m/sec
Site: 210 [10. ChapGardSATExE]											

South: Chapel Street											
P1	Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
East: Garden Street											
P2	Full	367	4.1	LOS A	0.2	0.2	0.46	0.46	28.0	28.6	1.02
North: Chapel Street											
P3	Full	150	31.7	LOS D	0.3	0.3	0.89	0.89	61.0	35.2	0.58
All Pedestrians		571	14.0	LOS B	0.3	0.3	0.61	0.61	39.8	31.0	0.78
Site: 211 [11. ChapWilsSATExE]											
East: Wilson Street											
P2	Full	320	2.3	LOS A	0.2	0.2	0.24	0.24	26.1	28.6	1.09
North: Chapel Street											
P3	Full	139	31.7	LOS D	0.3	0.3	0.89	0.89	61.0	35.2	0.58
All Pedestrians		458	11.2	LOS B	0.3	0.3	0.44	0.44	36.7	30.6	0.83

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: 212 [12. CommBalmSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Commercial Rd / Balmoral St / Porter St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Porter Street														
1	L2	15	1.5	15	1.5	0.590	49.0	LOS A	3.0	21.4	1.00	0.79	1.09	33.5
2	T1	21	1.5	21	1.5	0.590	42.5	LOS A	3.0	21.4	1.00	0.79	1.09	34.0
3	R2	37	1.5	37	1.5	0.590	48.0	LOS A	3.0	21.4	1.00	0.79	1.09	23.9
Approach		73	1.5	73	1.5	0.590	46.6	LOS A	3.0	21.4	1.00	0.79	1.09	29.6
East: Commercial Road														
5	T1	456	1.5	456	1.5	0.491	6.3	LOS A	8.7	61.4	0.63	0.58	0.63	50.7
6	R2	122	1.5	122	1.5	* 0.491	12.4	LOS A	8.7	61.4	0.71	0.67	0.71	47.5
Approach		578	1.5	578	1.5	0.491	7.6	LOS A	8.7	61.4	0.65	0.60	0.65	50.0
North: RoadName														
7	L2	171	1.5	171	1.5	* 0.572	25.2	LOS A	3.8	27.1	0.97	0.79	0.97	33.8
9	R2	129	1.5	129	1.5	* 0.897	56.2	LOS C	6.0	42.9	1.00	1.02	1.63	30.6
Approach		300	1.5	300	1.5	0.897	38.6	LOS C	6.0	42.9	0.98	0.89	1.25	31.8
West: Commercial Road														
10	L2	106	1.5	106	1.5	0.116	10.5	LOS A	1.1	8.1	0.52	0.67	0.52	50.2
11	T1	489	1.5	489	1.5	* 0.582	6.6	LOS A	6.4	45.1	0.69	0.60	0.69	49.2
Approach		595	1.5	595	1.5	0.582	7.3	LOS A	6.4	45.1	0.66	0.62	0.66	49.5
All Vehicles		1545	1.5	1545	1.5	0.897	15.4	LOS C	8.7	61.4	0.73	0.67	0.79	42.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Porter Street											
P1	Full	210	2.0	LOS A	0.1	0.1	0.23	0.23	23.1	25.3	1.09
East: Commercial Road											
P2	Full	112	31.7	LOS D	0.2	0.2	0.89	0.89	61.0	35.2	0.58
North: RoadName											
P3	Full	200	3.9	LOS A	0.1	0.1	0.44	0.44	30.4	31.9	1.05
All Pedestrians		522	9.1	LOS A	0.2	0.2	0.45	0.45	34.0	29.9	0.88

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

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MOVEMENT SUMMARY

 **Site: 213 [13. CommIzetSATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Commercial Rd / Izett St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Izett Street														
1	L2	136	1.5	136	1.5	* 0.856	51.1	LOS C	9.9	70.0	1.00	0.98	1.39	22.9
3	R2	84	1.5	84	1.5	0.856	50.1	LOS C	9.9	70.0	1.00	0.98	1.39	22.9
Approach		220	1.5	220	1.5	0.856	50.7	LOS C	9.9	70.0	1.00	0.98	1.39	22.9
East: Commercial Road														
4	L2	89	1.5	89	1.5	0.148	23.4	LOS A	2.4	17.1	0.63	0.69	0.63	36.9
5	T1	439	1.5	439	1.5	* 0.741	24.1	LOS C	14.0	99.1	0.85	0.77	0.89	15.9
Approach		528	1.5	528	1.5	0.741	24.0	LOS C	14.0	99.1	0.81	0.76	0.85	21.8
West: Commercial Road														
11	T1	559	1.5	559	1.5	0.531	5.4	LOS A	6.9	48.6	0.55	0.51	0.55	36.0
12	R2	93	1.5	93	1.5	0.531	11.5	LOS A	6.9	48.6	0.66	0.62	0.66	48.6
Approach		652	1.5	652	1.5	0.531	6.3	LOS A	6.9	48.6	0.57	0.52	0.57	40.4
All Vehicles		1399	1.5	1399	1.5	0.856	19.9	LOS C	14.0	99.1	0.73	0.68	0.80	26.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Izett Street											
P1	Full	272	15.2	LOS B	0.4	0.4	0.62	0.62	39.0	28.6	0.73
East: Commercial Road											
P2	Full	840	32.6	LOS D	1.8	1.8	0.92	0.92	62.0	35.2	0.57
All Pedestrians		1111	28.4	LOS C	1.8	1.8	0.85	0.85	56.4	33.6	0.60

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.

CCG MOVEMENT SUMMARY

Common Control Group: CCG3 [ChapelBray]

Network: N101 [Retail Trader Peak (Network Folder: General)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
Site: 214 [14. ChapMalvSATExE]														
South: Chapel Street														
1	L2	121	1.5	121	1.5	0.312	37.2	LOS A	4.6	32.7	1.00	0.80	1.00	16.8
2	T1	261	1.5	261	1.5	0.671	35.5	LOS B	10.7	75.9	1.00	0.86	1.02	17.1
3	R2	9	1.5	9	1.5	* 0.671	41.1	LOS B	10.7	75.9	1.00	0.86	1.02	17.1
Approach		391	1.5	391	1.5	0.671	36.1	LOS B	10.7	75.9	1.00	0.84	1.01	17.0
East: Malvern Road														
4	L2	44	1.5	44	1.5	0.142	4.3	LOS A	0.1	0.9	0.02	0.18	0.02	41.1
5	T1	450	1.5	450	1.5	0.658	3.4	LOS B	5.0	35.4	0.24	0.32	0.24	26.2
6	R2	94	1.5	94	1.5	* 0.658	7.3	LOS B	5.0	35.4	0.31	0.35	0.31	23.7
Approach		587	1.5	587	1.5	0.658	4.1	LOS B	5.0	35.4	0.24	0.31	0.24	26.5
North: Chapel Street														
7	L2	38	1.5	38	1.5	0.122	17.7	LOS A	1.2	8.5	0.45	0.52	0.45	35.5
8	T1	282	1.5	282	1.5	0.609	15.0	LOS B	6.6	46.6	0.63	0.56	0.63	35.1
9	R2	18	1.5	18	1.5	0.609	20.8	LOS B	6.6	46.6	0.65	0.57	0.65	35.1
Approach		338	1.5	338	1.5	0.609	15.6	LOS B	6.6	46.6	0.61	0.56	0.61	35.2
West: Commercial Road														
10	L2	134	1.5	134	1.5	0.376	20.1	LOS A	10.5	74.6	0.76	0.71	0.76	21.9
11	T1	405	1.5	405	1.5	0.376	14.7	LOS A	10.5	74.6	0.76	0.71	0.76	21.2
12	R2	78	1.5	78	1.5	0.376	21.5	LOS A	6.6	47.1	0.77	0.70	0.77	20.2
Approach		617	1.5	617	1.5	0.376	16.7	LOS A	10.5	74.6	0.76	0.71	0.76	21.2
All Vehicles		1933	1.5	1933	1.5	0.671	16.6	LOS B	10.7	75.9	0.62	0.59	0.63	23.4
Site: 215 [15. MalvBraySATExE]														
East: Malvern Road														
5	T1	557	1.5	557	1.5	0.425	14.7	LOS A	11.0	77.7	0.78	0.69	0.78	31.6
6	R2	108	1.5	108	1.5	0.425	20.8	LOS A	8.1	57.8	0.79	0.74	0.79	42.6
Approach		665	1.5	665	1.5	0.425	15.6	LOS A	11.0	77.7	0.78	0.70	0.78	34.7
North: Bray Street														
7	L2	56	1.5	56	1.5	0.097	27.3	LOS A	1.5	11.0	0.74	0.72	0.74	32.3
9	R2	26	1.5	26	1.5	0.048	26.2	LOS A	0.7	5.0	0.72	0.69	0.72	32.4
Approach		81	1.5	81	1.5	0.097	26.9	LOS A	1.5	11.0	0.74	0.71	0.74	32.3
West: Malvern Road														
10	L2	23	1.5	23	1.5	0.091	6.0	LOS A	0.5	3.6	0.15	0.24	0.15	51.7
11	T1	418	1.5	418	1.5	0.385	2.6	LOS A	2.0	14.3	0.16	0.15	0.16	31.6
Approach		442	1.5	442	1.5	0.385	2.8	LOS A	2.0	14.3	0.16	0.16	0.16	37.2
All Vehicles		1188	1.5	1188	1.5	0.425	11.6	LOS A	11.0	77.7	0.55	0.50	0.55	34.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
Site: 214 [14. ChapMalvSATExE]											
South: Chapel Street											
P1	Full	340	8.2	LOS A	0.4	0.4	0.46	0.46	37.5	35.2	0.94
East: Malvern Road											
P2	Full	463	18.6	LOS B	0.7	0.7	0.69	0.69	47.9	35.2	0.73
North: Chapel Street											
P3	Full	406	8.2	LOS A	0.4	0.4	0.46	0.46	37.6	35.2	0.94
West: Commercial Road											
P4	Full	726	18.8	LOS B	1.1	1.1	0.70	0.70	48.1	35.2	0.73
All Pedestrians		1935	14.7	LOS B	1.1	1.1	0.60	0.60	44.0	35.2	0.80
Site: 215 [15. MalvBraySATExE]											
North: Bray Street											
P3	Full	176	8.2	LOS A	0.2	0.2	0.45	0.45	34.7	31.9	0.92
West: Malvern Road											
P4	Full	54	18.3	LOS B	0.1	0.1	0.68	0.68	47.6	35.2	0.74
All Pedestrians		230	10.5	LOS B	0.2	0.2	0.51	0.51	37.7	32.7	0.87

