

# Planning Approval Consistency Assessment Form

# SM-17-00000111

Metro Body of Knowledge (MBoK)

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#### For information – do not alter:

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The Planning Approval Consistency Assessment Form should be completed in accordance with <u>SM-17-00000103 Planning Approval Consistency</u> <u>Assessment Procedure</u>.

# **1. Existing Approved Project**

Planning approval reference details (Application/Document No. (including modifications)):

Planning approval reference for the approved project include:

SSI\_8256 Sydney Metro City & Southwest - Sydenham to Bankstown

SSI\_8256 Sydney Metro City & Southwest – Sydenham to Bankstown Station: Modification 1 – October 2020

#### Date of determination:

Planning approval dates of determination for the approved project include:

Infrastructure Approval date – 12 December 2018

Modification 1 Approval date – 22 October 2020

## Type of planning approval:

Type of planning approval for the approved project is: Critical State Significant Infrastructure

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#### Approved project

The approved project includes construction and operation of a metro rail line, approximately 13km long, between Marrickville and Bankstown, including ten metro stations and associated ancillary infrastructure. The works include station works, track and rail system facility works and other works to support metro operations.

#### Description of approved project between Sydenham and Bankstown

Sydney Metro City and Southwest – Sydenham to Bankstown works includes the following:

#### Station works

In addition to the station upgrades to improve accessibility, works to meet the standards required for metro services include:

- Installation of platform screen doors
- Provision of operational facilities, such as station service buildings
- Accessibility upgrades for buildings
- Works related to integration with other modes of transport.

#### Track and rail system facility works

The upgrade of track and rail systems to enable operation of metro services include:

- Track works where required along the rail corridor, including upgrading tracks and adjusting alignments, between west of Sydenham Station and west of Bankstown Station
- New turn back facilities and track crossovers
- Installing Sydney Metro rail systems and adjusting existing Sydney Trains rail systems
- Overhead wiring adjustments.

#### Other Project elements

- Upgrading existing bridges and underpasses
- Security measures, such as fencing
- Noise barriers
- Modifications to corridor access gates and tracks
- Augmentation of existing power supply, including new traction sub-stations
- Utility and rail system protection.
- Bridge protection works

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- Combined Service Route
- Drainage works to reduce flooding and manage stormwater
- Provision of temporary facilities to support construction, including construction compounds and work sites.

## Temporary Transport Plan (TTP) during possessions

The Sydney Metro City and Southwest station upgrades between Sydenham and Bankstown include various construction activities that require the temporary shutdown of part of the rail line. The Environmental Impact Statement (EIS) for the project was exhibited in August 2017. The EIS presented a Temporary Transport Strategy (TTS) which outlined the use of bus replacement services over track possession periods, including assessments when trains could not run on the T3 Bankstown Line during construction. The possession periods that were assessed included school holiday possession periods (two (2) weeks in July and six (6) weeks in December/January for five (5) years), four (4) additional weekend possessions per year (in addition to the standard Sydney Trains possessions) and a final possession of up to six (6) months.

Following exhibition of the EIS, changes were made to the exhibited project in the Submissions and Preferred Infrastructure Report (SPIR). Given the reduction in the construction activities required to deliver the scope of works identified in the SPIR, there was also a change to the proposed temporary transport arrangements. Key changes to these arrangements included:

- Changes to possession periods
  - Additional eight (8) weekend possessions per year
  - Two (2) week possessions during December holiday periods only (July possession period excluded)
  - o Occasional weekday night-time possessions
- Concurrent closure of three (3) stations for up to two (2) months.

A Temporary Transport Plan (TTP) has been successfully delivered across holiday possession periods in 2019, 2020 and 2021, including a July school holiday period in 2021.

Relevant background information (including EA, REF, Submissions Report, Director General's Report, MCoA):

Sydenham to Bankstown Environmental Impact Statement (EIS) – September 2017 Sydenham to Bankstown Submissions and Preferred Infrastructure Report (SPIR) – June 2018 Sydenham to Bankstown Submissions Report (SR) – September 2018 Sydenham to Bankstown Modified Conditions of Approval – October 2020

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July 2022 Possessions Traffic Consistency Assessment (Appendix A) – June 2022

All proposed works identified in the assessment would be undertaken in accordance with the mitigation measures identified in the EIS, SPIR and SR and the conditions of approval.

2. Description of proposed development/activity/works

Describe ancillary activities, working hours, machinery, staffing levels, impacts on utilities/authorities, wastes generated or hazardous substances/dangerous goods used.

This Consistency Assessment relates to the mid-year possession period in July 2022 over the school holidays.

The additional full line closure would be required for two weeks in the July 2022 school holiday period (2 July – 16 July) to enable construction of the approved project. Stations between Sydenham and Birrong, along the T3 Bankstown Line, would be temporarily closed between 2am Saturday 2<sup>nd</sup> and 2am Saturday 16<sup>th</sup> July 2022.

Between 2 July and 3 July 2022, the T4 Eastern Suburbs & Illawarra Line would be closed between Sydenham and Central, whilst the T3 Bankstown Line would be closed between Sydenham and Birrong.

Between 4 July to 15 July 2022, stations between Sydenham and Birrong would be closed on the T3 Bankstown line. The T4 Eastern Suburbs & Illawarra line would operate between Sydenham and Central.

Sydenham would remain open during the closure as an interchange station between train and replacement bus services. Trains would continue to operate west of Birrong Station and along the City Circle line.

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Frequent bus services would replace trains between the closed stations during this period. Bus replacement services would be provided on five routes on weekdays and the weekends, with lower frequency of bus services on the weekend. For travel between Sydenham and Bankstown, the replacement bus routes are:

- 10T3 All stops between Sydenham and Bankstown (both directions)
- 33T3 Limited Stops: Sydenham to Belmore, then all stops to Bankstown (both directions)
- 13T3 Limited stops: Sydenham to Canterbury, then Campsie (both directions)

For travel between Bankstown and Lidcombe, the replacement bus routes are:

- 8AT3 Express: Bankstown then Lidcombe (both directions)
- 8T3 All stops between Bankstown and Lidcombe (both directions).

# 3. Timeframe

## When will the proposed change take place? For how long?

July 2022 for two weeks during school holidays (2 July – 16 July 2022).

# 4. Site description

The temporary bus stops and routes are in the streets surrounding the Sydenham to Bankstown rail corridor, with focus on the streets between Bankstown and Sydenham, Campsie and Sydenham, and Lidcombe and Bankstown. See Appendix A for further details regarding the site.

# **5. Site Environmental Characteristics**

Refer to the Environmental Impact Statement for a description of the existing environment. The proposed construction works would impact nearby receivers and the bus replacement services would impact on pedestrian spaces, parking spaces and Taxi Zones around affected train stations and existing road network only.

# 6. Justification for the proposed works

The Sydney Metro City & Southwest are upgrading all ten stations between Sydenham and Bankstown to meet current accessibility standards before converting the T3 Bankstown Line to Metro operations. The shutdown is needed to allow construction to take place on Sydney Metro.

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A review of the construction scheduling identified a delay in the commencement of station construction due to the availability of possessions (rail shutdowns). This has implications on the date of station and milestone completion and therefore the wider Approved Project. The proposed additional possession is required to mitigate construction delays.

As a result of the proposed works (and other temporary transport arrangements as part of the existing planning approval), there is no longer a need for up to four two-month station closures where up to three stations would be closed at one time. This is an improved overall customer outcome. A comparison of the approved possessions and closures against the proposed is as follows:

Rail Possessions and Closures	Approved Rail Possessions and Station Closures (Section 2.7.2 and Section 2.7.3 of the SPIR)	Proposed Rail Possessions and Station Closures
Standard weekend possessions (Sydney Trains possessions utilised by Sydney Metro)	Up to four weekends each calendar year.	No change.
Additional weekend possessions	Up to eight weekend possessions required each year.	No change.
School holiday possessions	Two week possessions of the T3 Bankstown line (either in part or full) during school holiday periods.	Two week track possessions would be taken over school holiday periods. A two-week possession during the July school holiday period would commence between the 2-16 July 2022.
Freight track possessions The section of rail corridor between east of Marrickville and west of Campsie is shared with freight tracks managed by ARTC.	Up to four weekend possessions a year (these periods coincide with the standard Sydney Trains possession described above).	No change.
Night-time weekday possessions	Required on an occasional basis to prepare the rail corridor ahead of weekend or school holiday possessions.	No change.

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Final possession	Between three and six months once the stations have been upgraded.	No change.
Temporary station closures	Individual stations may be closed for up to 2 months to complete the station works. Up to three stations may be closed at any one time.	The proposed activity avoids the need for 4 two-month station closures (with a total impact of 8 months).

Consultation has been undertaken with Sydney Trains and the Customer Journey Planning team (previously known as Sydney Coordination Office- SCO) as well as Sydney Metro's Linewide and TSOM contractor on the proposed activity.

#### 7. Environmental Benefit

The additional two-week possession would assist in mitigating construction delays. By ensuring the scheduling remains on time, this would reduce the period of time where environmental impacts are resulting from construction works. By providing the two-week possession this meant that the up to 4 two-month stations shutdowns would not be required in the future, which is also an improved overall customer outcome.

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## 8. Control Measures

The conditions of approval require a Temporary Transport Management Plan (TTMP) to be prepared in accordance with the Temporary Transport Strategy (TTS) which details the location of the elements of the TTS relevant to each station closure. The TTS identified a number of mitigation measures to minimise traffic and safety impacts.

The TTMP highlights network management and network performance monitoring control measures. These include rostered crews across the AM/PM peak to monitor and assist with the clearance of any incidents and manage unusual congestion on bus corridors. Also, Network Operations specialists would monitor and adjust traffic signal operations (SCATS) across the area in real-time.

Community consultation has also been undertaken with Inner West Council, Cumberland Council and Canterbury Bankstown council and Community Consultation Reports have been produced to determine any area specific control measures. These are either consistent with previous control measures or would be implemented.

AECOM's Traffic Consistency Report identified an additional mitigation measure to be included in the TTMP. Where there are more significant delays and oversaturated conditions, and/or impacts to the intersection performance because of addition of TTP buses, recommended signal phasing/timing changes would be considered in accordance with the revised environmental mitigation measure TC6 from the Approved Project conditions. The Community Consultation Reports are provided in Appendices B, C and D.

The transport related revised environmental mitigation measures listed in Appendix A from the Approved Project, together with the additional recommendations from the traffic assessment, are considered appropriate to manage the impacts associated with the proposal of bus replacement services during the July 2022 school holiday period.



# 9. Impact Assessment – Construction

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from Approved Project.	No additional measures required.	Y	Y	
Water	No change from Approved Project.	No additional measures required.	Y	Y	
Air quality	The proposed temporary bus routes have the potential for localised air quality impacts however, this is anticipated to be balanced by the line-wide shutdown of the rail corridor during this period. Nevertheless, any localised air quality impacts are considered to be negligible relative to the Approved Project.	No additional measures required.	Y	Y	
Noise vibration	The additional possession period and replacement bus services would result in minor noise impacts to nearby properties. The extent of construction noise and vibration impacts are expected to be similar to other possession periods assessed in the Approved Project. Construction noise and vibration was assessed in Volume 3, Technical Paper 2 of the EIS. These impacts would be mitigated in accordance with the measures contained within the Construction Noise and Vibration Management Plan and associated Construction Noise and Vibration Impact Statements The impacts would be consistent with the noise impacts as assessed within the EIS and would be temporary in nature over the 2-week period. It is considered that the additional noise impacts from the bus routes presents a negligible change from the Approved Project.	No additional measures required.	Y	Y	

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	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal		Endorsed
Aspect	positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments
Indigenous heritage	No change from Approved Project.	No additional measures required.	Y	Y	
Non-indigenous heritage	No change from Approved Project.	No additional measures required.	Y	Y	
Community and stakeholder	No change from Approved Project. There would be ongoing community and stakeholder engagement in relation to these proposed works.	No additional measures required.	Y	Y	
Traffic and Transport	<b>Traffic</b> In accordance with Condition of Approval E48, a Temporary Transport Management Plan has been prepared and sent to DPE prior to the Consistency Assessment approval. To support this Consistency Assessment, a Transport Consistency Assessment (Appendix A) has been prepared for the proposed activity. It assessed the traffic impacts of the five weekday and weekend bus routes and construction vehicles. Construction haulage traffic is consistent with the EIS. Three of these routes were assessed during the previous assessment, however, two of the routes have been modified as part of the July 2022 TTP. Majority of the intersections along two TTP routes between Lidcombe and Bankstown (08T3 and 08AT3) have been excluded from the sensitivity assessments/modelling as the bus frequencies are very low and the network is assumed to have sufficient spare capacity to accommodate the small increase in TTP buses during the peak periods. The traffic impact of these routes is considered negligible.	<ul> <li>Where there are more significant delays and oversaturated conditions and/or impacts to the intersection performance as a result of addition of TTP buses, recommended signal phasing/timing changes shall be considered in accordance with the revised environmental mitigation measure TC6.</li> <li>These intersections include: <ul> <li>Sydenham Road / Victoria Road (AM peak)</li> <li>Hume Highway/ Chapel Road/ Rookwood Road (PM peak)</li> <li>Canterbury Road/ Kingsgrove Road / Sharp Street (AM peak)</li> </ul> </li> </ul>	Y	Υ	

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	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal	Endorsed	
Aspect	positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments
	Three intersections have multiple routes passing through, which results in a combined high frequency of TTP services during the peak hours.				
	The impacts on key intersections are considered acceptable, subject to implementation of mitigation measures, and the assessment in the Transport Consistency Assessment (Appendix A) are summarised as follows:				
	<ul> <li>Marrickville Road/ Wardell Road – AM peak hour volumes are less than 15 and therefore have negligible impacts. The PM peak hour would accommodate 50 replacement services and is likely to result in satisfactory intersection operations.</li> </ul>				
	<ul> <li>Marrickville Road/ Victoria Road – the addition of replacement services in the AM and PM peak hour is likely to have satisfactory operations.</li> </ul>				
	<ul> <li>Sydenham Road/ Illawara Road - During PM peak, the volumes are less than 15 buses. Therefore, the addition of TTP buses to this intersection is likely to have negligible impacts.</li> </ul>				
	<ul> <li>Marrickville Road/ Illawara Road - In the PM peak hour, the intersection is likely to accommodate 96 bus replacement services. This is based on the previous SPIR assessment. The addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.</li> </ul>				
	<ul> <li>New Canterbury Road / Constitution Road         <ul> <li>In the PM peak hour, the intersection is             likely to accommodate 65 bus replacement</li> </ul> </li> </ul>				

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	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal Impact Y/N	Endorsed	
Aspect	positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	addition to project COA and REMMs		Y/N	Comments
	services. This addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.				
	<ul> <li>Wardell Road / Ewart Street - The addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.</li> </ul>				
	• The Boulevarde / Arthur Street - Though the TTP bus volumes have increased (by about 15 buses per hour), the impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR assessments. Therefore, the intersection would operate better compared to the SPIR forecasts for both AM and PM peak hours.				
	<ul> <li>Sydenham Road / Park Road / Petersham Road – This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.</li> </ul>				
	<ul> <li>Canterbury Road / Minter Street – This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.</li> </ul>				
	<ul> <li>Railway Parade/ Gleeson Avenue – The bus volumes during the AM peak hour are 17 buses and therefore likely to have negligible impacts in the AM peak hour. In the PM peak hour, the intersection is likely to have capacity to accommodate 84 replacement services. This is based on the</li> </ul>				

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Aspect	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal	Endorsed	
	positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments
	SPIR assessment. Thus, the addition of 84 replacement services in the PM peak hour is likely to result in satisfactory intersection operations.				
	<ul> <li>Beamish Street / South Parade / Lilian Lane - The addition of 51 replacement services in the AM peak hour and 68 replacement services in the PM peak hour is likely to result in satisfactory intersection operations.</li> </ul>				
	<ul> <li>Canterbury Road / Duke Street - This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.</li> </ul>				
	Beamish Street / Clissold Parade - The intersection is likely to have capacity to accommodate 47 bus replacement services. In the PM peak hour, the intersection is likely to accommodate 46 bus replacement services. AM peak hour would operate LOS A and PM peak hour would operate at LOS E.				
	<ul> <li>Sydenham Road / Centennial Street – This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.</li> </ul>				
	Majority of the signalised intersections have only slight increases in delays (less than 20 seconds) and the overall intersection performance is maintained as a result of the additional construction traffic and TTP buses during the July 2022				

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	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal		Endorsed
Aspect	measures implemented) of the proposed/activity, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments
	possession period. As the impact on the public would be minimal at this level of delay and the possession is for a short period (2 weeks) during the July 2022 school holiday period, it would not warrant specific mitigations.				
	Parking				
	The temporary bus stops and provision for bus layover and standby buses would temporarily impact street parking and Taxi Zones during the two-week possession period. Impacts to street parking have been minimised as much as possible by strategic location of the bus stops and where possible, limiting impacts only during weekday peak periods.				
	During the possession, street parking would also be impacted by construction vehicle parking, and also the loss of some commuter car parking areas for use for material, equipment and machinery lay down areas.				
	Street parking impacts are expected to be greatest in streets adjacent to stations, access areas to the rail corridor and commuter parking areas. This is due to proposed Bus Zones impacting parking spaces and the relocation of Taxi Zones impacting parking spaces.				
	Temporary kerbside changes have been managed in the Community Consultation Reports with the affected LGAs. Most changes were consistent with the previous TTP in December 2021 with no reported issues whilst other changes would be managed, such as with additional signage placed well in advance to provide clear information.				

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Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	Commuter parking demand around the stations is expected to drop significantly during the possession period which would assist with offsetting parking impacts from construction worker vehicles and material, equipment and machinery laydown areas. Impact to street parking during possession periods was assessed in Volume 2, Technical Paper 1 of the EIS, and the proposed activity is considered to be consistent with the Approved Project. The Conditions of Approval require a Temporary Transport Management Plan to be prepared and this would incorporate measures to minimise impact to on-street parking and surrounding residences and commercial properties. In addition to this, a mitigation measure is proposed, requiring consultation to be undertaken with businesses impacted by temporary bus stops and loss of car parking.				
Waste	No change from the Approved Project.	No additional measures required.	Y	Y	

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	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal	Endorsed	
Aspect	positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments
Social	The proposed activity would result in social impacts, by way of inconveniences and delays, as the train line would not be in operation for two weeks. However, there has been a significant attempt to mitigate these impacts by providing five bus replacement routes, including express services, limited stop services and also routes to all train lines which is anticipated to provide a more direct connection to Central Station than an all stops rail replacement service to cater for everyone's requirements. In addition, the additional July possession removes social impacts which would have resulted from four two-month stations closures, which are no longer required due to the additional July 2021 and July 2022 possession. An additional mitigation measure is proposed requiring consultation with the local community prior to the July possession.	Consultation with the local community is to be undertaken prior to the two-week July possession. A 24/7 phone number is available to answer any questions and a project web page was created to provide more information.	Y	Y	
Economic	There is potential for the proposed activity to result in economic impacts to businesses surrounding rail stations due to loss of rail patronage and some nearby car parking. However, the loss of rail patronage is temporary only and anticipated to be mitigated by additional patronage from construction workers and bus users. The car parking impacts are likely to be similar to other rail shutdowns being undertaken, for example over the Christmas possession. Any economic impact from the proposed activity is anticipated to be negligible relative to the Approved Project.	No additional measures required.	Y	Y	
Visual	Minor visual impacts would result from the temporary bus stops. However, this is considered to be temporary only and negligible relative to the Approved Project.	No additional measures required.	Y	Y	

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	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal	Endorsed	
Aspect	positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments
Urban design	No change from the Approved Project.	No additional measures required.	Y	Y	
Geotechnical	No change from the Approved Project.	No additional measures required.	Y	Y	
Land use	No change from the Approved Project.	No additional measures required.	Y	Y	
Climate Change	No change from the Approved Project.	No additional measures required.	Y	Y	
Risk	No change from the Approved Project.	No additional measures required.	Y	Y	
Other	No change from the Approved Project.	No additional measures required.	Y	Y	
Management and mitigation measures	The relevant mitigation measures identified in the approval documentation would continue to apply to Proposed activity.	Additional mitigation measures proposed as outlined above.	Y	Y	

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# **11. Impact Assessment – Operation**

The proposed works are during construction only.

	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal	Endorsed	
Aspect	implemented) of the proposed activity/works, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments
Flora and fauna	No change from the Approved Project.	No additional measures required.	Y	Y	
Water	No change from the Approved Project.	No additional measures required.	Y	Y	
Air quality	No change from the Approved Project.	No additional measures required.	Y	Y	
Noise vibration	No change from the Approved Project.	No additional measures required.	Y	Y	
Indigenous heritage	No change from the Approved Project.	No additional measures required.	Y	Y	
Non-indigenous heritage	No change from the Approved Project.	No additional measures required.	Y	Y	
Community and stakeholder	No change from the Approved Project.	No additional measures required.	Y	Y	
Traffic and Transport	No change from the Approved Project.	No additional measures required.	Y	Y	
Waste	No change from the Approved Project.	No additional measures required.	Y	Y	
Social	No change from the Approved Project.	No additional measures required.	Y	Y	
Economic	No change from the Approved Project.	No additional measures required.	Y	Y	
Visual	No change from the Approved Project.	No additional measures required.	Y	Y	

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	Nature and extent of impacts (negative and	Proposed Control Measures in	Minimal	Endorsed		
Aspect	positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	addition to project COA and REMMs	Impact Y/N	Y/N	Comments	
Urban design	No change from the Approved Project.	No additional measures required.	Y	Y		
Geotechnical	No change from the Approved Project.	No additional measures required.	Y	Y		
Land use	No change from the Approved Project.	No additional measures required.	Y	Y		
Climate Change	No change from the Approved Project.	No additional measures required.	Y	Y		
Risk	No change from the Approved Project.	No additional measures required.	Y	Y		
Other	No change from the Approved Project.	No additional measures required.	Y	Y		
Management and mitigation measures	No change from the Approved Project.	No additional measures required.	Y	Y		



# **12. Consistency with the Approved Project**

Based on a review and understanding of the existing Approved Project and the proposed modifications, is there a transformation of the Project?	No. The proposed works would not transform the project. The project would continue to provide a metro rail line between Sydenham and Bankstown.
Is the project as modified consistent with the objectives and functions of the Approved Project as a whole?	Yes. The proposed works would be consistent with the objectives and functions of the Approved Project.
Is the project as modified consistent with the objectives and functions of elements of the Approved Project?	Yes. The changes identified in this assessment are consistent with the objectives and functions of the Approved Project.
Are there any new environmental impacts as a result of the proposed works/modifications?	No. The proposed works do not result in any new environmental impacts beyond those considered in the Approved Project.
Is the project as modified consistent with the conditions of approval?	Yes. The proposed works would be consistent with the conditions of approval.
Are the impacts of the proposed activity/works known and understood?	Yes. The impacts of the proposed works are understood.
Are the impacts of the proposed activity/works able to be managed so as not to have an adverse impact?	Yes. The impacts of the proposed works can be managed so as to avoid an adverse impact.

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# **13. Other Environmental Approvals**

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# **Author certification**

To be completed by person preparing checklist.

<ul> <li>I certify that to the best of my knowledge this Consistency Checklist:</li> <li>Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the Proposed Revision; and</li> <li>Examines the consistency of the Proposed Revision with the Approved Project; is accurate in all</li> </ul>							
material respects and does not omit any material information.							
Name:	Isabella Caruso	Signatura	Traballa Carura				
Title:	Planning Officer	Signature.	Tangena caraso				
Company:	Sydney Metro	Date:	15/06/2022				

## This section is for Sydney Metro only.

Application supported and submitted by						
Name:	Yvette Buchli	Date:	16/06/2022			
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Signature:	GvetteBuchli	commento.				

SUCERNMENT

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Based on the above assessment, are the impacts and scope of the proposed activity/modification consistent with the existing Approved Project?

Yes 🗸

No

The proposed activity/works are consistent and no further assessment is required.

The proposed works/activity is not consistent with the Approved Project. A modification or a new activity approval/ consent is required. Advise Project Manager of appropriate alternative planning approvals pathway to be undertaken.

Endorsed by						
Name:	Fil Cerone	Date:	20 June 2022			
Title:	Director City & Southwest, Environment, Sustainability & Planning	Comments:				
Signature:	A,	-				

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# Appendix A – July 2022 Possessions Traffic Consistency Assessment

SM-17-00000111

Prepared for Sydney Metro ABN: 12 354 063 515



# July 2022 Possessions Traffic Consistency Assessment

15-Jun-2022 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade



Delivering a better world

# July 2022 Possessions Traffic Consistency Assessment

Client: Sydney Metro

ABN: 12 354 063 515

Prepared by

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In association with

GHD

15-Jun-2022

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# **Quality Information**

Document	July 2022 Possessions Traffic Consistency Assessment

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Prepared by Mark Yeung / Nirman Kesari

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# 1.0 Introduction

## 1.1 Background

Sydney Metro has received approval for the Sydenham to Bankstown upgrade component of the Sydney Metro City & Southwest (the project) in December 2018. The project involves upgrading 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13-kilometre-long section of the Sydney Trains T3 Bankstown Line, between west of Sydenham Station and east of Bankstown Station, to improve accessibility for customers and meet the standards required for metro operations. The project would enable Sydney Metro to operate beyond Sydenham, to Bankstown.

#### 1.1.1 Environmental Impact Statement (EIS)

An Environmental Impact Statement (EIS) for the project was exhibited in August 2017 (the exhibited project). The EIS included a Temporary Transport Strategy (TTS) which outlined the use of bus replacement services over track possession periods, periods when trains could not run on the T3 Bankstown Line, during construction.

This assessment analysed the potential impacts of the project during the required possession periods. The possession periods that were assessed included school holiday possession periods:

- Two weeks in July and six weeks in December/January for five years
- Four additional weekend possessions per year in addition to the standard Sydney Trains possessions

Typical weekday demand on the T3 Bankstown Line was assumed in the assessment to be in the order of 90,000 trips per day, of which the vast majority were between Sydenham and Bankstown Stations. A 6% per annum growth in demand was projected for the T3 Bankstown Line. To meet this demand, a Baseline Temporary Transport Plan (TTP) and a Refined TTP was developed which provided a potential network and frequencies of replacement bus services.

A Baseline Temporary Transport Plan included replacement buses during possession periods that provide a full rail capacity replacement by buses only, as currently occurs during typical weekend possession. This Baseline Temporary Transport Plan was assessed in the EIS and indicated that there would be extensive impacts with both intersection capacities and the ability to provide safe and efficient boarding and alighting facilities at stations being affected. As this scenario would have the potential to adversely affect not just the amenity for passengers using the rail replacement service, but those on existing bus routes in the area, private car users and cyclists, a Refined Baseline TTP scenario was also developed as part of the EIS. The Refined Baseline TTP was tested to assess an alternative rail replacement strategy to convey passengers west of Campsie to parallel rail lines and reduce the impact on intersections between Dulwich Hill and Marrickville.

The addition of buses on existing infrastructure may cause potential bottlenecks at certain intersections. To understand potential pinch-points traffic assessments were undertaken and EIS assessed the following scenarios:

- Scenario A: Existing 2016 background traffic flows for a typical day
- Scenario B: Future 2023 traffic flows for a typical day
- Scenario C: Future 2023 traffic + construction traffic
- Scenario D: Future 2023 traffic + construction traffic + Baseline TTP
- Scenario E: Future 2023 traffic + construction traffic + Refined TTP

The EIS was subsequently updated by the Submissions and Preferred Infrastructure Report (PIR) in 2018.

#### 1.1.2 Submissions and Preferred Infrastructure Report (SPIR)

Following the exhibition of the EIS, several changes were proposed to the exhibited project. The 'preferred project' enabled several issues raised in submissions to be addressed, but also significantly

minimised potential impacts – especially in respect of construction noise, traffic, heritage and vegetation impacts.

Key changes during the assessment of the preferred project included:

- Changes to construction sequencing and possession periods
  - Additional eight (8) weekend possessions per year
  - Two (2) week possessions during December holiday periods only (July possession period excluded)
  - Occasional weekday night-time possessions
- Concurrent closure of three (3) stations for up to two (2) months
- Revised works to road bridges
- Retaining and enhancing existing station layouts to facilitate improved operations with supporting precinct improvements to promote customer service.

The SPIR assessed the following scenarios:

- Scenario A: Future 2023 traffic flows for a typical day (from EIS)
- Scenario B: Future 2023 traffic + construction traffic + Refined TTP (from EIS)
- Scenario C: Future 2023 December traffic flows
- Scenario D: Future 2023 December traffic + construction traffic
- Scenario E: Future 2023 December traffic + construction traffic + Refined TTP.

#### 1.1.3 July 2021 consistency assessment (previous assessment)

A revised TTP network and service frequencies were proposed by Sydney Metro over the July 2021 school holiday period. This period was excluded from the SPIR but was included under the EIS.

A full line closure was required for two weeks in July 2021 and bus replacement services were provided on seven routes to enable construction. The July 2021 consistency assessment (previous assessment) assessed the potential traffic impacts of providing bus replacement services along these seven routes.

#### 1.1.4 July 2022 consistency assessment (this assessment)

An updated TTP network and service frequencies are proposed by Sydney Metro over the July 2022 school holiday period – 4 July 2022 to 15 July 2022. During this period, a full line closure would be required for two weeks, and bus replacement services would be provided on five routes to enable construction.

This assessment will assess the potential traffic impacts of providing bus replacement services along these five routes. Three of these routes were assessed during the previous assessment, however, two of these have been modified as part of the July 2022 TTP. Therefore, this will require the assessment of new intersections along these modified routes. Two new routes are also proposed that were not part of the previous assessment.

A preliminary sensitivity assessment was conducted that considered the bus replacement routes, frequencies, intersection control type, spare capacity likely to be available at the intersection, terminating and turn-around facilities as well as using a methodology similar to the EIS to determine the intersections requiring assessment.

The methodology for this assessment is discussed in further detail in Section 2.0.

## 1.2 Structure of this report

This report is structured in a manner that broadly replicates the SPIR.

- Section 2.0 describes the general transport context of this assessment and project area, as well as provides details of the methodology used for this assessment.
- Section 2.8 provides the assessment of potential impacts due to the July 2022 possessions during the construction phase.
- Section 4.0 provides the updated mitigation measures as an outcome from this assessment.

# 2.0 Methodology

# 2.1 Temporary transport strategy

The temporary transport strategy provides bus replacement services for commuters travelling from Sydenham to Bankstown. The proposed TTP routes, likely to operate during track possession period during July 2022 run along the train route, connecting all stations shown in Figure 1.



Figure 1 Project area and proposed July 2022 TTP routes

#### 2.1.1 Proposed TTP routes

Broad descriptions of the bus replacement services proposed for the July 2022 possession period used for this assessment are given in Table 1.

Table 1	Proposed TTP routes for July 2022 possession
1 4 5 1 6 1	

Route	Description
10T3	Bankstown to Sydenham (all stops)
13T3	Campsie to Sydenham (Limited stops - Canterbury then Sydenham)
33T3	Bankstown to Sydenham (Limited stops – All stops to Belmore then Sydenham)
8T3	Lidcombe to Bankstown (all stops)
8AT3	Lidcombe to Bankstown (Express to Lidcombe)

Detailed maps for the proposed TTP routes are included in Appendix A.

Route 10T3, Route 13T3 and Route 33T3 are proposed to be east-west routes running parallel to the T3 line and are proposed to be all stops services. Route 10T3 and Route 33T3 will run the full length of the rail line possession area from Bankstown to Sydenham. Route 13T3 will service the eastern segment of the possession area and only run between Campsie and Sydenham.
Route 8T3 and Route 8AT3 are proposed to service the western segment of the possession area by transporting passengers to the T1 parallel service to the north and are proposed to be all stop services. Both routes will transport passengers to Lidcombe from Bankstown.

#### 2.1.2 Frequencies

The proposed frequency of bus replacement services (TTP) during the AM and PM peak periods as well as the Inter-Peak (IP) and weekends for the July 2022 possession period, is presented in Table 2.

Pouto	Direction	Towards	Frequency (services/hour)			
Noute	Direction		AM	РМ	IP	Weekend
10T3	Inbound	Sydenham	38	12	12	8
10T3	Outbound	Bankstown	9	34	8	8
13T3	Inbound	Sydenham	25	5	7	8
13T3	Outbound	Campsie	4	22	4	8
33T3	Inbound	Sydenham	32	10	10	8
33T3	Outbound	Bankstown	4	28	6	8
8T3	Inbound	Bankstown	8	12	4	4
8T3	Outbound	Lidcombe	10	10	4	4
8AT3	Inbound	Bankstown	6	8	4	4
8AT3	Outbound	Lidcombe	6	8	4	4

 Table 2
 Proposed frequency of TTP routes for July 2022 possession

The bus replacement service frequencies proposed for the July 2022 possession period were compared to the frequencies adopted for the EIS, SPIR and previous assessment. A preliminary sensitivity analysis determined list of previously modelled intersections that would potentially require reassessment as well as identify intersections that require new models to be developed. The methodology adopted for the preliminary sensitivity analysis is included in Appendix B.

Impacts of the bus replacement services during the IP and weekend (Saturdays and Sundays) have not been assessed. This is due to lower background traffic generally observed on weekends and proposed frequency of TTP routes during the weekend being lower in comparison to the weekday peak period. Thus, the impacts on network due to the TTP services during the weekend peak period are likely to be similar or lower compared to the weekday peak period.

## 2.2 Intersection selection methodology

The methodology used during the preliminary sensitivity analysis to determine intersections for inclusion in this assessment is detailed below. As shown in Figure 2, a combination of sensitivity analysis and Level of Service (LOS) filter was used to optimise the number of intersections to be modelled.

Detailed methodology and outcomes from the preliminary sensitivity analysis are included in Appendix B.



Figure 2 Methodology adopted for preliminary sensitivity analysis

Based on the methodology detailed in Appendix B, intersections were allocated to five different categories. These categories are:

- Category 1 New modelling assessment: Intersections that were not previously assessed and where bus volumes are higher than 15 buses per hour and those that do not qualify under Category 4
- Category 2 Modelling re-assessment: 'Reassessment' intersections were those intersections where the proposed routes would pass with higher expected bus volumes than those previously assessed
- Category 3 No modelling re-assessment: 'No Reassessment' intersections were those
  intersections where only construction routes would pass and/ or where the proposed routes would
  pass but with similar or lower bus volumes when compared to the EIS, SPIR or the previous
  assessment (July 2021 CA). These intersections could therefore be reasonably expected to
  perform similarly or better during a July 2022 scenario as a worse-case scenario had already been
  assessed
- Category 4 Sensitivity test: 'Sensitivity test' intersections were those intersections where the
  proposed routes would pass with lower or similar bus volumes when compared to the EIS, SPIR or
  the previous assessment but did not require modelling re-assessment based on sensitivity testing
  as detailed in 2.2.4
- New modelling assessment, but disregarded: Intersections that are new but do not meet the criteria to fall under Category 1.

The preliminary sensitivity analysis enabled the identification of intersections that are likely to have potential impacts due to the addition of TTP buses and therefore requiring further detailed analysis under Category 1, 2 and 4. The potential impacts of providing TTP services on the existing network are discussed in Section 3.0 followed by mitigation measures discussed in Section 4.0.

#### 2.2.1 Category 1 – New modelling assessment

In the study area, thirteen (13) intersections were categorised as Category 1. The intersections that are included in Category 1 are shown in Figure 3 with the description of each included in Table 3.



Figure 3 Category 1 intersections site map

TCS	Intersection description
TCS 41	Sydenham Road / Victoria Road
TCS 42	Wardell Road / Frazer Street
TCS 61	Hume Highway / Chapel Road / Rookwood Road
TCS 67	Marrickville Road / Livingstone Road
TCS 81	Livingstone Road / Sydenham Road / Frazer Street
TCS 507	Canterbury Road / Charlotte Street / Thorncraft Parade
TCS 602	Canterbury Road / Fore Street
TCS 1153	Marrickville Road / Petersham Road
TCS 1203	Chapel Road / Rickard Road
TCS 1363	Fifth Avenue / Ninth Avenue
TCS 2789	Joseph Street / Georges Avenue
TCS 3340	New Canterbury Road / Frazer Street
TCS 4408	Chapel Road / French Avenue

#### Table 3 Category 1 intersections

#### 2.2.2 Category 2 – Modelling re-assessment

In the study area, fourteen (14) intersections were categorised as Category 2 and required re-assessing the model setup as part of previous assessments. The intersections that are included in Category 2 are shown in Figure 4 with the description of each included in Table 4.



Figure 4 Category 2 intersections site map

TCS	Intersection description
TCS 78	New Canterbury Road / Canterbury Road
TCS 79	Canterbury Road / Beamish Street / Bexley Road
TCS 86	New Canterbury Road / Marrickville Road / Dulwich Street
TCS 162	Canterbury Road / Burwood Road
TCS 382	King Georges Road / The Boulevarde
TCS 855	Canterbury Road / Jeffrey Street
TCS 1167	Canterbury Road / Wonga Street
TCS 1299	Haldon Street / The Boulevarde
TCS 1303	New Canterbury Road / Duntroon Street
TCS 1329	Burwood Road / Leylands Parade
TCS 1744	Punchbowl Road / The Boulevarde / South Terrace
TCS 1817	Restwell Street / South Terrace
TSC 2816	Beamish Street / Amy Street
TCS 4074	Restwell Street / Raymond Street / Greenfield Parade

#### Table 4 Category 2 intersections

#### 2.2.3 Category 3 – No modelling re-assessment

In the study area, fourteen (14) intersections were categorised as Category 3 and require no modelling re-assessment of previous models. The intersections that are included in Category 3 are shown in Figure 5 with the description of each included in Table 5.



Figure 5 Category 3 intersections site map

Table 5	Category 3	intersections
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TCS	Intersection description	Justification
TCS 66	Marrickville Road / Wardell Road	<ul> <li>During the possession period in July 2022, the intersection is expected to have: <ul> <li>8 TTP buses in the AM peak</li> <li>50 TTP buses in the PM peak</li> </ul> </li> <li>The bus volumes during the AM peak hour are less than 15 and therefore likely to have negligible impacts in the AM peak hour. <ul> <li>In the PM peak hour, the intersection is likely to have capacity to accommodate 50 replacement services. This is based on the SPIR assessment where the intersection was able to accommodate 84 bus replacement services in the PM peak hour and operate at satisfactory level of service C.</li> <li>Thus, the addition of 50 replacement services in the PM peak hour is likely to result in satisfactory intersection operations.</li> </ul> </li> </ul>

TCS	Intersection description	Justification
TCS 68	Marrickville Road / Victoria Road	<ul> <li>During the possession period in July 2022, the intersection is expected to have:</li> <li>55 TTP buses in the AM peak</li> <li>96 TTP buses in the PM peak</li> </ul>
		The intersection is likely to have capacity to accommodate 55 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 111 bus replacement services in the AM peak hour and operate at LOS C.
		In the PM peak hour, the intersection is likely to accommodate 96 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 113 bus replacement services in the PM peak hour and operate at LOS D.
		Thus, the addition of replacement services in the AM and PM peak hour is likely to have satisfactory operations.
TCS 96	Sydenham Road / Illawarra Road	This intersection is near the intersection of Sydenham Road and Victoria Road (TCS 41) and possess similarities in intersection geometry and potential traffic volumes in the peak hours.
		During the possession period in July 2022, the intersection is
		<ul> <li>57 TTP buses in the AM peak</li> <li>15 TTP buses in the PM peak</li> </ul>
		The intersection is likely to operate similar to the intersection of Sydenham Road and Victoria Road (TCS 41) as detailed in Section 3.2.1.
		During the PM peak, the volumes are less than 15 buses in the peak hour. Therefore, the addition of TTP buses to this intersection is likely to have negligible impacts in the PM peak hour.
TCS 435	Marrickville Road / Illawarra Road	<ul> <li>During the possession period in July 2022, the intersection is expected to have:</li> <li>55 TTP buses in the AM peak</li> <li>96 TTP buses in the PM peak</li> </ul>
		The intersection is likely to have capacity to accommodate 55 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 111 bus replacement services in the AM peak hour and operate at LOS B.
		In the PM peak hour, the intersection is likely to accommodate 96 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 113 bus replacement services in the PM peak hour and operate at LOS C.
		Thus, the addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.