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.

Site: 216 [16. MalvSurrSATExE (Site Folder: Retail Trader Peak)] Network: N101 [Retail Trader Peak (Network Folder: General)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Design Life Analysis (Final Year): Results for 1 years

Vehicle movement LOS values are based on degree of saturation per movement.
Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Bendigo Street											
P1	Full	98	11.6	LOS B	0.1	0.1	0.54	0.54	35.4	28.6	0.81
East: Malvern Road											
P2	Full	54	13.8	LOS B	0.1	0.1	0.59	0.59	43.2	35.2	0.82
North: Surrey Road											

P3 Full	87	11.6	LOS B	0.1	0.1	0.54	0.54	35.4	28.6	0.81
West: Malvern Road										
P4 Full	54	13.8	LOS B	0.1	0.1	0.59	0.59	43.2	35.2	0.82
All Pedestrians	292	12.4	LOS B	0.1	0.1	0.56	0.56	38.3	31.0	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.

MOVEMENT SUMMARY

 **Site: 217 [17. ChapChatSATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Chapel St / Chatam St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	21	1.5	21	1.5	0.118	26.0	LOS A	1.8	12.6	0.65	0.57	0.65	24.5
2	T1	347	1.5	347	1.5	* 0.592	23.7	LOS A	8.9	63.0	0.78	0.67	0.78	14.2
Approach		368	1.5	368	1.5	0.592	23.9	LOS A	8.9	63.0	0.77	0.66	0.77	14.9
North: Chapel Street														
8	T1	459	1.5	459	1.5	0.391	4.1	LOS A	5.8	41.1	0.47	0.42	0.47	45.3
9	R2	52	1.5	52	1.5	* 0.391	10.1	LOS A	5.8	41.1	0.58	0.52	0.58	45.6
Approach		511	1.5	511	1.5	0.391	4.7	LOS A	5.8	41.1	0.48	0.43	0.48	45.3
West: Chatham Street														
10	L2	42	1.5	42	1.5	0.044	15.9	LOS A	0.8	5.6	0.51	0.67	0.51	23.6
12	R2	51	1.5	51	1.5	* 0.279	43.5	LOS A	2.0	13.9	0.96	0.74	0.96	11.0
Approach		94	1.5	94	1.5	0.279	31.0	LOS A	2.0	13.9	0.76	0.71	0.76	14.6
All Vehicles		973	1.5	973	1.5	0.592	14.5	LOS A	8.9	63.0	0.62	0.55	0.62	26.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
North: Chapel Street											
P3	Full	273	31.9	LOS D	0.6	0.6	0.90	0.90	61.2	35.2	0.58
West: Chatham Street											
P4	Full	675	18.1	LOS B	1.0	1.0	0.68	0.68	44.6	31.9	0.71
All Pedestrians		948	22.0	LOS C	1.0	1.0	0.74	0.74	49.4	32.8	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.

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

MOVEMENT SUMMARY

 **Site: P201 [P1. PedXChap1SATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Pedestrian Crossing 12 on Chapel Street

Retail Trader Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%	[Veh. veh			Dist] m	km/h				
South: Chapel Street														
2	T1	510	1.5	510	1.5	* 0.404	2.9	LOS A	4.9	34.9	0.27	0.24	0.27	48.3
Approach		510	1.5	510	1.5	0.404	2.9	LOS A	4.9	34.9	0.27	0.24	0.27	48.3
North: Chapel Street														
8	T1	510	1.5	510	1.5	0.404	3.6	LOS A	5.9	41.9	0.32	0.29	0.32	40.1
Approach		510	1.5	510	1.5	0.404	3.6	LOS A	5.9	41.9	0.32	0.29	0.32	40.1
All Vehicles		1020	1.5	1020	1.5	0.404	3.2	LOS A	5.9	41.9	0.30	0.26	0.30	44.8

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	208	31.8	LOS D	0.4	0.4	0.90	0.90	55.6	28.6	0.51
All Pedestrians		208	31.8	LOS D	0.4	0.4	0.90	0.90	55.6	28.6	0.51

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: 218 [18. HighStEdSATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

High St / St. Edmonds Rd

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: High Street														
5	T1	398	1.5	397	1.5	0.457	7.4	LOS A	9.8	69.7	0.59	0.54	0.59	49.6
6	R2	109	1.5	109	1.5	* 0.457	15.5	LOS A	9.8	69.7	0.76	0.71	0.76	44.7
Approach		508	1.5	506 ^{N1}	1.5	0.457	9.1	LOS A	9.8	69.7	0.62	0.58	0.62	48.5
North: St. Edmonds Road														
7	L2	99	1.5	99	1.5	0.738	50.7	LOS C	4.2	30.1	1.00	0.87	1.25	23.1
9	R2	113	1.5	113	1.5	* 0.926	60.2	LOS D	5.5	38.8	1.00	1.06	1.80	29.6
Approach		212	1.5	212	1.5	0.926	55.8	LOS D	5.5	38.8	1.00	0.97	1.54	27.2
West: High Street														
10	L2	183	1.5	183	1.5	0.128	7.9	LOS A	1.8	12.4	0.27	0.65	0.27	51.8
11	T1	527	1.5	527	1.5	0.494	3.4	LOS A	7.3	51.5	0.38	0.35	0.38	54.0
Approach		710	1.5	710	1.5	0.494	4.6	LOS A	7.3	51.5	0.35	0.42	0.35	53.1
All Vehicles		1429	1.5	1428 ^{N1}	1.5	0.926	13.8	LOS D	9.8	69.7	0.54	0.56	0.63	44.3

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: High Street											
P2	Full	78	31.6	LOS D	0.2	0.2	0.89	0.89	60.9	35.2	0.58
North: St. Edmonds Road											
P3	Full	92	1.8	LOS A	0.0	0.0	0.21	0.21	28.4	31.9	1.12
All Pedestrians		171	15.5	LOS B	0.2	0.2	0.52	0.52	43.3	33.4	0.77

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: 219 [19. ChapHighSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / High St

Retail Trader Peak. Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	71	1.5	71	1.5	0.256	20.4	LOS A	3.9	27.3	0.54	0.55	0.54	29.0
2	T1	298	1.5	298	1.5	0.511	19.2	LOS A	6.5	46.2	0.77	0.70	0.77	25.8
3	R2	37	1.5	37	1.5	* 0.511	27.8	LOS A	6.5	46.2	0.94	0.80	0.94	23.9
Approach		406	1.5	406	1.5	0.511	20.2	LOS A	6.5	46.2	0.75	0.68	0.75	26.1
East: High Street														
4	L2	116	1.5	116	1.5	0.366	20.5	LOS A	8.4	59.9	0.72	0.68	0.72	30.2
5	T1	382	1.5	382	1.5	0.732	17.4	LOS C	8.4	59.9	0.83	0.75	0.86	27.8
6	R2	99	1.5	99	1.5	* 0.732	26.0	LOS C	7.7	54.4	0.96	0.84	1.02	25.5
Approach		597	1.5	597	1.5	0.732	19.5	LOS C	8.4	59.9	0.83	0.75	0.86	27.8
North: Chapel Street														
7	L2	94	1.5	94	1.5	0.513	31.5	LOS A	5.4	38.5	0.90	0.76	0.90	18.1
8	T1	277	1.5	277	1.5	* 1.025	80.9	LOS F ¹¹	19.2	135.9	0.98	1.26	1.88	7.8
9	R2	54	1.5	54	1.5	1.025	104.0	LOS F ¹¹	19.2	135.9	1.00	1.42	2.19	6.6
Approach		424	1.5	424	1.5	1.025	72.9	LOS F ¹¹	19.2	135.9	0.96	1.17	1.70	8.7
West: High Street														
10	L2	113	1.5	113	1.5	0.507	28.4	LOS A	7.5	53.1	0.79	0.72	0.79	16.5
11	T1	409	1.5	409	1.5	* 1.014	53.1	LOS F ¹¹	21.9	155.3	0.93	1.09	1.43	8.7
12	R2	93	1.5	93	1.5	1.014	74.1	LOS F ¹¹	21.9	155.3	1.00	1.28	1.75	7.1
Approach		615	1.5	615	1.5	1.014	51.7	LOS F ¹¹	21.9	155.3	0.92	1.05	1.36	9.2
All Vehicles		2042	1.5	2042	1.5	1.025	40.4	LOS F ¹¹	21.9	155.3	0.87	0.91	1.16	14.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

¹¹ Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m					
South: Chapel Street											
P1	Full	187	11.6	LOS B	0.2	0.2	0.54	0.54	41.0	35.2	0.86
East: High Street											
P2	Full	355	22.1	LOS C	0.6	0.6	0.75	0.75	51.4	35.2	0.68

North: Chapel Street											
P3	Full	208	21.2	LOS C	0.3	0.3	0.73	0.73	50.5	35.2	0.70
West: High Street											
P4	Full	484	14.1	LOS B	0.7	0.7	0.60	0.60	43.4	35.2	0.81
All Pedestrians		1235	17.2	LOS B	0.7	0.7	0.66	0.66	46.6	35.2	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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MOVEMENT SUMMARY

 Site: 220 [20. HighBangSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Bangs St / Hornby St

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hornby St														
1	L2	29	1.5	29	1.5	0.868	56.3	LOS C	4.7	33.4	1.00	0.98	1.59	21.9
2	T1	29	1.5	29	1.5	0.868	49.8	LOS C	4.7	33.4	1.00	0.98	1.59	31.9
3	R2	44	1.5	44	1.5	* 0.868	55.2	LOS C	4.7	33.4	1.00	0.98	1.59	31.2
Approach		102	1.5	102	1.5	0.868	54.0	LOS C	4.7	33.4	1.00	0.98	1.59	29.3
East: High Street														
5	T1	558	1.5	558	1.5	0.490	3.7	LOS A	7.1	50.1	0.36	0.37	0.36	52.9
6	R2	84	1.5	84	1.5	* 0.490	9.3	LOS A	7.1	50.1	0.39	0.41	0.39	54.2
Approach		642	1.5	642	1.5	0.490	4.4	LOS A	7.1	50.1	0.37	0.37	0.37	53.2
North: Bangs St														
7	L2	135	1.5	135	1.5	0.850	50.7	LOS C	5.3	37.9	0.99	0.89	1.31	32.4
9	R2	32	1.5	32	1.5	0.850	53.4	LOS C	5.3	37.9	1.00	0.97	1.50	22.0
Approach		167	1.5	167	1.5	0.850	51.2	LOS C	5.3	37.9	0.99	0.90	1.34	30.8
West: High Street														
10	L2	21	1.5	21	1.5	0.102	7.5	LOS A	1.0	6.8	0.18	0.22	0.18	54.7
11	T1	500	1.5	497	1.5	0.287	2.5	LOS A	2.9	20.6	0.21	0.20	0.21	57.0
Approach		521	1.5	518 ^{N1}	1.5	0.287	2.7	LOS A	2.9	20.6	0.21	0.20	0.21	56.9
All Vehicles		1432	1.5	1428 ^{N1}	1.5	0.868	12.8	LOS C	7.1	50.1	0.43	0.42	0.51	46.0

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Hornby St											
P1	Full	115	2.0	LOS A	0.1	0.1	0.23	0.23	23.1	25.3	1.09
East: High Street											
P2	Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
North: Bangs St											
P3	Full	91	2.0	LOS A	0.0	0.0	0.23	0.23	28.6	31.9	1.11

West: High Street											
P4	Full	54	31.6	LOS D	0.1	0.1	0.89	0.89	60.9	35.2	0.58
All Pedestrians		314	12.2	LOS B	0.1	0.1	0.45	0.45	37.7	30.6	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.

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MOVEMENT SUMMARY

 **Site: P202 [P2. PedXChap2SATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Pedestrian Crossing #2 on Chapel Street

Retail Trader Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Chapel Street														
2	T1	609	1.5	609	1.5	* 0.482	4.7	LOS A	10.7	75.7	0.49	0.44	0.49	45.8
Approach		609	1.5	609	1.5	0.482	4.7	LOS A	10.7	75.7	0.49	0.44	0.49	45.8
North: Chapel Street														
8	T1	485	1.5	479	1.5	0.379	6.6	LOS A	11.0	77.8	0.64	0.57	0.64	41.7
Approach		485	1.5	479 ^{N1}	1.5	0.379	6.6	LOS A	11.0	77.8	0.64	0.57	0.64	41.7
All Vehicles		1095	1.5	1088 ^{N1}	1.5	0.482	5.5	LOS A	11.0	77.8	0.55	0.50	0.55	43.9

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	165	31.7	LOS D	0.3	0.3	0.89	0.89	55.6	28.6	0.51
All Pedestrians		165	31.7	LOS D	0.3	0.3	0.89	0.89	55.6	28.6	0.51

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: P203 [P3. PedXChap3SATExE (Site Folder: Retail Trader Peak)]**

 **Network: N101 [Retail Trader Peak (Network Folder: General)]**

Pedestrian Crossing #3 on Chapel Street

Retail Trader Peak, Existing Conditions

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV] veh/h	%	[Veh. veh			Dist] m	km/h				
South: Chapel Street														
2	T1	609	1.5	609	1.5	* 0.475	3.8	LOS A	8.8	62.2	0.40	0.36	0.40	41.4
Approach		609	1.5	609	1.5	0.475	3.8	LOS A	8.8	62.2	0.40	0.36	0.40	41.4
North: Chapel Street														
8	T1	485	1.5	479	1.5	0.373	1.5	LOS A	2.6	18.4	0.15	0.13	0.15	54.5
Approach		485	1.5	479 ^{N1}	1.5	0.373	1.5	LOS A	2.6	18.4	0.15	0.13	0.15	54.5
All Vehicles		1095	1.5	1088 ^{N1}	1.5	0.475	2.8	LOS A	8.8	62.2	0.29	0.26	0.29	48.2