TCS	Intersection description	Justification
TCS 902	New Canterbury Road / Constitution Road	This intersection is adjacent to the intersection of Canterbury Road and Marrickville Road (TCS 86) and possess similarities in intersection geometry and potential traffic volumes in the peak hours.
		<ul> <li>During the possession period in July 2022, the intersection is expected to have:</li> <li>65 TTP buses in the AM peak</li> <li>65 TTP buses in the PM peak</li> </ul>
		The intersection is likely to have capacity to accommodate 65 bus replacement services. This is based on previous SPIR assessment of TCS 86 where intersection was able to accommodate 51 bus replacement services in the AM peak hour and operate at LOS B. Traffic volumes in the AM peak hour are expected to be lower in July 2022 by 200 vehicles in comparison to volumes assessed in SPIR.
		In the PM peak hour, the intersection is likely to accommodate 65 bus replacement services. This is based on the results of refurbished TCS 86 model in this assessment.
		This addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.
TCS 1413	Wardell Road / Ewart Street	<ul> <li>During the possession period in July 2022, the intersection is expected to have:</li> <li>47 TTP buses in the AM peak</li> <li>46 TTP buses in the PM peak</li> </ul> The intersection is likely to have capacity to accommodate 47 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 62 bus replacement services in the AM peak hour and operate at LOS C. This the addition of replacement services in the AM and PM peak
		hour is likely to have acceptable operations. In the PM peak hour, the intersection is likely to accommodate 65 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 61 bus replacement services in the PM peak hour and operate at LOS E.
TCS 2308	The Boulevarde / Arthur Street	<ul> <li>During the possession period in July 2022, the intersection is expected to have: <ul> <li>83 TTP buses in the AM peak</li> <li>84 TTP buses in the PM peak</li> </ul> </li> <li>The intersection is likely to have capacity to accommodate 83 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 60 bus replacement services in the AM peak hour and operate at LOS B.</li> </ul>

TCS	Intersection description	Justification
		In the PM peak hour, the intersection is likely to have capacity to accommodate 84 replacement services. This is based on the SPIR assessment where the intersection was able to accommodate 60 bus replacement services in the PM peak hour and operate at LOS B.
		Though the TTP bus volumes have increased (by about 15 buses per hour), the impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR assessments, as the forecast July 2022 traffic volumes are lower (than those forecast in the SPIR. As such, it is likely that the intersection will operate at LOS B or better compared to the SPIR forecasts for both AM and PM peak hours.
TCS 2450	Sydenham Road / Park Road / Petersham Road	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.
TCS 2995	Canterbury Road / Minter Street	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.
TCS 3320	Railway Parade / Gleeson Avenue	<ul> <li>During the possession period in July 2022, the intersection is expected to have: <ul> <li>17 TTP buses in the AM peak</li> <li>50 TTP buses in the PM peak</li> </ul> </li> <li>The bus volumes during the AM peak hour are 17 buses and therefore likely to have negligible impacts in the AM peak hour. <ul> <li>In the PM peak hour, the intersection is likely to have capacity to accommodate 84 replacement services. This is based on the SPIR assessment where the intersection was able to accommodate 139 bus replacement services in the PM peak hour and operate at LOS A.</li> </ul> </li> <li>Thus, the addition of 84 replacement services in the PM peak hour is likely to result in satisfactory intersection operations.</li> </ul>
TCS 3431	Beamish Street / South Parade / Lilian Lane	<ul> <li>During the possession period in July 2022, the intersection is expected to have:</li> <li>51 TTP buses in the AM peak</li> <li>68 TTP buses in the PM peak</li> <li>The intersection is likely to have capacity to accommodate 51 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 81 bus replacement services in the AM peak hour and operate at LOS B.</li> <li>In the PM peak hour, the intersection is likely to accommodate 68 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 68 bus replacement services in the AM peak hour and operate at LOS B.</li> <li>In the PM peak hour, the intersection was able to accommodate 80 bus replacement services in the PM peak hour and operate at LOS C.</li> <li>Thus, the addition of 51 replacement services in the AM peak hour is likely to result in satisfactory intersection operations.</li> </ul>

TCS	Intersection description	Justification
TCS 4052	Canterbury Road / Duke Street	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.
TCS 4136	Beamish Street / Clissold Parade	<ul> <li>During the possession period in July 2022, the intersection is expected to have:</li> <li>47 TTP buses in the AM peak</li> <li>46 TTP buses in the PM peak</li> <li>46 TTP buses in the PM peak</li> </ul> The intersection is likely to have capacity to accommodate 47 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 82 bus replacement services in the AM peak hour and operate at LOS A. In the PM peak hour, the intersection is likely to accommodate 46 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 46 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 46 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 82 bus replacement services in the PM peak hour and operate at LOS E.
TCS 4297	Sydenham Road / Centennial Street	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.

## 2.2.4 Category 4 – Sensitivity test

In the study area seven (7) intersections were categorised as Category 4. The intersections that are included in Category 3 are shown in Figure 6 with the description of each included in Table 6.



Figure 6 Category 4 intersection site map

TCS	Intersection description
TCS 80	Canterbury Road / Kingsgrove Road / Sharp Street
TCS 157	Burwood Road / Lakemba Street
TCS 569	Illawarra Road / Petersham Road
TCS 738	Beamish Street / Evaline Street
TCS 777	Canterbury Road / Queen Street / Crinan Street

#### Table 6 Category 4 intersections

TCS	Intersection description
TCS 996	Beamish Street / Ninth Avenue
TCS 1315	Illawarra Road / Warren Road

Sensitivity testing was undertaken using two levels of analysis:

- Sensitivity analysis; a comparison between the previously modelled total volumes (EIS, SPIR or July 2021 CA) and the forecast July 2022 total volumes
- LOS filtering; filtering criteria set for the previously modelled intersection LOS (EIS, SPIR or July 2021 CA) a LOS A, B or C were expected to perform with a similar LOS with the additional TTP buses, and a LOS E or F, which is near or over capacity, were likely to perform the same (i.e. poor conditions)

The outcomes from the sensitivity tests are presented in Figure 7 for the AM peak and Figure 8 for the PM peak. It is evident that for the intersections in Category 4, the modelled volumes from the previous assessments are generally higher or similar compared to the forecast volumes for July 2022 during both AM and PM peak hours, except TCS 80 where there is a marginal increase. These intersections could therefore be reasonably expected to perform similar or better during a July 2022 scenario as a worse-case scenario had already been assessed.



Figure 7 Category 4 intersections - Sensitivity tests for AM peak hour



Figure 8 Category 4 intersections - Sensitivity tests for PM peak hour

### 2.2.5 New assessment, but disregarded

In the study area, thirty (30) intersections were disregarded from the assessment based on the filtering criteria detailed in Section 2.2. The intersections in this category are included in Table 7.

Table 7 New assessment, but disregarded intersections

TCS	Site Description
TCS 225	Rookwood Road/ Brunker Road
TCS 436	Hume Highway / Auburn Road / William Street
TCS 935	Olympic Drive / Joseph Street
TCS 1135	Hume Highway / Meredith Street / The Boulevarde
TCS 1159	Rookwood Road / Muir Road
TCS 1326	Olympic Dr / Church Street / Bridge Street
TCS 1414	Marrickville Road / Gladstone Street
TCS 1451	Joseph Street / Amy Street / Weeroona Road
TCS 1542	Hume Highway / Cooper Road
TCS 1545	Hume Highway / Highland Avenue
TCS 1597	Church Street / John Street
TCS 1725	Joseph Street / Botanica Drive
TCS 1771	Auburn Road / Ferrier Road
TCS 1921	Illawarra Road / Arthur Street
TCS 1932	New Canterbury Road / Myra Road / Union Street
TCS 1966	New Canterbury Road / Pigott Street
TCS 1991	Chapel Road (N) / Raw Avenue
TCS 2015	The Boulevarde / Croydon Street (E)
TCS 2065	Sydenham Road / Farr Street
TCS 2072	Burwood Road (N) / Bridge Road
TCS 2192	Auburn Road / Pobje Avenue / Gazzard Street
TCS 2206	North Terrace / Fetherstone Street / Bankstown City Plaza
TCS 2468	Olympic Drive / Vaughan Street
TCS 2649	Olympic Dr / New Street W
TCS 2800	Joseph Street / Vaughan Street
TCS 2935	The Mall / The Appian Way
TCS 3222	Olympic Drive / Kerrs Road
TCS 3492	Rookwood Road / Boardman Street
TCS 3628	Evaline Street / Beamish Street
TCS 4127	South Terrace / Railway Station

## 2.3 Performance indicators

In order to assess the impact of the above scenarios on the performance of the intersections, the main indicators were:

- Degree of Saturation (DoS): the ratio between traffic volumes and capacity (v/c) of the intersection, used to measure how close to capacity an intersection is operating. The DoS is a direct measure of the congestion level of the intersection and as DoS approaches 1.0, both queue length and delays increase rapidly. Satisfactory operations usually occur with a DoS lower than 0.9.
- Average Delay: duration, in seconds, of the average vehicle waiting time at an intersection.
- Level of Service (LoS): a measure of the overall performance of the intersection. The levels of service (LoS) presented in Table 8 are in accordance with the TfNSW Traffic Modelling Guidelines and LoS gives an indication of how well the intersection is performing regarding delay incurred by vehicles. For signalised intersections the LoS is based on the average intersection delay, and the most delayed movement for priority-controlled intersections and roundabouts.

Level of service (LOS)	Average delay / vehicle (sec/veh)	Description
А	< 14	Good operation
В	15 to 28	Good with acceptable delays and spare capacity
С	29 to 42	Satisfactory
D	43 to 56	Operating near capacity
Е	57 to 70	At capacity; at signals incidents would cause excessive delays
F	> 70	Exceeds capacity; roundabouts require other control mode

Table 8 Level of Service criteria

Source: Guide to Traffic Generating Developments, RTA, 2002

## 2.4 Baseline conditions

For assessment of road traffic conditions during the possession period in July 2022, background traffic volumes (baseline) likely to use the intersections are required to be forecast. As the possessions are planned during the school holiday period, a seasonal reduction factor to account for the lower traffic volumes generally experienced during July school holidays shall be considered. This baseline shall also incorporate post-COVID lockdown impacts in travel behaviour and traffic volume profiles at the intersections.

EIS, SPIR and the previous assessments used growth rates to forecast future traffic volumes. Due to the COVID-19 pandemic, the applied growth factors (about 1.5% per annum) are considered to be high for use in forecasting July 2022 baseline traffic. Therefore, as agreed with Sydney Metro, the future baseline traffic volumes for July 2022 (Scenario 1) were estimated based on recent traffic volume data (March 2022) by applying seasonal reduction factors. SCATS detector data for the intersections observed for a typical weekday have been used to forecast the July 2022 baseline traffic volumes as detailed in Section 2.4.2.

#### 2.4.1 Review of impacts due to COVID-19

An assessment of traffic volumes and peak period traffic profiles during 2019 (pre-COVID lockdowns) and 2022 (post-COVID lockdowns) was undertaken at three sample intersections spread across the study area to determine if the impacts of COVID-19 are still prevalent. This is required to understand if a factor needs to be applied to the forecast traffic volumes for July 2022 to account for potential impacts



on traffic volumes due to COVID-19. The location of the sample intersections identified for this assessment is presented in Figure 9.

#### Figure 9: Location of sample sites reviewed

The assessment was undertaken using SCATS detector data for a typical weekday for the selected intersections from March 2019 and March 2022. The assessment indicates that traffic volumes and peak period traffic profiles for March 2022 are observed to be similar to or slightly lower in comparison to March 2019, as presented in Figure 10, Figure 11 and Figure 12. Therefore, the use of March 2022 SCATS detector data to forecast July 2022 traffic volumes shall include changes in travel behaviour post COVID-19. As such, no adjustments to traffic data are required to be applied to consider impacts of COVID-19.



Figure 10: TCS 382 - King Georges Road / The Boulevarde



Figure 11: TCS 1167 - Canterbury Road / Wonga Street



Figure 12: TCS 67 – Marrickville Road / Livingstone Road

#### 2.4.2 Factors to produce July 2022 traffic volumes

Seasonal trends and school holidays tend to impact travel behaviours on the road network. To account for this, the following steps were undertaken to forecast July 2022 traffic volumes:

- Seasonal factors were calculated for each intersection by comparing peak hour traffic volumes recorded using SCATS detector loops in March 2019 (normal period) and July 2019 (school holiday period).
- The seasonal factors determined for each intersection were then applied to peak hour traffic volumes observed at the intersections in March 2022 to forecast the baseline traffic volumes for July 2022 (possession period) during the AM and PM peak hours.
- The turning proportions for traffic volumes on shared traffic lanes and the proportion of heavy vehicles and light vehicles at Category 1 intersections (new sites) were obtained from sample traffic counts undertaken during May 2022. For Category 2 models (re-assessment), both proportions were obtained from the previous assessments.
- A 10% correction factor is applied to the July 2022 forecast volumes to account for potential SCATS detector errors.
- Construction traffic volumes at the study area intersections were obtained from the EIS scenario for the peak construction period (2023).
- Alignment of proposed TTP bus routes and their frequencies were received from Sydney Metro (as detailed in Table 2). Based on this information, the number of TTP buses passing through each intersection during the AM and PM peak hour were estimated. This accounts for multiple routes passing through an intersection, if any.

## 2.5 Assessment scenarios

The scenarios assessed as part of this assessment are presented in Table 9.

#### Table 9Assessment scenarios

Scenario	Description
Scenario 1	July 2022 (Future base) – This is used as the baseline conditions of background traffic during July 2022.
Scenario 2	July 2022 (Future base + SM Construction traffic) – This is used to test impacts of Sydney Metro construction traffic.
Scenario 3	July 2022 (Future base + SM Construction traffic + TTP) – This is used as the test scenario for the replacement bus services (5 routes).

For Category 2 sites, in addition to the future base scenario for July 2022 (Scenario 1), a comparison with the relevant assessment (EIS, SPIR or previous assessment) are also made.

For Category 4 sites, the assessment results include outcomes from the relevant assessment (EIS, SPIR or previous assessment), as new assessments were not completed.

## 2.6 Construction haulage traffic

Construction haulage routes were also considered during the Gap Analysis in the selection of intersections for assessment. These routes were categorised as follows, as per the EIS:

- Primary routes forming the main access for construction haulage vehicles
- Secondary routes provide links to the primary routes and State Roads
- Tertiary (alternative) routes are used as backup routes to connect to the primary and secondary routes

In the SPIR, construction works associated with the preferred project were revised since the assessment of the exhibited project in the EIS. However, in traffic terms, the peak hourly construction traffic volumes were found to be the same in the SPIR and EIS although there would be a reduction in the duration of the peak construction periods. So, whilst the total impact from construction may have been reduced as a result of the preferred project, the peak hourly volumes are expected to remain as per the EIS.

The EIS analysed the volumes of material required to be moved to and from each construction compound to determine the duration of construction and the total number of haulage vehicle movements required. A flat profile of haulage movements per day was assumed and a process of manual assignment of haulage vehicle movements to peak hours was undertaken.

Where daily haulage vehicle volumes to a compound were low (less than 10 per day), all haulage movements were assumed to take place during the peak hours. Where there were 10 or more haulage vehicles per day, 20% of vehicle movements were assigned to each of the peak hours.

This assessment follows the same methodology and uses the same construction traffic volumes as per the EIS. This assumption has been confirmed by Sydney Metro.

## 2.7 Bridge works

One of the most significant changes as a result of the preferred project was the revised bridge works along the project area. The assessment described in the EIS showed that there was a total of 26 bridges with different types of bridge closures that required significant bridge closures and diversions and resulted in significant impacts on the road network.

Bridge works for the preferred project include the installation of new traffic barriers, anti-throw screens as well as other protection measures as required. The preferred project does not require the closure of

the bridges for extended periods. It is also assumed that bridge works would be scheduled to minimise disruption to the traffic network and would not interface with the TTP scenario buses. Therefore, it is anticipated that bridges would be able to remain open to traffic during the bridge works. As such, impacts because of bridge works have not been assessed as part of this assessment.

## 2.8 Assumptions

The following assumptions were made to categorise the intersections:

- a. The proposed bus replacement routes and frequencies were as per the information received from Sydney Metro on 22 April 2022, i.e. five replacement services with the provided frequencies. These five routes are generally different to the routes considered in the previous July 2021 consistency assessments.
- b. Changes in the replacement bus routes require a number of new intersections to be assessed. For these new intersections, traffic surveys or recent traffic data has been used to capture turning movements and proportion of heavy and light vehicles to develop future base models.
- c. Seasonal/holiday reduction factors have been applied to account for lower traffic volumes during the school holiday period (in July) as detailed in Section 2.4.2.
- d. Construction haulage traffic is assumed to remain the same as the EIS. For new intersections that are being modelled as part of the July 2022 assessments, construction traffic volumes have been adapted from the EIS.
- e. Network closures/changes as part of Bridge works are assumed not to be in place during the possession period in July 2022.
- f. Covid-19 adjustment factor has not been applied as detailed in Section 2.4.1.
- g. Assessments have been undertaken for one typical weekday for the AM and PM peak hour.
- h. Intersections are excluded from the sensitivity assessments/modelling where the increase in bus volumes are up to 15 per hour. Such a small increase in bus volumes per hour are not anticipated to result in any significant changes to intersection performance.
- i. Majority of the intersections along two TTP routes proposed between Lidcombe and Bankstown (08T3 and 08AT3) have been excluded from the sensitivity assessments/modelling as the bus frequencies are very low and the network is assumed to have sufficient spare capacity to accommodate the small increase in TTP buses during the peak periods. Three intersections have multiple routes passing through, which results in a combined high frequency of TTP services during the peak hours. Therefore, these three intersections were included in the assessments.
- j. Unsignalised intersections along the bus routes have been excluded from the assessments based on the assumption that adjacent signalised intersections are likely to demonstrate the level of impact anticipated during the July 2022 TTP scenario.
- k. Some of the minor signalised intersections along the July 2022 TTP routes have been excluded from modelling/sensitivity assessments where the TTP bus routes go straight through without any turning movements. It is assumed that the impacts on such minor intersections will be minimal and can be assumed to be similar/less than the adjacent major signalised intersections that are being assessed as part of this assessment.
- I. SCATS data (detector volumes, signal phasing etc.) for all intersections, supported by traffic survey data for selected intersections have been used for this assessment. SCATS detector data was increased by 10% to account for any potential detector errors.
- m. 6am to 10am was adopted as the AM peak period and 3pm to 7pm was adopted as the PM peak period for this assessment.
- n. Traffic signal phasing for each site have been adopted from SCATS and the phases that run during the AM and PM peak hours on a typical weekday have been included in the models. As the assessments are being undertaken for a future scenario in July 2022, optimum cycle time settings have been used to replicate the traffic demand-based operations of the SCATS system. The lower and upper limits used for the optimum cycle time settings were adopted from SCATS. The optimum

o. Lane utilisation was included in the model, where applicable, based on SCATS detector volumes observed on each lane during March 2022.

## 2.9 Summary

In the study area, seventy-eight (78) signalised intersections were considered as part of this assessment. Based on the methodology detailed in Section 2.2 and Appendix B, intersections were allocated to five different categories. Thirty (30) intersections were disregarded from the assessment and fourteen (14) were categorised as Category 3 (no assessments), based on the filtering criteria detailed in Section 2.2. The remaining thirty-four (34) intersections were categorised for further assessments as follows:

- Category 1: Thirteen (13) intersections
- Category 2: Fourteen (14) intersections
- Category 4: Seven (7) intersections

The intersection assessments are detailed in Section 3.0. For a list of all the intersections considered as part of this assessment, refer to Appendix B.

# 3.0 Construction assessment

## 3.1 Assessment scenarios

This section presents the intersection modelling assessments undertaken for the July 2022 possession period. As discussed in Section 2.3, Category 1 and Category 2 intersections were assessed using the July 2022 forecast traffic volumes, whereas Category 4 intersections adopted either the EIS, SPIR or July 2021 assessments.

The following scenarios were included as part of the assessment as detailed in Section 2.5:

- Scenario 1: July 2022 (Future base) This is used as the baseline conditions of background traffic during July 2022.
- Scenario 2: July 2022 (Future base + SM Construction traffic) This is used to test impacts of Sydney Metro construction traffic.
- Scenario 3: July 2022 (Future base + SM Construction traffic + TTP) This is used as the test scenario for the replacement bus services (5 routes).

Modelled traffic volumes for Category 1 and Category 2 intersections are included in Appendix C with the detailed intersection movement summaries included in Appendix D.

## 3.2 Sydenham Station

Two (2) Category 1 intersections were assessed in the area surrounding Sydenham Station. These intersections are shown in Figure 13 with the category and description of each included in

#### Table 10.



#### Figure 13 Intersections assessed near Sydenham Station

#### Table 10 Intersections assessed near Sydenham Station

TCS	Intersection description	
Category 1		
TCS 41	Sydenham Road / Victoria Road	
TCS 81	Livingstone Road / Sydenham Road / Frazer Street	

### 3.2.1 TCS 41 – Sydenham Road / Victoria Road [Category 1]

Table 11 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.





Table 12 provides a summary of the intersection performance assessment for this intersection.

 Table 12
 Sydenham Road / Victoria Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	2519	0.963	41.4	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	2548	0.996	46.8	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2608	1.064	71.8	LOS F
Scenario 3 with proposed mitigation	2608	1.044	55.6	LOS D
PM Peak (4pm to 5pm)	1			
Scenario 1: July 2022 (Future base)				
Scenario 2: July 2022 (Future base + SM Construction traffic)	TTP bus volumes are less than or equal to 15 bus the PM peak. Impacts are expected to be negligib		ses per hour in ible as a result g the PM peak	
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				у ше гім реак.

The Sydenham Road / Victoria Road intersection (Scenario 1) is forecast to operate at LOS D during the AM peak hour. The addition of TTP buses (Scenario 3) is forecast to increase the average delay (by about 30 seconds) and result in a reduced intersection performance (LOS F).

To improve the intersection performance during the AM peak, signal optimisation (in line with approved mitigation TC6) has been considered as shown in Table 13. By reducing the cycle time and

subsequently the phase times, the intersection performance during the AM peak is forecast to improve from LOS F to LOS D as shown in Table 12. The existing phase times are based on average phase times observed at this intersection during a typical weekday in March 2022.

Modelling the intersection in Scenario 3 with additional green time for the TTP bus movements indicates that the intersection is forecast to operate at LOS D with a slight increase in delay (less than 15 seconds) compared to Scenario 1.

 Table 13
 Sydenham Road / Victoria Road – Optimised signal phase time

Phase Time			
Phase	А	В	С
Phase Diagram	Phase A REF Victoria Rd	Phase B Victoria Rd	Phese C Victoria Rd Pd Lunguago C Victoria Rd
Existing Phase Time (sec)	31	14	53
Proposed Phase Time (sec)	16	12	45
Difference (Proposed - Existing)	-15	-2	-8

### 3.2.2 TCS 81 – Livingstone Road / Sydenham Road / Frazer Street [Category 1]

Table 14 presents the layout of the intersection as per latest the NearMap imagery and the modelled layout in SIDRA.

#### Table 14 TCS 81 Livingstone Road / Sydenham Road / Frazer Street – intersection layout and SIDRA model layout



Table 15 provides a summary of the intersection performance assessment for this intersection.

#### Table 15 Livingstone Road / Sydenham Road / Frazer Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)		_		
Scenario 1: July 2022 (Future base)	2080	0.773	20.5	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2080	0.773	20.5	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2140	0.883	21.6	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)				
Scenario 2: July 2022 (Future base + SM Construction traffic)	TTP bus volumes are less than or equal to 15 buses per he the PM peak. Impacts are expected to be negligible as a n of additional TTP buses at this intersection during the PM r		ses per hour in ible as a result	
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				у ше гім реак.

The Marrickville Road / Livingstone Road intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.3 Marrickville Station

Two (2) Category 1 and two (2) Category 4 intersections were assessed in the area surrounding Marrickville Station. These intersections are shown in Figure 14 with the category and description of each included in Table 16.



Figure 14: Intersections assessed near Marrickville Station

TCS	Intersection description				
Category 1	Category 1				
TCS 67	Marrickville Road / Livingstone Road				
TCS 1153	Marrickville Road / Petersham Road				
Category 4					
TCS 569	Illawarra Road / Petersham Road				
TCS 1315	Illawarra Road / Warren Road				

#### Table 16 Marrickville Station assessed intersections

### 3.3.1 TCS 67 – Marrickville Road / Livingstone Road [Category 1]

Table 17 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 17 TCS 67 Marrickville Road / Livingstone Road – intersection layout and SIDRA model layout



Table 18 provides a summary of the intersection performance assessment for this intersection.

 Table 18
 Marrickville Road / Livingstone Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak	-			
Scenario 1: July 2022 (Future base)				
Scenario 2: July 2022 (Future base + SM Construction traffic)	TTP bus volumes are less than or equal to 15 buses per hout the AM peak. Impacts are expected to be negligible as a result additional TTP buses at this intersection during the AM per		ses per hour in le as a result of the AM peak	
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	additional TTP buses at this intersection during the Aivi peak.			
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2037	0.688	14.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2037	0.688	14.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2089	0.711	14.9	LOS B

The Marrickville Road / Livingstone Road intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

### 3.3.2 TCS 1153 – Marrickville Road / Petersham Road [Category 1]

Table 19 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 19 TCS 1153 Marrickville Road / Petersham Road – intersection layout and SIDRA model layout



Table 20 provides a summary of the intersection performance assessment for this intersection.

 Table 20
 Marrickville Road / Petersham Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS		
AM Peak		•				
Scenario 1: July 2022 (Future base)						
Scenario 2: July 2022 (Future base + SM Construction traffic)	TTP bus volumes are less than or equal to 15 buses per hour in the AM. Impacts are expected to be negligible as a result of					
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	additional TTP buses at this intersection during the AM peak.					
PM Peak (5pm to 6pm)						
Scenario 1: July 2022 (Future base)	1628	0.507	11	LOS A		
Scenario 2: July 2022 (Future base + SM Construction traffic)	1628	0.507	11	LOS A		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1681	0.542	10.6	LOS A		

The Marrickville Road / Petersham Road intersection is forecast to operate at LOS A during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A. LOS A would not cause noticeable delays for commuters in the peak hour.

### 3.3.3 TCS 569 – Illawarra Road / Petersham Road [Category 4]

Table 21 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 21 TCS 569 Illawarra Road / Petersham Road – intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 22 provides a summary of the intersection performance assessment for this intersection.

Table 22	Illawarra Road / Petersham Road - intersection assessment summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	1271	0.5	17	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1297	0.52	16	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1328	0.54	16	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	1381	0.53	12	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1407	0.55	12	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1437	0.58	12	LOS A

The Illawarra Road / Petersham Road intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

The Illawarra Road / Petersham Road intersection is forecast to operate at LOS A during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A. LOS A would not cause noticeable delays for commuters in the peak hour.

### 3.3.4 TCS 1315 – Illawarra Road / Warren Road [Category 4]

Table 23 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.



Table 23 Illawarra Road / Warren Road - intersection layout and SIDRA model layout

Intersection performance results were adopted from the previous assessment as detailed in Section 2.1.2. Table 24 provides a summary of the intersection performance assessment for this intersection.

Table 24	Illawarra Road	Warren Road	- intersection	assessment	summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	1545	0.81	25	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1545	0.81	25	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1575	0.89	28	LOS B

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
PM Peak				
Scenario 1: July 2022 (Future base)	1847	0.89	22	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1847	0.89	22	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1878	0.88	23	LOS B

The Illawarra Road / Warren Road intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.4 Dulwich Hill Station

Two (2) Category 1 and one (1) Category 2 intersections were assessed in the area surrounding Dulwich Hill Station. These intersections are shown in Figure 15 with the category and description of each included in Table 25.



Figure 15: Intersections assessed near Dulwich Hill Station

Table 25 D	Oulwich Station assessed intersections
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TCS	Intersection description
Category 1	
TCS 42	Wardell Road / Frazer Street
TCS 3340	New Canterbury Road / Frazer Street
Category 2	
TCS 86	New Canterbury Road / Marrickville Road / Dulwich Street

### 3.4.1 TCS 42 – Wardell Road / Frazer Street [Category 1]

Table 26 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

 Table 26
 TCS 42 Wardell Road / Frazer Street – intersection layout and SIDRA model layout



Table 27 provides a summary of the intersection performance assessment for this intersection.

 Table 27
 Wardell Road / Frazer Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1337	0.768	12.7	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1337	0.768	12.7	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1397	0.722	14.2	LOS A
PM Peak				
Scenario 1: July 2022 (Future base)				
Scenario 2: July 2022 (Future base + SM Construction traffic)	TTP bus volum the PM peak. Ir	nes are less than npacts are expec P buses at this in	or equal to 15 bu ted to be negligib	ses per hour in le as a result of the PM peak
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				шет м реак.

The Wardell Road / Frazer Street intersection is forecast to operate at LOS A during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A. LOS A would not cause noticeable delays for commuters in the peak hour.

### 3.4.2 TCS 3340 – New Canterbury Road / Frazer Street [Category 1]

Table 28 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 28 TCS 3340 New Canterbury Road / Frazer Street – intersection layout and SIDRA model layout



Table 29 provides a summary of the intersection performance assessment for this intersection.

Table 29	New Canterbury Road / Frazer Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)		-		
Scenario 1: July 2022 (Future base)	1889	0.709	16.3	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1889	0.709	16.3	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1949	0.753	17.4	LOS B
PM Peak	_			
Scenario 1: July 2022 (Future base)				
Scenario 2: July 2022 (Future base + SM Construction traffic)	TTP bus volum the PM peak. I	es are less than mpacts are expe	or equal to 15 bu ected to be neglig	ises per hour in ible as a result
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				g ule i îvî peak.

The New Canterbury Road / Frazer Street intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

### 3.4.3 TCS 86 – New Canterbury Road / Marrickville Road / Dulwich Street [Category 2]

Table 30 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.





Table 31 provides a summary of the intersection performance assessment for this intersection.

Table 31	New Canterbury Road / Marrickville Road	/ Dulwich Street - intersection assessment summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	The July 2022 for about 200 vehicle the SPIR assess construction, whic intersection to op	recast traffic volum es than the previou ment for the AM pe ch is 2023). PSIR a erate at LOS B dur	es (for Scenario 1) sly modelled traffic ak hour (for the pe assessment foreca ring both the future	are lower by volumes used in ak year of st the base scenario
Scenario 2: July 2022 (Future base + SM Construction traffic)	The SPIR assess 51 TTP buses du volumes for the J the TTP bus volu	ed the intersection ring the AM peak h uly 2022 possession mes have increase	performance with hour. The proposed on are 65 buses pe ed (by about 15 bus	the addition of I TTP bus er hour. Though ses per hour), the
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	impact of these a similar or lower co July 2022 traffic v such, it is likely th compared to the scenarios (Scena	dditional buses on ompared with the S volumes are lower that the intersection SPIR forecasts for urios 1 to 3).	the intersection is SPIR assessments than those forecast will operate at LOS the AM peak hour	expected to be , as the forecast t in the SPIR. As S B or better during all

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
PM Peak (5pm to 6pm)				-
Scenario 1: July 2022 (Future base)	2489	0.637	27.4	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2489	0.637	27.4	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2558	0.7	28.1	LOS B

The New Canterbury Road / Marrickville Road / Dulwich Street intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during the PM peak hours. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.5 Hurlstone Park Station

Two (2) Category 2 and one (1) Category 4 intersections were assessed in the area surrounding Hurlstone Park Station. These intersections are show in Figure 16 with the category and description of each included in Table 32.



Figure 16: Intersections assessed near Hurlstone Park Station

Table 32 Hurlstone Park Station assessed intersectio
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TCS	Intersection description
Category 2	
TCS 78	New Canterbury Road / Canterbury Road
TCS 1303	New Canterbury Road / Duntroon Street
Category 4	
TCS 777	Canterbury Road / Queen Street / Crinan Street

### 3.5.1 TCS 78 – New Canterbury Road / Canterbury Road [Category 2]

Table 33 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 33 TCS 78 New Canterbury Road / Canterbury Road – intersection layout and SIDRA model layout



Table 34 provides a summary of the intersection performance assessment for this intersection.

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS			
AM Peak (8am to 9am)							
Scenario 1: July 2022 (Future base)	3052	0.918	23.1	LOS B			
Scenario 2: July 2022 (Future base + SM Construction traffic)	3278	0.908	24.7	LOS B			
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3415	0.974	29.6	LOS C			
PM Peak (5pm to 6pm)							
Scenario 1: July 2022 (Future base)	3357	0.908	29	LOS C			
Scenario 2: July 2022 (Future base + SM Construction traffic)	3482	0.902	29.5	LOS C			
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3619	0.93	34.1	LOS C			

Table 34	New Canterbury	Road / Canterbur	Road - intersection	assessment summarv
			y noud mitorocoulon	

The New Canterbury Road / Canterbury Road intersection is forecast to operate at LOS B during the AM peak in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 10 seconds) and result in a reduced intersection performance (LOS C). This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS C) during Scenario 3. LOS C would generally be considered acceptable during peak periods.

The New Canterbury Road / Canterbury Road intersection is forecast to operate at LOS C during the PM peak in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C during the PM peak hour. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS C) during Scenario 3. LOS C would generally be considered acceptable during peak periods.

## 3.5.2 TCS 1303 – New Canterbury Road / Duntroon Street [Category 2]

Table 35 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.





Table 36 provides a summary of the intersection performance assessment for this intersection.

 Table 36
 New Canterbury Road / Duntroon Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS			
AM Peak (8am to 9am)							
Scenario 1: July 2022 (Future base)	1868	0.494	11.6	LOS A			
Scenario 2: July 2022 (Future base + SM Construction traffic)	1868	0.494	11.6	LOS A			
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1937	0.531	11.4	LOS A			
PM Peak (5pm to 6pm)							
Scenario 1: July 2022 (Future base)	2220	0.662	10.1	LOS A			
Scenario 2: July 2022 (Future base + SM Construction traffic)	2220	0.662	10.1	LOS A			
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2288	0.695	10.2	LOS A			

The New Canterbury Road / Duntroon Street intersection is forecast to operate at LOS A during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A during both peak hours. These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS B) during all scenarios. LOS A would not cause noticeable delays for commuters in the peak hour.

### 3.5.3 TCS 777 – Canterbury Road / Queen Street / Crinan Street [Category 4]

Table 37 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 37 TCS 777 – Canterbury Road / Queen Street / Crinan Street – intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 38 provides a summary of the intersection performance assessment for this intersection.
	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak			•	
Scenario 1: July 2022 (Future base)	3322	0.67	24	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3356	0.68	25	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3436	0.73	26	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	3595	0.78	20	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3629	0.8	22	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3710	0.83	27	LOS C

### Table 38 Canterbury Road / Queen Street / Crinan Street - intersection assessment summary

The Canterbury Road / Queen Street / Crinan Street intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

The Canterbury Road / Queen Street / Crinan Street intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to result in a slight increase to the average delay (less than 10 seconds) and is likely to result in a reduced intersection performance at LOS C. LOS C would generally be considered acceptable during the peak periods.

## 3.6 Canterbury Station

One (1) Category 1 and two (2) Category 2 intersections were assessed in the area surrounding Canterbury Station. These intersections are shown in Figure 17 with the category and description of each included in

Table 39.



Figure 17: Intersections assessed near Canterbury Station

Table 39	Canterbury Station assessed i	ntersections
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TCS	Intersection description
Category 1	
TCS 602	Canterbury Road / Fore Street
Category 2	
TCS 855	Canterbury Road / Jeffrey Street
TCS 1167	Canterbury Road / Wonga Street

## 3.6.1 TCS 602 – Canterbury Road / Fore Street [Category 1]

Table 40 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

 Table 40
 TCS 602 Canterbury Road / Fore Street – intersection layout and SIDRA model layout



Table 41 provides a summary of the intersection performance assessment for this intersection.

 Table 41
 Canterbury Road / Fore Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	3644	0.835	23.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3644	0.835	23.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3762	0.857	25.5	LOS B
PM Peak (4pm to 5pm)		-		
Scenario 1: July 2022 (Future base)	3792	0.847	22.6	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3792	0.847	22.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3908	0.874	25.8	LOS B

The Canterbury Road / Fore Street intersection is forecast to operate at LOS B during both the AM and PM peak hours. The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.6.2 TCS 855 – Canterbury Road / Jeffrey Street [Category 2]

Table 42 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 42 TCS 855 Canterbury Road / Jeffrey Street – intersection layout and SIDRA model layout



Table 43 provides a summary of the intersection performance assessment for this intersection.

Table 43	Canterbury Road / Jeffrey Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS		
AM Peak (8am to 9am)				•		
Scenario 1: July 2022 (Future base)	3353	0.859	18.6	LOS B		
Scenario 2: July 2022 (Future base + SM Construction traffic)	3394	0.87	19.2	LOS B		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3512	1.289	36.1	LOS C		
PM Peak						
Scenario 1: July 2022 (Future base)	The July 2022 forecast traffic volumes (for Scenario 1) are lower by about 75 vehicles than the previously modelled traffic volumes used in the EIS assessment for the PM peak hour (for the peak year of construction, which is 2023). EIS assessment forecast the intersection to operate at LOS C during both the future base					
Scenario 2: July 2022 (Future base + SM Construction traffic)	<ul> <li>scenario (Scenario 1) and TTP Scenario (Scenario 3).</li> <li>The EIS assessed the intersection performance with the addition of 81 TTP buses during the PM peak hour. The proposed TTP bus volumes for the July 2022 possession are 111 buses per hour. Though the TTP bus volumes have increased (by about 30)</li> </ul>					
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	buses per hour), the impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR assessments, as the forecast July 2022 traffic volumes are lower than those forecast in the EIS. As such, it is likely that the intersection will operate at LOS C or better compared to the EIS forecasts for the PM peak hour during all scenarios (Scenarios 1 to 3).					

The Canterbury Road / Jeffry Street intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to increase the average delay and is likely to result in a reduced intersection performance at LOS C. The assessments are aligned with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) for Scenario 1 and Scenario 2. Scenario 3 has a reduced intersection performance; however, the intersection is expected to perform at satisfactory levels at LOS C during the AM peak hour.

## 3.6.3 TCS 1167 – Canterbury Road / Wonga Street [Category 2]

Table 44 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 44 TCS 1167 Canterbury Road / Wonga Street – intersection layout and SIDRA model layout



Table 45 provides a summary of the intersection performance assessment for this intersection.

#### Table 45 Canterbury Road / Wonga Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	3481	0.804	14.6	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3481	0.804	14.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3599	0.964	18.3	LOS B
PM Peak (3pm to 4pm)				
Scenario 1: July 2022 (Future base)	3936	0.873	16.2	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3936	0.873	16.2	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4053	0.878	19.6	LOS B

The Canterbury Road / Wonga Street intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both peak hours. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.7 Campsie Station

Two (2) Category 1, two (2) Category 2 and two (2) Category 4 intersections were assessed in the area surrounding Campsie Station. These intersections are shown in Figure 18 with the category and description of each included in Table 46.



Figure 18: Intersections assessed near Campsie Station

Table 46	Campsie Station assessed intersections	
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TCS	Intersection description			
Category 1				
TCS 507	Canterbury Road / Charlotte Street / Thorncraft Parade			
TCS 1363	Fifth Avenue / Ninth Avenue			
Category 2				
TCS 79	Canterbury Road / Beamish Street / Bexley Road			
TCS 2816	Beamish Street / Amy Street			
Category 4				
TCS 738	Beamish Street / Evaline Street			
TCS 996	Beamish Street / Ninth Avenue			

### 3.7.1 TCS 507 – Canterbury Road / Charlotte Street / Thorncraft Parade [Category 1]

Table 53 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 47 TCS 507 Canterbury Road / Charlotte Street / Thorncraft Parade – intersection layout and SIDRA model layout



Table 54 provides a summary of the intersection performance assessment for this intersection.

Table 48	Canterbury R	Road / Charlotte	Street / Thorncra	aft Parade - inters	ection assessment	summary
Table le	e antono ary r	toud / enumette				oannary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)		-	-	
Scenario 1: July 2022 (Future base)	3247	1.02	48.3	LOS D
Scenario 2: July 2022 (Future base + SM Construction traffic)	3247	1.02	48.3	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3247	1.01	49.0	LOS D
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	3829	0.997	38.9	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	3829	0.997	38.9	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3869	0.947	40.4	LOS C

The Canterbury Road / Charlotte Street / Thorncraft Parade intersection is forecast to operate at LOS D during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS D. LOS D would generally be considered reasonable during the peak periods.

The Canterbury Road / Charlotte Street / Thorncraft Parade intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C. LOS C would generally be considered acceptable during the peak periods.

## 3.7.2 TCS 1363 – Fifth Avenue / Ninth Avenue [Category 1]

Table 49 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 49 TCS 1363 Fifth Avenue / Ninth Avenue – intersection layout and SIDRA model layout



Table 50 provides a summary of the intersection performance assessment for this intersection.

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)			-	
Scenario 1: July 2022 (Future base)	1121	0.558	16.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1121	0.558	16.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1171	0.602	16.3	LOS B
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	1408	0.629	16.8	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1408	0.629	16.8	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1457	0.642	16.4	LOS B

Table 50 Fifth Avenue / Ninth Avenue - intersection assessment sum	mary
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The Fifth Avenue / Ninth Avenue intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

### 3.7.3 TCS 79 – Canterbury Road / Beamish Street / Bexley Road [Category 2]

Table 51 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 51 TCS 79 Canterbury Road / Beamish Street / Bexley Road – intersection layout and SIDRA model layout



Table 52 provides a summary of the intersection performance assessment for this intersection.

Table 52	Canterbury	Road	/ Reamish	Street /	Beylev	Road.	. intersection	assessment	summarv
	ounterbui	, 11044	/ Deamon	000007	DUNICY	Nouu	111101 000011011	45565551116111	Sammary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	4111	0.773	20.6	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	4111	0.773	20.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4188	0.847	20.2	LOS B
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	4032	0.837	21.4	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	4032	0.837	21.4	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4084	0.849	19.2	LOS B

The Canterbury Road / Beamish Street / Bexley Road intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both peak hours. These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS C) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.7.4 TCS 2816 – Beamish Street / Amy Street [Category 2]

Table 53 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.