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	122	31.7	LOS D	0.2	0.2	0.89	0.89	55.5	28.6	0.52
All Pedestrians		122	31.7	LOS D	0.2	0.2	0.89	0.89	55.5	28.6	0.52

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

Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

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MOVEMENT SUMMARY

 Site: 221 [21. ChapDandSATExE (Site Folder: Retail Trader Peak)]

 Network: N101 [Retail Trader Peak (Network Folder: General)]

Chapel St / Dandenong Rd

Retail Trader Peak, Existing Conditions

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 1 years

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Street														
1	L2	68	1.5	68	1.5	0.218	23.9	LOS A	4.1	28.8	0.72	0.66	0.72	43.9
2	T1	264	1.5	264	1.5	0.732	26.8	LOS C	10.9	77.6	0.87	0.81	0.94	31.6
3	R2	110	1.5	110	1.5	0.732	36.0	LOS C	10.9	77.6	0.94	0.88	1.05	39.2
Approach		443	1.5	443	1.5	0.732	28.7	LOS C	10.9	77.6	0.87	0.80	0.93	36.3
East: Dandenong Road														
4	L2	71	1.5	71	1.5	0.120	26.7	LOS A	2.0	13.9	0.74	0.73	0.74	41.2
5	T1	1828	1.5	1828	1.5	0.738	27.4	LOS C	16.8	119.4	0.94	0.86	1.00	41.4
6	R2	239	1.5	239	1.5	* 0.866	50.7	LOS C	10.8	76.4	1.00	1.01	1.40	23.0
Approach		2138	1.5	2138	1.5	0.866	30.0	LOS C	16.8	119.4	0.94	0.87	1.03	39.5
North: Chapel Street														
7	L2	231	1.5	228	1.5	0.247	11.0	LOS A	3.2	22.8	0.51	0.69	0.51	46.0
8	T1	234	1.5	231	1.5	0.848	34.8	LOS C	11.8	84.0	0.90	0.92	1.15	31.5
9	R2	71	1.5	71	1.5	* 0.848	40.4	LOS C	11.8	84.0	0.90	0.92	1.15	31.4
Approach		537	1.5	530 ^{N1}	1.5	0.848	25.3	LOS C	11.8	84.0	0.73	0.82	0.87	36.4
West: Dandenong Road														
10	L2	106	1.5	106	1.5	0.857	44.2	LOS C	19.6	138.6	1.00	1.03	1.25	26.5
11	T1	2141	1.5	2141	1.5	* 0.857	37.7	LOS C	19.8	140.1	1.00	1.03	1.25	37.0
12	R2	127	1.5	127	1.5	0.692	46.8	LOS B	5.3	37.2	1.00	0.85	1.15	33.7
Approach		2374	1.5	2374	1.5	0.857	38.5	LOS C	19.8	140.1	1.00	1.02	1.24	36.5
All Vehicles		5492	1.5	5485 ^{N1}	1.5	0.866	33.1	LOS C	19.8	140.1	0.94	0.92	1.10	37.6

Site Level of Service (LOS) Method: Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on degree of saturation per movement.

Intersection and Approach LOS values are based on worst degree of saturation for any vehicle movement.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Chapel Street											
P1	Full	61	17.6	LOS B	0.1	0.1	0.66	0.66	46.9	35.2	0.75
East: Dandenong Road											
P21	Stage 1	167	8.6	LOS A	0.2	0.2	0.47	0.47	42.6	40.8	0.96

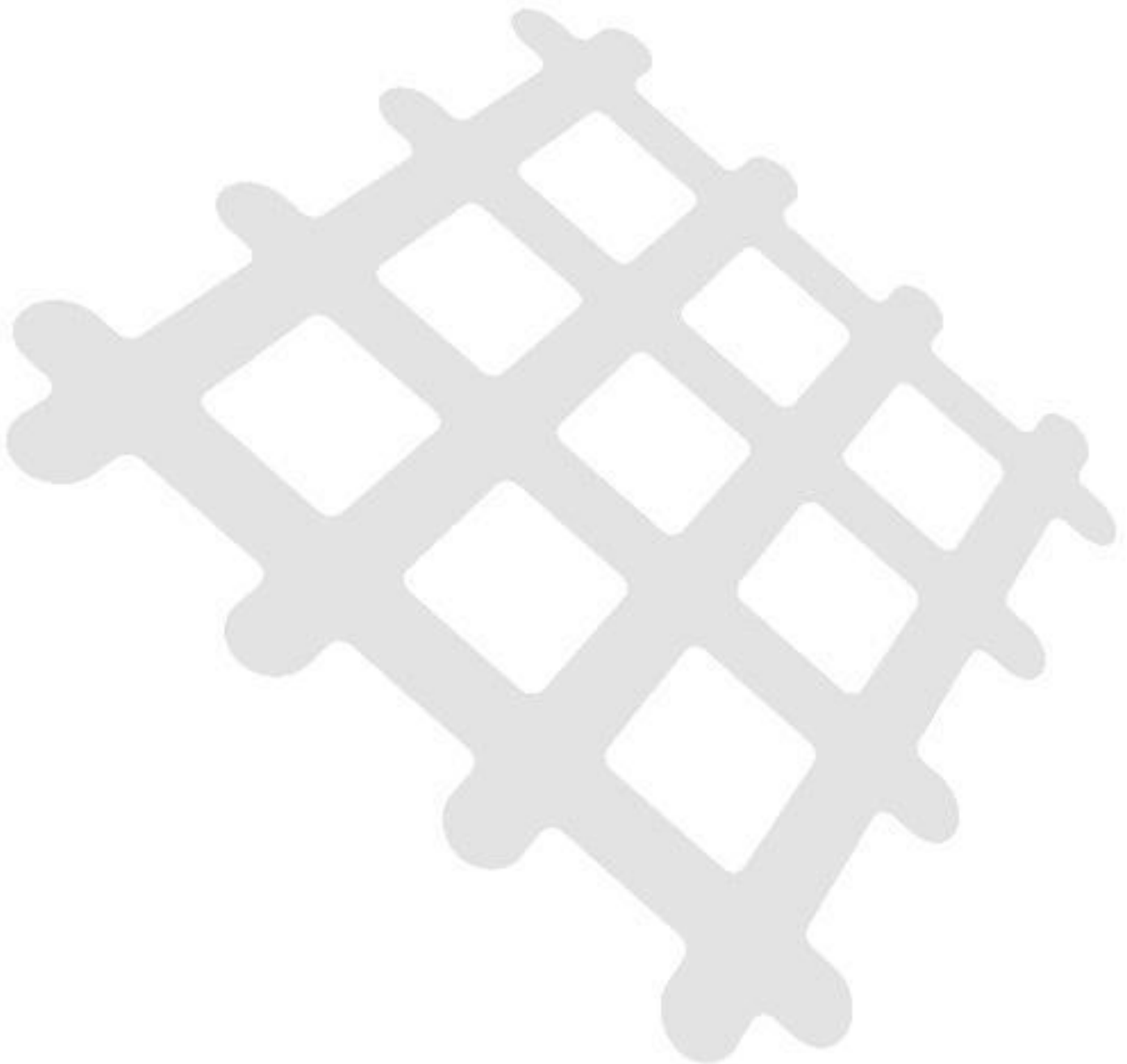
P22 Stage 2	167	16.4	LOS B	0.2	0.2	0.64	0.64	47.6	37.5	0.79
North: Chapel Street										
P3 Full	54	20.4	LOS C	0.1	0.1	0.71	0.71	49.7	35.2	0.71
West: Dandenong Road										
P41 Stage 1	170	6.9	LOS A	0.2	0.2	0.42	0.42	40.9	40.8	1.00
P42 Stage 2	170	16.4	LOS B	0.2	0.2	0.64	0.64	44.9	34.2	0.76
All Pedestrians	789	13.0	LOS B	0.2	0.2	0.56	0.56	44.6	37.9	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.

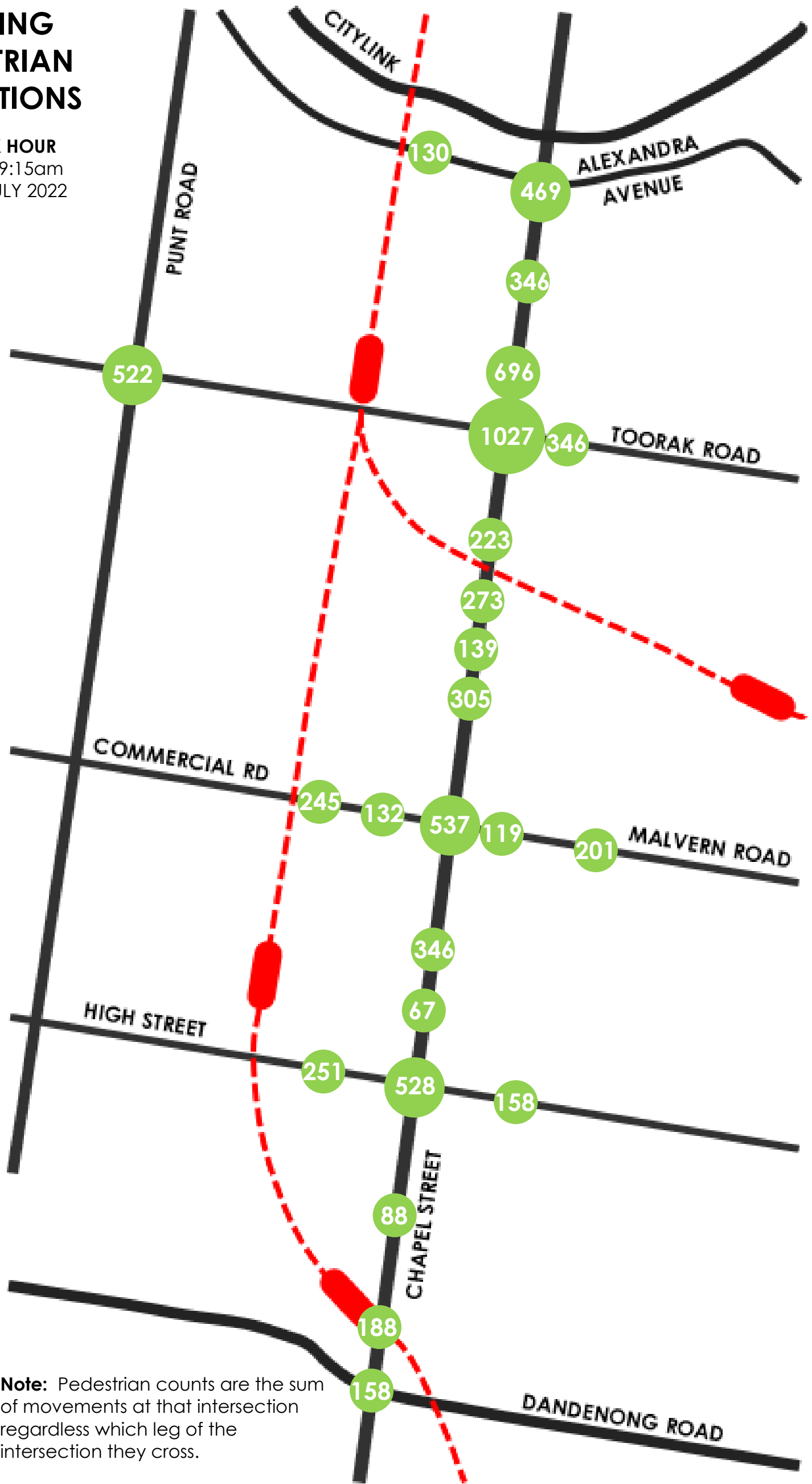
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Appendix E Pedestrian Volumes – Existing Conditions



EXISTING PEDESTRIAN CONDITIONS

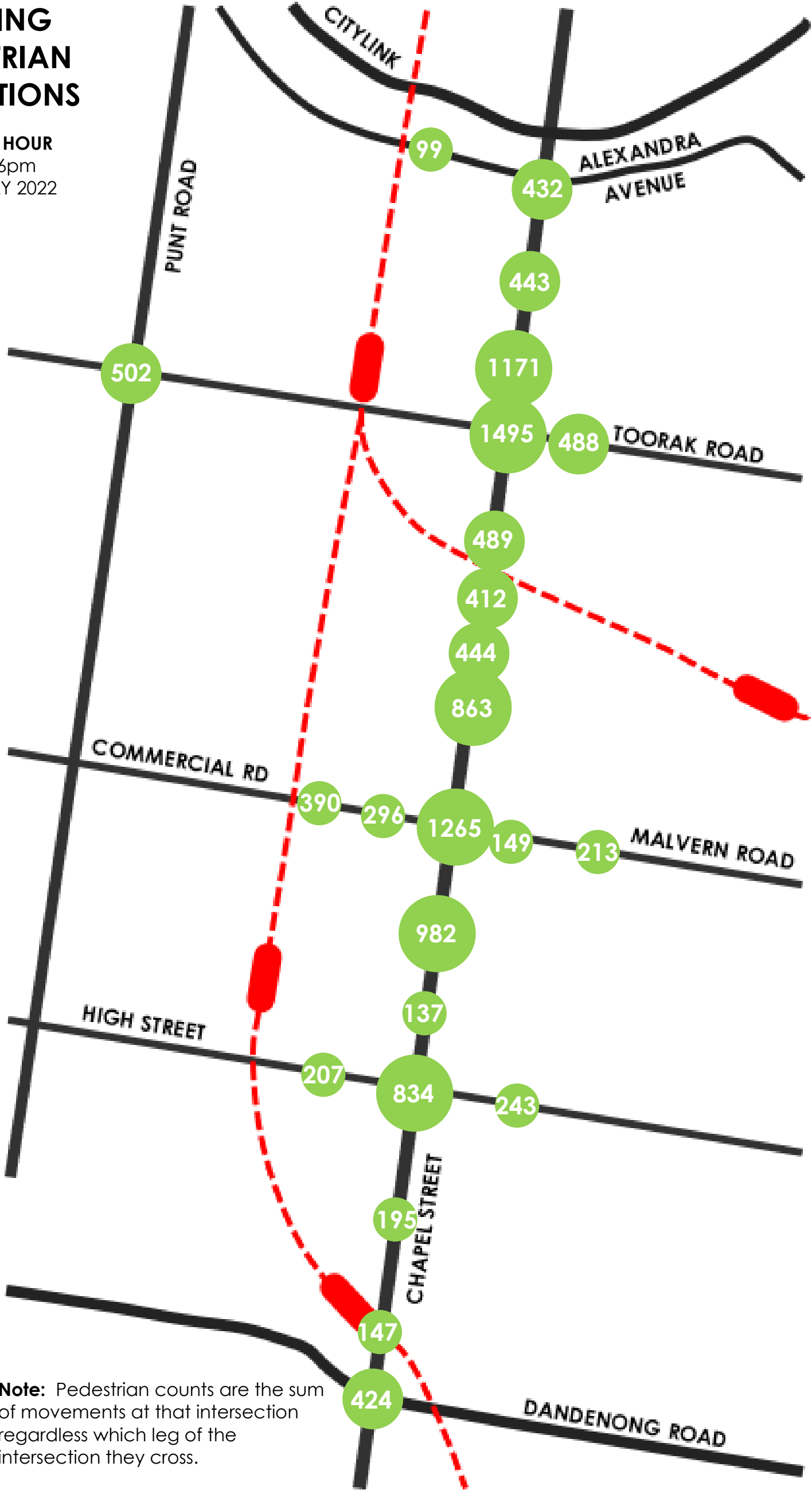
AM PEAK HOUR
8:15am – 9:15am
WED 20 JULY 2022



Note: Pedestrian counts are the sum of movements at that intersection regardless which leg of the intersection they cross.