Table 54 provides a summary of the intersection performance assessment for this intersection.

Table 54	Beamish Street / Amy Street – intersection assessment summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1159	0.481	6.8	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1159	0.481	6.8	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1213	0.501	6.9	LOS A
PM Peak (4pm to 5pm)				
Scenario 1: July 2022 (Future base)	1381	0.631	14.4	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1381	0.631	14.4	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1453	0.715	13.9	LOS A

The Beamish Street / Amy Street intersection is forecast to operate at LOS A during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A during both peak hours. These outcomes are better than the outcomes from the previous assessment which forecast a similar intersection performance (LOS A during the AM peak hour and LOS B during the PM peak hour) during all scenarios. LOS A would not cause noticeable delays for commuters in the peak hour.

## 3.7.5 TCS 738 – Beamish Street / Evaline Street [Category 4]

Table 55 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 55 TCS 738 – Beamish Street / Evaline Street – intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 56 provides a summary of the intersection performance assessment for this intersection.

Table 56	Beamish Street	Evaline Street	- intersection	assessment	summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS		
AM Peak						
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.					
Scenario 2: July 2022 (Future base + SM Construction traffic)	1639	0.76	29	LOS C		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1681	0.93	31	LOS C		
PM Peak						
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.					
Scenario 2: July 2022 (Future base + SM Construction traffic)	1732	0.83	31	LOS C		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1790	1.11	47	LOS D		

The Beamish Street / Evaline Street intersection is forecast to operate at LOS C during the AM peak hour in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C during the AM peak hour. LOS C would generally be considered acceptable during peak periods.

The Beamish Street / Evaline Street intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is expected to have an increase in average delay (by about 15 seconds) and is forecast to result in a reduced intersection performance at LOS D. LOS D would generally be considered reasonable during peak periods.

### 3.7.6 TCS 996 – Beamish Street / Ninth Avenue [Category 4]

Table 57 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.



Table 57 TCS 996 - Beamish Street / Ninth Avenue - intersection layout and SIDRA model layout

Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 58 provides a summary of the intersection performance assessment for this intersection.

Table 58	Beamish Street / Ninth	Avenue - intersection	assessment summary
	Douillion ou cou / minut	Avenue intersection	assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS		
AM Peak						
Scenario 1: July 2022 (Future base)	1944	0.69	15	LOS B		
Scenario 2: July 2022 (Future base + SM Construction traffic)	1960	0.69	16	LOS B		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1990	0.71	16	LOS B		
PM Peak						
Scenario 1: July 2022 (Future base)	2065	0.71	17	LOS B		
Scenario 2: July 2022 (Future base + SM Construction traffic)	2081	0.73	17	LOS B		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2111	0.79	18	LOS B		

The Beamish Street / Ninth Avenue intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.8 Belmore Station

Two (2) Category 2 and two (2) Category 4 intersections were assessed in the area surrounding Belmore Station. These intersections are shown in Figure 19 with the category and description of each included in Table 59.



Figure 19: Intersections assessed near Belmore Station

Table 59 Beimore Station assessed intersections	Table 59	Belmore	Station	assessed	intersections
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TCS	Site Description
Category 2	
TCS 162	Canterbury Road / Burwood Road
TCS 1329	Burwood Road / Leylands Parade
Category 4	
TCS 80	Canterbury Road / Kingsgrove Road / Sharp Street
TCS 157	Burwood Road / Lakemba Street

### 3.8.1 TCS 162 – Canterbury Road / Burwood Road [Category 2]

Table 60 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 60 TCS 162 Canterbury Road / Burwood Road – intersection layout and SIDRA model layout



Table 61 provides a summary of the intersection performance assessment for this intersection.

 Table 61
 Canterbury Road / Burwood Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS				
AM Peak (7am to 8am)								
Scenario 1: July 2022 (Future base)	The previous assessment included the addition of 21 TTP buses during the AM peak hour. The proposed TTP bus volumes for the July 2022 possession are 36 buses per hour. As the increase in TTP bus volumes are minor (15 buses per hour), the impact of these additional buses on the intersection is expected to be similar compared with the July 2021							
Scenario 2: July 2022 (Future base + SM Construction traffic)								
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	LOS A similar to the previous assessment forecasts for the AM peak hour during all scenarios (Scenarios 1 to 3).							
PM Peak (5pm to 6pm)	1	1	1					
Scenario 1: July 2022 (Future base)	3160	1.037	21.4	LOS B				
Scenario 2: July 2022 (Future base + SM Construction traffic)	3160	1.037	21.4	LOS B				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3200	0.889	22.1	LOS B				

The Canterbury Road / Burwood Road intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.8.2 TCS 1329 – Burwood Road / Leylands Parade [Category 2]

Table 62 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 62 TCS 1329 Burwood Road / Leylands Parade – intersection layout and SIDRA model layout



Table 63 provides a summary of the intersection performance assessment for this intersection.

Table 63	Burwood Road / Leylands Parade - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS			
AM Peak	AM Peak						
Scenario 1: July 2022 (Future base)	The July 2022 fo about 350 vehic	precast traffic volu les than the mode	mes (for Scenario	o 1) are lower by es used in the			
Scenario 2: July 2022 (Future base + SM Construction traffic)	<ul> <li>SPIR for the AM peak hour (for the peak year of construction, which is 2023). The previous assessment forecast the intersection to operate at LOS E during both the future base scenario (Scenario 1) and TTP Scenario (Scenario 3).</li> <li>The proposed TTP bus volumes for the July 2022 possession are 36 buses per hour. The impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR, as the forecast July 2022 traffic volumes are lower than those forecast in the SPIR. As such, it is likely that the intersection will operate at LOS E or better compared to the previous assessment for the AM peak hour during all scenarios (Scenarios 1 to 2).</li> </ul>						
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)							
PM Peak (3pm to 4pm)							
Scenario 1: July 2022 (Future base)	1906	1.029	45.6	LOS D			
Scenario 2: July 2022 (Future base + SM Construction traffic)	1942	1	47	LOS D			
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1982	1.014	52.8	LOS D			

The Burwood Road / Leylands Parade intersection is forecast to operate at LOS D during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS D. These outcomes are better than the outcomes from the SPIR which forecast an intersection performance (LOS E) during all scenarios. LOS D would generally be considered reasonable during the peak hour.

## 3.8.3 TCS 80 – Canterbury Road / Kingsgrove Road / Sharp Street [Category 4]

Table 64 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 64 TCS 80 – Canterbury Road / Kingsgrove Road / Sharp Street – intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 65 provides a summary of the intersection performance assessment for this intersection.

Table 65 Canterbury Road / Kingsgrove Road / Sharp Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	3134	0.924	38.8	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3157	1.002	67.4	LOS E
Scenario 3 with proposed mitigation	3157	0.934	52.5	LOS D

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS	
PM Peak					
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.				
Scenario 2: July 2022 (Future base + SM Construction traffic)	3304	0.953	36.1	LOS D	
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3318	0.937	36.2	LOS D	

The Canterbury Road / Kingsgrove Road / Sharp Street intersection is forecast to operate at LOS D during the AM peak hour in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (30 seconds) and is likely to result degrade intersection performance to LOS E during the AM peak hour. LOS E would generally be considered reasonable during peak periods in a constraint environment.

To improve the intersection performance during AM peak, signal optimisation has been considered as shown in Table 66. By providing more phase times to Phase B (+16 seconds) and reducing phase times for Phase A (-24seconds) and Phase D (-3 seconds), the intersection performance is forecast to improve from LOS E to LOS D. The average delay per vehicle experienced at the intersection is also forecast tto reduce from 78 seconds (before optimisation) to 52.5 seconds (after optimisation). LOS D would be generally considered reasonable during peak periods.

Phase Time							
Phase	Α	В	C	D			
Phase Diagram	Phase A REF	Phase B	Phase C	Phase D			
Phase Time Existing (sec)	63	23	24	23			
Phase Time Future (sec)	39	39	24	20			
Difference (Future - Existing)	-24	16	0	-3			

Table 66 Canterbury Road / Kingsgrove Road / Sharp Street – Optimised signal phase time

In the PM peak hour, the intersection is forecast to operate at LOS D. The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS D.

### 3.8.4 TCS 157 – Burwood Road / Lakemba Street [Category 4]

Table 67 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 67 TCS 157 - Burwood Road / Lakemba Street - intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 68 provides a summary of the intersection performance assessment for this intersection.

Table 68	Burwood Road	/ Lakemba Street	- intersection	assessment summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak	•			
Scenario 1: July 2022 (Future base)	The future base s previous assessn	cenario (Scenario nent.	1) was not assess	ed in the
Scenario 2: July 2022 (Future base + SM Construction traffic)	1854	0.64	18	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1884	0.73	19	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	2080	0.53	17	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2115	0.57	18	LOS B

The Burwood Road / Lakemba Street intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

## 3.9 Lakemba, Wiley Park and Punchbowl Stations

Three (3) Category 2 intersections were assessed in the area surrounding Lakemba, Wiley Park and Punchbowl Stations. These intersections are shown in Figure 20 with the category and description of each included in Table 69.



Figure 20: Intersections assessed near Lakemba, Wiley Park and Punchbowl Stations

TCS	Intersection description			
Category 2				
TCS 382	King Georges Road / The Boulevarde			
TCS 1299	Haldon Street / The Boulevarde, Lakemba			
TCS 1744	Punchbowl Road / The Boulevarde / South Terrace			

### Table 69 Lakemba, Wiley Park and Punchbowl Stations assessed intersections

## 3.9.1 TCS 382 – King Georges Road / The Boulevarde [Category 2]

Table 70 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 70 TCS 382 King Georges Road / The Boulevarde – intersection layout and SIDRA model layout



Table 71 provides a summary of the intersection performance assessment for this intersection.

Table 71 King Georges Road / The Boulevarde - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (6am to 7am)		•		
Scenario 1: July 2022 (Future base)	5727	0.821	25.3	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	5755	0.84	26.4	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	5842	0.976	49.4	LOS D
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	6425	0.877	33.5	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	6453	0.921	36.7	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	6541	0.982	50.3	LOS D

The King Georges Road / The Boulevarde intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 25 seconds) and result in a reduced intersection performance (LOS D). These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS E) during Scenario 3. LOS D would be generally considered reasonable during peak periods.

The King Georges Road / The Boulevarde intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 20 seconds) and result in a reduced intersection performance (LOS D). This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS D) during Scenario 3. LOS D would be generally considered reasonable during peak periods.

### 3.9.2 TCS 1299 – Haldon Street / The Boulevarde [Category 2]

Table 72 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.



Table 72 TCS 1299 Haldon Street / The Boulevarde – intersection layout and SIDRA model layout

Table 73 provides a summary of the intersection performance assessment for this intersection.

Table 73	Haldon Street / The Boulevarde - intersection assessment summar

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1614	0.931	39.7	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	1643	0.974	46.6	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1731	0.98	47	LOS D

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
PM Peak (3pm to 4pm)				
Scenario 1: July 2022 (Future base)	1772	0.925	32.2	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	1801	0.904	34	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1889	1.003	52.1	LOS D

The Haldon Street / The Boulevarde intersection is forecast to operate at LOS C during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 15 seconds) and result in a reduced intersection performance (LOS D). These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS F) during Scenario 3. LOS D would be generally considered acceptable during peak periods.

The Haldon Street / The Boulevarde intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 20 seconds) and result in a reduced intersection performance (LOS D). These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS F) during Scenario 3. LOS D would be generally considered acceptable during peak periods.

### 3.9.3 TCS 1744 – Punchbowl Road / The Boulevarde / South Terrace [Category 2]

Table 74 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA. This site is modelled as a network.



Table 74 TCS 1744 Punchbowl Road / The Boulevarde / South Terrace – intersection layout and SIDRA model layout

Table 75 is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to result in a minor increase in the average delay and is likely to result in a reduced intersection performance at LOS C. These are aligned with the outcomes from the previous assessment which forecast an intersection performance of LOS C for Scenario 3. LOS C would generally be considered acceptable during peak periods.

Table 76 provides a summary of the intersection performance assessment for this intersection.

Table 75 Punchbowl Road / The Boulevarde - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS	
AM Peak	eak				
Scenario 1: July 2022 (Future base)	The July 2022 forecast traffic volumes (for Scenario 1) are lower than the previously modelled traffic volumes used in the EIS assessment for the AM peak hour (for the peak year of construction, which is 2023). EIS assessment forecast the intersection to operate at LOS C during the future base scenario (Scenario 1) and at LOS D during the				
Scenario 2: July 2022 (Future base + SM Construction traffic)	TTP Scenario (So The EIS assesse TTP buses during for the July 2022 bus volumes hav	cenario 3). d the intersection p g the AM peak hou possession are 83 e increased (by ab	performance with th r. The proposed TT buses per hour. The out 25 buses per h	ne addition of 60 TP bus volumes hough the TTP our), the impact	
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	of these additional buses on the intersection is expected to be similar with the EIS assessments, as the forecast July 2022 traffic volumes are lower than those forecast in the EIS. As such, it is likely that the intersection will operate at LOS D or better compared to the EIS forecasts for the AM peak hour during all scenarios (Scenarios 1 to 3).				
PM Peak (5pm to 6pm)		-	-		
Scenario 1: July 2022 (Future base)	2707	0.832	25.8	LOS B	
Scenario 2: July 2022 (Future base + SM Construction traffic)	2720	0.852	26.1	LOS B	
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2808	0.852	28.7	LOS C	

The Punchbowl Road / The Boulevarde intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to result in a minor increase in the average delay and is likely to result in a reduced intersection performance at LOS C. These are aligned with the outcomes from the previous assessment which forecast an intersection performance of LOS C for Scenario 3. LOS C would generally be considered acceptable during peak periods.

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The July 2022 for the previously mo for the AM peak h	ecast traffic volum odelled traffic volun oour (for the peak y	es (for Scenario 1) nes used in the EIS vear of construction	are lower than assessment a, which is
Scenario 2: July 2022 (Future base + SM Construction traffic)	2023). EIS assessment forecast the intersection to operate at LC during both the future base scenario (Scenario 1) and TTP Scen (Scenario 3).			
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	The EIS assessed the intersection performance with the addition of 60 TTP buses during the PM peak hour. The proposed TTP bus volumes for the July 2022 possession are 83 buses per hour. Though the TTP bus volumes have increased (by about 25 buses per hour), the impact of these additional buses on the intersection is expected to be similar with the EIS assessments, as the forecast July 2022 traffic volumes are lower than those forecast in the EIS. As such, it is likely that the intersection will operate at LOS F similar to the EIS forecasts for the PM peak hour during all scenarios (Scenarios 1 to 3).			
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2692	0.974	29.8	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	2698	0.977	30.4	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2786	1.012	37.8	LOS C

### Table 76 Punchbowl Road / South Terrace - intersection assessment summary

The Punchbowl Road / South Terrace intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to increase the average delay (by about 10 seconds) and is likely to result in a similar intersection performance at LOS C during the PM peak hour. This is consistent with the outcomes from the previous assessment which forecast a similar intersection performance (LOS C) during Scenario 1 and Scenario 2. LOS C would be generally considered acceptable during the peak periods.

## 3.10 Bankstown Station

Two (2) Category 1 and two (2) Category 2 intersections were assessed in the area surrounding Bankstown Station. These intersections are shown in Figure 21 with the category and description of each included in Table 77.



Figure 21: Intersections assessed near Bankstown Station

Table 77 Bankstown Station	assessed intersections
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TCS	Intersection description
Category 1	
TCS 1203	Chapel Road / Rickard Road
TCS 4408	Chapel Road / French Avenue
Category 2	
TCS 1817	Restwell Street / South Terrace
TCS 4074	Restwell Street / Raymond Street / Greenfield Parade

## 3.10.1 TCS 1203 – Chapel Road / Rickard Road [Category 1]

Table 78 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.





Table 79 provides a summary of the intersection performance assessment for this intersection.

 Table 79
 Chapel Road / Rickard Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (9am to 10am)	_			
Scenario 1: July 2022 (Future base)	1817	0.823	19.5	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1827	0.823	19.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1859	0.647	20.3	LOS B
PM Peak (5pm to 6pm)	_			
Scenario 1: July 2022 (Future base)	2883	0.915	29.6	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	2894	0.915	30.5	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2934	0.891	31.9	LOS C

The Chapel Road / Rickard Road intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS B during the AM peak hour. LOS B would not cause noticeable delays for commuters in the peak hour.

The Chapel Road / Rickard Road intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS C during the AM peak hour. LOS C would be generally considered acceptable during the peak periods.

## 3.10.2 TCS 4408 – Chapel Road / French Avenue [Category 1]

Table 80 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

 Table 80
 TCS 4408 Chapel Road / French Avenue – intersection layout and SIDRA model layout



Table 81 provides a summary of the intersection performance assessment for this intersection.

Table 81	Chapel Road / French Avenue - intersection assessment summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (9am to 10am)		_		
Scenario 1: July 2022 (Future base)	988	0.439	9.7	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	988	0.439	9.7	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1020	0.374	9.9	LOS A
PM Peak (5pm to 6pm)		_		
Scenario 1: July 2022 (Future base)	1704	0.688	11.7	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1704	0.688	11.7	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1744	0.622	11.5	LOS A

The Chapel Road / French Avenue intersection is forecast to operate at LOS A during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS A during both AM and PM peak hours. LOS A would not cause noticeable delays for commuters in the peak hour.

## 3.10.3 TCS 1817 – Restwell Street / South Terrace [Category 2]

Table 82 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.





Table 83 provides a summary of the intersection performance assessment for this intersection.

 Table 83
 Restwell Street / South Terrace - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (9am to 10am)				
Scenario 1: July 2022 (Future base)	803	0.475	33.4	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	803	0.475	33.4	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	864	0.577	38.2	LOS C
PM Peak (4pm to 5pm)				
Scenario 1: July 2022 (Future base)	1097	0.573	28.3	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1097	0.573	28.3	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1158	0.662	32.5	LOS C

The Restwell Street / South Terrace intersection is forecast to operate at LOS C during in the AM and LOS B in the PM peak hours for future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS C during both AM and PM peak hours. LOS C would be generally considered acceptable during the peak periods.

### 3.10.4 TCS 4074 – Restwell Street / Raymond Street / Greenfield Parade [Category 2]

Table 84 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 84 TCS 4074 Restwell Street / Raymond Street / Greenfield Parade – intersection layout and SIDRA model layout



Table 85 provides a summary of the intersection performance assessment for this intersection.

Table OF	Destwall Street / Devimond Street / Creenfield Devede	interception approximant cummon.
	Restwell Street / Raymond Street / Greenheid Parade	- Intersection assessment summary
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	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1384	0.9	27.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1393	0.9	27.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1406	0.9	27.7	LOS B
PM Peak (5pm to 6pm)	-			
Scenario 1: July 2022 (Future base)	1888	0.965	44.1	LOS D
Scenario 2: July 2022 (Future base + SM Construction traffic)	1897	0.965	44.1	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1962	0.965	44	LOS D

The Restwell Street / Raymond Street intersection is forecast to operate at LOS B during the AM and LOS D during the PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance during both AM and PM peak hours. LOS D in the PM peak indicate the intersection is likely to be operating at capacity.

## 3.11 Yagoona and Berala Stations

Two (2) Category 1 intersections were assessed in the area surrounding Yagoona and Berala Stations. These intersections are shown in Figure 22 with the category and description of each included in Table 86



Figure 22: Intersections assessed near Yagoona and Berala Stations

TCS	Site Description
Category 1	
TCS 61	Hume Highway / Chapel Road / Rookwood Road
TCS 2789	Joseph Street / Georges Avenue

### Table 86 Yagoona and Berala Stations assessed intersections

## 3.11.1 TCS 61 – Hume Highway / Chapel Road / Rookwood Road [Category 1]

Table 87 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

### Table 87 TCS 61 Hume Highway / Chapel Road / Rookwood Road – intersection layout and SIDRA model layout



Table 88 provides a summary of the intersection performance assessment for this intersection.

### Table 88 Hume Highway / Chapel Road / Rookwood Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (7am to 8am)		•		
Scenario 1: July 2022 (Future base)	4151	0.802	30.6	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	4151	0.802	30.6	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4182	0.816	31.9	LOS C
PM Peak (5pm to 6pm)	1	1		
Scenario 1: July 2022 (Future base)	5516	1.068	80.4	LOS F
Scenario 2: July 2022 (Future base + SM Construction traffic)	5516	1.104	82.2	LOS F
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	5556	1.153	88	LOS F
Scenario 3 with proposed mitigation	5556	1.009	58.5	LOS E

The Hume Highway / Chapel Road / Rookwood Road intersection is forecast to operate at LOS C during the AM peak in the future base scenario (Scenario 1). The addition of bus replacement services (Scenario 3) is expected to have negligible effects to the delay and result in a similar intersection performance at LOS C during both periods. LOS C would generally be considered acceptable during the peak periods.

The Hume Highway / Chapel Road / Rookwood Road intersection is forecast to operate at LOS F during the PM peak in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (by about 20 seconds) and is likely to result in a similar intersection performance at LOS F. It is evident from Scenario 1 and Scenario 2 that intersection operates at oversaturated conditions due to the background traffic volumes and existing capacity constraints, even during a July school holiday period, and therefore the impact of TTP buses is considered minor.

To improve the intersection performance during the PM peak, signal optimisation (in line with approved mitigation TC6) has been considered as shown in Table 89. By providing more phase times to Phase A (8 seconds), Phase E (5 seconds) and Phase F (3 seconds) as well as reducing phase time for Phase D (11 seconds), the intersection performance during the PM peak is forecast to improves from LOS F to LOS E as shown in Table 88. The existing phase times are based on average phase times observed at this intersection during a typical weekday in March 2022.

Phase Time								
Phase	A	D	E	F				
Phase Diagrams	Phase A REF	Phase D						
Existing Phase Times (sec)	62	28	33	24				
Proposed Phase Times (sec)	70	17	38	27				
Difference (Proposed – Existing, sec)	8	-11	5	3				

Table 89 TCS 61 Hume Highway / Chapel Road / Rookwood Road - Optimised signal phase time

## 3.11.2 TCS 2789 – Joseph Street / Georges Avenue [Category 1]

Table 90 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

#### Table 90 TCS 2789 Joseph Street / Georges Avenue – intersection layout and SIDRA model layout



Table 91 provides a summary of the intersection performance assessment for this intersection.

 Table 91
 Joseph Street / Georges Avenue - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS		
AM Peak (8am to 9am)						
Scenario 1: July 2022 (Future base)	4960	0.87	29.3	LOS C		
Scenario 2: July 2022 (Future base + SM Construction traffic)	4960	0.87	29.3	LOS C		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4992	0.874	29.4	LOS C		
PM Peak (5pm to 6pm)						
Scenario 1: July 2022 (Future base)	5058	0.862	31.2	LOS C		
Scenario 2: July 2022 (Future base + SM Construction traffic)	5058	0.862	31.2	LOS C		
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	5098	0.875	32.7	LOS C		

The Joseph Street / Georges Avenue intersection (Scenario 1) is modelled to operate at LOS C during both the AM and PM peak period. The addition of bus replacement services (Scenario 3) is expected to have negligible effects to the delay and result in a similar intersection performance at LOS C during both periods. LOS C would generally be considered acceptable during the peak periods.

The Joseph Street / Georges Avenue intersection is forecast to operate at LOS C during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C during both AM and PM peak hours. LOS C would generally be considered acceptable during the peak periods.

# 4.0 Mitigation measures

This section discusses:

- the revised environmental mitigation measures from the Sydney Metro City and Southwest Sydenham to Bankstown Upgrade –Submissions Report (Sydney Metro, 2018)
- additional recommendations for this assessment.

## 4.1 Revised environmental mitigation measures

Table 92 provides the full list of approved revised environmental mitigation measures (that are relevant to transport) from the *Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade – Submissions Report* (Sydney Metro, 2018). These measures relate to design / pre-construction, construction and operation stages of the project. The measures relevant for this consistency assessment are highlighted in grey, with a column at the end indicating if a specific measure is relevant for this Consistency Assessment.

Revised mitigation measure TC6 is most relevant to this assessment. This requires further consideration of the need for intersection modifications to be undertaken, to improve intersection performance at locations most affected by the addition of construction heavy vehicles and rail replacement buses. The specific recommendations arising from this assessment in accordance with TC6 to improve intersection performance are provided in Section 4.2.

The transport related revised environmental mitigation measures listed in Table 92, together with the additional recommendations arising from this assessment (see Section 4.2), are considered appropriate to manage the impacts associated with the proposed operation of bus replacement services during the July 2022 school holiday period. No changes to the transport related revised environmental mitigation measures are considered necessary.

The measures are broadly grouped according to the main stage of implementation. However, it is noted that the implementation of some measures may occur across several stages.

The location/s applicable to each mitigation measure are identified by using the unique identifiers as follows:

- All Project as a whole
- BW Bridge works
- AS All Stations
- MA Marrickville Station
- DU Dulwich Hill Station
- HP Hurlstone Park
- CB Canterbury Station
- CP Campsie Station
- BE Belmore Station
- LA Lakemba Station
- WP Wiley Park Station
- PB Punchbowl Station
- BA Bankstown Station
- SS Substations
#### Table 92 Revised environmental mitigation measures

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
Desigr	n / pre-construction			
TC 1	Temporary transport arrangements	<ul> <li>Guided by the Temporary Transport Strategy, detailed temporary transport plan/s would be developed prior to construction to manage the movement of people along the T3 Bankstown Line during possession periods. The plans would be developed in consultation with key Stakeholders (including Transport for NSW, Sydney Coordination Office (now Customer Journey Planning), Roads and Maritime Services (now Sydney Roads), Sydney Trains, local councils, emergency services, and bus operators), and would address the requirements specified by the Temporary Transport Strategy. The development of each plan would consider, as a minimum:</li> <li>A review of the road network constraints along any proposed rail replacement bus route</li> <li>Further traffic analysis of key intersections used by rail replacement buses</li> <li>Potential impacts to local road networks affected by rail passengers diverting to cars to reach their destinations</li> <li>The design of temporary facilities at bus Stop locations in consultation with the relevant road authority</li> <li>Expected changes to parking demand at other Stations, displacement of existing parking, and any upgrades that may be</li> </ul>	AS	Yes
TC 2		Sydney Metro would consult with Transport for NSW, Roads and Maritime Services, the State Transit Authority, the Inner West and Canterbury-Bankstown councils, and bus operators, to identify opportunities to minimise impacts to bus layovers and existing bus Stops during operation of rail replacement buses.	AS	Yes
TC 3		The impacts on the surrounding road network of lane closures resulting from bridge works across the rail corridor would be assessed in detail, to identify the suite of management measures to be implemented for each closure required. This would be undertaken in consultation	BW	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
		with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, the Inner West and Canterbury-Bankstown councils, emergency services, and relevant bus operators. Planning for partial bridge closures would consider bus rerouting and timetabling, with the intention of minimising impacts to bus customers and bus operators.		
TC 4	Parking impacts during	Opportunities to reduce the loss of existing on- and off-street car parking (including the amount of spaces reduced and the time associated with this reduction) would be reviewed during detailed design and construction planning.	AS	Yes
TC 5	construction	Where parking spaces are lost or access is impeded, particularly for extended periods, alternative parking would be provided wherever feasible and reasonable. This would include consideration of other privately owned (or vacant) land within close proximity to affected Stations.	AS	
TC 6	Impacts of intersection performance	<ul> <li>Further consideration of the need for intersection modifications would be undertaken, to improve intersection performance at locations most affected by the addition of construction heavy vehicles and rail replacement buses. This would be undertaken in consultation with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, and the relevant road authority. The improvements considered would include:</li> <li>Modification to the existing traffic signal phasing</li> <li>Lane priority changes</li> <li>Changing lane designations (line markings and signage)</li> <li>Kerbside changes (such as removing on Street parking or implementing no Standing zones at peak times to increase lane capacity)</li> <li>Physical geometric changes (such as minor kerb cut-backs to enable large vehicles to safely move through intersections)</li> </ul>	AII	Yes

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
		Restricting turning movements     where traffic demand is low.		
TC 7	Changes to cyclist facilities during construction	Where existing cycle facilities (e.g. bike parking) would be temporarily unavailable at a Station, suitable replacement facilities would be provided while the facility is unavailable.	AS	
TO 1	Parking impacts during operation	Further consideration of car parking management at Stations would be undertaken in consultation with Roads and Maritime Services, the Sydney Coordination Office, and the Inner West and Canterbury-Bankstown councils, to minimise adverse impacts of operation on parking and other kerbside use in local Streets.	AS	
TO 2	Consideration of cross corridor connections	Sydney Metro, in consultation with Canterbury-Bankstown Council, would investigate the feasibility of the provision of a cross-corridor connection between Bankstown and Punchbowl Stations. Should a cross-corridor connection be deemed feasible, Sydney Metro would work with Canterbury-Bankstown Council and the Department of Planning and Environment to safeguard its future delivery.	All	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
Const	ruction			
TC 8	Management of traffic transport and access	<ul> <li>A construction traffic management plan would be prepared and implemented prior to construction. The plan would be prepared in accordance with the Construction Environmental Management Framework, and would detail, as a minimum:</li> <li>How traffic would be managed when construction works are being carried out</li> <li>The activities proposed and their impact on the road network and on road users</li> <li>How these impacts would be addressed.</li> <li>The plan would be prepared in consultation with the Traffic and Transport Liaison Group and would be approved by the relevant authority before construction commences.</li> </ul>	All	Yes
TC 9		Modification of existing bus Stops, or implementation of new Stops and alterations to service patterns, would be carried out by Sydney Metro in consultation with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and bus operators.	AS	Yes
TC 10	Changes to public transport services and alternative transport arrangements	<ul> <li>canterbury-Bankstown councils, and bus operators.</li> <li>Sydney Metro would undertake an extensive community awareness and information campaign before changes to public transport services are implemented. This would include a range of communication activities such as: <ul> <li>Information at Stations</li> <li>Wayfinding signage</li> <li>Clearly marked bus Stop locations</li> <li>Letter box drops</li> <li>Web based information and transport 'app' where changes to travel are found in a single place</li> <li>Information via 131 500</li> <li>Advertising in local papers</li> </ul> </li> </ul>		Yes

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
TC 11	Impacts on special events	Consideration of special events would be undertaken as part of construction work programming. For special events that require specific traffic and pedestrian management, measures would be developed and implemented in consultation with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and the organisers of the event.	All	Yes
TC12	Impacts of construction compounds and work sites	Vehicle access to and from construction sites would be managed to ensure pedestrian, cyclist, and motorist safety. Depending on the location, this may require manual supervision, barrier placement, temporary traffic signals, modifications to existing traffic signals, or police assistance.	All	
TC13	Construction vehicles	<ul> <li>Construction vehicles (including contractor staff vehicles) would be managed to: <ul> <li>Minimise parking or queuing on public roads</li> <li>Minimise use of residential streets to gain access to work sites or compounds</li> <li>Minimise vehicle movements near schools, particularly during school start and finish times.</li> </ul> </li> </ul>	All	
TC14	Signage	Directional signage and line marking would be used to direct and guide drivers, pedestrians, and other road users past construction compounds and work sites, and on the surrounding road network. This may be supplemented by variable message signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternate routes.	All	
TC15	Construction parking impacts	Construction sites would be managed to minimise construction worker parking on surrounding Streets. A worker car parking Strategy would be developed in consultation with the relevant local council to identify measures to reduce the impact on the availability of on-street and off-street parking. The Strategy would identify potential mitigation measures including alternative parking locations. The Strategy would encourage contractor Staff to:	All	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
TC16	Traffic incidents	In the event of a traffic related incident, co-ordination would be carried out with the Sydney Coordination Office and Transport Management Centre's Operations Manager.	All	
TC17	Changes to road, pedestrian and cyclist networks	The community would be notified in advance of proposed road and pedestrian network changes through appropriate forms of community notification.	All	
TC18	Impacts on pedestrian or cyclist paths	A condition survey would be undertaken to confirm changes to routes proposed to be used by pedestrians and/or cyclists are suitable (e.g., suitably paved and lit), with identified modification requirements discussed with the Inner West and/or Canterbury-Bankstown councils and implemented prior to use of the routes.	All	
TC19	Pedestrian, cyclist and motorist safety	Pedestrian, cyclist, and motorist safety in the vicinity of the construction sites would be addressed during construction planning and development of the construction traffic management plan. Measures that may be implemented to assist in multi modal traffic management include:	All	
TC 20		Access for residents, businesses, and community infrastructure would be maintained. Where disruption to access cannot be avoided, consultation would be undertaken with the owners and occupants of affected properties, to confirm their access requirements and to discuss alternatives.	All	
TC 21	Impacts to access	Access to Stations and surrounding properties for emergency vehicles would be provided at all times. Emergency service providers (i.e. police and ambulance) would be consulted throughout construction to ensure they are aware of Station closures, changes to access, including bridge lane closures, and changes to Station or rail corridor access.	All	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
TC 22	Co-ordination of cumulative traffic effects	The potential cumulative effects of construction traffic from multiple construction sites within the project would be further considered during development of the construction traffic management plan. Where there is potential for cumulative impacts across the project, these issues would be addressed with the assistance of the Traffic and Transport Liaison Group.	All	
Opera	tion		1	
ТОЗ	Walking and cycling	Sydney Metro would develop a Walking and Cycling Strategy in consultation with Inner West Council, Canterbury- Bankstown Council and other relevant Stakeholders, which would identify walking and cycling facilities to encourage active transport to the Station precincts.	AS	
TO4	Bus	Sydney Metro would work with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and bus operators to identify improvements to bus Stops and services.	AS	
TO5	Commuter parking	Sydney Metro would monitor the demand for additional commuter car parking spaces and consider opportunities for, and implications of, meeting this demand between Bankstown and Marrickville Stations	AS	

As discussed throughout Chapter 3 (Construction assessment) and in Section 4.1, where there are more significant delays and oversaturated conditions in the future base scenario (Scenario 1) and/or impacts to the intersection performance as a result of addition of TTP buses, recommended signal phasing/timing changes shall be considered in accordance with the revised environmental mitigation measure TC6.

These intersections include:

тсѕ	Intersection description	Recommended signal phasing/timing changes (in line with TC 6)
TCS 41	Sydenham Road / Victoria Road (AM peak)	Reduce phase times for Phase A (-15 seconds), Phase B (-2 seconds) and Phase C (-8 seconds). For detailed information, please refer to Section 3.2.1.
TCS 61	Hume Highway / Chapel Rd / Rookwood Rd (PM Peak)	Provide more phase times to Phase A (8 seconds), Phase E (+5 seconds) and Phase F (+3 seconds) and less phase time to Phase D (-11 seconds). For detailed information, please refer to Section 3.11.1.
TCS 80	Canterbury Road / Kingsgrove Road / Sharp Street (AM peak)	Provide more phase times to Phase B (+16 seconds) and reduce phase times for Phase A (-24 seconds) and Phase D (-3 seconds). For detailed information, please refer to Section 3.8.3.

#### 5.0 Summary and conclusions

- An updated TTP network and service frequencies are proposed by Sydney Metro over the July 2022 school holiday period – 4 July 2022 to 15 July 2022. During this period, a full line closure would be required for two weeks, and bus replacement services would be provided on five routes to enable construction.
- A preliminary sensitivity analysis was undertaken to identify intersections along the TTP routes that are likely to have potential impacts due to the addition of TTP buses and therefore requiring further detailed analysis. These intersections were categories under five categories, with Category 1 (13 intersections) and Category 2 (14 intersections) taken forward for detailed modelling assessments. Sensitivity tests were carried out for intersections in Category 4 (7 intersections).
- Based on sensitivity tests, it is evident that for the intersections in Category 4, the modelled volumes from the previous assessments are generally higher or similar compared to the forecast volumes for July 2022 during both AM and PM peak hours, except TCS 80 where there is a marginal increase. These intersections could therefore be reasonably expected to perform similar or better during a July 2022 scenario as a worse-case scenario had already been assessed.
- For modelling intersections in Category 1 and Category 2, as agreed with Sydney Metro, the future baseline traffic volumes for July 2022 (Scenario 1) were estimated based on recent traffic volume data (March 2022) by applying seasonal reduction factors.
- An assessment of traffic volumes and peak period traffic profiles during 2019 (pre-COVID lockdowns) and 2022 (post-COVID lockdowns) was undertaken at three sample intersections spread across the study area to determine if the impacts of COVID-19 are still prevalent. The assessment indicates that traffic volumes and peak period traffic profiles for March 2022 are observed to be similar or slightly lower in comparison to March 2019. Therefore, the use of March 2022 SCATS detector data to forecast July 2022 traffic volumes shall include changes in travel behaviour post COVID-19. As such, no adjustments to traffic data were required to be applied to consider the impacts of COVID-19.
- The assessments indicate the following:
  - Majority of the signalised intersections have only slight increases in delays (less than 20 seconds) and the overall intersection performance is maintained (LOS D or better) as a result of the additional construction traffic and TTP buses during the July 2022 possession period. As the impact on the public is likely to be minimal at this level of delay and the possessions being planned only for a short period (2 weeks) during the July 2022 school holiday period, it would not warrant specific mitigations.
  - Intersections with high existing background traffic volumes and forecast to operate at oversaturated conditions (LOS E or LOS F) in the future base scenario, the impacts of construction traffic and TTP buses were considered minor. These intersections include:
    - TCS 61 Hume Highway / Chapel Road / Rookwood Road (during the PM peak)
    - TCS 80 Canterbury Road / Kingsgrove Road
  - Where there are more significant delays and oversaturated conditions in the future base scenario (Scenario 1) and/or impacts to the intersection performance as a result of addition of TTP buses, recommended signal phasing/timing changes shall be considered in accordance with the revised environmental mitigation measure TC6 (the revised environmental mitigation measures form part of the conditions of approval for the project). Recommended changes for these intersections (TCS 41, TCS 61 and TCS 80) are included in Section 3.11.1.

• The Temporary Transport Management Plans (TTMPs) that would be developed for the possession period, guided by the TTS, shall seek to minimise delays during construction and opportunities to reduce the impacts of construction and TTP shall be considered as part of detailed planning for these intersections in line with the mitigation measures (highlighted in grey) in Section 4.0.

## Appendix A

## TTP Bus Routes -Detailed Maps

#### Train replacement bus map













# Appendix B

## Preliminary Sensitivity Analysis

#### **Preliminary Sensitivity Analysis** Signalised intersection. TTP bus volumes greater Intersection has capacity than 15 per peak hour. constraints and/or is a Yes Yes major intersection. Priority Controlled Sites -Category 3 No No No New, but disregarded excluded from the No Assessment assessment Previously modelled in Future forecast traffic the EIS/PIR/July 21 volumes for July 2022 Yes less than previously Yes assessments. modelled traffic volumes. Category 1 No New Assessment No Future forecast traffic volumes for Operations likely to July 2022 greater than previously remain same or better as modelled traffic volumes by up to Yes forecast by the previous 10% and previous assessment is

Category 2

Re-Assessment

not LOS D

No

**Sensitivity Tests** 

Yes

model.

Yes

Category 4

Sensitivity Test

#### Summary of Modelling Assessments

Site	Intersection	Bus_Vol_AM	Bus_Vol_PM	Model_Ref	AM_Model	Model_Category	PM_Model	Remarks
41	TCS 41-SYDENHAM RD/VICTORIA RD	57	15	New	Yes	1	No	AM modelling required.
42	TCS 42-WARDELL RD/FRAZER ST	57	15	New	Yes	1	No	AM modelling required.
61	TCS 61-HUME HWY/CHAPEL RD	30	38	New	Yes	1	Yes	Network may have sufficient capacity. Modelling may not be required. Background volumes to be reviewed first to progress with modelling.
66	TCS 66-MARRICKVILLE RD/WARDELL RD	8	50	H.37	No	3	No	Bus volumes are less than 15 per hour in the AM. No major impacts expected.EIS assessed a worst-case using bus volumes of 83 per hour in the PM peak
67	TCS 67-MARRICKVILLE RD/LIVINGSTONE RD	8	50	New	No	1	Yes	Bus volumes are less than 15 per hour in the AM. No major impacts expected. PM modelling required.
68	TCS 68-MARRICKVILLE RD/VICTORIA RD	55	96	B.18	No	3	No	EIS and PIR assessed a worst-case using bus volumes of 111/113.
78	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	65	65	B.27	No	2	No	EIS Assessed 50 for the AM peak and 51 for PM. The increase is less than 15 buses per hour. A sensitivity analysis is sufficient.
79	TCS 79-CANTERBURY RD/BEXLEY RD	74	50	H.13	No	2	Yes	Jul 21 assessments used 20/15 for AM/PM. Increase in bus volumes are not high and impacts may not be significant. Sensitivity check may be sufficient.
80	TCS 80-CANTERBURY RD/KINGSGROVE RD	36	38	Yes	No	4	Yes	Jul 21 assessments used 21/14 for AM/PM. Increase in bus volumes are not high and impacts may not be significant. Sensitivity check may be sufficient.
81	TCS 81-FRAZER ST/LIVINGSTONE RD	57	15	New	Yes	1	No	AM modelling required. Bus volumes are less than or equal to 15 per hour in the PM. No major impacts expected.
86	TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	65	65	B.28	No	2	Yes	PIR assessed 51/50 for AM/PM. Bus volumes have increased by 15 buses per hour. Results are likely to be similar to PIR. A sensitivity analysis is sufficient.
96	TCS 96-SYDENHAM RD/ILLAWARRA RD	57	15	New	Yes	3	No	AM modelling required.
157	TCS 157-BURWOOD RD/LAKEMBA ST	47	46	H.20	Yes	4	Yes	EIS/PIR assessed 31 buses per hour. July 21 CA assessed 30/35 buses for AM/PM. Results are likely to be similar as the increase is less than 15 buses per hour. Sensitivity analysis is sufflicient.
162	TCS 162-CANTERBURY RD/BURWOOD RD	36	38	H.33	No	2	Yes	July 21 CA assessment 21/14 for AM and PM. Sensitivity assessments maybe sufficient.
382	TCS 382-KING GEORGES RD/THE BOULEVARDE	83	84	B.06	No	2	Yes	PIR assessed 60/60 for AM/PM per hour. Only minor increase in bus volumes during both AM and PM. Sensitivity analysis maybe sufficient.
435	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	55	96	B.17	No	3	No	EIS/PIR assessed over 100 buses per hour for both AM/PM. No modelling.
507	TCS 507-CANTERBURY RD/CHARLOTTE ST	36	38	New	Yes	1	Yes	
569	TCS 569-ILLAWARRA RD/PETERSHAM RD	47	46	H.19	Yes	4	Yes	EIS bus volumes 31/30 and Jul 21 30/35 - The increase in number of buses is about 15. The impacts are likely to be similar. Sensitivity analysis is sufficient.
602	TCS 602-CANTERBURY RD/FORE ST	112	111	New	Yes	1	Yes	AM and PM models required.
738	TCS 738-BEAMISH ST/EVALINE ST	51	68	Yes	Yes	4	Yes	Jul 21 bus volumes 38/53 for AM/PM peaks. The increase in number of buses during both peaks is about 15. Sensitivity analysis may be sufficient.
777	TCS 777-CANTERBURY RD/QUEEN ST	112	111	B.14	Yes	4	Yes	EIS assessed 80/81 for AM/PM.
855	TCS 855-CANTERBURY RD/JEFFREY ST	112	111	H.15	Yes	2	Yes	EIS assessed 81/82 for AM/PM.
902	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	65	65	J21CA	Yes	3	Yes	July 21 assessments used 50/42 for AM and PM. Sensitivity analysis may be sufficient.
996	TCS 996-BEAMISH ST/NINTH AV	47	46	B.10	Yes	4	Yes	EIS assessed 30/30 and Jul 21 assessed 30/35. Increase is only 15 buses. Results maybe similar. Can be excluded from modelling. Only a sensitivity check is sufficient
1153	TCS 1153-MARRICKVILLE RD/PETERSHAM RD	8	50	New	No	1	Yes	Bus volumes are less than 15 per hour in the AM. No major impacts expected. PM modelling required.

Site	Intersection	Bus_Vol_AM	Bus_Vol_PM	Model_Ref	AM_Model	Model_Category	PM_Model	Remarks
1167	TCS 1167-CANTERBURY RD/WONGA ST	112	111	B.13	Yes	2	Yes	EIS assessed 80/80 for AM/PM. Impacts maybe similar. AM and PM modelling required.
1203	TCS 1203-CHAPEL RD/RICKARD RD	30	38	New	Yes	1	Yes	Network may have sufficient capacity. Modelling may not be required. Background volumes to be reviewed first to progress with modelling.
1299	TCS 1299-HALDON ST/THE BOULEVARDE	83	84	B.07	Yes	2	Yes	Jul 21 assessed 51/49 for AM/PM. AM and PM models required.
1303	TCS 1303-NEW CANTERBURY RD/DUNTROON ST	65	65	J21CA	Yes	2	Yes	Jul 21 assessed 50/42 for AM/PM. AM may not be required. PM modelling required. Sensitivity analysis may be sufficient.
1315	TCS 1315-ILLAWARRA RD/WARREN RD	47	46	B.16	Yes	4	Yes	EIS assessed 30/31 for AM/PM. Results maybe similar as increase less than 15 buses per hour. Sensitivity analysis is sufficient.
1329	TCS 1329-BURWOOD RD/LEYLANDS PDE	36	38	J21CA	No	2	Yes	Jul 21 assessments used 21/14 for AM/PM. Increase in bus volumes is about 15. PM model maybe required. Sensitivity analysis to check.
1363	TCS 1363-FIFTH AV/NINTH AV	47	46	New	Yes	1	Yes	AM and PM models required.
1413	TCS 1413-WARDELL RD/EWART ST	47	46	B.15	No	3	No	EIS Assessed a worst-case using bus volumes of 61 for the AM and PM peak. No modelling required.
1744	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	83	84	B.05	No	2	Yes	EIS assessed 60/60 for AM/PM. Results maybe similar. Modelling may not be required. Sensitivity analysis to be completed.
1817	TCS 1817-RESTWELL ST/SOUTH TCE	37	92	B.01	Yes	2	Yes	EIS assessed similar volumes. Impacts are likely to be similar.
2065	TCS 2065-SYDENHAM RD/FARR ST	32	10	New	Yes	3	No	The intersection is a minor intersection and bus movements are through the intersection (without turning). So the impacts are expected to be minor. Excluded from modelling.
2308	TCS 2308-THE BOULEVARDE/ARTHUR ST	83	84	H.22	No	3	Yes	EIS assessed 60/60 for AM/PM. The increase in bus volumes is not high to cause a significant impact. Modelling can be excluded considering the intersection is minor and bus movements are through (without turning).
2450	TCS 2450-SYDENHAM RD/PARK RD	57	15	New	Yes	3	No	Bus volumes are less than or equal to 15 per hour in the PM. No major impacts expected during PM peak. The intersection is a minor intersection and bus movements are through the intersection (without turning). So the impacts are expected to be minor. Excluded from modelling.
2789	TCS 2789-JOSEPH ST/GEORGES AV	30	38	New	Yes	1	Yes	Network may have sufficient capacity. Modelling may not be required. Background volumes to be reviewed first to progress with modelling.
2816	TCS 2816-BEAMISH ST/AMY ST	51	68	H.12	Yes	2	Yes	AM and PM models required.
2995	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	112	111	New	Yes	3	Yes	Although bus volumes are high (one bus every 1.5cycle), the intersection is a minor intersection and the buses go straight through this intersection. The impacts are therefore expected to be minimal. Therefore, excluded from modelling.
3320	TCS 3320-RAILWAY PDE/GLEESON AVE	17	84	H.23	No	3	No	EIS assessed a worst-case scenario with 112/114 for the AM/PM peaks. Impacts are expected to be similar. No modelling required.
3340	TCS 3340-NEW CANTERBURY RD/FRAZER ST	57	15	New	Yes	1	No	AM modelling required.
3431	TCS 3431-BEAMISH ST/SOUTH PDE	51	68	B.12	No	3	No	EIS assessed a worst-case with 81/80 for AM/PM peak. No modelling required.

#### Summary of Modelling Assessments

Site	Intersection	Bus_Vol_AM	Bus_Vol_PM	Model_Ref	AM_Model	Model_Category	PM_Model	Remarks
4052	TCS 4052-CANTERBURY RD/DUKE ST	74	50	New	No	3	Yes	The bus volumes are not very high and intersection is a minor intersection and bus movements are through the intersection (without turning). So the impacts are expected to be minor. Excluded from modelling.
4074	TCS 4074-RESTWELL ST/RAYMOND ST	13	62	B.02	Yes	2	Yes	AM and PM models required.
4136	TCS 4136-BEAMISH ST/CLISSOLD ST	47	46	B.11	No	3	No	EIS assessed a worst-case scenario with 82/82 for AM/PM peaks. No modelling required.
4297	TCS 4297-SYDENHAM RD/CENTENNIAL ST	57	15	New	No	3	No	Excluded - minor intersection with buses going straight; assumed minimal impacts
4408	TCS 4408-CHAPEL RD/FRENCH AV	30	38	New	Yes	1	Yes	Minor intersection with buses going straight; assumed minimal impacts - still check if need to be modelled

Site	Street Names	Intersection	Model Category	Route	Movement	Bus Vol AM	Bus Vol PM
4	1 SYDENHAM RD/VICTORIA RD	TCS 41-SYDENHAM RD/VICTORIA RD	1	13T3 to SYDH	Sydenham Rd (W) to Sydenham Rd (E)	25	5
4	1 SYDENHAM RD/VICTORIA RD	TCS 41-SYDENHAM RD/VICTORIA RD	1	33T3 to SYDH	Sydenham Rd (W) to Sydenham Rd (E)	32	10
4	2 WARDELL RD/FRAZER ST	TCS 42-WARDELL RD/FRAZER ST	1	13T3 to SYDH	Frazer St (W) to Frazer St (E)	25	5
4	2 WARDELL RD/FRAZER ST	TCS 42-WARDELL RD/FRAZER ST	1	33T3 to SYDH	Frazer St (W) to Frazer St (E)	32	10
6	1 HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8T3 to BTWN	Hume Hwy (W) to Chapel Rd	8	12
6	1 HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8T3 to LDCB	Chapel Rd to Hume Hwy (W)	10	10
6	1 HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8AT3 to BTWN	Rookwood Rd to Chapel Rd	6	8
6	1 HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8AT3 to LDCB	Chapel Rd to Rookwood Rd	6	8
6	7 MARRICKVILLE RD/LIVINGSTONE RD	TCS 67-MARRICKVILLE RD/LIVINGSTONE RD	1	13T3 to CAMP	Marrickville Rd (E) to Marrickville Rd (W)	4	22
6	7 MARRICKVILLE RD/LIVINGSTONE RD	TCS 67-MARRICKVILLE RD/LIVINGSTONE RD	1	33T3 to BTWN	Marrickville Rd (E) to Marrickville Rd (W)	4	28
8	1 FRAZER ST/LIVINGSTONE RD	TCS 81-FRAZER ST/LIVINGSTONE RD	1	13T3 to SYDH	Frazer St to Sydenham Rd	25	5
8	31 FRAZER ST/LIVINGSTONE RD	TCS 81-FRAZER ST/LIVINGSTONE RD	1	33T3 to SYDH	Frazer St to Sydenham Rd	32	10
50	7 CANTERBURY RD/CHARLOTTE ST	TCS 507-CANTERBURY RD/CHARLOTTE ST	1	33T3 to BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
50	7 CANTERBURY RD/CHARLOTTE ST	TCS 507-CANTERBURY RD/CHARLOTTE ST	1	33T3 to SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
60	2 CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	10T3 to BTWN	Canterbury Rd (E) to Canterbury Rd (W)	9	34
60	2 CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	10T3 to SYDH	Canterbury Rd (W) to Canterbury Rd (E)	38	12
60	2 CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	13T3_to_CAMP	Canterbury Rd (E) to Canterbury Rd (W)	4	22
60	2 CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	13T3 to SYDH	Canterbury Rd (W) to Canterbury Rd (E)	25	5
60	2 CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
60	2 CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	33T3 to SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
115	3 MARRICKVILLE RD/PETERSHAM RD	TCS 1153-MARRICKVILLE RD/PETERSHAM RD	1	13T3_to_CAMP	Marrickville Rd (E) to Marrickville Rd (W)	4	22
115	3 MARRICKVILLE RD/PETERSHAM RD	TCS 1153-MARRICKVILLE RD/PETERSHAM RD	1	33T3_to_BTWN	Marrickville Rd (E) to Marrickville Rd (W)	4	28
120	3 CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8AT3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	6	8
120	3 CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8AT3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	6	8
120	3 CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8T3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	8	12
120	3 CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8T3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	10	10
136	3 FIFTH AV/NINTH AV	TCS 1363-FIFTH AV/NINTH AV	1	10T3_to_BTWN	Ninth Ave (E) to Ninth Ave (W)	9	34
136	3 FIFTH AV/NINTH AV	TCS 1363-FIFTH AV/NINTH AV	1	10T3_to_SYDH	Ninth Ave (W) to Ninth Ave (E)	38	12
278	39 JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8T3_to_BTWN	Joseph St (N) to Georges Ave (W)	8	12
278	39 JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8T3_to_LDCB	Georges Ave (W) to Joseph St (N)	10	10
278	39 JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8AT3_to_BTWN	Joseph St (N) to Joseph St (S)	6	8
278	39 JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8AT3_to_LDCB	Joseph St (S) to Joseph St (N)	6	8
334	0 NEW CANTERBURY RD/FRAZER ST	TCS 3340-NEW CANTERBURY RD/FRAZER ST	1	13T3_to_SYDH	New Canterbury Rd (S) to Frazer St	25	5
334	0 NEW CANTERBURY RD/FRAZER ST	TCS 3340-NEW CANTERBURY RD/FRAZER ST	1	33T3_to_SYDH	New Canterbury Rd (S) to Frazer St	32	10
440	08 CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8T3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	8	12
440	08 CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8T3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	10	10
440	08 CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8AT3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	6	8
440	08 CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8AT3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	6	8
7	78 NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	13T3_to_CAMP		4	22
7	78 NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	13T3_to_SYDH		25	5
7	'8 NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	33T3_to_BTWN		4	28
7	'8 NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	33T3_to_SYDH		32	10
7	9 CANTERBURY RD/BEXLEY RD	ICS 79-CANTERBURY RD/BEXLEY RD	2	3313_to_BIWN		4	28
/	9 CANTERBURY RD/BEXLEY RD	ICS 79-CANTERBURY RD/BEXLEY RD	2	3313_to_SYDH		32	10
8	36 NEW CANTERBURY RD/MARRICKVILLE RD	TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	2	1313_to_CAMP	Marrickville Rd to New Canterbury (W)	4	22
8		TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	2	1313_to_SYDH	New Canterbury (W) to New Canterbury (E)	25	5
8	NEW CANTERBURY RD/MARRICKVILLE RD		2	3313_t0_BTWN	Marrickville Rd to New Canterbury (W)	4	28
6			2	3313_10_SYDH	New Canterbury (W) to New Canterbury (E)	32	10
16			2	22T2 to SVDU	Canterbury Rd (E) to Burwood Rd	4	28
10			2	10T2 to PTW/N	The Peuloverde (E) to The Peuloverde (M)	32	10
30			2	10T2 to SVDH	The Boulevarde (M) to The Boulevarde (W)	30	34
38			2	22T2 to PTW/N	The Boulevarde (W) to The Boulevarde (E)	30	12
30			2		The Boulevarde (W) to The Boulevarde (W)	4	20
30			2	10T3 to BTW/N	Capterbury Rd (E) to Capterbury Rd (M)	0	34
95	5 CANTERBURY RD/ IEFEREV ST	TCS 855-CANTERBURY RD/ JEFEREY ST	2	10T3 to SYDH	Canterbury Rd (W) to Canterbury Rd (W)	38	12
95	5 CANTERBURY RD/ IEFEREV ST	TCS 855-CANTERBURY RD/ IEFEREY ST	2	13T3 to CAMP	Canterbury Rd (F) to Canterbury Rd (M)	4	22
00			4	1010_10_0/101		-	22

855 CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	13T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	25	5
855 CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
855 CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	33T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	10T3_to_BTWN	Canterbury Rd (E) to Wonga St	9	34
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	10T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	38	12
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	13T3_to_CAMP	Canterbury Rd (E) to Wonga St	4	22
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	13T3 to SYDH	Wonga St to Canterbury Rd (E)	25	5
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	33T3 to BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	33T3 to SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	10T3 to BTWN	The Boulevarde (E) to The Boulevarde (W)	9	34
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	10T3 to SYDH	The Boulevarde (W) to The Boulevarde (E)	38	12
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	33T3 to BTWN	The Boulevarde (E) to The Boulevarde (W)	4	28
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	33T3 to SYDH	The Boulevarde (W) to The Boulevarde (E)	32	10
1303 NEW CANTERBURY RD/DUNTROON ST	TCS 1303-NEW CANTERBURY RD/DUNTROON ST	2	13T3 to CAMP	New Canterbury (E) to New Canterbury (W)	4	22
1303 NEW CANTERBURY RD/DUNTROON ST	TCS 1303-NEW CANTERBURY RD/DUNTROON ST	2	13T3 to SYDH	New Canterbury (W) to New Canterbury (E)	25	5
1303 NEW CANTERBURY RD/DUNTROON ST	TCS 1303-NEW CANTERBURY RD/DUNTROON ST	2	33T3 to BTWN	New Canterbury (E) to New Canterbury (W)	4	28
1303 NEW CANTERBURY RD/DUNTROON ST	TCS 1303-NEW CANTERBURY RD/DUNTROON ST	2	33T3 to SYDH	New Canterbury (W) to New Canterbury (E)	32	10
1329 BURWOOD RD/LEYLANDS PDE	TCS 1329-BURWOOD RD/LEYLANDS PDE	2	33T3 to BTWN	Burwood Rd (S) to Burwood Rd (N)	4	28
1329 BURWOOD RD/LEYLANDS PDF	TCS 1329-BURWOOD RD/LEYLANDS PDF	2	33T3 to SYDH	Burwood Rd (N) to Burwood Rd (S)	32	10
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	10T3 to BTWN	The Boulevarde to Punchbowl (SW)	9	34
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	10T3 to SYDH	Punchbowl (SW) to The Boulevarde	38	12
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	33T3 to BTWN	The Boulevarde to Punchbowl (SW)	4	28
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	33T3 to SYDH	Punchbowl (SW) to The Boulevarde	32	10
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	10T3 to BTWN	Restwell St to South Terrace (F)	9	34
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	10T3 to SYDH	Bus Depot (N) to South Terrace (E)	38	12
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	33T3 to BTWN	Restwell St to South Terrace (E)	4	28
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	33T3 to SYDH	Bus Depot (N) to South Terrace (E)	32	10
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	8T3 to BTWN	South Terrace (W) to South Terrace (E)	8	10
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	8T3 to LDCB	Bus Depot (N) to South Terrace (W)	10	10
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	8AT3 to LDCB	Bus Depot (N) to South Terrace (W)	6	8
2816 REAMISH ST/AMV ST	TCS 2816 BEAMISH ST/AMY ST	2	10T3 to BTW/N	Beamish St (S) to Beamish St (N)	9	3/
	TCS 2010-DEAMISH ST/AWY ST	2		Beamish St (S) to Beamish St (N)	20	12
		2	12T2 to CAMP	Beamish St (N) to Beamish St (S)	30	12
		2	10T2 to RTM/N	Paymond St to Postwoll St (N)	4	22
		2	22T2 to BTW/N	Raymond St to Restwell St (N)	9	29
		2		Raymond St to Restweir St (N)	4	20
		2	22T2 to RTM/N		4	22
		3	10T2 to BTWN		4	20
		ు స			9	34
		ა ი			30	12
		<u> </u>			4	22
		3	12T2 to SVDU		4	28
		<u> </u>			20	5
		3	3313_10_SYDH		32	10
		3	1013_to_BIWN		9	34
435 MARRICKVILLE RD/ILLAWARRA RD	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	3	1013_to_SYDH		38	12
435 MARRICKVILLE RD/ILLAWARRA RD	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	3	1313_to_CAMP		4	22
435 MARRICKVILLE RD/ILLAWARRA RD	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	3	3313_to_BIWN		4	28
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	1313_to_CAMP		4	22
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	1313_to_SYDH		25	5
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	3313_to_BIWN		4	28
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	3313_to_SYDH		32	10
1413 WARDELL RD/EWART ST	TCS 1413-WARDELL RD/EWART ST	3	1013_to_BIWN		9	34
1413 WARDELL RD/EWART ST	TCS 1413-WARDELL RD/EWART ST	3	1013_to_SYDH		38	12
2065 SYDENHAM RD/FARR ST	TCS 2065-SYDENHAM RD/FARR ST	3	1313_to_SYDH		25	5
2065 SYDENHAM RD/FARR ST	TCS 2065-SYDENHAM RD/FARR ST	3	3313_to_SYDH		32	10
2308 THE BOULEVARDE/ARTHUR ST	TCS 2308-THE BOULEVARDE/ARTHUR ST	3	1013_to_BTWN		9	34
2308 THE BOULEVARDE/ARTHUR ST	TCS 2308-THE BOULEVARDE/ARTHUR ST	3	1013_to_SYDH		38	12
2308 THE BOULEVARDE/ARTHUR ST	ICS 2308-THE BOULEVARDE/ARTHUR ST	3	33T3 to BTWN		4	28

2308 THE BOULEVARDE/ARTHUR ST	TCS 2308-THE BOULEVARDE/ARTHUR ST	3	33T3_to_SYDH		32	10
2450 SYDENHAM RD/PARK RD	TCS 2450-SYDENHAM RD/PARK RD	3	13T3_to_SYDH		25	5
2450 SYDENHAM RD/PARK RD	TCS 2450-SYDENHAM RD/PARK RD	3	33T3_to_SYDH		32	10
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	10T3_to_BTWN		9	34
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	10T3_to_SYDH		38	12
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	13T3_to_CAMP		4	22
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	13T3_to_SYDH		25	5
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	33T3_to_BTWN		4	28
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	33T3_to_SYDH		32	10
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	10T3_to_BTWN		9	34
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	10T3_to_SYDH		38	12
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	13T3_to_CAMP		4	22
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	13T3_to_SYDH		25	5
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	33T3_to_BTWN		4	28
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	33T3_to_SYDH		32	10
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	10T3_to_BTWN		9	34
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	10T3_to_SYDH		38	12
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	13T3_to_CAMP		4	22
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	13T3_to_SYDH		25	5
4052 CANTERBURY RD/DUKE ST	TCS 4052-CANTERBURY RD/DUKE ST	3	33T3_to_BTWN		4	28
4052 CANTERBURY RD/DUKE ST	TCS 4052-CANTERBURY RD/DUKE ST	3	33T3_to_SYDH		32	10
4136 BEAMISH ST/CLISSOLD ST	TCS 4136-BEAMISH ST/CLISSOLD ST	3	10T3_to_BTWN		9	34
4136 BEAMISH ST/CLISSOLD ST	TCS 4136-BEAMISH ST/CLISSOLD ST	3	10T3_to_SYDH		38	12
80 CANTERBURY RD/KINGSGROVE RD	TCS 80-CANTERBURY RD/KINGSGROVE RD	4	33T3_to_BTWN		4	28
80 CANTERBURY RD/KINGSGROVE RD	TCS 80-CANTERBURY RD/KINGSGROVE RD	4	33T3_to_SYDH		32	10
157 BURWOOD RD/LAKEMBA ST	TCS 157-BURWOOD RD/LAKEMBA ST	4	10T3_to_BTWN		9	34
157 BURWOOD RD/LAKEMBA ST	TCS 157-BURWOOD RD/LAKEMBA ST	4	10T3_to_SYDH		38	12
569 ILLAWARRA RD/PETERSHAM RD	TCS 569-ILLAWARRA RD/PETERSHAM RD	4	10T3_to_BTWN		9	34
569 ILLAWARRA RD/PETERSHAM RD	TCS 569-ILLAWARRA RD/PETERSHAM RD	4	10T3_to_SYDH		38	12
738 BEAMISH ST/EVALINE ST	TCS 738-BEAMISH ST/EVALINE ST	4	10T3_to_BTWN		9	34
738 BEAMISH ST/EVALINE ST	TCS 738-BEAMISH ST/EVALINE ST	4	10T3_to_SYDH		38	12
738 BEAMISH ST/EVALINE ST	TCS 738-BEAMISH ST/EVALINE ST	4	13T3_to_CAMP		4	22
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	10T3_to_BTWN	Crinan St to Canterbury Rd (W)	9	34
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	10T3_to_SYDH	Canterbury Rd (W) to Crinan St	38	12
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	13T3_to_CAMP	Canterbury Rd (E) to Canterbury Rd (W)	4	22
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	13T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	25	5
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	33T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
996 BEAMISH ST/NINTH AV	TCS 996-BEAMISH ST/NINTH AV	4	10T3_to_BTWN		9	34
996 BEAMISH ST/NINTH AV	TCS 996-BEAMISH ST/NINTH AV	4	10T3_to_SYDH		38	12
1315 ILLAWARRA RD/WARREN RD	TCS 1315-ILLAWARRA RD/WARREN RD	4	10T3_to_BTWN		9	34
1315 ILLAWARRA RD/WARREN RD	TCS 1315-ILLAWARRA RD/WARREN RD	4	10T3 to SYDH		38	12

#### Intersection-Route Matrix

Intersection-Route Matrix	Routes										
											Number of
											routes (both
Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	directions)
TCS 1153-MARRICKVILLE RD/PETERSHAM RD			1		1						2
TCS 1167-CANTERBURY RD/WONGA ST	1	1	1	1	1	1					6
TCS 1203-CHAPEL RD/RICKARD RD							1	1	1	1	4
TCS 1299-HALDON ST/THE BOULEVARDE	1	1			1	1					4
TCS 1303-NEW CANTERBURY RD/DUNTROON ST			1	1	1	1					4
TCS 1315-ILLAWARRA RD/WARREN RD	1	1									2
TCS 1363-FIFTH AV/NINTH AV	1	1									2
TCS 1413-WARDELL RD/EWART ST	1	1									2
TCS 157-BURWOOD RD/LAKEMBA ST	1	1									2
TCS 162-CANTERBURY RD/BURWOOD RD					1	1					2
TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	1	1			1	1					4
TCS 1817-RESTWELL ST/SOUTH TCE	1	1			1	1		1	1	1	7
TCS 2065-SYDENHAM RD/FARR ST				1		1					2
TCS 2308-THE BOULEVARDE/ARTHUR ST	1	1			1	1					4
TCS 2450-SYDENHAM RD/PARK RD				1		1					2
TCS 2789-JOSEPH ST/GEORGES AV							1	1	1	1	4
TCS 2816-BEAMISH ST/AMY ST	1	1	1								3
TCS 2995-CANTERBURY RD/MINTER ST (SW-)	. 1	1	1	1	1	1					6
TCS 3320-BAILWAY PDF/GLEESON AVE	1	1	1	1	1	1					6
TCS 3340-NEW CANTERBURY RD/FRAZER ST				1		1					2
TCS 3431-BEAMISH ST/SOUTH PDE	1	1	1	1		•					4
TCS 382-KING GEORGES RD/THE BOULEVARDE	1	1		•	1	1					4
TCS 4052-CANTERBURY RD/DUKE ST		-			1	1					2
TCS 4074-RESTWELL ST/RAYMOND ST	1				1	•					2
TCS 4136-BEAMISH ST/CLISSOLD ST	1	1			•						2
TCS 41-SYDENHAM RD/VICTORIA RD		-		1		1					2
TCS 42-WARDELL RD/FRAZER ST				1		1					2
TCS 435-MARRICK/II LE RD/II LAWARRA RD	1	1	1	•	1	•					4
TCS 507-CANTERBURY RD/CHARLOTTE ST		•			1	1					2
	1	1				•					2
	1	1	1	1	1	1					6
TCS 61_HUME HW/Y/CHAPEL RD					•	•	1	1	1	1	4
			1		1				•	•	
			1		1						2
	1	1	1		1						2
TCS 00-IMARRICKVILLE RD/ VICTORIA RD	1	1	1		•						4
	1	1	1	1	1	1					6
	1	1	1	1	1	1					0
				•	1	1					4
					1	1					2
				4	1	1					2
	1	1	1	1	1	1					2
			1	1	1	1					0
			1	1	1	1					4
TCS 902-INEW CANTERBURY RD/CONSTITUTION RD				1		1					4
	1	1									2
					4	4					2
							4	4		4	2
I CO 4400-CHAPEL KD/FKENCH AV											4

TTP Bus Frequency (AM Peak)	Routes										
Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	TTP Bus Volume - AM
											Peak
41				25		32					57
42				25		32					57
61							6	6	8	10	30
66			4		4						8
67		20	4		4						8
68	9	38	4	25	4	20					55
78		20	4	25	4	32					00
/9		30			4	32					74
81				25	4	32					57
88			4	25	4	32					65
96				25		32					57
157	9	38		20		02					47
162					4	32					36
225							6	6			12
382	9	38			4	32					83
435	9	38	4		4						55
436									8	10	18
507					4	32					36
569	9	38									47
602	9	38	4	25	4	32					112
738	9	38	4								51
777	9	38	4	25	4	32					112
855	9	38	4	25	4	32					112
902			4	25	4	32					65
935							6	6	8	10	30
996	9	38									47
1135									8	10	18
1153			4		4						8
1159				05			6	6			12
1167	9	38	4	25	4	32		0		40	112
1203	0	20			4	22	6	6	8	10	30
1299	9	30	4	25	4	32					03
1303	0	20	4	25	4	32					47
1313	9	50			Λ	30					41
1363	9	38			4	52					47
1413	g	38									47
1413	0	00					6	6			12
1401							U U	U			12

											TTP Bus
Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	Volume - AM
											Peak
1542									8	10	18
1545									8	10	18
1725							6	6			12
1744	9	38			4	32					83
1771									8	10	18
1817	9				4			6	8	10	37
2192									8	10	18
2206							6	6	8	10	30
2308	9	38			4	32					83
2450				25		32					57
2468							6		8		14
2789							6	6	8	10	30
2800								6		10	16
2816	9	38	4								51
2995	9	38	4	25	4	32					112
3222							6		8		14
3320	9		4		4						17
3340				25		32					57
3431	9	38	4								51
3492							6	6			12
3509								6			6
4052		38			4	32					74
4074	9				4						13
4127							6	6	8	10	30
4136	9	38									47
4276							6	6			12
4297				25		32					57
4325							6	6			12
4408							6	6	8	10	30
2065						32					32

TTP Bus Frequency (PM peak)	Routes										
Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	TTP Bus Volume - PM Peak
41				5		10					15
42				5		10					15
61							8	8	12	10	38
66			22		28						50
67			22		28						50
68	34	12	22		28						96
78			22	5	28	10					65
79		12			28	10					50
80					28	10					38
81				5		10					15
86			22	5	28	10					65
96				5		10					15
157	34	12									46
162					28	10					38
225							8	8			16
382	34	12			28	10					84
435	34	12	22		28						96
436									12	10	22
507					28	10					38
569	34	12									46
602	34	12	22	5	28	10					111
738	34	12	22								68
777	34	12	22	5	28	10					111
855	34	12	22	5	28	10					111
902			22	5	28	10					65
935							8	8	12	10	38
996	34	12									46
1135									12	10	22
1153			22		28						50
1159							8	8			16
1167	34	12	22	5	28	10					111
1203							8	8	12	10	38
1299	34	12			28	10					84
1303			22	5	28	10					65
1315	34	12									46
1329					28	10					38
1363	34	12									46
1413	34	12									46

											TTP Bus
Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	Volume - PM
1451							8	8			16
1542									12	10	22
1545									12	10	22
1725							8	8			16
1744	34	12			28	10					84
1771									12	10	22
1817	34				28			8	12	10	92
2192									12	10	22
2206							8	8	12	10	38
2308	34	12			28	10					84
2450				5		10					15
2468							8		12		20
2789							8	8	12	10	38
2800								8		10	18
2816	34	12	22								68
2995	34	12	22	5	28	10					111
3222							8		12		20
3320	34		22		28						84
3340				5		10					15
3431	34	12	22								68
3492							8	8			16
3509								8			8
4052		12			28	10					50
4074	34				28						62
4127							8	8	12	10	38
4136	34	12									46
4276							8	8			16
4297				5		10					15
4325							8	8			16
4408							8	8	12	10	38
2065						10					10

## Appendix C

### Intersection Assessment Volumes

#### Table 1 TCS 41 Sydenham Road / Victoria Road

AM Model Volume Inpu	uts											
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	353	45	17	695	173	100	193	66	38	506	28
Heavies	0	32	3	3	36	10	7	19	14	6	43	6
Construction Forecast	0	0	0	0	14	0	0	0	0	0	14	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	0	0
Total	0	385	48	20	802	183	107	212	80	44	563	34
PM Model Volume Inpu	uts											
Hour		South Leg			West Leg			North Leg			East Leg	
HOUI	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	268	77	20	610	102	215	398	74	68	710	45
Heavies	0	22	0	2	11	0	6	26	0	0	20	0
Construction Forecast	0	0	0	0	14	0	0	0	0	0	14	0
TTP Buses	0	0	0	0	15	0	0	0	0	0	0	0
Total	0	290	77	22	650	102	221	424	74	68	744	45

#### Table 2 TCS 42 – Wardell Road / Frazer Street

AM Model Volume Inpu	uts											
Hour		South Leg			West Leg			North Leg			East Leg	
rioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	118	276	34	31	379	4	2	117	41	43	139	52
Heavies	4	2	2	1	8	0	0	3	4	1	8	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	0	0
Total	122	278	36	32	444	4	2	120	45	44	147	53
PM Model Volume Inpu	uts											

Hour		South Leg			West Leg			North Leg			East Leg	
Houi	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	64	168	25	36	279	8	11	305	45	106	400	171
Heavies	0	0	0	0	4	0	0	2	0	1	2	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	15	0	0	0	0	0	0	0
Total	64	168	25	36	298	8	11	307	45	107	402	172

Table 3 TCS 61 – Hume Highway / Chapel Road / Rookwood Road

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
Tiour	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	146	115	98	1779	161	51	179	32	29	1007	78
Heavies	6	5	5	9	132	18	3	12	2	1	67	8
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	6	10	8	0	0	0	6	0	0	0	0
Total	6	157	130	115	1911	179	54	197	34	30	1074	86
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
Hour	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	322	234	194	1580	191	107	477	20	52	1750	103
Heavies	11	9	10	9	30	22	5	10	0	0	92	12
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	8	10	12	0	0	0	8	0	0	0	0
Total	11	339	254	215	1610	213	112	495	20	52	1842	115

#### Table 4 TCS 67 – Marrickville Road / Livingstone Road

AM Model Volume Inputs												
AM Model Volume Inputs Hour Light Heavies Construction Forecast TTP Buses Total		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	46	272	18	41	504	50	18	106	60	120	228	72
Heavies	1	7	0	2	20	2	2	4	1	2	15	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	0	8	0
Total	47	279	18	43	524	52	20	110	61	122	251	72
PM Model Volume Inputs												
PM Model Volume Inputs		South Leg			West Leg			North Leg			East Leg	
PM Model Volume Inputs Hour	Right	South Leg Through	Left	Right	West Leg Through	Left	Right	North Leg Through	Left	Right	East Leg Through	Left
PM Model Volume Inputs Hour Light	Right 48	South Leg Through 161	Left 42	Right 20	West Leg Through 353	Left 53	Right 50	North Leg Through 257	Left 106	Right 107	East Leg Through 551	Left 149
PM Model Volume Inputs Hour Light Heavies	Right 48 0	South Leg Through 161 3	Left 42 0	Right 20 0	West Leg Through 353 10	Left 53 0	Right 50 0	North Leg Through 257 3	Left 106 0	Right 107 2	East Leg Through 551 17	Left 149 0
PM Model Volume Inputs Hour Light Heavies Construction Forecast	Right 48 0 0	South Leg Through 161 3 0	Left 42 0	Right           20           0           0	West Leg Through 353 10 0	Left 53 0	Right 50 0	North Leg Through 257 3 0	Left 106 0	Right 107 2 0	East Leg Through 551 17 0	Left 149 0
PM Model Volume Inputs Hour Light Heavies Construction Forecast TTP Buses	Right 48 0 0 0	South Leg Through 161 3 0 0	Left 42 0 0	Right 20 0 0 0	West Leg Through 353 10 0 0	Left 53 0 0 0	Right 50 0 0 0	North Leg Through 257 3 0 0	Left 106 0 0	Right 107 2 0 0	East Leg Through 551 17 0 50	Left 149 0 0

#### Table 5 TCS 78 – New Canterbury Road / Canterbury Road

AM Model Volume Inpu	uts											
Hour		South Leg			West Leg			North Leg			East Leg	
rioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	820	656	30	9	318	14	0	384	24	17	258	371
Heavies	65	28	1	1	3	2	0	20	2	2	5	50
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	65	0	0	0	0	0	0	0	0	0	0	65
Total	950	684	31	10	321	16	0	404	26	19	263	486
PM Model Volume Inpu	ıts											
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	473	547	23	20	264	9	0	649	37	30	468	672
Heavies	18	11	0	0	3	0	0	10	0	2	7	31
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	65	0	0	0	0	0	0	0	0	0	0	65
Total	556	558	23	20	267	9	0	659	37	32	475	768

#### Table 6 TCS 79 – Canterbury Road / Bexley Road

AM Model Volume Inputs												
Hour	:	South Leg			West Leg			North Leg			East Leg	
rioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	378	556	76	203	1081	53	76	358	46	0	597	225
Heavies	13	26	8	14	69	10	13	38	1	0	49	15
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	32	0	0	0	38	0	4	0
Total	391	582	84	217	1182	63	89	396	85	0	650	240
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
Tioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	358	386	85	186	975	88	128	321	40	0	969	168
Heavies	5	15	0	6	14	7	10	14	5	0	46	4
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	10	0	0	0	12	0	28	0
Total	363	401	85	192	999	95	138	335	57	0	1043	172

#### Table 7 TCS 81 – Livingstone Road / Sydenham Road / Frazer Street

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
TIOUI	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	28	471	22	0	209	124	59	202	323	271	148	16
Heavies	0	10	2	0	4	4	0	7	37	31	7	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	0	0
Total	28	481	24	0	270	128	59	209	360	302	155	17
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
ΠΟΟΙ	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	34	221	59	0	165	87	184	411	311	299	479	50
Heavies	2	5	1	0	2	1	2	18	16	19	3	0
Construction Forecast	•	0	0	0	0	Ο	0	0	0	0	0	0
Construction Forecast	0	0	0	0	0	U	0	•	0	v	0	•
TTP Buses	0	0	0	0	15	0	0	0	0	0	0	0

#### Table 8 TCS 86 – New Canterbury Road / Marrickville Road / Dulwich Street

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	39	39	111	357	910	13	2	56	21	0	353	73
Heavies	1	0	15	11	49	0	1	4	4	0	31	5
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	8	0	57	0	0	0	0	0	0	0
Total	40	39	134	368	1016	13	3	60	25	0	384	78
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	54	64	322	206	582	5	3	53	17	0	921	75
Heavies	0	0	14	5	13	1	0	7	0	0	22	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	50	0	15	0	0	0	0	0	0	0
Total	54	64	386	211	610	6	3	60	17	0	943	75

#### Table 9 TCS 162 – Canterbury Road / Burwood Road

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
11001	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	1329	66	56	0	111	187	660	0
Heavies	0	0	0	0	91	4	9	0	23	16	52	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	32	4	0	0
Total	0	0	0	0	1420	70	65	0	166	207	712	0
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	1231	64	149	0	82	201	1164	0
Heavies	0	0	0	0	25	0	4	0	9	12	65	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	10	28	0	0
	•	0	v	v	-	-	-				-	-

#### Table 10 TCS 382 – King Georges Road / The Boulevarde

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	2298	17	0	134	127	37	2057	104	113	99	8
Heavies	0	202	2	0	2	3	1	232	2	1	1	1
Construction Forecast	0	8	8	0	0	8	0	0	0	0	0	2
TTP Buses	0	0	0	0	70	0	0	0	0	0	13	0
Total	0	2508	27	0	206	138	38	2289	106	114	113	11
PM Model Volume Inputs		0 2508 27										
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	2248	30	0	144	183	92	2421	164	199	337	27
Heavies	0	159	0	0	1	0	1	92	1	1	4	0
Construction Forecast	0	8	8	0	0	8	0	0	0	0	0	2
TTP Buses	0	0	0	0	22	0	0	0	0	0	62	0
Total	0	2415	20	0	167	101	02	2542	165	200	402	20

#### Table 11 TCS 507 – Canterbury Road / Charlotte Street / Thorncraft Parade

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	33	239	15	0	1222	151	48	236	62	135	748	25
Heavies	2	6	1	0	77	2	1	2	0	0	43	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	32	0	0	0	0	0	4	0
Total	35	245	16	0	1331	153	49	238	62	135	795	26
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	56	239	28	0	1062	140	121	364	96	179	1211	67
Lleavies												-
Heavies	1	3	1	0	25	0	5	7	1	1	31	0
Construction Forecast	1 0	3 0	1 0	0	25 0	0	5 0	7 0	1 0	1 0	31 0	0
Construction Forecast	1 0 0	3 0 0	1 0 0	0 0 0	25 0 10	0 0 0	5 0 0	7 0 0	1 0 0	1 0 0	31 0 28	0 0 0

#### Table 12 TCS 602 – Canterbury Road / Fore Street

AM Model Volume Inputs												
Hour	:	South Leg			West Leg			North Leg			East Leg	
Tioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	265	0	200	163	1564	0	0	0	0	0	1030	95
Heavies	15	0	9	4	68	0	0	0	0	0	41	8
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	95	0	0	0	0	0	17	0
Total	280	0	209	167	1727	0	0	0	0	0	1088	103
PM Model Volume Inputs												
Hour	:	South Leg			West Leg			North Leg			East Leg	
Tiour	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	183	0	242	158	1247	0	0	0	0	0	1542	172
Heavies	3	0	1	2	14	0	0	0	0	0	32	6
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	27	0	0	0	0	0	84	0
Total	186	0	243	160	1288	0	0	0	0	0	1658	178