EXISTING PEDESTRIAN CONDITIONS

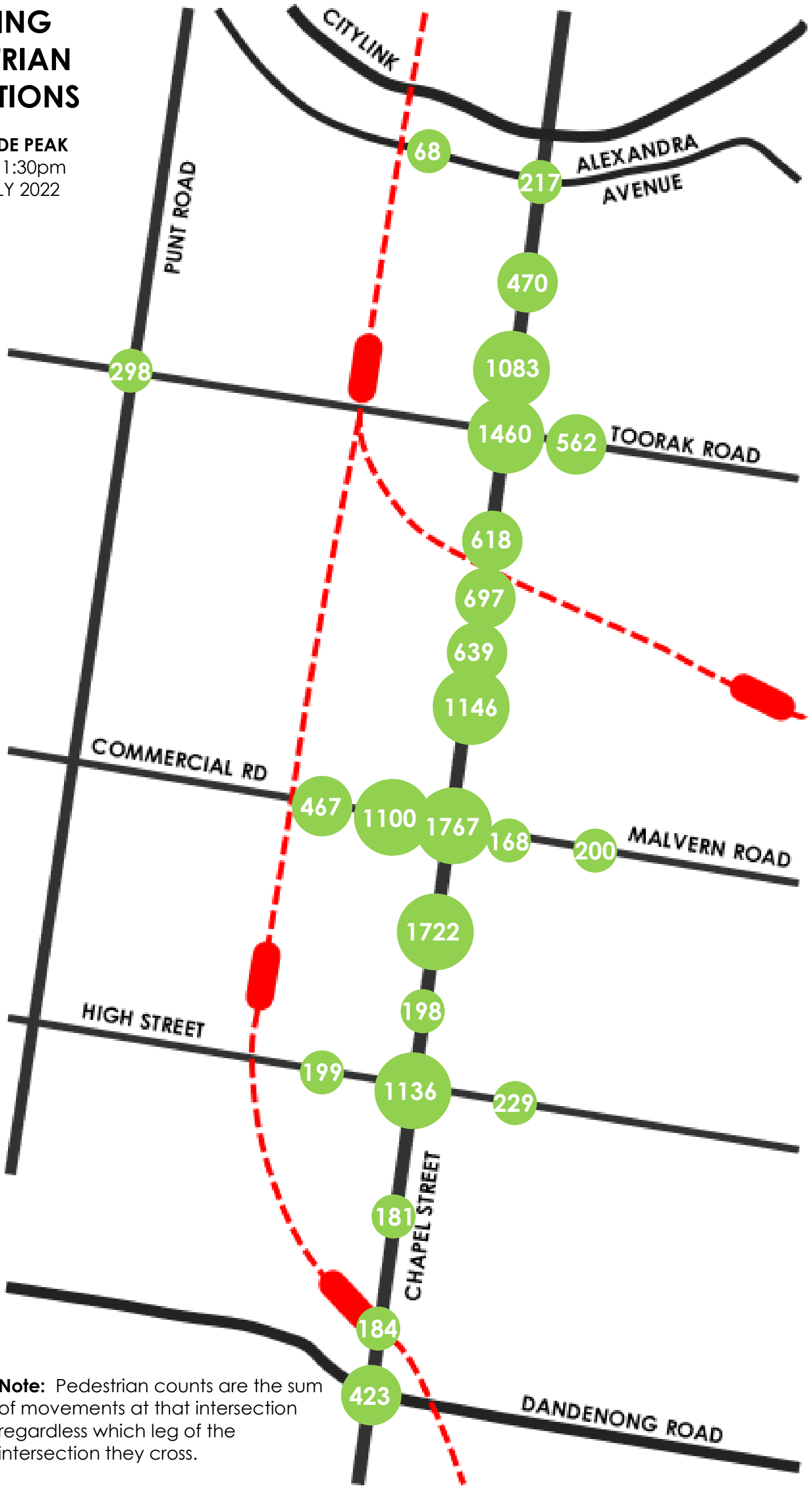
PM PEAK HOUR
5pm – 6pm
FRI 22 JULY 2022



Note: Pedestrian counts are the sum of movements at that intersection regardless which leg of the intersection they cross.