#### Table 13 TCS 855 Canterbury Road / Jeffery Street

AM Model Volume Inputs													
Hour		South Leg			West Leg			North Leg			East Leg		
ΠΟΟΙ	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	
Light	1575	247	29	77	18	0	0	167	19	0	3	852	
Heavies	67	18	0	3	7	0	0	6	3	0	10	49	
<b>Construction Forecast</b>	2	0	11	0	10	0	0	0	0	0	0	16	
TTP Buses	95	0	0	0	0	0	0	0	0	0	0	17	
Total	1739	265	40	80	35	0	0	173	22	0	13	934	
PM Model Volume Inpu	uts												
Hour		South Leg			West Leg			North Leg			East Leg		
i ioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	
Light	1010	249	21	83	18	0	0	314	28	0	14	1569	
Heavies	19	6	0	3	3	0	0	5	0	0	5	32	
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0	

#### Table 14 TCS 1153 – Marrickville Road / Petersham Road

AM Model Volume Inpu	uts											
Hour		South Leg			West Leg			North Leg			East Leg	
rioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	10	25	34	133	650	0	23	88	21	7	312	16
Heavies	1	0	1	1	30	0	0	0	0	1	17	3
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	0	8	0
Total	11	25	35	134	680	0	23	88	21	8	337	19
PM Model Volume Inpu	uts											

Hour		South Leg			West Leg			North Leg			East Leg	
rioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	18	28	56	167	411	0	31	95	34	4	643	26
Heavies	0	0	1	1	13	0	2	0	0	0	17	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	0	50	0
Total	18	28	57	168	424	0	33	95	34	4	710	26

### Table 15 TCS 1167 - Canterbury Road and Wonga StreetAM Model Volume Inputs

Hour		South Leg			West Leg			North Leg			East Leg	
riour	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	1623	15	63	0	171	185	1068	0	0	0	0
Heavies	0	118	0	4	0	5	8	47	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	70	0	0	0	25	13	4	0	0	0	0
Total	0	1811	15	67	0	201	206	1119	0	0	0	0
PM Model Volume Inputs		0 1811 15 6										
Hour		South Leg			West Leg			North Leg			East Leg	
riour	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	1198	63	154	0	193	326	1719	0	0	0	0
Heavies	0	21	2	0	0	5	2	56	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	22	0	0	0	5	56	28	0	0	0	0
Total	0	1241	65	154	0	203	384	1803	0	0	0	0
#### Table 16 TCS 1203 – Chapel Road / Rickard Road

AM Model Volume Inputs												
Hour	:	South Leg			West Leg			North Leg			East Leg	
Houi	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	183	89	129	449	66	33	222	93	68	228	77
Heavies	0	3	0	0	9	1	1	9	25	25	13	3
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	10
TTP Buses	0	16	0	0	0	0	0	14	0	0	0	0
Total	0	202	89	129	458	67	34	245	118	93	241	90
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	

Hour												
Houi	Right	Through	Left									
Light	0	292	194	122	425	87	33	359	172	206	603	151
Heavies	0	2	1	0	12	0	1	8	27	32	6	6
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	10
TTP Buses	0	18	0	0	0	0	0	20	0	0	0	0
Total	0	312	195	122	437	87	34	387	199	238	609	167

#### Table 17 TCS 1299 - Haldon Street / The Boulevarde

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	240	39	37	160	157	158	225	101	202	77	20
Heavies	0	21	8	6	31	3	1	18	3	14	12	0
Construction Forecast	0	8	7	5	0	0	0	8	0	0	0	0
TTP Buses	0	0	0	0	70	0	0	0	0	0	13	0
Total	0	269	54	48	261	160	159	251	104	216	102	20
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	261	91	36	128	190	158	221	100	232	142	25
Heavies	0	14	9	5	20	4	4	13	3	2	23	2
Construction Forecast	0	8	7	5	0	0	0	8	0	0	0	0
TTP Buses	0	0	0	0	22	0	0	0	0	0	62	0
Total	0	283	107	46	170	194	162	242	103	234	227	27

Table 18 TCS 1303 - New Canterbury Road / Duntroon Street

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
riour	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	78	0	6	54	990	0	0	0	0	0	509	16
Heavies	1	0	0	1	82	0	0	0	0	0	38	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	8	0
Total	79	0	6	55	1129	0	0	0	0	0	555	16
PM Model Volume Inputs												
Hour	:	South Leg			West Leg			North Leg			East Leg	
riour	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	33	0	29	59	686	0	0	0	0	0	1128	100
Heavies	0	0	0	1	23	0	0	0	0	0	49	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	15	0	0	0	0	0	50	0
Total	33	0	29	60	724	0	0	0	0	0	1227	101

#### Table 19 TCS 1329 - Burwood Road / Leylands Parade

AM Model Volume Inputs												
Цоци		South Leg			West Leg			North Leg			East Leg	
Houi	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	25	313	31	0	114	127	50	239	37	167	163	51
Heavies	1	35	0	0	2	2	1	33	1	4	3	2
Construction Forecast	0	17	0	0	0	0	0	17	0	0	0	0
TTP Buses	0	4	0	0	0	0	0	32	0	0	0	0
Total	26	369	31	0	116	129	51	321	38	171	166	53
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
Hour	Right	South Leg Through	Left	Right	West Leg Through	Left	Right	North Leg Through	Left	Right	East Leg Through	Left
Hour	Right 44	South Leg Through 453	Left 64	Right 0	West Leg Through 126	Left 191	Right 61	North Leg Through 289	Left 47	Right 201	East Leg Through 197	Left 34
Hour Light Heavies	Right 44 2	South Leg Through 453 59	Left 64 0	Right 0 0	West Leg Through 126 3	Left 191 4	Right 61 1	North Leg Through 289 25	Left 47 1	Right 201 4	East Leg Through 197 4	Left 34 1
Hour Light Heavies Construction Forecast	Right 44 2 0	South Leg Through 453 59 17	Left 64 0	Right 0 0 0	West Leg Through 126 3 0	Left 191 4 0	Right 61 1 0	North Leg Through 289 25 17	Left 47 1 0	Right 201 4 0	East Leg Through 197 4 0	Left 34 1 0
Hour Light Heavies Construction Forecast TTP Buses	Right           44           2           0           0	South Leg Through 453 59 17 28	Left 64 0 0	Right           0           0           0           0           0	West Leg Through 126 3 0 0	Left 191 4 0	Right 61 1 0 0	North Leg Through 289 25 17 10	Left 47 1 0 0	Right 201 4 0 0	East Leg Through 197 4 0 0	Left 34 1 0

#### Table 20 TCS 1363 - Fifth Avenue / Ninth Avenue

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	287	97	123	0	180	223	130	0
Heavies	0	0	0	0	2	2	5	0	5	8	3	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	38	0	0	0	0	0	9	0
Total	0	0	0	0	327	99	128	0	185	231	142	0

#### PM Model Volume Inputs

Hour		South Leg			West Leg			North Leg			East Leg	
riou	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	261	127	177	0	221	245	292	0
Heavies	0	0	0	0	0	0	6	0	5	0	4	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	12	0	0	0	0	0	34	0
Total	0	0	0	0	273	127	183	0	226	245	330	0

#### Table 21 TCS 1744 – Punchbowl Road / The Boulevarde

All Model Volume inpu	115											
Hour		South Leg			West Leg			North Leg			East Leg	
TIOUI	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	399	494	0	0	0	0	0	617	83	121	0	242
Heavies	0	39	0	0	0	0	0	41	0	4	0	7
Construction Forecast	0	3	0	0	0	0	0	3	3	3	0	0
TTP Buses	70	0	0	0	0	0	0	0	0	0	0	13
Total	469	536	0	0	0	0	0	661	86	128	0	262
PM Model Volume Inpl	its											
	its	South Leg			West Leg			North Leg			East Leg	
Hour	Right	South Leg Through	Left	Right	West Leg Through	Left	Right	North Leg Through	Left	Right	East Leg Through	Left
Hour Light	Right 400	South Leg Through 591	Left 0	Right 0	West Leg Through 0	Left 0	Right 0	North Leg Through 756	Left 86	Right 231	East Leg Through 0	Left 447
Hour Light Heavies	Right 400	South Leg Through 591 18	Left 0 0	Right 0 0	West Leg Through 0 0	Left 0 0	Right 0 0	North Leg Through 756 30	Left 86 0	Right 231 4	East Leg Through 0 0	Left 447 9
Hour Light Construction Forecast	Right 400 0	South Leg Through 591 18 3	Left 0 0 0	Right 0 0 0	West Leg Through 0 0 0	Left 0 0	Right 0 0 0	North Leg Through 756 30 3	Left 86 0 3	Right 231 4 3	East Leg Through 0 0 0	Left 447 9 0
Hour Hour Light Heavies Construction Forecast TTP Buses	Right 400 0 22	South Leg Through 591 18 3 0	Left 0 0 0 0	Right 0 0 0 0	West Leg Through 0 0 0 0	Left 0 0 0 0	Right 0 0 0 0	North Leg Through 756 30 3 0	Left 86 0 3 0	Right 231 4 3 0	East Leg Through 0 0 0 0	Left 447 9 0 62

#### Table 22 TCS 1744 – Punchbowl Road / South Terrace

AM Model Volume Inpu	uts											
Hour		South Leg			West Leg			North Leg			East Leg	
i ioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	543	214	74	0	350	272	587	0	0	0	0
Heavies	0	17	0	0	0	0	0	21	0	0	0	0
Construction Forecast	0	0	0	0	0	3	3	0	0	0	0	0
TTP Buses	0	70	0	0	0	0	0	13	0	0	0	0
Total	0	630	214	74	0	353	275	621	0	0	0	0
PM Model Volume Inpu	uts											
Hour		South Leg			West Leg			North Leg			East Leg	
Πουί	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	397	202	122	0	594	429	774	0	0	0	0
Heavies	0	12	0	0	0	0	0	27	0	0	0	0
Construction Forecast	0	0	0	0	0	3	3	0	0	0	0	0
TTP Buses	0	22	0	0	0	0	0	62	0	0	0	0

#### Table 23 TCS 1817 - Restwell Street / South Terrace

AM Model Volume Inputs	5											
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	547	0	60	0	0	0	0	0	1	0	0	0
Heavies	11	0	25	43	24	0	31	0	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	4	0	0	0	38	0	16	0	0	0	0	0
Total	1120	0	170	86	86	0	78	0	2	0	0	0
PM Model Volume Inputs	6											
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	792	0	93	0	3	0	0	0	6	0	0	0
Heavies	6	0	43	42	28	0	29	0	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	22	0	0	0	18	0	18	0	0	0	0	0
Total	1618	0	272	84	80	0	76	0	12	0	0	0

#### Table 24 TCS 2789 - Joseph Street / Georges Avenue

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
i ioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	165	2173	24	48	154	88	70	1363	28	7	200	70
Heavies	8	166	2	1	3	3	2	122	0	1	8	6
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	6	0	0	0	10	8	6	0	0	0	0
Total	173	2345	26	49	157	101	80	1491	28	8	208	76
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
noui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	92	1681	61	27	167	83	124	1931	30	20	256	179
			-		•	•	4	07		0	2	Б
Heavies	2	72	0	1	2	0	Ĩ	67	1	0	3	5
Heavies Construction Forecast	2 0	72 0	0	1 0	2	0	0	0	1 0	0	0	0
Heavies Construction Forecast TTP Buses	2 0 0	72 0 8	0 0 0	1 0 0	2 0 0	0 0 10	0 12	0 8	1 0 0	0 0 0	0 0	0

#### Table 25 TCS 2816 – Beamish Street / Amy Street

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
r ioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	436	71	0	0	34	3	466	0	0	0	0
Heavies	0	45	1	0	0	0	0	45	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	13	0	0	0	0	0	38	0	0	0	0
Total	0	494	72	0	0	34	3	549	0	0	0	0
PM Model Volume Inputs												

Hour		South Leg			West Leg			North Leg			East Leg	
Houi	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	473	104	0	0	142	6	521	0	0	0	0
Heavies	0	32	1	0	0	0	0	33	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	56	0	0	0	0	0	12	0	0	0	0
Total	0	561	105	0	0	142	6	566	0	0	0	0

#### Table 26 TCS 3340 – New Canterbury Road / Frazer Street

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	300	802	0	0	0	0	0	340	127	67	0	74
Heavies	6	44	0	0	0	0	0	24	2	1	0	8
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	57	0	0	0	0	0	0	0	0	0	0	0
Total	363	846	0	0	0	0	0	364	129	68	0	82
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	182	522	0	0	0	0	0	800	98	142	0	205
Heavies	1	14	0	0	0	0	0	21	3	1	0	2
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	15	0	0	0	0	0	0	0	0	0	0	0
Total	198	536	0	0	0	0	0	821	101	143	0	207

Table 27 TCS 4074 – Restwell Street / Raymond Street / Greenfield Parade

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	301	194	0	0	373	0	0	0	59	210	101
Heavies	0	32	0	0	0	0	0	39	0	4	0	2
Construction Forecast	0	0	0	0	0	0	0	0	0	8	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	13	0	0
Total	0	333	194	0	0	373	0	39	0	84	210	103
PM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
rioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	226	186	0	0	535	0	0	0	109	408	259
Heavies	0	26	0	0	0	0	0	36	0	7	0	2
Construction Forecast	0	0	0	0	0	0	0	0	0	8	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	62	0	0
Total	0	252	186	0	0	535	0	36	0	186	408	261

#### Table 28 TCS 4408 – Chapel Road / French Avenue

AM Model Volume Inputs												
Hour		South Leg			West Leg			North Leg			East Leg	
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	41	235	16	11	67	29	50	282	15	37	55	37
Heavies	1	23	0	0	1	1	1	33	0	0	2	2
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	16	0	0	0	0	0	14	0	0	0	0
Total	42	274	16	11	68	30	51	329	15	37	57	39
PM Model Volume Inputs												
Hour		South Lea						Nauth Lan				
		eeun Eeg			vvest Leg			North Leg			East Leg	
r ioui	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	East Leg Through	Left
Light	Right 76	Through 436	Left 89	Right 36	Through 60	Left 53	Right 109	Through 493	Left 44	Right 40	East Leg Through 64	Left 48
Light Heavies	Right 76 0	Through 436 36	Left 89 0	Right 36 0	West Leg Through 60 0	Left 53 0	Right 109 0	Through 493 34	Left 44 0	Right 40 1	East Leg Through 64 0	Left 48 0
Light Heavies Construction Forecast	Right 76 0 0	Through           436           36           0	Left 89 0 0	Right 36 0	West Leg Through 60 0 0	Left 53 0 0	Right 109 0	Through 493 34 0	Left 44 0 0	Right 40 1 0	East Leg Through 64 0 0	Left 48 0 0
Light Heavies Construction Forecast TTP Buses	Right 76 0 0 0	Through           436           36           0           18	Left 89 0 0	Right 36 0 0 0	West Leg Through 60 0 0 0	Left 53 0 0	Right 109 0 0	Through 493 34 0 20	Left 44 0 0	Right           40           1           0           0	East Leg Through 64 0 0 0	Left 48 0 0

# Appendix D

## Intersection Movement Summaries

## Site: TCS 41 [Sydenham Rd / Victoria Rd - Base Future (Site Folder: AM)]

Sydenham Rd / Victoria Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Victo	oria Rd												
1 2	L2 T1	48 385	3 32	51 405	6.3 8.3	* 0.878 0.878	49.9 44.1	LOS D LOS D	9.7 10.1	72.3 75.9	1.00 1.00	1.05 1.05	1.47 1.47	22.5 28.5
Appro	oach	433	35	456	8.1	0.878	44.7	LOS D	10.1	75.9	1.00	1.05	1.47	27.9
East:	Syder	nham Rd												
4	L2	34	6	36	17.6	0.257	16.5	LOS B	4.8	36.4	0.59	0.53	0.59	46.0
5	T1	549	43	578	7.8	0.963	42.8	LOS D	22.8	171.4	0.86	1.03	1.32	27.0
6	R2	44	6	46	13.6	0.963	65.1	LOS E	22.8	171.4	1.00	1.29	1.71	25.7
Appro	oach	627	55	660	8.8	0.963	42.9	LOS D	22.8	171.4	0.85	1.02	1.30	27.7
North	n: Victo	oria Rd												
7	L2	80	14	84	17.5	0.262	27.2	LOS B	3.7	29.2	0.79	0.72	0.79	37.8
8	T1	212	19	223	9.0	0.856	36.9	LOS C	11.3	84.9	0.96	1.03	1.24	30.4
9	R2	107	7	113	6.5	*0.856	46.6	LOS D	11.3	84.9	1.00	1.12	1.36	23.3
Appro	oach	399	40	420	10.0	0.856	37.5	LOS C	11.3	84.9	0.94	0.99	1.18	30.0
West	: Syde	nham Ro	I											
10	L2	183	10	193	5.5	0.238	13.1	LOS A	4.3	31.3	0.50	0.65	0.50	40.7
11	T1	731	36	769	4.9	* 0.952	46.8	LOS D	38.8	284.0	0.96	1.23	1.43	25.6
12	R2	20	3	21	15.0	0.952	55.8	LOS D	38.8	284.0	1.00	1.28	1.50	21.1
Appro	oach	934	49	983	5.2	0.952	40.4	LOS C	38.8	284.0	0.87	1.12	1.24	27.2
All Vehic	les	2393	179	2519	7.5	0.963	41.4	LOS C	38.8	284.0	0.90	1.06	1.29	27.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Victoria	a Rd										
P1 Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
East: Sydenha	am Rd										
P2 Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
North: Victoria	Rd										

## Site: TCS 41 [Sydenham Rd / Victoria Rd - Construction (Site Folder: AM)]

Sydenham Rd / Victoria Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist ] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Victo	oria Rd	Voli/II	Volivit	,,,	110			Volt					
1	L2	48	3	51	6.3	0.903	50.5	LOS D	9.5	70.7	1.00	1.10	1.60	22.3
2	T1	385	32	405	8.3	*0.903	44.6	LOS D	9.9	74.4	1.00	1.10	1.59	28.3
Appro	oach	433	35	456	8.1	0.903	45.3	LOS D	9.9	74.4	1.00	1.10	1.59	27.7
East:	Syder	nham Rd												
4	L2	34	6	36	17.6	0.266	16.1	LOS B	4.6	35.4	0.60	0.54	0.60	46.3
5	T1	563	57	593	10.1	*0.996	51.3	LOS D	25.5	194.5	0.86	1.12	1.49	24.4
6	R2	44	6	46	13.6	0.996	77.8	LOS F	25.5	194.5	1.00	1.43	1.96	23.0
Appro	oach	641	69	675	10.8	0.996	51.3	LOS D	25.5	194.5	0.86	1.11	1.47	25.0
North	: Victo	oria Rd												
7	L2	80	14	84	17.5	0.267	26.3	LOS B	3.5	27.5	0.80	0.72	0.80	38.3
8	T1	212	19	223	9.0	0.872	36.2	LOS C	11.0	82.2	0.96	1.05	1.30	30.7
9	R2	107	7	113	6.5	*0.872	45.9	LOS D	11.0	82.2	1.00	1.14	1.43	23.6
Appro	oach	399	40	420	10.0	0.872	36.8	LOS C	11.0	82.2	0.94	1.01	1.23	30.3
West	: Syde	nham Ro	I											
10	L2	183	10	193	5.5	0.246	12.7	LOS A	4.1	30.1	0.50	0.65	0.50	41.1
11	T1	745	50	784	6.7	0.983	57.1	LOS E	42.4	314.5	0.96	1.36	1.62	22.8
12	R2	20	3	21	15.0	0.983	67.2	LOS E	42.4	314.5	1.00	1.42	1.72	18.5
Appro	oach	948	63	998	6.6	0.983	48.7	LOS D	42.4	314.5	0.87	1.22	1.41	24.5
All Vehic	les	2421	207	2548	8.6	0.996	46.8	LOS D	42.4	314.5	0.90	1.14	1.43	26.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Victoria	a Rd										
P1 Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	208.7	215.2	1.03
East: Sydenha	am Rd										
P2 Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	208.7	215.2	1.03
North: Victoria	Rd										

## Site: TCS 41 [Sydenham Rd / Victoria Rd - TTP (Site Folder: AM)]

Sydenham Rd / Victoria Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfo	rmance										
Mov ID	Turn	INF VOLL [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% B/ QU [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
Sout	n: Victo	oria Rd	ven/n	ven/m	70	V/C	Sec	_	ven		_	_	_	K111/11
1	L2	48	3	51	6.3	0.967	67.8	LOS E	11.7	87.2	1.00	1.23	1.89	18.2
2	T1	385	32	405	8.3	*0.967	61.9	LOS E	12.2	91.8	1.00	1.23	1.88	23.5
Appr	oach	433	35	456	8.1	0.967	62.5	LOS E	12.2	91.8	1.00	1.23	1.88	23.0
East:	Syder	nham Rd												
4	L2	34	6	36	17.6	0.284	16.1	LOS B	5.3	41.0	0.59	0.53	0.59	46.4
5	T1	563	57	593	10.1	1.063	75.2	LOS F	31.7	241.8	0.84	1.22	1.69	18.9
6	R2	44	6	46	13.6	1.063	121.2	LOS F	31.7	241.8	1.00	1.66	2.39	16.8
Appr	oach	641	69	675	10.8	1.063	75.2	LOS F	31.7	241.8	0.84	1.22	1.68	19.5
North	n: Victo	oria Rd												
7	L2	80	14	84	17.5	0.256	28.0	LOS B	3.5	27.5	0.80	0.73	0.80	37.3
8	T1	212	19	223	9.0	0.837	35.8	LOS C	11.4	85.4	0.97	1.03	1.21	30.8
9	R2	107	7	113	6.5	*0.837	44.0	LOS D	11.4	85.4	1.00	1.09	1.30	24.2
Appr	oach	399	40	420	10.0	0.837	36.4	LOS C	11.4	85.4	0.94	0.99	1.15	30.4
West	: Syde	nham Ro	ł											
10	L2	183	10	193	5.5	0.266	13.3	LOS A	4.8	35.7	0.51	0.64	0.51	40.8
11	T1	802	107	844	13.3	* 1.064	104.0	LOS F	63.8	497.6	0.95	1.74	2.09	15.0
12	R2	20	3	21	15.0	1.064	120.2	LOS F	63.8	497.6	1.00	1.86	2.26	11.7
Appr	oach	1005	120	1058	11.9	1.064	87.8	LOS F	63.8	497.6	0.87	1.54	1.81	16.5
All Vehic	les	2478	264	2608	10.7	1.064	71.8	LOS F	63.8	497.6	0.90	1.31	1.68	19.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	orman	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Victoria	a Rd										
P1 Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
East: Sydenha	am Rd										
P2 Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
North: Victoria	Rd										

## Site: TCS 41 [Sydenham Rd / Victoria Rd - TTP - Mitigated (Site Folder: AM)]

Sydenham Rd / Victoria Rd Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 73 seconds (Site User-Given Phase Times)

Vehi	cle M	ovemen	t Perfo	rmance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Victo	oria Rd	VC11/11	VCH/H	70	V/C	360	_	ven			_	_	N111/11
1	L2	48	3	51	6.3	*0.782	42.0	LOS C	8.6	63.9	1.00	0.94	1.23	25.1
2	T1	385	32	405	8.3	0.782	36.3	LOS C	8.9	66.9	1.00	0.94	1.23	31.3
Appro	oach	433	35	456	8.1	0.782	36.9	LOS C	8.9	66.9	1.00	0.94	1.23	30.7
East:	Syder	nham Rd												
4	L2	34	6	36	17.6	0.279	15.8	LOS B	5.1	39.1	0.58	0.53	0.58	46.6
5	T1	563	57	593	10.1	* 1.044	67.3	LOS E	29.6	225.5	0.84	1.19	1.63	20.4
6	R2	44	6	46	13.6	1.044	107.5	LOS F	29.6	225.5	1.00	1.60	2.28	18.4
Appro	oach	641	69	675	10.8	1.044	67.3	LOS E	29.6	225.5	0.84	1.18	1.62	21.0
North	: Victo	oria Rd												
7	L2	80	14	84	17.5	0.265	27.8	LOS B	3.5	27.4	0.81	0.73	0.81	37.4
8	T1	212	19	223	9.0	0.866	37.5	LOS C	11.8	88.2	0.97	1.05	1.28	30.2
9	R2	107	7	113	6.5	*0.866	46.3	LOS D	11.8	88.2	1.00	1.12	1.39	23.4
Appro	oach	399	40	420	10.0	0.866	37.9	LOS C	11.8	88.2	0.94	1.00	1.22	29.9
West	: Syde	nham Ro	I											
10	L2	183	10	193	5.5	0.306	13.7	LOS A	5.5	41.4	0.54	0.63	0.54	40.8
11	T1	802	107	844	13.3	1.020	73.7	LOS F	51.7	403.3	0.94	1.48	1.76	19.2
12	R2	20	3	21	15.0	1.020	89.9	LOS F	51.7	403.3	1.00	1.62	1.96	14.8
Appro	oach	1005	120	1058	11.9	1.020	63.1	LOS E	51.7	403.3	0.86	1.33	1.54	20.8
All Vehic	les	2478	264	2608	10.7	1.044	55.6	LOS D	51.7	403.3	0.89	1.17	1.46	23.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pede	estrian I	Novem	ent Perf	orman	ce							
Mov	Proceina	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
	JUSSING	Vol.	Flow	Delay	Service	QUE [Ped	=UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
South	n: Victoria	a Rd										
P1 F	Full	50	53	30.8	LOS D	0.1	0.1	0.92	0.92	210.1	215.2	1.02
East:	Sydenha	am Rd										
P2 F	Full	50	53	30.8	LOS D	0.1	0.1	0.92	0.92	210.1	215.2	1.02
North	n: Victoria	Rd										
P3 F	Full	50	53	30.8	LOS D	0.1	0.1	0.92	0.92	210.1	215.2	1.02

## Site: TCS 42 [Wardell Rd / Frazer St - Future Base (Site Folder: AM)]

Wardell Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service		EUE Diet 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	⊓vj %	v/c	sec		ven. veh	m Dist		Rale	Cycles	km/h
South	n: War	dell Rd												
1	L2	36	2	38	5.6	0.156	13.4	LOS A	1.0	7.1	0.77	0.65	0.77	44.2
2	T1	278	2	293	0.7	0.768	13.1	LOS A	6.1	43.5	0.93	0.93	1.21	41.2
3	R2	122	4	128	3.3	*0.768	18.5	LOS B	6.1	43.5	0.96	0.98	1.29	41.8
Appro	oach	436	8	459	1.8	0.768	14.7	LOS B	6.1	43.5	0.93	0.92	1.19	41.6
East:	Fraze	r St												
4	L2	53	1	56	1.9	0.102	14.1	LOS A	0.6	4.4	0.75	0.71	0.75	43.3
5	T1	147	8	155	5.4	0.457	10.7	LOS A	2.7	19.4	0.88	0.73	0.88	47.5
6	R2	44	1	46	2.3	0.457	16.3	LOS B	2.7	19.4	0.88	0.73	0.88	44.1
Appro	oach	244	10	257	4.1	0.457	12.5	LOS A	2.7	19.4	0.85	0.73	0.85	45.8
North	: Ward	dell Rd												
7	L2	45	4	47	8.9	0.092	13.2	LOS A	0.5	4.0	0.75	0.69	0.75	42.5
8	T1	120	3	126	2.5	0.228	9.0	LOS A	1.5	10.7	0.79	0.62	0.79	44.2
9	R2	2	0	2	0.0	0.228	13.6	LOS A	1.5	10.7	0.79	0.62	0.79	45.1
Appro	oach	167	7	176	4.2	0.228	10.2	LOS A	1.5	10.7	0.78	0.64	0.78	43.8
West	: Fraze	er St												
10	L2	4	0	4	0.0	0.147	14.3	LOS A	0.9	6.8	0.76	0.60	0.76	46.0
11	T1	387	8	407	2.1	0.679	11.4	LOS A	5.3	37.9	0.90	0.80	1.02	47.9
12	R2	32	1	34	3.1	*0.679	17.3	LOS B	5.3	37.9	0.93	0.86	1.08	44.1
Appro	oach	423	9	445	2.1	0.679	11.8	LOS A	5.3	37.9	0.90	0.81	1.02	47.5
All Vehic	les	1270	34	1337	2.7	0.768	12.7	LOS A	6.1	43.5	0.88	0.81	1.02	44.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Movem	ent Peri	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service		EUE	Que	Stop	Time	Dist.	Speed
	1/1	171			[ Pea	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Warde	ll Rd										
P1 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23
East: Frazer S	St										
P2 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23

## Site: TCS 42 [Wardell Rd / Frazer St - Construction (Site Folder: AM)]

Wardell Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service		EUE Dict 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	⊓vj %	v/c	sec		ven. veh	m Dist		Rale	Cycles	km/h
South	n: War	dell Rd												
1	L2	36	2	38	5.6	0.156	13.4	LOS A	1.0	7.1	0.77	0.65	0.77	44.2
2	T1	278	2	293	0.7	0.768	13.1	LOS A	6.1	43.5	0.93	0.93	1.21	41.2
3	R2	122	4	128	3.3	*0.768	18.5	LOS B	6.1	43.5	0.96	0.98	1.29	41.8
Appro	oach	436	8	459	1.8	0.768	14.7	LOS B	6.1	43.5	0.93	0.92	1.19	41.6
East:	Fraze	r St												
4	L2	53	1	56	1.9	0.102	14.1	LOS A	0.6	4.4	0.75	0.71	0.75	43.3
5	T1	147	8	155	5.4	0.457	10.7	LOS A	2.7	19.4	0.88	0.73	0.88	47.5
6	R2	44	1	46	2.3	0.457	16.3	LOS B	2.7	19.4	0.88	0.73	0.88	44.1
Appro	oach	244	10	257	4.1	0.457	12.5	LOS A	2.7	19.4	0.85	0.73	0.85	45.8
North	: Ward	dell Rd												
7	L2	45	4	47	8.9	0.092	13.2	LOS A	0.5	4.0	0.75	0.69	0.75	42.5
8	T1	120	3	126	2.5	0.228	9.0	LOS A	1.5	10.7	0.79	0.62	0.79	44.2
9	R2	2	0	2	0.0	0.228	13.6	LOS A	1.5	10.7	0.79	0.62	0.79	45.1
Appro	oach	167	7	176	4.2	0.228	10.2	LOS A	1.5	10.7	0.78	0.64	0.78	43.8
West	: Fraze	er St												
10	L2	4	0	4	0.0	0.147	14.3	LOS A	0.9	6.8	0.76	0.60	0.76	46.0
11	T1	387	8	407	2.1	0.679	11.4	LOS A	5.3	37.9	0.90	0.80	1.02	47.9
12	R2	32	1	34	3.1	*0.679	17.3	LOS B	5.3	37.9	0.93	0.86	1.08	44.1
Appro	oach	423	9	445	2.1	0.679	11.8	LOS A	5.3	37.9	0.90	0.81	1.02	47.5
All Vehic	les	1270	34	1337	2.7	0.768	12.7	LOS A	6.1	43.5	0.88	0.81	1.02	44.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Movem	ent Peri	forman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Warde	ll Rd										
P1 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23
East: Frazer S	St										
P2 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23

#### Site: TCS 42 [Wardell Rd / Frazer St - TTP (Site Folder: AM)]

Wardell Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	it Perfoi	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLC	WS	Satn	Delay	Service	QUE	EUE	Que	Stop	No.	Speed
		l Iotai veh/h	HV J veh/h	i Iotai veh/h	HV J %	v/c	sec		ر ven. veh	Dist j m		Rate	Cycles	km/h
Sout	h: War	dell Rd												
1	L2	36	2	38	5.6	0.146	15.3	LOS B	1.3	9.1	0.74	0.64	0.74	43.1
2	T1	278	2	293	0.7	0.722	14.7	LOS B	7.3	52.1	0.90	0.86	1.04	40.4
3	R2	122	4	128	3.3	*0.722	20.1	LOS B	7.3	52.1	0.94	0.91	1.11	41.0
Appr	oach	436	8	459	1.8	0.722	16.3	LOS B	7.3	52.1	0.90	0.86	1.04	40.8
East:	Fraze	er St												
4	L2	53	1	56	1.9	0.082	14.5	LOS A	0.7	5.2	0.67	0.70	0.67	43.1
5	T1	147	8	155	5.4	0.406	12.7	LOS A	3.3	24.0	0.84	0.71	0.84	46.0
6	R2	44	1	46	2.3	0.406	18.3	LOS B	3.3	24.0	0.84	0.71	0.84	42.9
Appr	oach	244	10	257	4.1	0.406	14.1	LOS A	3.3	24.0	0.80	0.71	0.80	44.7
North	n: Waro	dell Rd												
7	L2	45	4	47	8.9	0.085	15.1	LOS B	0.7	5.0	0.72	0.69	0.72	41.4
8	T1	120	3	126	2.5	0.211	10.9	LOS A	1.9	13.5	0.76	0.61	0.76	43.1
9	R2	2	0	2	0.0	0.211	15.5	LOS B	1.9	13.5	0.76	0.61	0.76	43.8
Appr	oach	167	7	176	4.2	0.211	12.1	LOS A	1.9	13.5	0.75	0.63	0.75	42.7
West	: Fraze	er St												
10	L2	4	0	4	0.0	0.149	14.7	LOS B	1.3	10.0	0.69	0.55	0.69	45.7
11	T1	444	65	467	14.6	0.691	12.7	LOS A	7.6	59.1	0.86	0.78	0.94	46.9
12	R2	32	1	34	3.1	*0.691	18.8	LOS B	7.6	59.1	0.90	0.84	1.01	43.2
Appr	oach	480	66	505	13.8	0.691	13.1	LOS A	7.6	59.1	0.86	0.78	0.95	46.6
All Vehic	cles	1327	91	1397	6.9	0.722	14.2	LOS A	7.6	59.1	0.85	0.77	0.93	43.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	e							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Wardell Rd											
P1 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: Frazer S	st										
P2 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
North: Wardel	l Rd										

## Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Future Base (Site Folder: AM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU	JMES	FLC	WS ม\/ 1	Satn	Delay	Service	QUE [ \/eh	EUE Diet 1	Que	Stop Rate	No.	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Trate	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	120	5	126	4.2	0.242	43.1	LOS D	6.1	44.0	0.80	0.77	0.80	30.0
2	T1	151	5	159	3.3	*0.569	55.2	LOS D	9.9	73.2	0.97	0.80	0.97	24.7
3	R2	6	6	6	100.0	0.569	61.8	LOS E	9.9	73.2	0.97	0.80	0.97	26.4
Appro	oach	277	16	292	5.8	0.569	50.1	LOS D	9.9	73.2	0.90	0.78	0.90	27.0
East:	Hume	e Hwy												
4	L2	86	8	91	9.3	0.434	27.1	LOS B	15.6	115.5	0.68	0.64	0.68	38.9
5	T1	1074	67	1131	6.2	0.434	21.0	LOS B	16.1	118.7	0.67	0.61	0.67	35.2
6	R2	30	1	32	3.3	0.207	67.4	LOS E	1.9	13.9	0.97	0.72	0.97	15.1
Appro	oach	1190	76	1253	6.4	0.434	22.6	LOS B	16.1	118.7	0.68	0.61	0.68	34.7
North	: Rooł	wood Ro	d											
7	L2	34	2	36	5.9	0.131	42.5	LOS C	3.1	22.6	0.78	0.68	0.78	21.2
8	T1	191	12	201	6.3	0.355	41.4	LOS C	8.8	65.1	0.85	0.71	0.85	28.9
9	R2	54	3	57	5.6	*0.699	78.1	LOS F	3.9	28.6	1.00	0.81	1.18	13.4
Appro	oach	279	17	294	6.1	0.699	48.6	LOS D	8.8	65.1	0.87	0.72	0.90	24.4
West	: Hume	e Hwy												
10	L2	179	18	188	10.1	0.802	33.7	LOS C	37.8	281.8	0.89	0.84	0.89	25.2
11	T1	1911	132	2012	6.9	*0.802	27.3	LOS B	39.3	291.2	0.88	0.81	0.88	31.3
12	R2	107	9	113	8.4	*0.775	74.7	LOS F	7.6	57.2	1.00	0.88	1.20	22.4
Appro	oach	2197	159	2313	7.2	0.802	30.1	LOS C	39.3	291.2	0.89	0.82	0.90	30.0
All Vehic	les	3943	268	4151	6.8	0.802	30.6	LOS C	39.3	291.2	0.83	0.75	0.83	30.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUI	EUE	Que	Stop	Time	Dist.	Speed
					[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chape	l Rd										
P1 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	225.4	216.0	0.96
North: Rookw	ood Rd										
P3 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	227.3	218.5	0.96

## Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Construction (Site Folder: AM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU	UT IMES	DEM FLC	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE		Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		i iotai veh/h	HV J veh/h	l Iotai veh/h	нvј %	v/c	sec		ر ven. veh	DIST J m		Rate	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	120	5	126	4.2	0.242	43.1	LOS D	6.1	44.0	0.80	0.77	0.80	30.0
2	T1	151	5	159	3.3	*0.569	55.2	LOS D	9.9	73.2	0.97	0.80	0.97	24.7
3	R2	6	6	6	100.0	0.569	61.8	LOS E	9.9	73.2	0.97	0.80	0.97	26.4
Appro	bach	277	16	292	5.8	0.569	50.1	LOS D	9.9	73.2	0.90	0.78	0.90	27.0
East:	Hume	Hwy												
4	L2	86	8	91	9.3	0.434	27.1	LOS B	15.6	115.5	0.68	0.64	0.68	38.9
5	T1	1074	67	1131	6.2	0.434	21.0	LOS B	16.1	118.7	0.67	0.61	0.67	35.2
6	R2	30	1	32	3.3	0.207	67.4	LOS E	1.9	13.9	0.97	0.72	0.97	15.1
Appro	bach	1190	76	1253	6.4	0.434	22.6	LOS B	16.1	118.7	0.68	0.61	0.68	34.7
North	: Rooł	wood Ro	ł											
7	L2	34	2	36	5.9	0.131	42.5	LOS C	3.1	22.6	0.78	0.68	0.78	21.2
8	T1	191	12	201	6.3	0.355	41.4	LOS C	8.8	65.1	0.85	0.71	0.85	28.9
9	R2	54	3	57	5.6	*0.699	78.1	LOS F	3.9	28.6	1.00	0.81	1.18	13.4
Appro	bach	279	17	294	6.1	0.699	48.6	LOS D	8.8	65.1	0.87	0.72	0.90	24.4
West	: Hume	e Hwy												
10	L2	179	18	188	10.1	0.802	33.7	LOS C	37.8	281.8	0.89	0.84	0.89	25.2
11	T1	1911	132	2012	6.9	*0.802	27.3	LOS B	39.3	291.2	0.88	0.81	0.88	31.3
12	R2	107	9	113	8.4	*0.775	74.7	LOS F	7.6	57.2	1.00	0.88	1.20	22.4
Appro	bach	2197	159	2313	7.2	0.802	30.1	LOS C	39.3	291.2	0.89	0.82	0.90	30.0
All Vehic	les	3943	268	4151	6.8	0.802	30.6	LOS C	39.3	291.2	0.83	0.75	0.83	30.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUI	EUE	Que	Stop	Time	Dist.	Speed
					[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chape	l Rd										
P1 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	225.4	216.0	0.96
North: Rookw	ood Rd										
P3 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	227.3	218.5	0.96

## Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd TTP (Site Folder: AM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	TUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID				FLC	WS	Satn	Delay	Service		EUE Diet 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Itale	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	130	15	137	11.5	0.275	42.9	LOS D	6.6	50.8	0.81	0.77	0.81	30.2
2	T1	157	11	165	7.0	*0.610	55.7	LOS D	10.3	78.9	0.98	0.81	0.98	24.5
3	R2	6	6	6	100.0	0.610	62.3	LOS E	10.3	78.9	0.98	0.81	0.98	26.4
Appro	oach	293	32	308	10.9	0.610	50.2	LOS D	10.3	78.9	0.90	0.79	0.90	27.0
East:	Hume	Hwy												
4	L2	86	8	91	9.3	0.441	27.8	LOS B	15.8	117.3	0.69	0.65	0.69	38.5
5	T1	1074	67	1131	6.2	0.441	21.7	LOS B	16.4	120.6	0.68	0.61	0.68	34.8
6	R2	30	1	32	3.3	0.190	66.1	LOS E	1.9	13.7	0.96	0.72	0.96	15.3
Appro	oach	1190	76	1253	6.4	0.441	23.2	LOS B	16.4	120.6	0.69	0.62	0.69	34.3
North	: Rooł	wood Ro	ł											
7	L2	34	2	36	5.9	0.137	42.6	LOS D	3.2	23.7	0.78	0.68	0.78	21.2
8	T1	197	18	207	9.1	0.373	41.6	LOS C	9.1	68.7	0.85	0.71	0.85	28.8
9	R2	54	3	57	5.6	*0.699	78.1	LOS F	3.9	28.6	1.00	0.81	1.18	13.4
Appro	oach	285	23	300	8.1	0.699	48.6	LOS D	9.1	68.7	0.87	0.73	0.91	24.5
West	: Hume	e Hwy												
10	L2	179	18	188	10.1	0.816	35.6	LOS C	39.2	292.4	0.91	0.86	0.92	24.3
11	T1	1911	132	2012	6.9	*0.816	29.1	LOS C	40.4	299.9	0.90	0.83	0.91	30.4
12	R2	115	17	121	14.8	*0.813	76.0	LOS F	8.3	65.7	1.00	0.91	1.26	22.2
Appro	oach	2205	167	2321	7.6	0.816	32.0	LOS C	40.4	299.9	0.90	0.84	0.93	29.1
All Vehic	les	3973	298	4182	7.5	0.816	31.9	LOS C	40.4	299.9	0.84	0.76	0.85	29.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUI	EUE	Que	Stop	Time	Dist.	Speed
					[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chape	l Rd										
P1 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	225.4	216.0	0.96
North: Rookw	ood Rd										
P3 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	227.3	218.5	0.96

## Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Future Base (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 147 seconds (Site User-Given Phase Times)

Vehi	cle M	ovemen	t Perfo	mance										
Mov	Turn	INF	PUT	DEM	IAND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLC	WS ا	Satn	Delay	Service		EUE Dict 1	Que	Stop	No.	Speed
		veh/h	rvj veh/h	veh/h	пvј %	v/c	sec		veh	m		Nale	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	244	10	257	4.1	0.534	53.3	LOS D	16.2	117.5	0.90	0.83	0.90	27.0
2	T1	331	9	348	2.7	* 1.068	151.0	LOS F	40.7	299.6	1.00	1.40	1.77	12.0
3	R2	11	11	12	100.0	1.068	160.9	LOS F	40.7	299.6	1.00	1.42	1.80	13.3
Appro	oach	586	30	617	5.1	1.068	110.5	LOS F	40.7	299.6	0.96	1.16	1.41	16.1
East:	Hume	e Hwy												
4	L2	115	12	121	10.4	0.992	101.4	LOS F	66.6	490.4	1.00	1.19	1.39	19.0
5	T1	1842	92	1939	5.0	0.992	94.8	LOS F	69.4	506.5	1.00	1.21	1.39	14.5
6	R2	52	0	55	0.0	0.241	69.3	LOS E	3.6	25.2	0.94	0.75	0.94	14.8
Appro	oach	2009	104	2115	5.2	0.992	94.5	LOS F	69.4	506.5	1.00	1.20	1.38	14.8
North	n: Rool	wood Ro	d											
7	L2	20	0	21	0.0	0.271	38.8	LOS C	9.4	67.2	0.73	0.63	0.73	23.8
8	T1	487	10	513	2.1	0.541	36.4	LOS C	18.3	130.3	0.79	0.68	0.79	31.1
9	R2	112	5	118	4.5	0.464	68.9	LOS E	7.9	57.4	0.97	0.79	0.97	14.7
Appro	oach	619	15	652	2.4	0.541	42.4	LOS C	18.3	130.3	0.82	0.70	0.82	27.3
West	: Hum	e Hwy												
10	L2	213	22	224	10.3	*0.924	70.9	LOS F	51.2	373.7	1.00	1.03	1.19	14.8
11	T1	1610	30	1695	1.9	0.924	63.9	LOS E	54.4	387.2	0.99	1.04	1.18	19.2
12	R2	203	9	214	4.4	*0.980	111.6	LOS F	19.9	144.7	1.00	1.07	1.55	17.2
Appro	oach	2026	61	2133	3.0	0.980	69.4	LOS E	54.4	387.2	1.00	1.04	1.22	18.5
All Vehic	les	5240	210	5516	4.0	1.068	80.4	LOS F	69.4	506.5	0.97	1.07	1.25	17.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel	Rd										
P1 Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	233.9	216.0	0.92
North: Rookwo	ood Rd										
P3 Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	235.8	218.5	0.93
West: Hume H	lwy										

## Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Construction (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 147 seconds (Site User-Given Phase Times)

Vehi	cle M	ovemer	nt Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% B/	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLC	WS .	Satn	Delay	Service	QU	EUE	Que	Stop	No.	Speed
		l Iotai veh/h	HV J veh/h	l Iotai veh/h	нvј %	v/c	sec		ι ven. veh	Dist j m		Rate	Cycles	km/h
Sout	h: Cha	pel Rd												
1	L2	244	10	257	4.1	0.460	48.9	LOS D	14.7	106.4	0.85	0.81	0.85	28.2
2	T1	331	9	348	2.7	* 1.104	180.8	LOS F	45.6	335.4	1.00	1.52	1.94	10.3
3	R2	11	11	12	100.0	1.104	187.4	LOS F	45.6	335.4	1.00	1.52	1.94	11.7
Appr	oach	586	30	617	5.1	1.104	126.0	LOS F	45.6	335.4	0.94	1.22	1.49	14.5
East:	Hume	e Hwy												
4	L2	115	12	121	10.4	0.992	101.4	LOS F	66.6	490.4	1.00	1.19	1.39	19.0
5	T1	1842	92	1939	5.0	0.992	94.8	LOS F	69.4	506.5	1.00	1.21	1.39	14.5
6	R2	52	0	55	0.0	0.241	69.3	LOS E	3.6	25.2	0.94	0.75	0.94	14.8
Appr	oach	2009	104	2115	5.2	0.992	94.5	LOS F	69.4	506.5	1.00	1.20	1.38	14.8
North	n: Rool	wood R	d											
7	L2	20	0	21	0.0	0.226	38.1	LOS C	7.7	54.9	0.72	0.62	0.72	24.0
8	T1	487	10	513	2.1	0.612	37.0	LOS C	20.5	145.7	0.80	0.69	0.80	30.8
9	R2	112	5	118	4.5	0.464	68.9	LOS E	7.9	57.4	0.97	0.79	0.97	14.7
Appro	oach	619	15	652	2.4	0.612	42.8	LOS D	20.5	145.7	0.83	0.71	0.83	27.2
West	: Hum	e Hwy												
10	L2	213	22	224	10.3	*0.924	70.9	LOS F	51.2	373.7	1.00	1.03	1.19	14.8
11	T1	1610	30	1695	1.9	0.924	63.9	LOS E	54.4	387.2	0.99	1.04	1.18	19.2
12	R2	203	9	214	4.4	*0.980	111.6	LOS F	19.9	144.7	1.00	1.07	1.55	17.2
Appr	oach	2026	61	2133	3.0	0.980	69.4	LOS E	54.4	387.2	1.00	1.04	1.22	18.5
All Vehic	cles	5240	210	5516	4.0	1.104	82.2	LOS F	69.4	506.5	0.97	1.08	1.26	17.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	Noveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
	1.0	1/1			[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chape	Rd										
P1 Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	233.9	216.0	0.92
North: Rookwo	ood Rd										
P3 Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	235.8	218.5	0.93
West: Hume H	lwy										

## Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd TTP (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 147 seconds (Site User-Given Phase Times)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLC	WS	Satn	Delay	Service	QUI	EUE	Que	Stop	No.	Speed
		[ Iotal veh/h	HV J veh/h	[ Iotal veh/h	HV J %	v/c	sec		ر ven. veh	Dist J m		Rate	Cycles	km/h
Sout	n: Cha	pel Rd												
1	L2	254	20	267	7.9	0.497	49.6	LOS D	15.5	116.0	0.87	0.82	0.87	28.1
2	T1	339	17	357	5.0	* 1.153	218.5	LOS F	51.6	386.2	1.00	1.65	2.12	8.7
3	R2	11	11	12	100.0	1.153	225.1	LOS F	51.6	386.2	1.00	1.65	2.12	10.0
Appr	oach	604	48	636	7.9	1.153	147.6	LOS F	51.6	386.2	0.94	1.30	1.60	12.8
East:	Hume	e Hwy												
4	L2	115	12	121	10.4	0.992	101.4	LOS F	66.6	490.4	1.00	1.19	1.39	19.0
5	T1	1842	92	1939	5.0	0.992	94.8	LOS F	69.4	506.5	1.00	1.21	1.39	14.5
6	R2	52	0	55	0.0	0.241	69.3	LOS E	3.6	25.2	0.94	0.75	0.94	14.8
Appr	oach	2009	104	2115	5.2	0.992	94.5	LOS F	69.4	506.5	1.00	1.20	1.38	14.8
North	n: Rool	wood Ro	b											
7	L2	20	0	21	0.0	0.233	38.3	LOS C	7.9	56.8	0.72	0.62	0.72	24.0
8	T1	495	18	521	3.6	0.633	37.3	LOS C	20.9	150.9	0.81	0.70	0.81	30.7
9	R2	112	5	118	4.5	0.464	68.9	LOS E	7.9	57.4	0.97	0.79	0.97	14.7
Appr	oach	627	23	660	3.7	0.633	42.9	LOS D	20.9	150.9	0.83	0.71	0.83	27.1
West	: Hum	e Hwy												
10	L2	213	22	224	10.3	*0.926	71.6	LOS F	51.7	377.0	1.00	1.04	1.20	14.7
11	T1	1610	30	1695	1.9	0.926	64.6	LOS E	54.9	390.6	0.99	1.04	1.19	19.0
12	R2	215	21	226	9.8	* 1.095	182.0	LOS F	27.8	211.1	1.00	1.25	1.97	11.6
Appr	oach	2038	73	2145	3.6	1.095	77.7	LOS F	54.9	390.6	0.99	1.07	1.27	17.0
All Vehic	les	5278	248	5556	4.7	1.153	88.0	LOS F	69.4	506.5	0.97	1.10	1.30	16.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel	Rd										
P1 Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	233.9	216.0	0.92
North: Rookwo	ood Rd										
P3 Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	235.8	218.5	0.93
West: Hume H	lwy										

## Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd TTP - Mitigation (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

```
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 152 seconds (Site User-Given Phase Times)
```

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	IAND	Deg.	Aver.	Level of	95% B/	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU	JMES	FLC	WS	Satn	Delay	Service	QU	EUE	Que	Stop	No.	Speed
		[ Iotal veh/h	HV J veh/h	[ Iotal veh/h	HV J %	v/c	sec		Į Veh. veh	Dist J m		Rate	Cycles	km/h
Sout	h: Cha	pel Rd												
1	L2	254	20	267	7.9	0.438	45.5	LOS D	15.0	112.0	0.81	0.81	0.81	29.4
2	T1	339	17	357	5.0	<b>*</b> 1.009	119.7	LOS F	38.6	288.9	1.00	1.28	1.55	14.6
3	R2	11	11	12	100.0	1.009	126.3	LOS F	38.6	288.9	1.00	1.28	1.55	16.3
Appr	oach	604	48	636	7.9	1.009	88.6	LOS F	38.6	288.9	0.92	1.08	1.24	19.0
East:	Hume	e Hwy												
4	L2	115	12	121	10.4	*0.898	61.2	LOS E	52.5	386.0	1.00	0.99	1.11	26.3
5	T1	1842	92	1939	5.0	0.898	54.5	LOS D	54.2	395.6	0.99	0.99	1.11	21.4
6	R2	52	0	55	0.0	0.213	68.7	LOS E	3.6	25.4	0.93	0.75	0.93	14.9
Appr	oach	2009	104	2115	5.2	0.898	55.3	LOS D	54.2	395.6	0.99	0.98	1.10	21.5
North	n: Rool	kwood Ro	b											
7	L2	20	0	21	0.0	0.272	45.5	LOS D	8.9	64.3	0.78	0.67	0.78	21.4
8	T1	495	18	521	3.6	0.738	45.2	LOS D	23.4	169.0	0.87	0.75	0.87	27.8
9	R2	112	5	118	4.5	<b>*</b> 1.007	128.1	LOS F	11.7	85.3	1.00	1.11	1.72	9.0
Appr	oach	627	23	660	3.7	1.007	60.0	LOS E	23.4	169.0	0.89	0.81	1.02	22.3
West	: Hum	e Hwy												
10	L2	213	22	224	10.3	0.845	51.4	LOS D	44.0	320.7	0.97	0.91	1.01	18.8
11	T1	1610	30	1695	1.9	0.845	44.6	LOS D	46.5	331.0	0.95	0.89	0.99	24.1
12	R2	215	21	226	9.8	*0.971	110.4	LOS F	21.4	162.7	1.00	1.05	1.50	17.3
Appr	oach	2038	73	2145	3.6	0.971	52.3	LOS D	46.5	331.0	0.96	0.91	1.05	22.3
All Vehic	cles	5278	248	5556	4.7	1.009	58.5	LOS E	54.2	395.6	0.96	0.95	1.09	21.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Crossing Vol. ped/h p		Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel	Rd										
P1 Full	50	53	70.3	LOS F	0.2	0.2	0.96	0.96	236.4	216.0	0.91
North: Rookwo	ood Rd										
P3 Full	50	53	70.3	LOS F	0.2	0.2	0.96	0.96	238.3	218.5	0.92
West: Hume H	lwy										

## Site: TCS 67 [Marrickville Rd / Livingstone Rd - Future Base (Site Folder: PM)]

Marrickville Rd / Livingstone Rd - TCS 67

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INP	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLL	JMES	FLO	WS	Satn	Delay	Service	QUE	EUE	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	нvј %	v/c	sec		ven. veh	Dist j m		Rate	Cycles	km/h
South	n: Livir	ngstone R	Rd											
1	L2	42	0	44	0.0	0.107	17.6	LOS B	0.9	6.2	0.74	0.67	0.74	43.6
2	T1	164	3	173	1.8	0.462	13.9	LOS A	3.7	26.5	0.86	0.73	0.86	41.4
3	R2	48	0	51	0.0	0.462	18.7	LOS B	3.7	26.5	0.87	0.73	0.87	38.7
Appro	bach	254	3	267	1.2	0.462	15.4	LOS B	3.7	26.5	0.84	0.72	0.84	41.4
East:	Marrio	ckville Rd												
4	L2	149	0	157	0.0	*0.653	17.8	LOS B	8.6	61.5	0.86	0.79	0.89	40.5
5	T1	568	17	598	3.0	0.653	12.2	LOS A	8.6	61.5	0.87	0.80	0.91	45.1
6	R2	109	2	115	1.8	0.653	18.4	LOS B	7.0	49.9	0.88	0.81	0.94	39.8
Appro	bach	826	19	869	2.3	0.653	14.0	LOS A	8.6	61.5	0.87	0.80	0.91	43.4
North	: Livin	gstone R	d											
7	L2	106	0	112	0.0	0.211	17.4	LOS B	1.8	12.7	0.80	0.74	0.80	37.5
8	T1	260	3	274	1.2	*0.640	14.8	LOS B	6.3	44.6	0.91	0.82	0.97	41.2
9	R2	53	0	56	0.0	0.640	19.3	LOS B	6.3	44.6	0.91	0.82	0.97	43.3
Appro	bach	419	3	441	0.7	0.640	16.0	LOS B	6.3	44.6	0.88	0.80	0.93	40.7
West	: Marri	ickville Ro	b											
10	L2	53	0	56	0.0	0.330	15.1	LOS B	3.6	25.9	0.73	0.64	0.73	46.6
11	T1	363	10	382	2.8	0.330	9.9	LOS A	3.6	25.9	0.74	0.64	0.74	47.7
12	R2	20	0	21	0.0	0.330	15.8	LOS B	3.2	22.5	0.75	0.63	0.75	46.5
Appro	bach	436	10	459	2.3	0.330	10.8	LOS A	3.6	25.9	0.74	0.64	0.74	47.5
All Vehic	les	1935	35	2037	1.8	0.653	13.9	LOS A	8.6	61.5	0.84	0.75	0.87	43.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Noveme	nt Peri	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	ped/h ped/h sed/h					EUE	Que	Stop	Time	Dist.	Speed
	1/1	1/1			[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Livings	tone Rd										
P1 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	180.7	214.8	1.19
East: Marricky	ville Rd										
P2 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.0	215.2	1.19

## Site: TCS 67 [Marrickville Rd / Livingstone Rd - Construction (Site Folder: PM)]

Marrickville Rd / Livingstone Rd - TCS 67

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% BA	CK OF	Prop.	Effective	Aver.	Aver.
ID		VOLL	IMES	FLO	WS	Satn	Delay	Service	QUE		Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	⊓vj %	v/c	sec		ven. veh	m Dist		Rale	Cycles	km/h
South	n: Livir	igstone R	\d											
1	L2	42	0	44	0.0	0.107	17.6	LOS B	0.9	6.2	0.74	0.67	0.74	43.6
2	T1	164	3	173	1.8	0.462	13.9	LOS A	3.7	26.5	0.86	0.73	0.86	41.4
3	R2	48	0	51	0.0	0.462	18.7	LOS B	3.7	26.5	0.87	0.73	0.87	38.7
Appro	bach	254	3	267	1.2	0.462	15.4	LOS B	3.7	26.5	0.84	0.72	0.84	41.4
East:	Marrio	ckville Rd												
4	L2	149	0	157	0.0	*0.653	17.8	LOS B	8.6	61.5	0.86	0.79	0.89	40.5
5	T1	568	17	598	3.0	0.653	12.2	LOS A	8.6	61.5	0.87	0.80	0.91	45.1
6	R2	109	2	115	1.8	0.653	18.4	LOS B	7.0	49.9	0.88	0.81	0.94	39.8
Appro	bach	826	19	869	2.3	0.653	14.0	LOS A	8.6	61.5	0.87	0.80	0.91	43.4
North	: Livin	gstone R	d											
7	L2	106	0	112	0.0	0.211	17.4	LOS B	1.8	12.7	0.80	0.74	0.80	37.5
8	T1	260	3	274	1.2	*0.640	14.8	LOS B	6.3	44.6	0.91	0.82	0.97	41.2
9	R2	53	0	56	0.0	0.640	19.3	LOS B	6.3	44.6	0.91	0.82	0.97	43.3
Appro	bach	419	3	441	0.7	0.640	16.0	LOS B	6.3	44.6	0.88	0.80	0.93	40.7
West	: Marri	ckville Ro	ł											
10	L2	53	0	56	0.0	0.330	15.1	LOS B	3.6	25.9	0.73	0.64	0.73	46.6
11	T1	363	10	382	2.8	0.330	9.9	LOS A	3.6	25.9	0.74	0.64	0.74	47.7
12	R2	20	0	21	0.0	0.330	15.8	LOS B	3.2	22.5	0.75	0.63	0.75	46.5
Appro	bach	436	10	459	2.3	0.330	10.8	LOS A	3.6	25.9	0.74	0.64	0.74	47.5
All Vehic	les	1935	35	2037	1.8	0.653	13.9	LOS A	8.6	61.5	0.84	0.75	0.87	43.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Noveme	nt Peri	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	ped/h ped/h sed/h					EUE	Que	Stop	Time	Dist.	Speed
	1/1	1/1			[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Livings	tone Rd										
P1 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	180.7	214.8	1.19
East: Marricky	ville Rd										
P2 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.0	215.2	1.19

## Site: TCS 67 [Marrickville Rd / Livingstone Rd - TTP (Site Folder: PM)]

Marrickville Rd / Livingstone Rd - TCS 67

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INP	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU	JMES	FLO	WS ม\/ 1	Satn	Delay	Service	QUE [ \/eh	EUE Diet 1	Que	Stop Rate	No.	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Trate	Cycles	km/h
South	h: Livir	ngstone R	۲d											
1	L2	42	0	44	0.0	0.118	18.7	LOS B	0.9	6.5	0.77	0.68	0.77	43.2
2	T1	164	3	173	1.8	0.508	15.0	LOS B	3.9	27.5	0.89	0.75	0.89	40.9
3	R2	48	0	51	0.0	0.508	19.7	LOS B	3.9	27.5	0.90	0.75	0.90	38.1
Appro	bach	254	3	267	1.2	0.508	16.5	LOS B	3.9	27.5	0.87	0.74	0.87	40.9
East:	Marrio	ckville Rd												
4	L2	149	0	157	0.0	*0.689	17.9	LOS B	9.4	70.3	0.87	0.82	0.93	40.5
5	T1	618	67	651	10.8	0.689	12.3	LOS A	9.4	70.3	0.87	0.83	0.95	44.9
6	R2	109	2	115	1.8	0.689	18.6	LOS B	7.6	57.0	0.88	0.84	0.98	39.7
Appro	oach	876	69	922	7.9	0.689	14.0	LOS A	9.4	70.3	0.87	0.83	0.95	43.4
North	: Livin	gstone R	d											
7	L2	106	0	112	0.0	0.231	18.3	LOS B	1.9	13.2	0.82	0.74	0.82	37.0
8	T1	260	3	274	1.2	*0.698	16.7	LOS B	6.8	47.9	0.95	0.88	1.09	40.4
9	R2	53	0	56	0.0	0.698	21.2	LOS B	6.8	47.9	0.95	0.88	1.09	42.4
Appro	bach	419	3	441	0.7	0.698	17.7	LOS B	6.8	47.9	0.91	0.85	1.02	39.9
West	: Marri	ickville Ro	b											
10	L2	53	0	56	0.0	0.317	14.3	LOS A	3.5	25.3	0.70	0.62	0.70	47.1
11	T1	363	10	382	2.8	0.317	9.5	LOS A	3.5	25.3	0.72	0.63	0.72	48.1
12	R2	20	0	21	0.0	0.317	15.8	LOS B	3.1	21.9	0.74	0.63	0.74	46.6
Appro	bach	436	10	459	2.3	0.317	10.4	LOS A	3.5	25.3	0.72	0.63	0.72	47.8
All Vehic	les	1985	85	2089	4.3	0.698	14.3	LOS A	9.4	70.3	0.85	0.78	0.90	42.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Noveme	nt Peri	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service		EUE	Que	Stop	Time	Dist.	Speed
	1/1	1/1			[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Livings	tone Rd										
P1 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	180.7	214.8	1.19
East: Marricky	ville Rd										
P2 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.0	215.2	1.19

#### Site: TCS 78 [Old Canterbury Road / New Canterbury Road -

Future Base (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% B/ QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	o: Con	veh/h torbury P	veh/h	veh/h	%	V/C	sec		veh	m				km/h
Souti	i. Can		.u											
30	L2	31	1	33	3.2	0.573	6.1	LOSA	1.5	10.8	0.05	0.25	0.05	49.3
31	T1	684	28	720	4.1	0.573	1.7	LOS A	1.5	10.8	0.05	0.25	0.05	50.9
32	R2	885	65	932	7.3	*0.820	14.6	LOS B	17.8	132.1	0.49	0.74	0.52	39.7
Appro	oach	1600	94	1684	5.9	0.820	8.9	LOS A	17.8	132.1	0.29	0.52	0.31	43.2
East:	New (	Canterbu	ry Rd											
21	L2	309	37	325	12.0	0.267	8.9	LOS A	4.7	36.0	0.36	0.65	0.36	41.2
22	T1	194	4	204	2.1	0.675	39.7	LOS C	8.8	62.7	0.98	0.84	1.04	25.4
23	R2	19	2	20	10.5	0.226	53.2	LOS D	0.9	7.0	0.99	0.69	0.99	24.1
Appro	oach	522	43	549	8.2	0.675	22.0	LOS B	8.8	62.7	0.61	0.72	0.63	33.0
North	: Old (	Canterbu	ry Rd											
24	L2	26	2	27	7.7	0.918	66.4	LOS E	12.2	89.5	1.00	1.14	1.54	23.2
25	T1	404	20	425	5.0	*0.918	57.2	LOS E	12.2	89.5	1.00	1.14	1.54	19.2
Appro	oach	430	22	453	5.1	0.918	57.7	LOS E	12.2	89.5	1.00	1.14	1.54	19.5
West	: Griffit	ths St												
27	L2	16	2	17	12.5	0.346	50.9	LOS D	4.3	30.9	0.93	0.76	0.93	6.2
28	T1	321	3	338	0.9	* 0.866	47.0	LOS D	12.9	91.3	0.98	0.97	1.23	23.5
29	R2	10	1	11	10.0	0.866	53.7	LOS D	12.9	91.3	1.00	1.05	1.35	16.3
Appro	bach	347	6	365	1.7	0.866	47.3	LOS D	12.9	91.3	0.98	0.96	1.22	21.3
All Vehic	les	2899	165	3052	5.7	0.918	23.1	LOS B	17.8	132.1	0.54	0.70	0.66	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	ce									
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.		
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate					
	ped/h	ped/h	sec		ped	m			sec	m	m/sec		
South: Canterbury Rd													
P8 Full	7	7	39.2	LOS D	0.0	0.0	0.93	0.93	65.1	33.7	0.52		
East: New Car	nterbury	Rd											
P5 Full	12	13	39.2	LOS D	0.0	0.0	0.93	0.93	66.2	35.1	0.53		
North: Old Car	nterbury	Rd											

#### Site: TCS 78 [Old Canterbury Road / New Canterbury Road -

Construction (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INF VOLU [ Total veb/b	PUT JMES HV]	DEM FLO [ Total veb/b	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Can	terbury R	d	VGH/H	70	0/0	300		Ven					N111/11
30	L2	31	1	33	3.2	0.598	6.1	LOS A	1.6	11.9	0.05	0.25	0.05	49.2
31	T1	701	45	738	6.4	0.598	1.8	LOS A	1.6	11.9	0.05	0.25	0.05	50.9
32	R2	885	65	932	7.3	*0.839	16.2	LOS B	20.1	149.5	0.54	0.76	0.58	38.6
Appro	bach	1617	111	1702	6.9	0.839	9.7	LOS A	20.1	149.5	0.32	0.53	0.34	42.5
East:	New (	Canterbu	ry Rd											
21	L2	421	50	443	11.9	0.369	9.7	LOS A	7.3	56.2	0.41	0.67	0.41	40.6
22	T1	263	5	277	1.9	*0.898	52.3	LOS D	14.4	102.4	1.00	1.11	1.43	22.0
23	R2	19	2	20	10.5	0.251	54.5	LOS D	0.9	7.1	1.00	0.68	1.00	23.8
Appro	bach	703	57	740	8.1	0.898	26.9	LOS B	14.4	102.4	0.64	0.84	0.80	30.7
North	: Old (	Canterbu	ry Rd											
24	L2	26	2	27	7.7	0.908	64.5	LOS E	12.6	94.6	1.00	1.13	1.50	23.6
25	T1	421	37	443	8.8	*0.908	55.4	LOS D	12.6	94.6	1.00	1.13	1.50	19.6
Appro	bach	447	39	471	8.7	0.908	55.9	LOS D	12.6	94.6	1.00	1.13	1.50	19.9
West	: Griffit	hs St												
27	L2	16	2	17	12.5	0.358	51.0	LOS D	4.5	32.0	0.93	0.76	0.93	6.2
28	T1	321	3	338	0.9	0.894	49.5	LOS D	13.2	93.5	0.98	1.00	1.29	22.8
29	R2	10	1	11	10.0	0.894	57.4	LOS E	13.2	93.5	1.00	1.10	1.43	15.6
Appro	bach	347	6	365	1.7	0.894	49.8	LOS D	13.2	93.5	0.98	0.99	1.28	20.7
All Vehic	les	3114	213	3278	6.8	0.908	24.7	LOS B	20.1	149.5	0.56	0.74	0.72	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	ce									
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.		
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate					
	ped/h	ped/h	sec		ped	m			sec	m	m/sec		
South: Canterbury Rd													
P8 Full	7	7	39.2	LOS D	0.0	0.0	0.93	0.93	65.1	33.7	0.52		
East: New Car	nterbury	Rd											
P5 Full	12	13	39.2	LOS D	0.0	0.0	0.93	0.93	66.2	35.1	0.53		
North: Old Car	nterbury	Rd											

#### Site: TCS 78 [Old Canterbury Road / New Canterbury Road -

TTP (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV]	DEM FLC [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	a: Can	veh/h torbury P	veh/h	veh/h	%	V/C	sec	_	veh	m	_	_	_	km/h
Souti	i. Can		u ,											
30	L2	31	1	33	3.2	0.581	6.1	LOSA	1.7	12.7	0.05	0.25	0.05	49.2
31	T1	701	45	738	6.4	0.581	1.8	LOS A	1.7	12.7	0.05	0.25	0.05	50.9
32	R2	950	130	1000	13.7	*0.901	19.1	LOS B	27.4	214.4	0.55	0.79	0.63	36.9
Appro	oach	1682	176	1771	10.5	0.901	11.6	LOS A	27.4	214.4	0.33	0.55	0.38	41.0
East:	New (	Canterbu	ry Rd											
21	L2	486	115	512	23.7	0.463	10.2	LOS A	9.8	82.2	0.43	0.69	0.43	39.3
22	T1	263	5	277	1.9	0.928	62.8	LOS E	16.7	118.6	1.00	1.16	1.49	19.7
23	R2	19	2	20	10.5	0.315	61.7	LOS E	1.1	8.1	1.00	0.67	1.00	22.3
Appro	oach	768	122	808	15.9	0.928	29.5	LOS C	16.7	118.6	0.64	0.85	0.81	29.3
North	: Old (	Canterbu	ry Rd											
24	L2	26	2	27	7.7	0.937	76.7	LOS F	14.5	109.4	1.00	1.18	1.56	21.4
25	T1	421	37	443	8.8	* 0.937	66.4	LOS E	14.5	109.4	1.00	1.18	1.56	17.4
Appro	oach	447	39	471	8.7	0.937	67.0	LOS E	14.5	109.4	1.00	1.18	1.56	17.7
West	: Griffit	ths St												
27	L2	16	2	17	12.5	0.389	55.8	LOS D	5.2	37.6	0.94	0.77	0.94	6.1
28	T1	321	3	338	0.9	* 0.974	68.4	LOS E	16.6	117.6	0.98	1.11	1.48	18.9
29	R2	10	1	11	10.0	0.974	82.0	LOS F	16.6	117.6	1.00	1.26	1.70	11.8
Appro	oach	347	6	365	1.7	0.974	68.2	LOS E	16.6	117.6	0.98	1.10	1.46	17.5
All Vehic	les	3244	343	3415	10.6	0.974	29.6	LOS C	27.4	214.4	0.57	0.77	0.76	29.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	e									
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.		
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate					
	ped/h	ped/h	sec		ped	m			sec	m	m/sec		
South: Canterbury Rd													
P8 Full	7	7	43.3	LOS E	0.0	0.0	0.93	0.93	69.2	33.7	0.49		
East: New Car	nterbury	Rd											
P5 Full	12	13	44.2	LOS E	0.0	0.0	0.94	0.94	71.2	35.1	0.49		
North: Old Car	nterbury	Rd											

#### Site: TCS 78 [Old Canterbury Road / New Canterbury Road -

Future Base (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLL [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Can	terbury R	d ven/n	ven/n	70	v/C	SEC	_	ven	111	_	_	_	K111/11
30	L2	23	0	24	0.0	0.553	6.6	LOS A	2.1	15.0	0.09	0.27	0.09	48.5
31	T1	558	11	587	2.0	0.553	2.4	LOS A	2.1	15.0	0.09	0.27	0.09	50.0
32	R2	491	18	517	3.7	*0.733	27.6	LOS B	14.1	102.0	0.78	0.80	0.80	31.9
Appro	bach	1072	29	1128	2.7	0.733	14.1	LOS A	14.1	102.0	0.40	0.51	0.41	38.4
East:	New (	Canterbu	ry Rd											
21	L2	652	28	686	4.3	0.587	13.9	LOS A	16.7	121.5	0.61	0.76	0.61	38.2
22	T1	441	6	464	1.4	*0.900	46.6	LOS D	23.9	169.1	1.00	1.13	1.33	23.4
23	R2	32	2	34	6.3	0.200	44.9	LOS D	1.4	10.3	0.93	0.73	0.93	26.2
Appro	bach	1125	36	1184	3.2	0.900	27.6	LOS B	23.9	169.1	0.77	0.90	0.90	30.6
North	: Old (	Canterbu	ry Rd											
24	L2	37	0	39	0.0	0.908	56.5	LOS E	19.6	138.6	1.00	1.14	1.40	24.4
25	T1	659	10	694	1.5	*0.908	52.0	LOS D	19.6	138.6	1.00	1.14	1.40	20.4
Appro	bach	696	10	733	1.4	0.908	52.2	LOS D	19.6	138.6	1.00	1.14	1.40	20.7
West	: Griffit	hs St												
27	L2	9	0	9	0.0	0.222	40.2	LOS C	4.1	29.1	0.80	0.68	0.80	6.5
28	T1	267	3	281	1.1	0.554	33.1	LOS C	7.7	54.6	0.89	0.74	0.89	27.6
29	R2	20	0	21	0.0	0.554	41.2	LOS C	7.7	54.6	0.96	0.79	0.96	19.9
Appro	bach	296	3	312	1.0	0.554	33.9	LOS C	7.7	54.6	0.89	0.74	0.89	25.3
All Vehic	les	3189	78	3357	2.4	0.908	29.0	LOS C	23.9	169.1	0.71	0.81	0.85	29.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	nt Perf	ormano	e									
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.		
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate					
	ped/h	ped/h	sec		ped	m			sec	m	m/sec		
South: Canterbury Rd													
P8 Full	7	7	29.6	LOS C	0.0	0.0	0.81	0.81	55.5	33.7	0.61		
East: New Car	nterbury	Rd											
P5 Full	12	13	36.5	LOS D	0.0	0.0	0.90	0.90	63.5	35.1	0.55		
North: Old Car	nterbury	Rd											

#### Site: TCS 78 [Old Canterbury Road / New Canterbury Road -

Construction (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT IMES HV]	DEM/ FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Can	terbury R	d											
30	L2	23	0	24	0.0	0.607	7.9	LOS A	4.6	33.8	0.18	0.34	0.18	46.1
31	T1	575	28	605	4.9	0.607	3.7	LOS A	4.6	33.8	0.18	0.34	0.18	48.2
32	R2	491	18	517	3.7	*0.825	32.9	LOS C	16.4	118.3	0.87	0.85	0.94	29.7
Appro	oach	1089	46	1146	4.2	0.825	16.9	LOS B	16.4	118.3	0.49	0.57	0.52	36.3
East:	New (	Canterbu	ry Rd											
21	L2	703	31	740	4.4	0.645	15.0	LOS B	19.6	142.6	0.66	0.78	0.66	37.5
22	T1	475	7	500	1.5	*0.898	44.9	LOS D	25.5	180.8	1.00	1.11	1.30	23.9
23	R2	32	2	34	6.3	0.184	43.7	LOS D	1.4	10.2	0.92	0.73	0.92	26.5
Appro	oach	1210	40	1274	3.3	0.898	27.5	LOS B	25.5	180.8	0.80	0.91	0.92	30.6
North	: Old (	Canterbu	ry Rd											
24	L2	37	0	39	0.0	0.902	55.2	LOS D	19.9	143.4	1.00	1.13	1.38	24.7
25	T1	676	27	712	4.0	*0.902	50.7	LOS D	19.9	143.4	1.00	1.13	1.38	20.7
Appro	oach	713	27	751	3.8	0.902	50.9	LOS D	19.9	143.4	1.00	1.13	1.38	21.0
West	: Griffit	hs St												
27	L2	9	0	9	0.0	0.209	38.6	LOS C	4.0	28.5	0.78	0.67	0.78	6.6
28	T1	267	3	281	1.1	0.521	31.7	LOS C	7.5	53.2	0.87	0.73	0.87	28.1
29	R2	20	0	21	0.0	0.521	40.1	LOS C	7.5	53.2	0.94	0.78	0.94	20.3
Appro	oach	296	3	312	1.0	0.521	32.5	LOS C	7.5	53.2	0.88	0.73	0.88	25.8
All Vehic	les	3308	116	3482	3.5	0.902	29.5	LOS C	25.5	180.8	0.75	0.83	0.88	29.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	e									
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.		
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate					
	ped/h	ped/h	sec		ped	m			sec	m	m/sec		
South: Canterbury Rd													
P8 Full	7	7	28.0	LOS C	0.0	0.0	0.79	0.79	53.9	33.7	0.62		
East: New Car	nterbury	Rd											
P5 Full	12	13	35.6	LOS D	0.0	0.0	0.89	0.89	62.6	35.1	0.56		
North: Old Car	nterbury	Rd											

#### Site: TCS 78 [Old Canterbury Road / New Canterbury Road -

TTP (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT IMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Can	terbury R	d											
30	L2	23	0	24	0.0	0.581	6.7	LOS A	2.3	16.8	0.08	0.27	0.08	48.5
31	T1	575	28	605	4.9	0.581	2.4	LOS A	2.3	16.8	0.08	0.27	0.08	50.0
32	R2	556	83	585	14.9	*0.928	40.5	LOS C	24.3	192.2	0.91	0.92	1.09	27.0
Appro	oach	1154	111	1215	9.6	0.928	20.9	LOS B	24.3	192.2	0.48	0.58	0.57	33.9
East:	New (	Canterbu	ry Rd											
21	L2	768	96	808	12.5	0.746	16.8	LOS B	26.2	203.0	0.73	0.81	0.73	35.9
22	T1	475	7	500	1.5	*0.930	56.4	LOS D	30.2	213.7	1.00	1.18	1.38	21.0
23	R2	32	2	34	6.3	0.215	50.5	LOS D	1.6	11.6	0.95	0.73	0.95	24.7
Appro	oach	1275	105	1342	8.2	0.930	32.4	LOS C	30.2	213.7	0.83	0.95	0.97	28.5
North	: Old (	Canterbu	ry Rd											
24	L2	37	0	39	0.0	0.912	61.3	LOS E	22.1	159.8	1.00	1.14	1.37	23.3
25	T1	676	27	712	4.0	*0.912	56.8	LOS E	22.1	159.8	1.00	1.14	1.37	19.3
Appro	oach	713	27	751	3.8	0.912	57.0	LOS E	22.1	159.8	1.00	1.14	1.37	19.5
West	: Griffit	hs St												
27	L2	9	0	9	0.0	0.228	42.3	LOS C	4.8	34.1	0.79	0.68	0.79	6.5
28	T1	267	3	281	1.1	0.571	36.6	LOS C	8.3	58.3	0.89	0.74	0.89	26.4
29	R2	20	0	21	0.0	0.571	46.1	LOS D	8.3	58.3	0.96	0.79	0.96	18.4
Appro	oach	296	3	312	1.0	0.571	37.4	LOS C	8.3	58.3	0.89	0.74	0.89	24.3
All Vehic	les	3438	246	3619	7.2	0.930	34.1	LOS C	30.2	213.7	0.75	0.85	0.91	27.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	orman	ce									
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.		
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate					
	ped/h	ped/h	sec		ped	m			sec	m	m/sec		
South: Canterbury Rd													
P8 Full	7	7	31.2	LOS D	0.0	0.0	0.79	0.79	57.1	33.7	0.59		
East: New Car	nterbury	Rd											
P5 Full	12	13	38.7	LOS D	0.0	0.0	0.88	0.88	65.7	35.1	0.53		
North: Old Car	nterbury	Rd											

#### Site: TCS 79 [H.13 Canterbury Road / Beamish Street - Future

Base (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 55 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	TUT	DEM	AND	Deg.	Aver.	Level of	95% BA	CK OF	Prop. E	Effective	Aver.	Aver.
ID			JMES	FLO	WS	Sath	Delay	Service	QUE	UE	Que	Stop	NO.	Speed
		l Iotai veh/h	HV J veh/h	l Iotai veh/h	нvј %	v/c	sec		ι ven. veh	Dist j m		Rate	Cycles	km/h
Sout	h: Bexl	ley Rd												
1	L2	84	8	88	9.5	*0.535	26.2	LOS B	6.6	48.9	0.94	0.82	0.94	42.4
2	T1	582	26	613	4.5	*0.713	22.9	LOS B	10.7	77.6	0.97	0.86	1.02	43.5
3	R2	391	13	412	3.3	0.763	30.5	LOS C	11.4	82.0	1.00	0.90	1.15	39.2
Appr	oach	1057	47	1113	4.4	0.763	26.0	LOS B	11.4	82.0	0.98	0.87	1.06	41.7
East:	Cante	erbury Rd												
4	L2	240	15	253	6.3	0.711	25.8	LOS B	11.4	84.4	0.94	0.82	0.97	42.4
5	T1	646	49	680	7.6	*0.711	20.1	LOS B	11.6	86.7	0.94	0.81	0.97	44.2
Appr	oach	886	64	933	7.2	0.711	21.7	LOS B	11.6	86.7	0.94	0.81	0.97	43.7
North	n: Bear	nish St												
7	L2	47	1	49	2.1	0.696	28.0	LOS B	5.8	43.1	0.99	0.91	1.12	42.8
8	T1	396	38	417	9.6	0.773	25.4	LOS B	6.4	48.4	1.00	0.92	1.20	42.1
9	R2	89	13	94	14.6	*0.440	32.4	LOS C	2.5	20.0	0.98	0.76	0.98	37.8
Appr	oach	532	52	560	9.8	0.773	26.8	LOS B	6.4	48.4	0.99	0.89	1.16	41.4
West	: Cant	erbury Ro	b											
10	L2	63	10	66	15.9	0.369	16.1	LOS B	8.0	59.3	0.57	0.52	0.57	49.4
11	T1	1150	69	1211	6.0	0.462	10.3	LOS A	11.4	83.6	0.61	0.54	0.61	50.9
12	R2	217	14	228	6.5	0.428	30.1	LOS C	5.8	42.9	0.97	0.78	0.97	38.9
Appr	oach	1430	93	1505	6.5	0.462	13.5	LOS A	11.4	83.6	0.66	0.57	0.66	48.6
All Vehic	cles	3905	256	4111	6.6	0.773	20.6	LOS B	11.6	86.7	0.86	0.75	0.91	44.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Bexley	Rd										
P1 Full	1	1	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73
East: Canterb	ury Rd										
P2 Full	21	22	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73