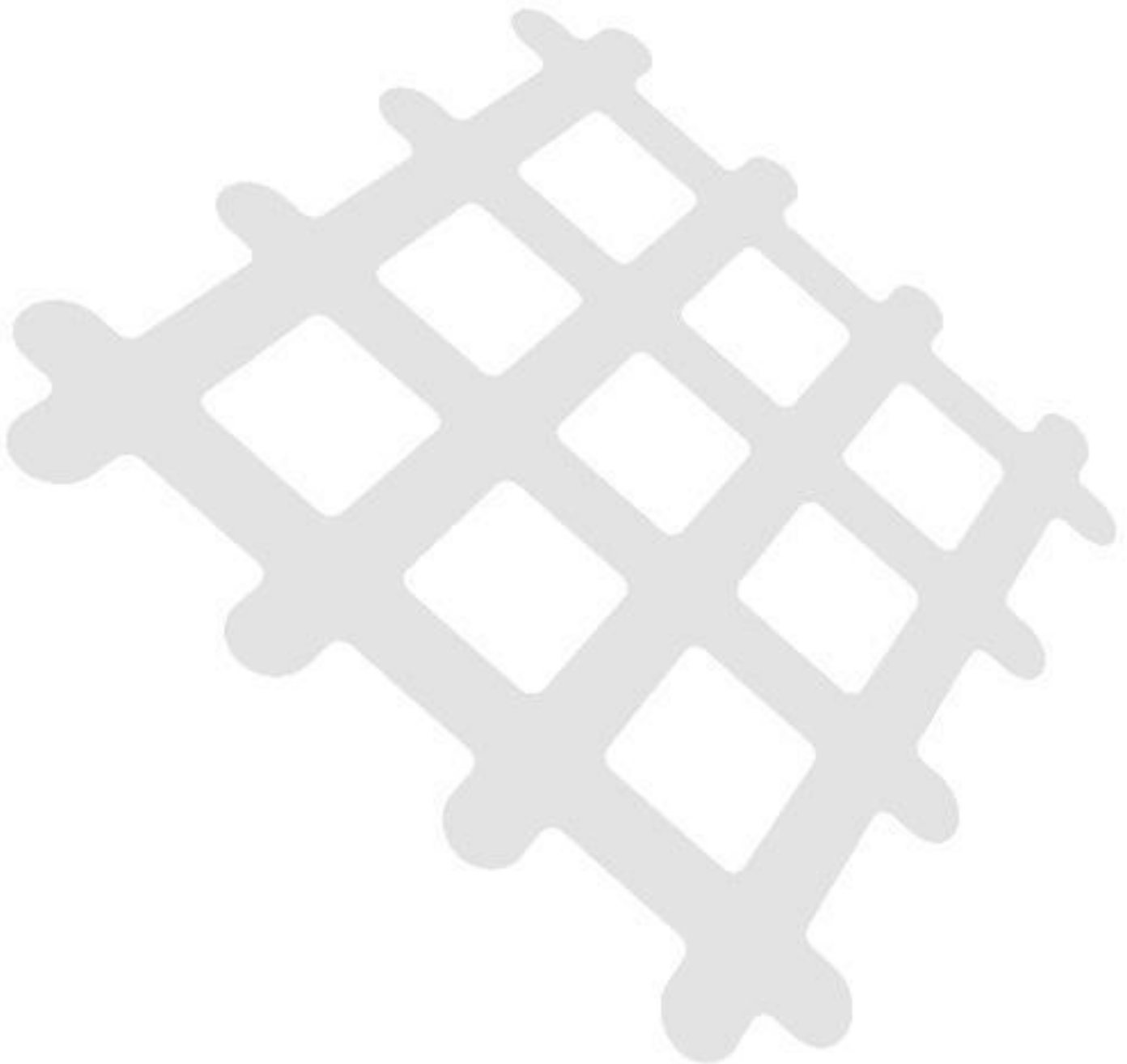
EXISTING PEDESTRIAN CONDITIONS

RETAIL TRADE PEAK
12:30pm – 1:30pm
SAT 23 JULY 2022



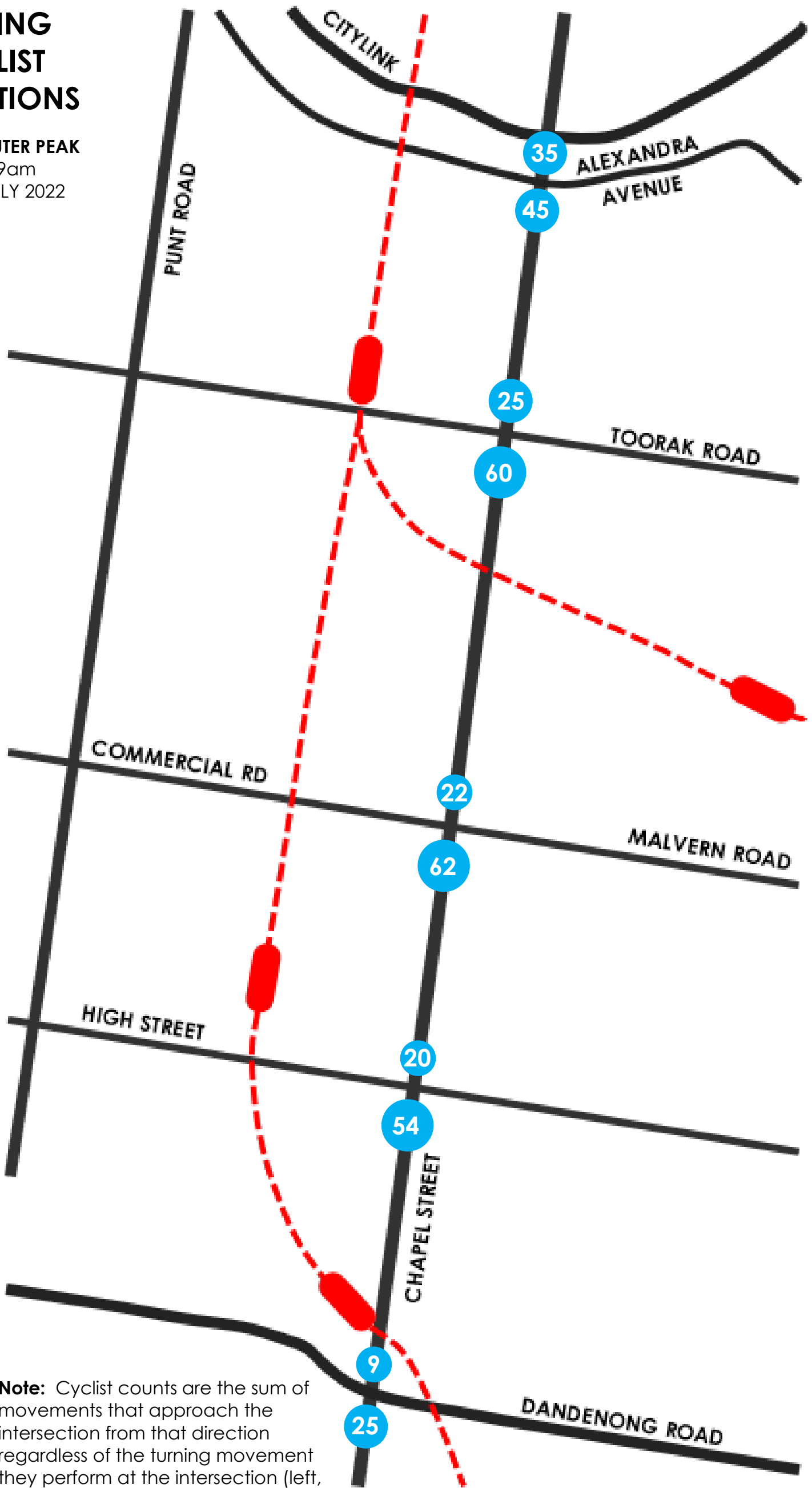
Note: Pedestrian counts are the sum of movements at that intersection regardless which leg of the intersection they cross.

Appendix F Cyclist Volumes – Existing Conditions



EXISTING CYCLIST CONDITIONS

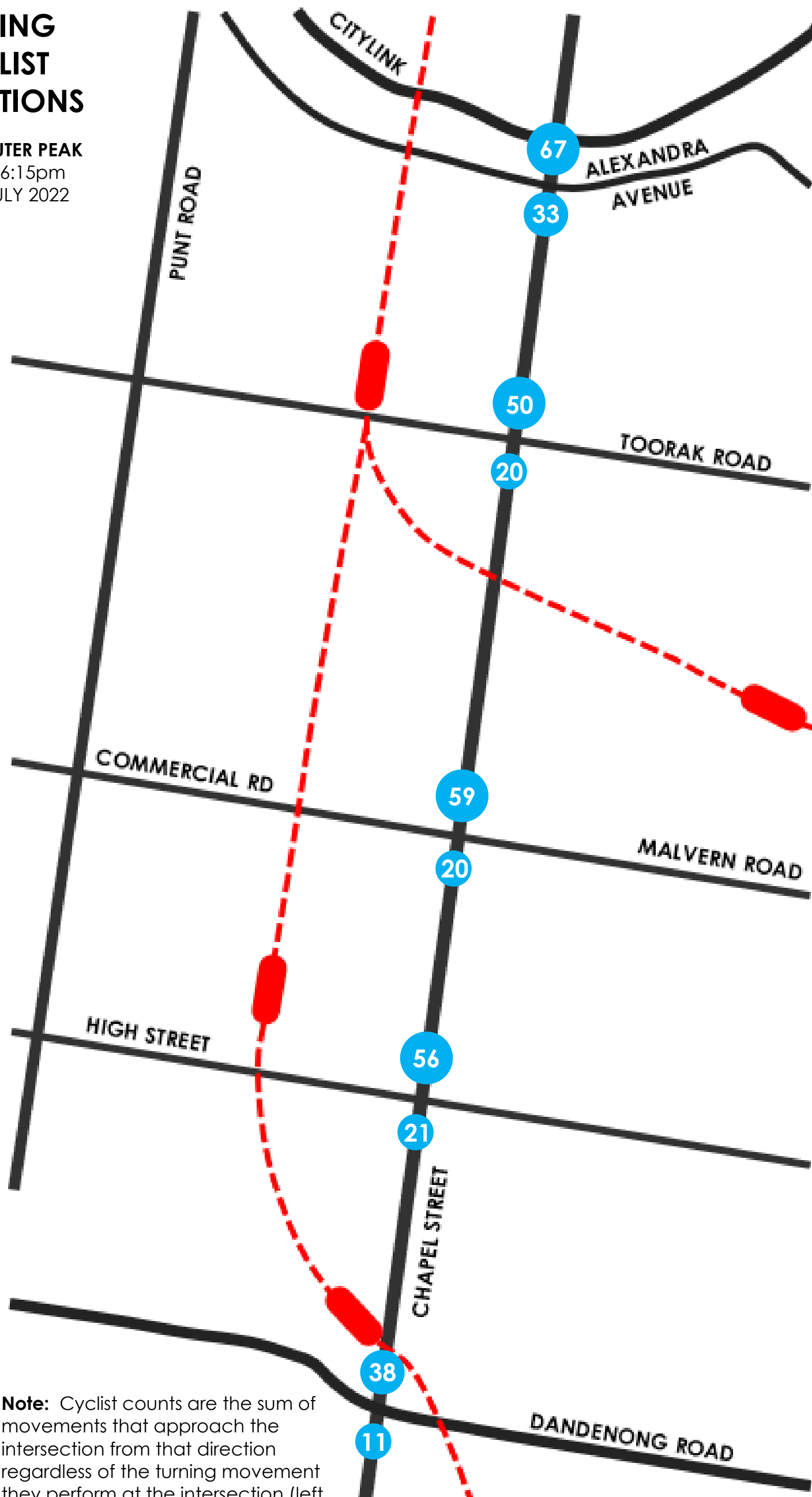
AM COMMUTER PEAK
8am – 9am
WED 20 JULY 2022



Note: Cyclist counts are the sum of movements that approach the intersection from that direction regardless of the turning movement they perform at the intersection (left, right, through).