#### Site: TCS 79 [H.13 Canterbury Road / Beamish Street -

Construction (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 55 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF		DEM		Deg.	Aver.	Level of	95% BA	CK OF	Prop. E	ffective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service	QUE [\/ab	UE Diet 1	Que	Stop	NO.	Speed
		veh/h	veh/h	veh/h	нvј %	v/c	sec		i ven. veh	m Dist		Rale	Cycles	km/h
Sout	h: Bexl	ley Rd												
1	L2	84	8	88	9.5	*0.535	26.2	LOS B	6.6	48.9	0.94	0.82	0.94	42.4
2	T1	582	26	613	4.5	*0.713	22.9	LOS B	10.7	77.6	0.97	0.86	1.02	43.5
3	R2	391	13	412	3.3	0.763	30.5	LOS C	11.4	82.0	1.00	0.90	1.15	39.2
Appr	oach	1057	47	1113	4.4	0.763	26.0	LOS B	11.4	82.0	0.98	0.87	1.06	41.7
East:	Cante	erbury Rd												
4	L2	240	15	253	6.3	0.711	25.8	LOS B	11.4	84.4	0.94	0.82	0.97	42.4
5	T1	646	49	680	7.6	*0.711	20.1	LOS B	11.6	86.7	0.94	0.81	0.97	44.2
Appr	oach	886	64	933	7.2	0.711	21.7	LOS B	11.6	86.7	0.94	0.81	0.97	43.7
North	n: Bear	mish St												
7	L2	47	1	49	2.1	0.696	28.0	LOS B	5.8	43.1	0.99	0.91	1.12	42.8
8	T1	396	38	417	9.6	0.773	25.4	LOS B	6.4	48.4	1.00	0.92	1.20	42.1
9	R2	89	13	94	14.6	*0.440	32.4	LOS C	2.5	20.0	0.98	0.76	0.98	37.8
Appr	oach	532	52	560	9.8	0.773	26.8	LOS B	6.4	48.4	0.99	0.89	1.16	41.4
West	: Cante	erbury Ro	b											
10	L2	63	10	66	15.9	0.369	16.1	LOS B	8.0	59.3	0.57	0.52	0.57	49.4
11	T1	1150	69	1211	6.0	0.462	10.3	LOS A	11.4	83.6	0.61	0.54	0.61	50.9
12	R2	217	14	228	6.5	0.428	30.1	LOS C	5.8	42.9	0.97	0.78	0.97	38.9
Appr	oach	1430	93	1505	6.5	0.462	13.5	LOS A	11.4	83.6	0.66	0.57	0.66	48.6
All Vehic	cles	3905	256	4111	6.6	0.773	20.6	LOS B	11.6	86.7	0.86	0.75	0.91	44.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Bexley	Rd										
P1 Full	1	1	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73
East: Canterb	ury Rd										
P2 Full	21	22	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73

#### Site: TCS 79 [H.13 Canterbury Road / Beamish Street - TTP

(Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INP		DEM		Deg.	Aver.	Level of	95% BA	CK OF	Prop. E	ffective	Aver.	Aver.
ID				FLO	WS	Satn	Delay	Service	QUE	UE	Que	Stop	NO.	Speed
		veh/h	veh/h	veh/h	нvј %	v/c	sec		i ven. veh	Dist j m		Rale	Cycles	km/h
Sout	n: Bexl	ey Rd												
1	L2	84	8	88	9.5	*0.593	25.1	LOS B	6.2	45.9	0.96	0.83	0.96	43.0
2	T1	582	26	613	4.5	*0.790	22.9	LOS B	10.4	75.9	0.99	0.91	1.13	43.5
3	R2	391	13	412	3.3	0.847	32.3	LOS C	11.4	82.3	1.00	0.98	1.35	38.5
Appr	oach	1057	47	1113	4.4	0.847	26.6	LOS B	11.4	82.3	0.99	0.93	1.20	41.5
East:	Cante	erbury Rd												
4	L2	240	15	253	6.3	0.814	26.6	LOS B	11.4	84.7	0.99	0.89	1.11	42.1
5	T1	650	53	684	8.2	*0.814	20.9	LOS B	11.6	87.0	0.99	0.89	1.11	43.7
Appr	oach	890	68	937	7.6	0.814	22.4	LOS B	11.6	87.0	0.99	0.89	1.11	43.2
North	n: Bear	nish St												
7	L2	85	39	89	45.9	0.685	21.9	LOS B	4.5	37.2	0.98	0.91	1.10	45.1
8	T1	396	38	417	9.6	0.761	21.1	LOS B	6.3	47.8	0.99	0.92	1.19	44.3
9	R2	89	13	94	14.6	*0.400	29.4	LOS C	2.3	18.0	0.96	0.76	0.96	39.1
Appr	oach	570	90	600	15.8	0.761	22.5	LOS B	6.3	47.8	0.98	0.89	1.14	43.6
West	: Cante	erbury Ro	ł											
10	L2	63	10	66	15.9	0.405	16.2	LOS B	8.0	60.7	0.61	0.55	0.61	49.4
11	T1	1182	101	1244	8.5	0.507	10.3	LOS A	11.4	85.8	0.65	0.57	0.65	50.9
12	R2	217	14	228	6.5	0.454	28.4	LOS B	5.4	39.6	0.97	0.78	0.97	39.7
Appr	oach	1462	125	1539	8.5	0.507	13.3	LOS A	11.4	85.8	0.70	0.60	0.70	48.8
All Vehic	les	3979	330	4188	8.3	0.847	20.2	LOS B	11.6	87.0	0.88	0.80	0.99	44.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Bexley	Rd										
P1 Full	1	1	19.4	LOS B	0.0	0.0	0.88	0.88	47.1	36.0	0.77
East: Canterb	ury Rd										
P2 Full	21	22	19.4	LOS B	0.0	0.0	0.88	0.88	47.1	36.0	0.76

#### Site: TCS 79 [H.13 Canterbury Road / Beamish Street - Future

Base (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	DT	DEM	AND	Deg.	Aver.	Level of	95% BA	CK OF	Prop. E	ffective	Aver.	Aver.
ID		VOLU	JMES	FLO	WS	Satn	Delay	Service	QUE	UE	Que	Stop	No.	Speed
		[ Iotal veh/h	HV J veh/h	[ Iotai veh/h	HV J %	v/c	sec		Į ven. veh	Dist J m		Rate	Cycles	km/h
South	n: Bex	ley Rd												
1	L2	85	0	89	0.0	*0.328	22.2	LOS B	4.2	30.3	0.86	0.76	0.86	44.4
2	T1	401	15	422	3.7	0.437	20.2	LOS B	7.4	53.1	0.89	0.75	0.89	44.8
3	R2	363	5	382	1.4	*0.834	24.8	LOS B	8.6	61.2	1.00	0.93	1.28	41.8
Appro	oach	849	20	894	2.4	0.834	22.3	LOS B	8.6	61.2	0.93	0.83	1.05	43.4
East:	Cante	erbury Rd	l											
4	L2	172	4	181	2.3	0.837	28.2	LOS B	17.9	129.5	0.98	0.90	1.08	42.1
5	T1	1015	46	1068	4.5	*0.837	22.6	LOS B	18.1	131.3	0.98	0.90	1.08	43.0
Appro	oach	1187	50	1249	4.2	0.837	23.4	LOS B	18.1	131.3	0.98	0.90	1.08	42.8
North	: Bear	nish St												
7	L2	45	5	47	11.1	0.705	29.0	LOS C	5.2	38.3	1.00	0.90	1.15	42.2
8	T1	335	14	353	4.2	*0.783	27.9	LOS B	6.1	43.9	1.00	0.91	1.23	41.0
9	R2	138	10	145	7.2	0.598	34.9	LOS C	4.4	32.4	0.99	0.81	1.05	36.9
Appro	oach	518	29	545	5.6	0.783	29.8	LOS C	6.1	43.9	1.00	0.88	1.17	40.0
West	: Cant	erbury Ro	b											
10	L2	95	7	100	7.4	0.332	17.3	LOS B	7.9	56.7	0.58	0.54	0.58	48.3
11	T1	989	14	1041	1.4	0.415	11.9	LOS A	11.1	78.8	0.62	0.55	0.62	49.6
12	R2	192	6	202	3.1	0.467	33.9	LOS C	5.8	41.4	0.99	0.78	0.99	37.4
Appro	oach	1276	27	1343	2.1	0.467	15.6	LOS B	11.1	78.8	0.67	0.58	0.67	47.2
All Vehic	les	3830	126	4032	3.3	0.837	21.4	LOS B	18.1	131.3	0.87	0.78	0.95	43.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Movem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Bexley	Rd										
P1 Full	1	1	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69
East: Canterb	ury Rd										
P2 Full	21	22	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69

#### Site: TCS 79 [H.13 Canterbury Road / Beamish Street -

Construction (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehi	cle M	ovemen	it Perfoi	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop. E	Effective	Aver.	Aver.
ID				FLO		Satn	Delay	Service		EUE	Que	Stop	NO.	Speed
		veh/h	⊓vj veh/h	veh/h	⊓vj %	v/c	sec		ven. veh	m Dist		Rate	Cycles	km/h
South	n: Bex	ley Rd												
1	L2	85	0	89	0.0	*0.328	22.2	LOS B	4.2	30.3	0.86	0.76	0.86	44.4
2	T1	401	15	422	3.7	0.437	20.2	LOS B	7.4	53.1	0.89	0.75	0.89	44.8
3	R2	363	5	382	1.4	*0.834	24.8	LOS B	8.6	61.2	1.00	0.93	1.28	41.8
Appro	oach	849	20	894	2.4	0.834	22.3	LOS B	8.6	61.2	0.93	0.83	1.05	43.4
East:	Cante	erbury Rd	I											
4	L2	172	4	181	2.3	0.837	28.2	LOS B	17.9	129.5	0.98	0.90	1.08	42.1
5	T1	1015	46	1068	4.5	* 0.837	22.6	LOS B	18.1	131.3	0.98	0.90	1.08	43.0
Appro	oach	1187	50	1249	4.2	0.837	23.4	LOS B	18.1	131.3	0.98	0.90	1.08	42.8
North	: Bear	mish St												
7	L2	45	5	47	11.1	0.705	29.0	LOS C	5.2	38.3	1.00	0.90	1.15	42.2
8	T1	335	14	353	4.2	*0.783	27.9	LOS B	6.1	43.9	1.00	0.91	1.23	41.0
9	R2	138	10	145	7.2	0.598	34.9	LOS C	4.4	32.4	0.99	0.81	1.05	36.9
Appro	oach	518	29	545	5.6	0.783	29.8	LOS C	6.1	43.9	1.00	0.88	1.17	40.0
West	: Cant	erbury R	d											
10	L2	95	7	100	7.4	0.332	17.3	LOS B	7.9	56.7	0.58	0.54	0.58	48.3
11	T1	989	14	1041	1.4	0.415	11.9	LOS A	11.1	78.8	0.62	0.55	0.62	49.6
12	R2	192	6	202	3.1	0.467	33.9	LOS C	5.8	41.4	0.99	0.78	0.99	37.4
Appro	oach	1276	27	1343	2.1	0.467	15.6	LOS B	11.1	78.8	0.67	0.58	0.67	47.2
All Vehic	les	3830	126	4032	3.3	0.837	21.4	LOS B	18.1	131.3	0.87	0.78	0.95	43.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Bexley	Rd										
P1 Full	1	1	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69
East: Canterb	ury Rd										
P2 Full	21	22	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69

#### Site: TCS 79 [H.13 Canterbury Road / Beamish Street - TTP

(Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 55 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance														
Mov	Turn	INF	DT	DEM	AND	Deg.	Aver.	Level of	95% BA	95% BACK OF		Effective	Aver.	Aver.
ID		VOLU	JMES	FLO	ws	Satn	Delay	Service	QUE	UE	Que	Stop	No.	Speed
		[ Iotal veh/h	HV J veh/h	[ Iotai veh/h	HV J %	v/c	sec		ر ven. veh	Dist J m		Rate	Cycles	km/h
South: Bexley Rd														
1	L2	85	0	89	0.0	*0.521	25.4	LOS B	4.6	32.9	0.96	0.82	0.96	42.7
2	T1	401	15	422	3.7	*0.694	24.2	LOS B	7.8	56.5	0.99	0.85	1.05	42.7
3	R2	363	5	382	1.4	0.849	35.1	LOS C	11.6	82.1	1.00	0.97	1.34	37.4
Appro	oach	849	20	894	2.4	0.849	29.0	LOS C	11.6	82.1	0.99	0.90	1.17	40.3
East: Canterbury Rd														
4	L2	172	4	181	2.3	0.741	22.8	LOS B	15.1	111.0	0.91	0.81	0.94	44.8
5	T1	1043	74	1098	7.1	*0.741	17.2	LOS B	15.1	112.4	0.91	0.80	0.94	46.0
Appro	oach	1215	78	1279	6.4	0.741	18.0	LOS B	15.1	112.4	0.91	0.80	0.94	45.8
North	: Bear	mish St												
7	L2	57	17	60	29.8	0.655	22.8	LOS B	4.1	31.9	0.99	0.87	1.09	45.0
8	T1	335	14	353	4.2	0.728	23.0	LOS B	5.7	41.2	1.00	0.88	1.15	43.3
9	R2	138	10	145	7.2	*0.640	33.5	LOS C	4.1	30.5	1.00	0.83	1.12	37.5
Appro	oach	530	41	558	7.7	0.728	25.7	LOS B	5.7	41.2	1.00	0.87	1.14	41.8
West: Canterbury Rd														
10	L2	95	7	100	7.4	0.286	13.1	LOS A	5.7	41.1	0.45	0.45	0.45	51.2
11	T1	999	24	1052	2.4	0.358	7.5	LOS A	8.2	58.3	0.49	0.44	0.49	52.9
12	R2	192	6	202	3.1	0.367	29.8	LOS C	5.1	36.5	0.96	0.77	0.96	39.1
Appro	oach	1286	37	1354	2.9	0.367	11.2	LOS A	8.2	58.3	0.56	0.49	0.56	50.1
All Vehic	les	3880	176	4084	4.5	0.849	19.2	LOS B	15.1	112.4	0.82	0.73	0.89	45.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian Movement Performance												
Mo\ ID	/ Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of AVERAGE BACK OF Service QUEUE [ Ped Dist ]			Prop. Ef Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		ped	m		i tato	sec	m	m/sec
Sou	ith: Bexley	Rd										
P1	Full	1	1	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73
East: Canterbury Rd												
P2	Full	21	22	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73

#### Site: TCS 81 [Livingstone Rd / Sydenham Rd / Frazer St -

Future Base (Site Folder: AM)]

Livingstone Rd / Sydenham Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INP VOLU [ Total	UT IMES HV]	DEM, FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South: Livingstone Rd					70	0/0	300		VCIT					N111/11
1a	L1	24	2	25	8.3	0.580	24.2	LOS B	8.1	58.0	0.91	0.77	0.91	38.8
2	T1	481	10	506	2.1	0.580	21.2	LOS B	8.1	58.0	0.92	0.77	0.92	36.6
3b	R3	28	0	29	0.0	0.580	27.5	LOS B	6.7	47.4	0.93	0.78	0.93	35.4
Appro	bach	533	12	561	2.3	0.580	21.7	LOS B	8.1	58.0	0.92	0.77	0.92	36.7
South	nEast:	Sydenha	m Rd											
21b	L3	17	1	18	5.9	0.205	16.2	LOS B	3.1	22.3	0.61	0.53	0.61	43.7
22	T1	155	7	163	4.5	0.205	9.8	LOS A	3.1	22.3	0.61	0.53	0.61	47.0
23a	R1	302	31	318	10.3	*0.773	30.8	LOS C	9.9	75.1	0.98	0.95	1.19	26.8
Appro	bach	474	39	499	8.2	0.773	23.4	LOS B	9.9	75.1	0.85	0.80	0.98	33.1
North	: Livin	gstone R	d											
7a	L1	360	37	379	10.3	0.327	9.3	LOS A	4.7	36.1	0.46	0.70	0.46	40.7
8	T1	209	7	220	3.3	*0.753	28.0	LOS B	8.7	62.1	0.99	0.93	1.17	33.0
9b	R3	59	0	62	0.0	0.753	33.2	LOS C	8.7	62.1	0.99	0.93	1.17	32.1
Appro	bach	628	44	661	7.0	0.753	17.8	LOS B	8.7	62.1	0.68	0.80	0.76	36.0
North	West:	Frazer S	t											
27b	L3	128	4	135	3.1	0.577	18.1	LOS B	4.3	30.9	0.90	0.78	0.90	42.2
28	T1	213	4	224	1.9	*0.577	20.7	LOS B	4.3	30.9	0.95	0.79	0.98	37.5
Appro	bach	341	8	359	2.3	0.577	19.7	LOS B	4.3	30.9	0.93	0.79	0.95	39.1
All Vehic	les	1976	103	2080	5.2	0.773	20.5	LOS B	9.9	75.1	0.83	0.79	0.89	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian Movement Performance												
Mov	v Input Dem. Aver.			Level of a	AVERAGE	Prop. Et	ffective	Travel	Travel	Aver.		
ID Crossing	Vol.	Flow	Delay	Service	QUE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate				
	ped/h	ped/h	sec		ped	m			sec	m	m/sec	
South: Livingstone Rd												
P1 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13	
SouthEast: Sydenham Rd												
P5 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13	
North: Livingst	North: Livingstone Rd											
### Site: TCS 81 [Livingstone Rd / Sydenham Rd / Frazer St -

Construction (Site Folder: AM)]

Livingstone Rd / Sydenham Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	UT IMES HV]	DEM, FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Livin	igstone R	d	VCH/11	70	0,0	300		VCIT					N111/11
1a	L1	24	2	25	8.3	0.580	24.2	LOS B	8.1	58.0	0.91	0.77	0.91	38.8
2	T1	481	10	506	2.1	0.580	21.2	LOS B	8.1	58.0	0.92	0.77	0.92	36.6
3b	R3	28	0	29	0.0	0.580	27.5	LOS B	6.7	47.4	0.93	0.78	0.93	35.4
Appro	bach	533	12	561	2.3	0.580	21.7	LOS B	8.1	58.0	0.92	0.77	0.92	36.7
South	nEast:	Sydenha	m Rd											
21b	L3	17	1	18	5.9	0.205	16.2	LOS B	3.1	22.3	0.61	0.53	0.61	43.7
22	T1	155	7	163	4.5	0.205	9.8	LOS A	3.1	22.3	0.61	0.53	0.61	47.0
23a	R1	302	31	318	10.3	*0.773	30.8	LOS C	9.9	75.1	0.98	0.95	1.19	26.8
Appro	bach	474	39	499	8.2	0.773	23.4	LOS B	9.9	75.1	0.85	0.80	0.98	33.1
North	: Livin	gstone R	d											
7a	L1	360	37	379	10.3	0.327	9.3	LOS A	4.7	36.1	0.46	0.70	0.46	40.7
8	T1	209	7	220	3.3	*0.753	28.0	LOS B	8.7	62.1	0.99	0.93	1.17	33.0
9b	R3	59	0	62	0.0	0.753	33.2	LOS C	8.7	62.1	0.99	0.93	1.17	32.1
Appro	bach	628	44	661	7.0	0.753	17.8	LOS B	8.7	62.1	0.68	0.80	0.76	36.0
North	West:	Frazer S	t											
27b	L3	128	4	135	3.1	0.577	18.1	LOS B	4.3	30.9	0.90	0.78	0.90	42.2
28	T1	213	4	224	1.9	*0.577	20.7	LOS B	4.3	30.9	0.95	0.79	0.98	37.5
Appro	bach	341	8	359	2.3	0.577	19.7	LOS B	4.3	30.9	0.93	0.79	0.95	39.1
All Vehic	les	1976	103	2080	5.2	0.773	20.5	LOS B	9.9	75.1	0.83	0.79	0.89	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	orman	ce								
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.	
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed	
					[Ped	Dist ]		Rate				
	ped/h	ped/h	sec		ped	m			sec	m	m/sec	
South: Livingstone Rd												
P1 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13	
SouthEast: Sy	denham	Rd										
P5 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13	
North: Livingst	tone Rd											

### Site: TCS 81 [Livingstone Rd / Sydenham Rd / Frazer St - TTP

(Site Folder: AM)]

Livingstone Rd / Sydenham Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF UE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
Ocuth		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
Sout	1: LIVIN	igstone R	KO .											
1a	L1	24	2	25	8.3	0.676	24.1	LOS B	7.4	53.0	0.96	0.86	1.05	38.9
2	T1	481	10	506	2.1	0.676	20.8	LOS B	7.4	53.0	0.96	0.86	1.06	36.8
3b	R3	28	0	29	0.0	0.676	26.8	LOS B	6.2	44.3	0.97	0.87	1.08	35.7
Appro	bach	533	12	561	2.3	0.676	21.3	LOS B	7.4	53.0	0.96	0.86	1.06	36.8
South	nEast:	Sydenha	m Rd											
21b	L3	17	1	18	5.9	0.207	14.7	LOS B	2.6	18.8	0.61	0.53	0.61	44.7
22	T1	155	7	163	4.5	0.207	8.3	LOS A	2.6	18.8	0.61	0.53	0.61	48.5
23a	R1	302	31	318	10.3	*0.879	35.0	LOS C	9.8	74.9	1.00	1.11	1.56	25.0
Appro	bach	474	39	499	8.2	0.879	25.6	LOS B	9.8	74.9	0.86	0.90	1.22	31.9
North	: Livin	gstone R	d											
7a	L1	360	37	379	10.3	0.363	10.3	LOS A	4.8	36.5	0.55	0.73	0.55	39.6
8	T1	209	7	220	3.3	*0.883	32.7	LOS C	8.8	63.1	1.00	1.10	1.62	31.1
9b	R3	59	0	62	0.0	0.883	37.9	LOS C	8.8	63.1	1.00	1.10	1.62	30.0
Appro	bach	628	44	661	7.0	0.883	20.3	LOS B	8.8	63.1	0.74	0.89	1.00	34.4
North	West:	Frazer S	t											
27b	L3	128	4	135	3.1	0.703	19.1	LOS B	5.0	39.1	0.96	0.87	1.10	41.6
28	T1	270	61	284	22.6	*0.703	19.1	LOS B	5.0	39.1	0.98	0.87	1.17	38.5
Appro	bach	398	65	419	16.3	0.703	19.1	LOS B	5.0	39.1	0.97	0.87	1.15	39.4
All Vehic	les	2033	160	2140	7.9	0.883	21.6	LOS B	9.8	74.9	0.87	0.88	1.10	35.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	orman	ce								
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.	
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed	
					[Ped	Dist ]		Rate				
	ped/h	ped/h	sec		ped	m			sec	m	m/sec	
South: Livingstone Rd												
P1 Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16	
SouthEast: Sy	denham	Rd										
P5 Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16	
North: Livingst	tone Rd											

### Site: TCS 86 [New Canterbury Road / Marrickville Road -

Future Base (Site Folder: PM)]

New Canterbury Road / Marrickville Road

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLL	IMES	FLC	WS	Satn	Delay	Service	QUE	EUE	Que	Stop	No.	Speed
		l Iotai veh/h	HV J veh/h	l Iotai veh/h	нvј %	v/c	sec		ι ven. veh	DIST J m		Rate	Cycles	km/h
South	n: New	Canterb	ury Rd											
10	L2	6	1	6	16.7	0.461	6.7	LOS A	2.2	15.6	0.08	0.08	0.08	48.8
11	T1	595	13	626	2.2	0.461	1.0	LOS A	2.2	15.6	0.08	0.08	0.08	56.0
12	R2	211	5	222	2.4	*0.612	45.7	LOS D	9.7	69.5	0.93	0.81	0.93	22.5
Appro	bach	812	19	855	2.3	0.612	12.7	LOS A	9.7	69.5	0.30	0.27	0.30	33.5
East:	Marrio	ckville Rd												
1	L2	336	14	354	4.2	0.609	26.0	LOS B	12.5	90.4	0.77	0.77	0.77	27.4
2	T1	64	0	67	0.0	0.595	46.5	LOS D	6.0	42.1	0.99	0.81	1.01	24.0
3	R2	54	0	57	0.0	*0.595	49.9	LOS D	6.0	42.1	0.99	0.81	1.01	21.5
Appro	bach	454	14	478	3.1	0.609	31.7	LOS C	12.5	90.4	0.83	0.78	0.83	26.0
North	: New	Canterbu	ury Rd											
4	L2	75	0	79	0.0	*0.637	41.2	LOS C	24.3	172.8	1.00	0.89	1.00	25.1
5	T1	943	22	993	2.3	0.637	35.4	LOS C	24.8	177.3	1.00	0.89	1.00	17.9
6	R2	1	1	1	100.0	0.637	41.8	LOS C	24.8	177.3	1.00	0.89	1.00	21.4
Appro	bach	1019	23	1073	2.3	0.637	35.8	LOS C	24.8	177.3	1.00	0.89	1.00	18.8
West	: Dulw	ich St												
7	L2	17	0	18	0.0	0.088	48.8	LOS D	0.8	5.6	0.93	0.69	0.93	17.9
8	T1	60	7	63	11.7	0.264	43.0	LOS D	3.0	22.6	0.92	0.73	0.92	25.0
9	R2	3	0	3	0.0	0.264	46.3	LOS D	3.0	22.6	0.92	0.73	0.92	18.9
Appro	bach	80	7	84	8.8	0.264	44.4	LOS D	3.0	22.6	0.93	0.72	0.93	23.7
All Vehic	les	2365	63	2489	2.7	0.637	27.4	LOS B	24.8	177.3	0.72	0.65	0.72	24.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUI [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: New C	anterbur	y Rd									
P4 Full	20	21	40.5	LOS E	0.1	0.1	0.90	0.90	66.3	33.5	0.51
East: Marricky	ville Rd										
P1 Full	18	19	18.0	LOS B	0.0	0.0	0.60	0.60	44.2	34.0	0.77

### Site: TCS 86 [New Canterbury Road / Marrickville Road -

Construction (Site Folder: PM)]

New Canterbury Road / Marrickville Road

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INP	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLL		FLC	WS	Satn	Delay	Service		EUE	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	⊓vj %	v/c	sec		ven. veh	m Dist j		Rale	Cycles	km/h
South	n: New	/ Canterb	ury Rd											
10	L2	6	1	6	16.7	0.461	6.7	LOS A	2.2	15.6	0.08	0.08	0.08	48.8
11	T1	595	13	626	2.2	0.461	1.0	LOS A	2.2	15.6	0.08	0.08	0.08	56.0
12	R2	211	5	222	2.4	*0.612	45.7	LOS D	9.7	69.5	0.93	0.81	0.93	22.5
Appro	bach	812	19	855	2.3	0.612	12.7	LOS A	9.7	69.5	0.30	0.27	0.30	33.5
East:	Marrie	ckville Rd	l											
1	L2	336	14	354	4.2	0.609	26.0	LOS B	12.5	90.4	0.77	0.77	0.77	27.4
2	T1	64	0	67	0.0	0.595	46.5	LOS D	6.0	42.1	0.99	0.81	1.01	24.0
3	R2	54	0	57	0.0	* 0.595	49.9	LOS D	6.0	42.1	0.99	0.81	1.01	21.5
Appro	bach	454	14	478	3.1	0.609	31.7	LOS C	12.5	90.4	0.83	0.78	0.83	26.0
North	: New	Canterbu	ury Rd											
4	L2	75	0	79	0.0	*0.637	41.2	LOS C	24.3	172.8	1.00	0.89	1.00	25.1
5	T1	943	22	993	2.3	0.637	35.4	LOS C	24.8	177.3	1.00	0.89	1.00	17.9
6	R2	1	1	1	100.0	0.637	41.8	LOS C	24.8	177.3	1.00	0.89	1.00	21.4
Appro	bach	1019	23	1073	2.3	0.637	35.8	LOS C	24.8	177.3	1.00	0.89	1.00	18.8
West	: Dulw	rich St												
7	L2	17	0	18	0.0	0.088	48.8	LOS D	0.8	5.6	0.93	0.69	0.93	17.9
8	T1	60	7	63	11.7	0.264	43.0	LOS D	3.0	22.6	0.92	0.73	0.92	25.0
9	R2	3	0	3	0.0	0.264	46.3	LOS D	3.0	22.6	0.92	0.73	0.92	18.9
Appro	bach	80	7	84	8.8	0.264	44.4	LOS D	3.0	22.6	0.93	0.72	0.93	23.7
All Vehic	les	2365	63	2489	2.7	0.637	27.4	LOS B	24.8	177.3	0.72	0.65	0.72	24.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUI [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: New C	anterbur	y Rd									
P4 Full	20	21	40.5	LOS E	0.1	0.1	0.90	0.90	66.3	33.5	0.51
East: Marricky	ville Rd										
P1 Full	18	19	18.0	LOS B	0.0	0.0	0.60	0.60	44.2	34.0	0.77

### Site: TCS 86 [New Canterbury Road / Marrickville Road - TTP (Site Folder: PM)]

New Canterbury Road / Marrickville Road

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLL	JMES	FLC	WS	Satn	Delay	Service	QUE		Que	Stop	No.	Speed
		veh/h	⊓vj veh/h	veh/h	⊓vj %	v/c	sec		ven. veh	m Dist		Rale	Cycles	km/h
South	n: New	/ Canterb	ury Rd											
10	L2	6	1	6	16.7	0.490	7.1	LOS A	3.1	22.7	0.11	0.10	0.11	48.0
11	T1	610	28	642	4.6	0.490	1.5	LOS A	3.1	22.7	0.11	0.10	0.11	54.6
12	R2	211	5	222	2.4	0.532	42.6	LOS D	9.1	65.3	0.88	0.80	0.88	23.2
Appro	bach	827	34	871	4.1	0.532	12.0	LOS A	9.1	65.3	0.30	0.28	0.30	34.2
East:	Marrie	ckville Rd	l											
1	L2	386	64	406	16.6	*0.689	24.7	LOS B	14.4	115.3	0.78	0.78	0.78	27.7
2	T1	64	0	67	0.0	0.553	45.1	LOS D	5.9	41.3	0.98	0.79	0.98	24.3
3	R2	54	0	57	0.0	0.553	48.5	LOS D	5.9	41.3	0.98	0.79	0.98	21.8
Appro	bach	504	64	531	12.7	0.689	29.8	LOS C	14.4	115.3	0.83	0.78	0.83	26.4
North	: New	Canterb	ury Rd											
4	L2	75	0	79	0.0	*0.700	44.4	LOS D	24.7	175.8	1.00	0.89	1.00	24.2
5	T1	943	22	993	2.3	0.700	38.6	LOS C	25.3	180.9	1.00	0.89	1.00	16.8
6	R2	1	1	1	100.0	0.700	45.1	LOS D	25.3	180.9	1.00	0.89	1.00	20.3
Appro	bach	1019	23	1073	2.3	0.700	39.1	LOS C	25.3	180.9	1.00	0.89	1.00	17.7
West	: Dulw	rich St												
7	L2	17	0	18	0.0	0.080	47.6	LOS D	0.8	5.6	0.92	0.69	0.92	18.2
8	T1	60	7	63	11.7	0.248	42.0	LOS C	2.9	22.3	0.91	0.73	0.91	25.3
9	R2	3	0	3	0.0	0.248	45.2	LOS D	2.9	22.3	0.91	0.73	0.91	19.2
Appro	bach	80	7	84	8.8	0.248	43.3	LOS D	2.9	22.3	0.91	0.72	0.91	23.9
All Vehic	les	2430	128	2558	5.3	0.700	28.1	LOS B	25.3	180.9	0.72	0.65	0.72	24.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: New C	anterbury	y Rd									
P4 Full	20	21	39.6	LOS D	0.1	0.1	0.89	0.89	65.4	33.5	0.51
East: Marrickv	ille Rd										
P1 Full	18	19	20.5	LOS C	0.0	0.0	0.64	0.64	46.7	34.0	0.73

### Site: TCS 162 [Canterbury Rd / Burwood Rd - Future Base (Site Folder: PM)]

Canterbury Rd / Burwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle Mo	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU Total	PUT JMES HV 1	DEM/ FLO	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF EUE Dist 1	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
East:	Cante	rbury Ro	1											
5	T1	1229	65	1294	5.3	0.759	5.1	LOS A	13.0	95.4	0.28	0.29	0.29	53.6
6	R2	213	15	224	7.0	<b>*</b> 0.759	27.4	LOS B	13.0	95.4	0.89	0.97	0.97	38.0
Appro	oach	1442	80	1518	5.5	0.759	8.4	LOS A	13.0	95.4	0.37	0.39	0.39	50.2
North	: Burw	ood Rd												
7	L2	91	9	96	9.9	0.136	18.4	LOS B	2.0	15.5	0.65	0.70	0.65	40.1
9	R2	153	4	161	2.6	* 1.037	97.1	LOS F	10.2	72.8	1.00	1.43	2.49	20.1
Appro	oach	244	13	257	5.3	1.037	67.8	LOS E	10.2	72.8	0.87	1.16	1.80	24.7
West	: Cante	erbury R	d											
10	L2	60	0	63	0.0	*0.886	32.5	LOS C	25.1	178.7	0.94	1.00	1.16	36.7
11	T1	1256	25	1322	2.0	0.886	26.8	LOS B	25.8	183.6	0.94	1.00	1.16	38.1
Appro	oach	1316	25	1385	1.9	0.886	27.0	LOS B	25.8	183.6	0.94	1.00	1.16	38.0
All Vehic	les	3002	118	3160	3.9	1.037	21.4	LOS B	25.8	183.6	0.66	0.72	0.84	40.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e:							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE		Que	Stop	Time	Dist. S	Speed
	ped/h	ped/h	sec		ped	m Dist j		Rate	sec	m	m/sec
East: Canterbu	ury Rd										
P2 Full	14	15	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
North: Burwoo	d Rd										
P3 Full	1	1	17.2	LOS B	0.0	0.0	0.70	0.70	45.6	37.0	0.81
West: Canterb	ury Rd										
P4 Full	20	21	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
All Pedestrians	35	37	28.1	LOS C	0.0	0.0	0.89	0.89	53.5	33.1	0.62

### Site: TCS 162 [Canterbury Rd / Burwood Rd - Construction (Site Folder: PM)]

Canterbury Rd / Burwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO' [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Cante	rbury Rd	l											
5 6 Appro	T1 R2 bach	1229 213 1442	65 15 80	1294 224 1518	5.3 7.0 5.5	0.759 * 0.759 0.759	5.1 27.4 8.4	LOS A LOS B LOS A	13.0 13.0 13.0	95.4 95.4 95.4	0.28 0.89 0.37	0.29 0.97 0.39	0.29 0.97 0.39	53.6 38.0 50.2
North	: Burw	ood Rd												
7 9	L2 R2	91 153	9 4	96 161	9.9 2.6	0.136 <b>*</b> 1.037	18.4 97.1	LOS B LOS F	2.0 10.2	15.5 72.8	0.65 1.00	0.70 1.43	0.65 2.49	40.1 20.1
Appro	oach	244	13	257	5.3	1.037	67.8	LOS E	10.2	72.8	0.87	1.16	1.80	24.7
West	: Cante	erbury Ro	b											
10 11	L2 T1	60 1256	0 25	63 1322	0.0 2.0	* 0.886 0.886	32.5 26.8	LOS C LOS B	25.1 25.8	178.7 183.6	0.94 0.94	1.00 1.00	1.16 1.16	36.7 38.1
Appro	oach	1316	25	1385	1.9	0.886	27.0	LOS B	25.8	183.6	0.94	1.00	1.16	38.0
All Vehic	les	3002	118	3160	3.9	1.037	21.4	LOS B	25.8	183.6	0.66	0.72	0.84	40.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	VERAGE I	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist. 3	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: Canterbu	ury Rd										
P2 Full	14	15	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
North: Burwoo	d Rd										
P3 Full	1	1	17.2	LOS B	0.0	0.0	0.70	0.70	45.6	37.0	0.81
West: Canterb	ury Rd										
P4 Full	20	21	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
All Pedestrians	35	37	28.1	LOS C	0.0	0.0	0.89	0.89	53.5	33.1	0.62

## Site: TCS 162 [Canterbury Rd / Burwood Rd - TTP (Site Folder: PM)]

Canterbury Rd / Burwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veb/b	PUT JMES HV] veb/b	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist ] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Cante	rbury Ro		V011/11	,,,	0,0			Ven					N11/11
5 6 Appro	T1 R2 bach	1229 241 1470	65 43 108	1294 254 1547	5.3 17.8 7.3	0.720 * 0.720 0.720	5.9 36.6 11.0	LOS A LOS C LOS A	19.7 19.7 19.7	151.8 151.8 151.8	0.20 0.83 0.31	0.22 0.97 0.35	0.20 0.83 0.31	52.8 34.2 48.0
North	: Burw	ood Rd												
7 9	L2 R2	101 153	19 4	106 161	18.8 2.6	0.151 * 0.889	26.8 79.5	LOS B LOS F	3.9 11.6	31.7 82.9	0.62	0.71	0.62	36.2 22.8
Appro	bach	254	23	267	9.1	0.889	58.5	LOSE	11.6	82.9	0.85	0.87	1.08	26.8
West	: Cante	erbury R	d											
10 11	L2 T1	60 1256	0 25	63 1322	0.0 2.0	* 0.803 0.803	32.9 27.3	LOS C LOS B	33.4 33.8	237.2 240.9	0.83 0.83	0.77 0.76	0.84 0.83	36.5 37.8
Appro	oach	1316	25	1385	1.9	0.803	27.6	LOS B	33.8	240.9	0.83	0.76	0.83	37.7
All Vehic	les	3040	156	3200	5.1	0.889	22.1	LOS B	33.8	240.9	0.58	0.57	0.60	40.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: Canterbu	ury Rd										
P2 Full	14	15	55.4	LOS E	0.1	0.1	0.92	0.92	80.8	33.0	0.41
North: Burwoo	d Rd										
P3 Full	1	1	24.0	LOS C	0.0	0.0	0.61	0.61	52.5	37.0	0.71
West: Canterb	ury Rd										
P4 Full	20	21	55.4	LOS E	0.1	0.1	0.92	0.92	80.8	33.0	0.41
All Pedestrians	35	37	54.5	LOS E	0.1	0.1	0.91	0.91	80.0	33.1	0.41

## Site: TCS 382 [King Georges Rd / The Boulevarde - Future Base (Site Folder: AM)]

King Georges Rd / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: King	Georges	s Rd											
1	L2	19	2	20	10.5	*0.821	31.3	LOS C	50.1	375.5	0.86	0.80	0.86	37.8
2	T1	2500	202	2632	8.1	0.821	25.5	LOS B	50.3	376.8	0.86	0.80	0.86	36.8
Appro	oach	2519	204	2652	8.1	0.821	25.6	LOS B	50.3	376.8	0.86	0.80	0.86	36.8
East:	The B	Soulevard	е											
4	L2	9	1	9	11.1	0.315	59.9	LOS E	7.2	51.1	0.90	0.73	0.90	27.8
5	T1	100	1	105	1.0	0.315	55.3	LOS D	7.2	51.1	0.90	0.73	0.90	25.0
6	R2	114	1	120	0.9	*0.815	85.1	LOS F	9.4	66.2	1.00	0.91	1.23	16.2
Appro	oach	223	3	235	1.3	0.815	70.7	LOS F	9.4	66.2	0.95	0.82	1.07	20.4
North	: King	Georges	Rd											
7	L2	106	2	112	1.9	0.707	20.7	LOS B	35.3	266.6	0.63	0.62	0.63	36.8
8	T1	2289	232	2409	10.1	0.707	15.5	LOS B	38.0	288.7	0.66	0.62	0.66	43.2
9	R2	38	1	40	2.6	*0.312	59.5	LOS E	2.8	19.8	0.92	0.79	0.92	20.2
Appro	oach	2433	235	2561	9.7	0.707	16.5	LOS B	38.0	288.7	0.66	0.62	0.66	42.3
West	: The E	Boulevard	de											
10	L2	130	3	137	2.3	0.390	61.6	LOS E	8.8	62.6	0.92	0.79	0.92	19.4
11	T1	136	2	143	1.5	*0.656	70.6	LOS F	10.3	73.2	1.00	0.82	1.02	22.0
Appro	oach	266	5	280	1.9	0.656	66.2	LOS E	10.3	73.2	0.96	0.81	0.97	20.9
All Vehic	les	5441	447	5727	8.2	0.821	25.3	LOS B	50.3	376.8	0.78	0.72	0.79	36.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Ped	lestrian N	loveme	ent Perf	ormano	ce							
Mov		Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID	Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
Sou	th: King G	eorges F	Rd									
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
East	t: The Bou	levarde										
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
Nort	th: King Ge	eorges F	۶d									
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