EXISTING CYCLIST CONDITIONS

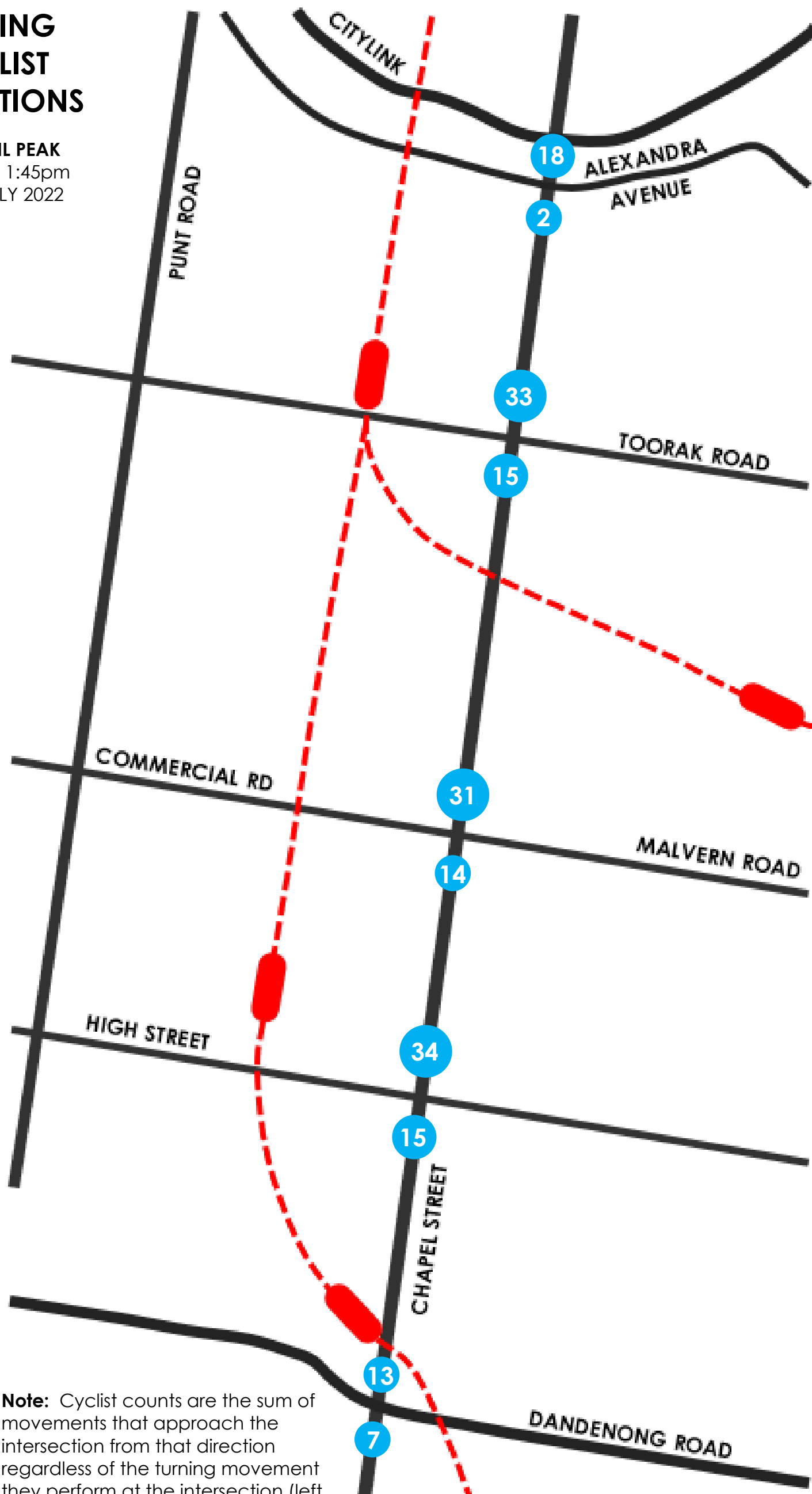
PM COMMUTER PEAK
5:15pm – 6:15pm
WED 20 JULY 2022



Note: Cyclist counts are the sum of movements that approach the intersection from that direction regardless of the turning movement they perform at the intersection (left, right, through).

EXISTING CYCLIST CONDITIONS

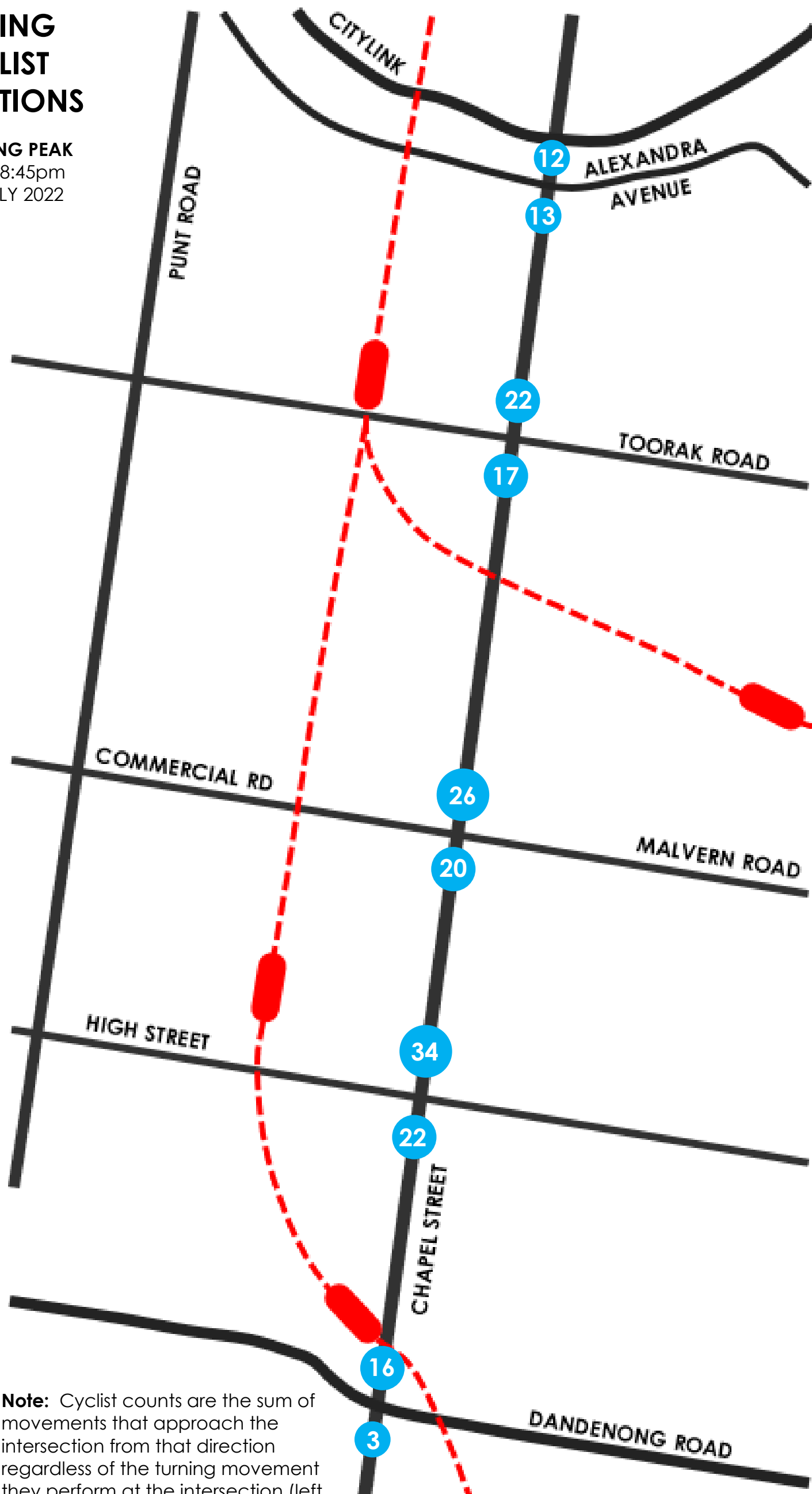
SAT RETAIL PEAK
12:45pm – 1:45pm
SAT 23 JULY 2022



Note: Cyclist counts are the sum of movements that approach the intersection from that direction regardless of the turning movement they perform at the intersection (left, right, through).

EXISTING CYCLIST CONDITIONS

SAT EVENING PEAK
7:45pm – 8:45pm
SAT 23 JULY 2022



Note: Cyclist counts are the sum of movements that approach the intersection from that direction regardless of the turning movement they perform at the intersection (left, right, through).