## Site: TCS 382 [King Georges Rd / The Boulevarde - Construction (Site Folder: AM)]

King Georges Rd / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	mance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV ]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Kina	Georges	ven/n s Rd	ven/n	%	V/C	sec	_	ven	m	_	_	_	Km/n
1	12	27	10	28	37.0	*0840	32.8	105.0	51.6	390.0	0.89	0.83	0.89	37.0
2	T1	2508	210	2640	8.4	0.840	26.7	LOS B	52.3	392.1	0.89	0.83	0.89	36.2
Appro	bach	2535	220	2668	8.7	0.840	26.7	LOS B	52.3	392.1	0.89	0.83	0.89	36.2
East:	The B	oulevard	е											
4	L2	11	3	12	27.3	0.326	60.2	LOS E	7.3	52.9	0.90	0.73	0.90	27.6
5	T1	100	1	105	1.0	0.326	55.5	LOS D	7.3	52.9	0.90	0.73	0.90	24.9
6	R2	114	1	120	0.9	*0.815	85.1	LOS F	9.4	66.2	1.00	0.91	1.23	16.2
Appro	bach	225	5	237	2.2	0.815	70.7	LOS F	9.4	66.2	0.95	0.82	1.07	20.4
North	: King	Georges	Rd											
7	L2	106	2	112	1.9	0.714	21.4	LOS B	36.1	272.1	0.64	0.63	0.64	36.4
8	T1	2289	232	2409	10.1	0.714	16.2	LOS B	38.7	294.7	0.67	0.63	0.67	42.7
9	R2	38	1	40	2.6	*0.314	62.4	LOS E	2.8	20.1	0.93	0.79	0.93	19.6
Appro	bach	2433	235	2561	9.7	0.714	17.1	LOS B	38.7	294.7	0.67	0.63	0.67	41.8
West	: The E	Boulevard	de											
10	L2	138	11	145	8.0	0.526	61.4	LOS E	9.3	69.9	0.92	0.79	0.92	19.3
11	T1	136	2	143	1.5	*0.827	75.4	LOS F	10.8	76.9	1.00	0.95	1.23	21.2
Appro	bach	274	13	288	4.7	0.827	68.3	LOS E	10.8	76.9	0.96	0.87	1.08	20.4
All Vehic	les	5467	473	5755	8.7	0.840	26.4	LOS B	52.3	392.1	0.80	0.74	0.81	35.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Peo	destrian I	Novem	ent Perf	orman	ce							
Mo	/ Crossing	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
U	Crossing	VOI.	FIOW	Delay	Service	QUE [Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
Sou	th: King G	eorges l	Rd									
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
Eas	t: The Bou	llevarde										
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
Nor	th: King Ge	eorges F	Rd									
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

# Site: TCS 382 [King Georges Rd / The Boulevarde - TTP (Site Folder: AM)]

King Georges Rd / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total	PUT IMES HV]	DEM FLO [ Total	AND WS HV ]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Kina	Georges	ven/n s Rd	ven/n	%	V/C	sec	_	ven	m	_	_	_	Km/n
1	12	27	10	28	37.0	0.960	72.6	LOSE	78.6	594 0	1 00	1 10	1 22	25.3
2	T1	2508	210	2640	84	*0.960	66.2	LOSE	79.4	595 8	1.00	1.10	1.22	22.8
Appro	bach	2535	220	2668	8.7	0.960	66.3	LOS E	79.4	595.8	1.00	1.10	1.22	22.8
East:	The B	oulevard	е											
4	L2	11	3	12	27.3	0.277	49.9	LOS D	7.4	53.3	0.82	0.68	0.82	30.2
5	T1	113	1	119	0.9	0.277	45.2	LOS D	7.4	53.3	0.82	0.68	0.82	27.5
6	R2	114	1	120	0.9	*0.889	91.5	LOS F	9.8	69.4	1.00	0.99	1.38	15.4
Appro	bach	238	5	251	2.1	0.889	67.6	LOS E	9.8	69.4	0.91	0.83	1.09	21.1
North	: King	Georges	Rd											
7	L2	106	2	112	1.9	0.802	29.2	LOS C	44.1	332.8	0.79	0.75	0.79	31.9
8	T1	2289	232	2409	10.1	0.802	24.2	LOS B	47.4	360.4	0.82	0.76	0.82	37.5
9	R2	38	1	40	2.6	*0.321	76.5	LOS F	2.9	21.0	0.98	0.74	0.98	17.2
Appro	bach	2433	235	2561	9.7	0.802	25.2	LOS B	47.4	360.4	0.82	0.76	0.82	36.7
West	: The E	Boulevard	le											
10	L2	138	11	145	8.0	0.407	50.0	LOS D	8.3	62.1	0.83	0.77	0.83	21.8
11	T1	206	2	217	1.0	*0.976	106.3	LOS F	20.7	145.8	1.00	1.22	1.56	17.2
Appro	bach	344	13	362	3.8	0.976	83.8	LOS F	20.7	145.8	0.93	1.04	1.27	18.4
All Vehic	les	5550	473	5842	8.5	0.976	49.4	LOS D	79.4	595.8	0.91	0.94	1.04	26.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Peo	destrian N	lovem	ent Perf	ormano	ce							
Μον	/	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID	Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
Sou	th: King G	eorges I	Rd									
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
Eas	t: The Bou	levarde										
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
Nor	th: King Ge	eorges F	Rd									
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

## Site: TCS 382 [King Georges Rd / The Boulevarde - Future Base (Site Folder: PM)]

King Georges Rd / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec	-	veh	m	-	-	-	km/h
South	n: King	Georges	s Rd											
1	L2	30	0	32	0.0	*0.872	42.3	LOS C	56.4	416.1	0.95	0.90	0.98	33.7
2	T1	2407	159	2534	6.6	0.872	36.0	LOS C	56.5	418.1	0.95	0.90	0.98	31.8
Appro	bach	2437	159	2565	6.5	0.872	36.1	LOS C	56.5	418.1	0.95	0.90	0.98	31.8
East:	The B	oulevard	е											
4	L2	27	0	28	0.0	0.701	55.7	LOS D	24.8	175.1	0.95	0.83	0.95	29.0
5	T1	341	4	359	1.2	0.877	51.9	LOS D	24.8	175.1	0.96	0.83	0.96	25.8
6	R2	200	1	211	0.5	*0.877	84.2	LOS F	17.5	122.8	1.00	0.97	1.26	16.3
Appro	bach	568	5	598	0.9	0.877	63.4	LOS E	24.8	175.1	0.97	0.88	1.07	22.3
North	: King	Georges	Rd											
7	L2	165	1	174	0.6	0.809	27.0	LOS B	51.7	371.5	0.81	0.78	0.81	32.9
8	T1	2513	92	2645	3.7	0.809	21.0	LOS B	52.0	375.7	0.80	0.75	0.80	39.3
9	R2	93	1	98	1.1	* 0.590	41.4	LOS C	4.7	33.1	1.00	0.82	1.00	24.8
Appro	bach	2771	94	2917	3.4	0.809	22.0	LOS B	52.0	375.7	0.80	0.75	0.80	38.4
West	: The E	Boulevard	de											
10	L2	183	0	193	0.0	0.741	50.2	LOS D	11.0	76.7	1.00	0.85	1.07	21.9
11	T1	145	1	153	0.7	*0.695	71.4	LOS F	11.1	78.4	1.00	0.84	1.05	21.9
Appro	bach	328	1	345	0.3	0.741	59.6	LOS E	11.1	78.4	1.00	0.84	1.06	21.9
All Vehic	les	6104	259	6425	4.2	0.877	33.5	LOS C	56.5	418.1	0.89	0.83	0.91	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Movem	ent Peri	formand	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
	VOI.	FIOW	Delay	Service	QUE [ Ped	Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: King (	Georges I	Rd									
P1 Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
East: The Bo	ulevarde										
P2 Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
North: King G	Georges F	Rd									
P3 Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

## Site: TCS 382 [King Georges Rd / The Boulevarde - Construction (Site Folder: PM)]

King Georges Rd / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV 1	DEM FLO [ Total	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI I Veh	CK OF EUE Dist 1	Prop. Que	Effective Stop Rate	Aver. No. Cvcles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: King	Georges	s Rd											
1	L2	38	8	40	21.1	0.914	51.7	LOS D	58.5	436.3	0.99	1.03	1.13	30.5
2	T1	2415	167	2542	6.9	*0.914	45.0	LOS D	59.2	438.7	0.99	1.03	1.13	28.4
Appro	bach	2453	175	2582	7.1	0.914	45.1	LOS D	59.2	438.7	0.99	1.03	1.13	28.5
East:	The B	oulevard	е											
4	L2	29	2	31	6.9	0.690	47.8	LOS D	21.8	154.7	0.94	0.82	0.94	31.1
5	T1	341	4	359	1.2	0.690	43.4	LOS D	21.8	154.7	0.94	0.82	0.94	28.0
6	R2	200	1	211	0.5	*0.871	74.7	LOS F	14.8	103.9	1.00	0.98	1.29	17.7
Appro	bach	570	7	600	1.2	0.871	54.6	LOS D	21.8	154.7	0.96	0.88	1.06	24.2
North	: King	Georges	Rd											
7	L2	165	1	174	0.6	0.842	26.9	LOS B	48.1	345.6	0.87	0.82	0.87	32.9
8	T1	2513	92	2645	3.7	0.842	21.3	LOS B	48.3	349.0	0.85	0.80	0.85	39.1
9	R2	93	1	98	1.1	*0.666	40.0	LOS C	4.0	28.1	1.00	0.82	1.09	25.3
Appro	bach	2771	94	2917	3.4	0.842	22.3	LOS B	48.3	349.0	0.86	0.80	0.86	38.2
West	: The E	Boulevard	de											
10	L2	191	8	201	4.2	*0.921	60.3	LOS E	11.9	86.6	1.00	1.01	1.43	19.6
11	T1	145	1	153	0.7	0.848	67.7	LOS E	10.3	72.4	1.00	0.98	1.30	22.5
Appro	bach	336	9	354	2.7	0.921	63.5	LOS E	11.9	86.6	1.00	1.00	1.37	21.0
All Vehic	les	6130	285	6453	4.6	0.921	36.7	LOS C	59.2	438.7	0.93	0.91	1.02	30.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pec	lestrian I	lovem	ent Perf	orman	ce							
Mov	Crossing	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
U	Crossing	VOI.	FIOW	Delay	Service	QUE [Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
Sou	th: King G	eorges I	Rd									
P1	Full	50	53	60.2	LOS F	0.2	0.2	0.96	0.96	233.5	225.3	0.96
Eas	t: The Bou	levarde										
P2	Full	50	53	55.5	LOS E	0.2	0.2	0.93	0.93	221.0	215.2	0.97
Nor	th: King Ge	eorges F	Rd									
P3	Full	50	53	60.2	LOS F	0.2	0.2	0.96	0.96	234.2	226.1	0.97

# Site: TCS 382 [King Georges Rd / The Boulevarde - TTP (Site Folder: PM)]

King Georges Rd / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: King	Georges	s Rd											
1	L2	38	8	40	21.1	0.955	72.4	LOS F	74.9	558.5	1.00	1.09	1.21	25.5
2	T1	2415	167	2542	6.9	*0.955	65.5	LOS E	75.7	561.6	1.00	1.09	1.21	22.9
Appro	bach	2453	175	2582	7.1	0.955	65.6	LOS E	75.7	561.6	1.00	1.09	1.21	23.0
East:	The B	oulevard	е											
4	L2	29	2	31	6.9	0.758	52.8	LOS D	27.5	194.5	0.96	0.85	0.96	29.7
5	T1	403	4	424	1.0	0.948	52.2	LOS D	27.5	194.5	0.96	0.87	1.00	25.7
6	R2	200	1	211	0.5	*0.948	98.5	LOS F	21.9	154.0	1.00	1.07	1.42	14.7
Appro	bach	632	7	665	1.1	0.948	66.9	LOS E	27.5	194.5	0.97	0.93	1.13	21.8
North	: King	Georges	Rd											
7	L2	165	1	174	0.6	0.873	34.5	LOS C	59.8	429.8	0.92	0.88	0.93	29.3
8	T1	2513	92	2645	3.7	0.873	28.9	LOS C	60.0	433.3	0.90	0.85	0.91	34.9
9	R2	93	1	98	1.1	*0.648	45.3	LOS D	4.4	30.7	1.00	0.80	1.05	23.7
Appro	bach	2771	94	2917	3.4	0.873	29.8	LOS C	60.0	433.3	0.90	0.85	0.92	34.1
West	The E	Boulevard	de											
10	L2	191	8	201	4.2	0.769	47.0	LOS D	10.9	79.0	0.98	0.86	1.09	22.6
11	T1	167	1	176	0.6	*0.982	109.0	LOS F	16.5	116.4	1.00	1.19	1.61	16.9
Appro	bach	358	9	377	2.5	0.982	76.0	LOS F	16.5	116.4	0.99	1.02	1.33	19.0
All Vehic	les	6214	285	6541	4.6	0.982	50.3	LOS D	75.7	561.6	0.95	0.96	1.08	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Peo	destrian I	Novem	ent Perf	orman	ce							
Mo	/ Crossing	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
U	Crossing	VOI.	FIOW	Delay	Service	QUE [Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
Sou	th: King G	eorges l	Rd									
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
Eas	t: The Bou	llevarde										
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
Nor	th: King Ge	eorges F	Rd									
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

### Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde -

Future Base (Site Folder: AM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Cha	ven/h rlotte St	ven/n	ven/n	%	V/C	sec	_	ven	m	_	_	_	Km/n
1	1. 0110	16	1	17	6.2	0 000	20.9	108.0	2.4	04 E	0.92	0.67	0 00	27.5
1		10	1	17	0.3	0.223	29.0		3.4	24.5	0.02	0.07	0.02	37.5
2	11	245	6	258	2.4	0.746	34.0	LUSC	8.2	59.2	0.94	0.83	1.04	32.2
3	R2	35	2	37	5.7	0.746	43.5	LOS D	8.2	59.2	1.00	0.91	1.17	32.3
Appro	bach	296	9	312	3.0	0.746	34.9	LOS C	8.2	59.2	0.94	0.83	1.04	32.4
East:	Cante	rbury Rd												
4	L2	26	1	27	3.8	0.398	15.1	LOS B	9.0	65.7	0.58	0.52	0.58	46.4
5	T1	795	43	837	5.4	0.398	9.5	LOS A	9.1	66.6	0.58	0.52	0.58	51.2
6	R2	135	0	142	0.0	* 1.020	92.9	LOS F	9.1	63.5	1.00	1.25	2.25	20.8
Appro	bach	956	44	1006	4.6	1.020	21.4	LOS B	9.1	66.6	0.64	0.62	0.81	42.8
North	: Thor	ncraft Pd	е											
7	L2	62	0	65	0.0	0.198	29.6	LOS C	3.0	21.2	0.82	0.71	0.82	36.2
8	T1	238	2	251	0.8	*0.940	52.2	LOS D	14.0	98.6	0.98	1.15	1.55	27.0
9	R2	49	1	52	2.0	0.940	60.9	LOS E	14.0	98.6	1.00	1.22	1.66	27.4
Appro	bach	349	3	367	0.9	0.940	49.4	LOS D	14.0	98.6	0.95	1.08	1.43	28.3
West	: Cante	erbury Ro	b											
10	L2	153	2	161	1.3	0.988	74.1	LOS F	48.7	355.2	1.00	1.38	1.66	25.1
11	T1	1331	77	1401	5.8	*0.988	67.2	LOS E	51.2	376.1	1.00	1.40	1.65	27.3
Appro	bach	1484	79	1562	5.3	0.988	68.0	LOS E	51.2	376.1	1.00	1.40	1.65	27.0
All Vehic	les	3085	135	3247	4.4	1.020	48.3	LOS D	51.2	376.1	0.88	1.07	1.31	31.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	orman	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Charlot	tte St										
P1 Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
East: Canterb	ury Rd										
P2 Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
North: Thornci	raft Pde										

### Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde -

Construction (Site Folder: AM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Cha	ven/h rlotte St	ven/n	ven/n	%	V/C	sec	_	ven	m	_	_	_	Km/n
1	1. 0110	16	1	17	6.2	0 000	20.9	108.0	2.4	04 E	0.92	0.67	0 00	27.5
1		10	1	17	0.3	0.223	29.0		3.4	24.5	0.02	0.07	0.02	37.5
2	11	245	6	258	2.4	0.746	34.0	LUSC	8.2	59.2	0.94	0.83	1.04	32.2
3	R2	35	2	37	5.7	0.746	43.5	LOS D	8.2	59.2	1.00	0.91	1.17	32.3
Appro	bach	296	9	312	3.0	0.746	34.9	LOS C	8.2	59.2	0.94	0.83	1.04	32.4
East:	Cante	rbury Rd												
4	L2	26	1	27	3.8	0.398	15.1	LOS B	9.0	65.7	0.58	0.52	0.58	46.4
5	T1	795	43	837	5.4	0.398	9.5	LOS A	9.1	66.6	0.58	0.52	0.58	51.2
6	R2	135	0	142	0.0	* 1.020	92.9	LOS F	9.1	63.5	1.00	1.25	2.25	20.8
Appro	bach	956	44	1006	4.6	1.020	21.4	LOS B	9.1	66.6	0.64	0.62	0.81	42.8
North	: Thor	ncraft Pd	е											
7	L2	62	0	65	0.0	0.198	29.6	LOS C	3.0	21.2	0.82	0.71	0.82	36.2
8	T1	238	2	251	0.8	*0.940	52.2	LOS D	14.0	98.6	0.98	1.15	1.55	27.0
9	R2	49	1	52	2.0	0.940	60.9	LOS E	14.0	98.6	1.00	1.22	1.66	27.4
Appro	bach	349	3	367	0.9	0.940	49.4	LOS D	14.0	98.6	0.95	1.08	1.43	28.3
West	: Cante	erbury Ro	b											
10	L2	153	2	161	1.3	0.988	74.1	LOS F	48.7	355.2	1.00	1.38	1.66	25.1
11	T1	1331	77	1401	5.8	*0.988	67.2	LOS E	51.2	376.1	1.00	1.40	1.65	27.3
Appro	bach	1484	79	1562	5.3	0.988	68.0	LOS E	51.2	376.1	1.00	1.40	1.65	27.0
All Vehic	les	3085	135	3247	4.4	1.020	48.3	LOS D	51.2	376.1	0.88	1.07	1.31	31.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	forman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Charlot	tte St										
P1 Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
East: Canterb	ury Rd										
P2 Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
North: Thornci	aft Pde										

# Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - TTP (Site Folder: AM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	DT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU [ Total	JMES HV 1	FLO [ Total	WS HV 1	Sath	Delay	Service	QUE [ Veh	EUE Dist 1	Que	Stop Rate	NO. Cvcles	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Cha	rlotte St												
1	L2	16	1	17	6.3	0.244	29.8	LOS C	2.9	20.5	0.87	0.69	0.87	37.5
2	T1	245	6	258	2.4	0.815	33.4	LOS C	8.2	58.6	0.96	0.90	1.18	32.4
3	R2	35	2	37	5.7	0.815	41.7	LOS C	8.2	58.6	1.00	1.00	1.32	32.9
Appro	bach	296	9	312	3.0	0.815	34.2	LOS C	8.2	58.6	0.96	0.90	1.18	32.7
East:	Cante	rbury Rd												
4	L2	26	1	27	3.8	0.383	12.9	LOS A	7.4	54.2	0.54	0.49	0.54	47.9
5	T1	795	47	837	5.9	0.383	7.3	LOS A	7.5	55.0	0.54	0.48	0.54	53.0
6	R2	135	0	142	0.0	*0.893	50.3	LOS D	5.9	41.2	1.00	1.03	1.66	29.1
Appro	bach	956	48	1006	5.0	0.893	13.5	LOS A	7.5	55.0	0.61	0.56	0.70	47.6
North	: Thor	ncraft Pd	е											
7	L2	62	0	65	0.0	0.213	29.6	LOS C	2.5	17.3	0.86	0.73	0.86	36.0
8	T1	238	2	251	0.8	* 1.010	74.1	LOS F	16.6	117.3	0.99	1.41	2.05	22.7
9	R2	49	1	52	2.0	1.010	83.1	LOS F	16.6	117.3	1.00	1.47	2.16	23.0
Appro	bach	349	3	367	0.9	1.010	67.5	LOS E	16.6	117.3	0.97	1.30	1.86	24.3
West	: Cante	erbury Ro	b											
10	L2	153	2	161	1.3	0.999	76.5	LOS F	46.8	346.8	1.00	1.50	1.83	24.7
11	T1	1331	109	1401	8.2	*0.999	69.8	LOS E	49.4	369.9	1.00	1.51	1.82	26.7
Appro	bach	1484	111	1562	7.5	0.999	70.5	LOS E	49.4	369.9	1.00	1.51	1.82	26.5
All Vehic	les	3085	171	3247	5.5	1.010	49.0	LOS D	49.4	369.9	0.87	1.13	1.42	31.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of .	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Charlot	tte St										
P1 Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	194.9	215.2	1.10
East: Canterb	ury Rd										
P2 Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	197.4	218.5	1.11
North: Thornci	raft Pde										

### Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde -

Future Base (Site Folder: PM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
	•	veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Cha	rlotte St												
1	L2	29	1	31	3.4	0.252	30.9	LOS C	5.6	39.5	0.77	0.66	0.77	37.0
2	T1	242	3	255	1.2	*0.843	40.4	LOS C	10.3	73.0	0.89	0.83	1.05	30.1
3	R2	57	1	60	1.8	0.843	58.6	LOS E	10.3	73.0	1.00	1.01	1.32	28.1
Appro	bach	328	5	345	1.5	0.843	42.7	LOS D	10.3	73.0	0.90	0.85	1.07	30.2
East:	Cante	rbury Rd												
4	L2	67	0	71	0.0	0.731	23.6	LOS B	27.7	197.6	0.81	0.75	0.81	41.4
5	T1	1242	31	1307	2.5	0.731	17.1	LOS B	27.7	197.6	0.77	0.70	0.77	45.9
6	R2	180	1	189	0.6	*0.855	60.8	LOS E	10.4	72.8	1.00	0.95	1.34	26.6
Appro	bach	1489	32	1567	2.1	0.855	22.7	LOS B	27.7	197.6	0.80	0.73	0.84	42.2
North	: Thor	ncraft Pd	е											
7	L2	97	1	102	1.0	0.795	40.6	LOS C	23.3	165.4	0.97	0.92	1.05	32.8
8	T1	371	7	391	1.9	0.795	36.0	LOS C	23.3	165.4	0.97	0.92	1.05	31.4
9	R2	126	5	133	4.0	0.997	93.5	LOS F	9.3	67.7	1.00	1.24	1.95	20.9
Appro	bach	594	13	625	2.2	0.997	49.0	LOS D	23.3	165.4	0.98	0.98	1.24	28.5
West	: Cante	erbury Ro	b											
10	L2	140	0	147	0.0	0.927	58.8	LOS E	38.6	274.3	1.00	1.12	1.31	28.5
11	T1	1087	25	1144	2.3	*0.927	52.1	LOS D	39.6	282.4	1.00	1.13	1.31	31.1
Appro	bach	1227	25	1292	2.0	0.927	52.8	LOS D	39.6	282.4	1.00	1.13	1.31	30.8
All Vehic	les	3638	75	3829	2.1	0.997	38.9	LOS C	39.6	282.4	0.90	0.92	1.08	34.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	Noveme	ent Perf	ormano	e:							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Charlot	tte St										
P1 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Canterbo	ury Rd										
P2 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	212.4	218.5	1.03
North: Thornci	raft Pde										

# Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - Construction (Site Folder: PM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
	•	veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Cha	rlotte St												
1	L2	29	1	31	3.4	0.252	30.9	LOS C	5.6	39.5	0.77	0.66	0.77	37.0
2	T1	242	3	255	1.2	*0.843	40.4	LOS C	10.3	73.0	0.89	0.83	1.05	30.1
3	R2	57	1	60	1.8	0.843	58.6	LOS E	10.3	73.0	1.00	1.01	1.32	28.1
Appro	bach	328	5	345	1.5	0.843	42.7	LOS D	10.3	73.0	0.90	0.85	1.07	30.2
East:	Cante	rbury Rd												
4	L2	67	0	71	0.0	0.731	23.6	LOS B	27.7	197.6	0.81	0.75	0.81	41.4
5	T1	1242	31	1307	2.5	0.731	17.1	LOS B	27.7	197.6	0.77	0.70	0.77	45.9
6	R2	180	1	189	0.6	*0.855	60.8	LOS E	10.4	72.8	1.00	0.95	1.34	26.6
Appro	bach	1489	32	1567	2.1	0.855	22.7	LOS B	27.7	197.6	0.80	0.73	0.84	42.2
North	: Thor	ncraft Pd	е											
7	L2	97	1	102	1.0	0.795	40.6	LOS C	23.3	165.4	0.97	0.92	1.05	32.8
8	T1	371	7	391	1.9	0.795	36.0	LOS C	23.3	165.4	0.97	0.92	1.05	31.4
9	R2	126	5	133	4.0	0.997	93.5	LOS F	9.3	67.7	1.00	1.24	1.95	20.9
Appro	bach	594	13	625	2.2	0.997	49.0	LOS D	23.3	165.4	0.98	0.98	1.24	28.5
West	: Cante	erbury Ro	b											
10	L2	140	0	147	0.0	0.927	58.8	LOS E	38.6	274.3	1.00	1.12	1.31	28.5
11	T1	1087	25	1144	2.3	*0.927	52.1	LOS D	39.6	282.4	1.00	1.13	1.31	31.1
Appro	bach	1227	25	1292	2.0	0.927	52.8	LOS D	39.6	282.4	1.00	1.13	1.31	30.8
All Vehic	les	3638	75	3829	2.1	0.997	38.9	LOS C	39.6	282.4	0.90	0.92	1.08	34.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Charlot	tte St										
P1 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Canterb	ury Rd										
P2 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	212.4	218.5	1.03
North: Thornci	raft Pde										

# Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - TTP (Site Folder: PM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INP VOLU [ Total	PUT IMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	o Cha	veh/h	veh/h	veh/h	%	v/c	sec	-	veh	m		_		km/h
Sout	i. Cha													
1	L2	29	1	31	3.4	0.233	30.0	LOS C	5.2	36.8	0.76	0.65	0.76	37.4
2	T1	242	3	255	1.2	0.779	37.7	LOS C	10.1	71.7	0.89	0.81	0.99	30.9
3	R2	57	1	60	1.8	0.779	52.8	LOS D	10.1	71.7	1.00	0.94	1.19	29.5
Appro	bach	328	5	345	1.5	0.779	39.6	LOS C	10.1	71.7	0.90	0.82	1.00	31.1
East:	Cante	rbury Rd												
4	L2	67	0	71	0.0	0.772	25.0	LOS B	29.6	214.7	0.85	0.79	0.85	40.7
5	T1	1270	59	1337	4.6	0.772	18.9	LOS B	29.6	214.7	0.81	0.74	0.81	44.8
6	R2	180	1	189	0.6	*0.933	71.4	LOS F	11.5	80.6	1.00	1.05	1.59	24.4
Appro	bach	1517	60	1597	4.0	0.933	25.4	LOS B	29.6	214.7	0.83	0.78	0.91	40.8
North	: Thor	ncraft Pd	е											
7	L2	97	1	102	1.0	0.757	37.7	LOS C	21.7	154.0	0.95	0.87	0.99	33.9
8	T1	371	7	391	1.9	*0.947	34.0	LOS C	21.7	154.0	0.95	0.88	1.01	32.0
9	R2	126	5	133	4.0	0.947	77.1	LOS F	9.1	65.7	1.00	1.17	1.73	23.4
Appro	bach	594	13	625	2.2	0.947	43.8	LOS D	21.7	154.0	0.96	0.94	1.16	29.9
West	: Cante	erbury Ro	ł											
10	L2	140	0	147	0.0	0.942	63.4	LOS E	40.8	291.3	1.00	1.16	1.37	27.4
11	T1	1097	35	1155	3.2	*0.942	56.7	LOS E	41.7	299.9	1.00	1.17	1.36	29.8
Appro	bach	1237	35	1302	2.8	0.942	57.5	LOS E	41.7	299.9	1.00	1.17	1.36	29.5
All Vehic	les	3676	113	3869	3.1	0.947	40.4	LOS C	41.7	299.9	0.91	0.94	1.11	33.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	e									
Mov Input Dem. Aver. Level of AVERAGE BACK OF Prop. Effective Travel Travel Ave ID Crossing Vol Flow Delay Service OLIFLIE Oue Stop Time Dist Spee													
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed		
					[Ped	Dist ]		Rate					
	ped/h	ped/h	sec		ped	m			sec	m	m/sec		
ped/h ped/h sec ped m sec m m/se South: Charlotte St													
P1 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03		
East: Canterbo	ury Rd												
P2 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	212.4	218.5	1.03		
North: Thornci	aft Pde												

### Site: TCS 602 [Canterbury Rd / Fore St - Future Base (Site Folder: AM)]

Canterbury Rd / Fore St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
	_	veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Fore	st												
1	L2	209	9	220	4.3	0.264	20.2	LOS B	5.8	42.5	0.65	0.73	0.65	35.3
3	R2	280	15	295	5.4	*0.835	49.1	LOS D	14.2	103.7	1.00	0.96	1.25	29.0
Appro	bach	489	24	515	4.9	0.835	36.8	LOS C	14.2	103.7	0.85	0.86	0.99	31.0
East:	Cante	rbury Rd	l											
4	L2	103	8	108	7.8	*0.834	46.1	LOS D	26.6	193.6	0.97	1.01	1.09	31.6
5	T1	1071	41	1127	3.8	*0.834	35.5	LOS C	27.7	200.6	0.97	0.98	1.09	29.0
Appro	bach	1174	49	1236	4.2	0.834	36.5	LOS C	27.7	200.6	0.97	0.98	1.09	29.3
West	: Cante	erbury Ro	d											
11	T1	1632	68	1718	4.2	0.729	9.9	LOS A	25.8	186.9	0.67	0.62	0.67	46.4
12	R2	167	4	176	2.4	*0.726	30.6	LOS C	5.3	37.5	1.00	0.85	1.14	31.3
Appro	bach	1799	72	1894	4.0	0.729	11.8	LOS A	25.8	186.9	0.70	0.64	0.71	44.1
All Vehic	les	3462	145	3644	4.2	0.835	23.7	LOS B	27.7	200.6	0.81	0.79	0.88	35.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of .	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
D Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Fore St	t										
P1 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
East: Canterbo	ury Rd										
P2 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	206.7	217.7	1.05
All Pedestrians	100	105	39.3	LOS D	0.1	0.1	0.94	0.94	205.8	216.5	1.05

## Site: TCS 602 [Canterbury Rd / Fore St - Construction (Site Folder: AM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Fore	St												
1 3 Appro	L2 R2 bach	209 280 489	9 15 24	220 295 515	4.3 5.4 4.9	0.264 * 0.835 0.835	20.2 49.1 36.8	LOS B LOS D LOS C	5.8 14.2 14.2	42.5 103.7 103.7	0.65 1.00 0.85	0.73 0.96 0.86	0.65 1.25 0.99	35.3 29.0 31.0
East:	Cante	rbury Rd	I											
4 5	L2 T1	103 1071	8 41	108 1127	7.8 3.8	* 0.834 * 0.834	46.1 35.5	LOS D LOS C	26.6 27.7	193.6 200.6	0.97 0.97	1.01 0.98	1.09 1.09	31.6 29.0
Appro	bach	1174	49	1236	4.2	0.834	36.5	LOS C	27.7	200.6	0.97	0.98	1.09	29.3
West	: Cante	erbury R	d											
11 12	T1 R2	1632 167	68 4	1718 176	4.2 2.4	0.729 * 0.726	9.9 30.6	LOS A LOS C	25.8 5.3	186.9 37.5	0.67	0.62 0.85	0.67	46.4 31.3
Appro	bach	1799 3462	145	1894 3644	4.0	0.729	23.7	LOS A	25.8	186.9 200.6	0.70	0.64	0.71	44.1 35.5
Vehic	les													

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian I	Novem	ent Perf	ormano	e							
Mov LD Crossing	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
	VOI.	FIOW	Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Fore S	t										
P1 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
East: Canterb	ury Rd										
P2 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	206.7	217.7	1.05
All Pedestrians	100	105	39.3	LOS D	0.1	0.1	0.94	0.94	205.8	216.5	1.05

#### Site: TCS 602 [Canterbury Rd / Fore St - TTP (Site Folder: AM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLO	WS	Satn	Delay	Service	QUE	EUE	Que	Stop	No.	Speed
		veh/h	⊓vj veh/h	veh/h	нvј %	v/c	sec		ven. veh	DISL J m		Rale	Cycles	km/h
South	n: Fore	e St												
1	L2	209	9	220	4.3	0.264	20.2	LOS B	5.8	42.5	0.65	0.73	0.65	35.3
3	R2	280	15	295	5.4	*0.835	49.1	LOS D	14.2	103.7	1.00	0.96	1.25	29.0
Appro	bach	489	24	515	4.9	0.835	36.8	LOS C	14.2	103.7	0.85	0.86	0.99	31.0
East:	Cante	erbury Rd	Í											
4	L2	103	8	108	7.8	*0.857	49.0	LOS D	28.5	209.0	0.98	1.05	1.14	30.8
5	T1	1088	58	1145	5.3	*0.857	38.3	LOS C	29.5	216.0	0.98	1.02	1.14	27.9
Appro	bach	1191	66	1254	5.5	0.857	39.2	LOS C	29.5	216.0	0.98	1.03	1.14	28.3
West	: Cant	erbury Ro	d											
11	T1	1727	163	1818	9.4	0.806	12.5	LOS A	31.1	235.4	0.74	0.70	0.76	43.8
12	R2	167	4	176	2.4	*0.726	30.6	LOS C	5.3	37.5	1.00	0.85	1.14	31.3
Appro	bach	1894	167	1994	8.8	0.806	14.1	LOS A	31.1	235.4	0.76	0.72	0.80	42.0
All Vehic	les	3574	257	3762	7.2	0.857	25.5	LOS B	31.1	235.4	0.85	0.84	0.94	34.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian I	Movem	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
	VOI.	FIOW	Delay	Service	QUE [ Ped	Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Fore S	t										
P1 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
East: Canterb	ury Rd										
P2 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	206.7	217.7	1.05
All Pedestrians	100	105	39.3	LOS D	0.1	0.1	0.94	0.94	205.8	216.5	1.05

### Site: TCS 602 [Canterbury Rd / Fore St - Future Base (Site Folder: PM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM/ FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Fore	st	ven/n	ven/n	%	V/C	sec	_	ven	m	_	_	_	KM/N
1	L2	243	1	256	0.4	0.437	39.5	LOS C	11.9	83.3	0.84	0.80	0.84	27.8
3	R2	186	3	196	1.6	*0.803	64.8	LOS E	12.1	85.9	1.00	0.91	1.19	25.5
Appro	bach	429	4	452	0.9	0.803	50.4	LOS D	12.1	85.9	0.91	0.85	0.99	26.6
East:	Cante	rbury Rd	l											
4	L2	178	6	187	3.4	0.833	28.4	LOS B	43.0	306.9	0.88	0.85	0.89	38.2
5	T1	1574	32	1657	2.0	*0.833	22.4	LOS B	44.0	313.7	0.88	0.83	0.89	35.7
Appro	bach	1752	38	1844	2.2	0.833	23.0	LOS B	44.0	313.7	0.88	0.84	0.89	36.1
West	: Cante	erbury Ro	d											
11	T1	1261	14	1327	1.1	0.463	6.4	LOS A	15.0	105.7	0.43	0.39	0.43	50.4
12	R2	160	2	168	1.3	*0.847	70.7	LOS F	10.8	76.6	1.00	0.93	1.29	20.7
Appro	bach	1421	16	1496	1.1	0.847	13.7	LOS A	15.0	105.7	0.49	0.45	0.52	42.3
All Vehic	les	3602	58	3792	1.6	0.847	22.6	LOS B	44.0	313.7	0.73	0.68	0.76	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of .	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
D Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Fore St	t										
P1 Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
East: Canterbo	ury Rd										
P2 Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	221.7	217.7	0.98
All Pedestrians	100	105	54.3	LOS E	0.2	0.2	0.95	0.95	220.8	216.5	0.98

## Site: TCS 602 [Canterbury Rd / Fore St - Construction (Site Folder: PM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM/ FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Fore	st	ven/n	ven/n	%	V/C	sec	_	ven	m	_	_	_	KM/N
1	L2	243	1	256	0.4	0.437	39.5	LOS C	11.9	83.3	0.84	0.80	0.84	27.8
3	R2	186	3	196	1.6	*0.803	64.8	LOS E	12.1	85.9	1.00	0.91	1.19	25.5
Appro	bach	429	4	452	0.9	0.803	50.4	LOS D	12.1	85.9	0.91	0.85	0.99	26.6
East:	Cante	rbury Rd	l											
4	L2	178	6	187	3.4	0.833	28.4	LOS B	43.0	306.9	0.88	0.85	0.89	38.2
5	T1	1574	32	1657	2.0	*0.833	22.4	LOS B	44.0	313.7	0.88	0.83	0.89	35.7
Appro	bach	1752	38	1844	2.2	0.833	23.0	LOS B	44.0	313.7	0.88	0.84	0.89	36.1
West	: Cante	erbury Ro	d											
11	T1	1261	14	1327	1.1	0.463	6.4	LOS A	15.0	105.7	0.43	0.39	0.43	50.4
12	R2	160	2	168	1.3	*0.847	70.7	LOS F	10.8	76.6	1.00	0.93	1.29	20.7
Appro	bach	1421	16	1496	1.1	0.847	13.7	LOS A	15.0	105.7	0.49	0.45	0.52	42.3
All Vehic	les	3602	58	3792	1.6	0.847	22.6	LOS B	44.0	313.7	0.73	0.68	0.76	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of .	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
D Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Fore St	t										
P1 Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
East: Canterbo	ury Rd										
P2 Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	221.7	217.7	0.98
All Pedestrians	100	105	54.3	LOS E	0.2	0.2	0.95	0.95	220.8	216.5	0.98

#### Site: TCS 602 [Canterbury Rd / Fore St - TTP (Site Folder: PM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL	PUT JMES	DEM FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE	ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %	v/c	sec		[ Veh. veh	Dist] m		Rate	Cycles	km/h
South	n: Fore	e St												
1	L2	243	1	256	0.4	0.461	44.2	LOS D	13.1	92.3	0.86	0.81	0.86	26.3
3	R2	186	3	196	1.6	*0.870	75.4	LOS F	13.8	97.7	1.00	0.96	1.30	23.5
Appro	oach	429	4	452	0.9	0.870	57.7	LOS E	13.8	97.7	0.92	0.87	1.05	24.9
East:	Cante	erbury Rd	I											
4	L2	178	6	187	3.4	0.874	33.2	LOS C	53.6	395.3	0.91	0.90	0.95	36.2
5	T1	1658	116	1745	7.0	*0.874	27.2	LOS B	54.3	402.6	0.91	0.89	0.95	32.9
Appro	bach	1836	122	1933	6.6	0.874	27.8	LOS B	54.3	402.6	0.91	0.89	0.95	33.4
West	: Cant	erbury R	d											
11	T1	1288	41	1356	3.2	0.471	6.0	LOS A	15.6	112.1	0.40	0.37	0.40	50.9
12	R2	160	2	168	1.3	*0.852	76.0	LOS F	11.7	82.8	1.00	0.93	1.28	19.8
Appro	oach	1448	43	1524	3.0	0.852	13.8	LOS A	15.6	112.1	0.47	0.43	0.50	42.2
All Vehic	les	3713	169	3908	4.6	0.874	25.8	LOS B	54.3	402.6	0.74	0.71	0.79	34.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian I	Movem	ent Perf	ormano	e							
Mov LD Crossing	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
	VOI.	FIOW	Delay	Service	QUE [ Ped	Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Fore S	t										
P1 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	224.8	215.2	0.96
East: Canterb	ury Rd										
P2 Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	226.7	217.7	0.96
All Pedestrians	100	105	59.3	LOS E	0.2	0.2	0.96	0.96	225.8	216.5	0.96

# Site: TCS 855 [Canterbury Rd / Jeffrey St / Tincombe St / Broughton St - AM (Site Folder: AM)]

Canterbury Rd / Jeffrey St / Tincombe St / Broughton St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service		EUE Diet 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	пvј %	v/c	sec		ven. veh	m Dist j		Rale	Cycles	km/h
East:	Cante	erbury Rd												
4b	L3	12	0	13	0.0	0.391	18.3	LOS B	16.5	120.6	0.52	0.47	0.52	35.8
5	T1	901	49	948	5.4	0.558	22.5	LOS B	21.4	160.0	0.67	0.60	0.67	34.0
6	R2	13	10	14	76.9	*0.558	42.3	LOS C	21.4	160.0	0.87	0.76	0.87	19.2
Appro	bach	926	59	975	6.4	0.558	22.8	LOS B	21.4	160.0	0.67	0.60	0.67	33.8
North	East:	Jeffrey St	t											
24b	L3	22	3	23	13.6	0.859	80.5	LOS F	7.3	53.9	1.00	0.97	1.38	15.9
24	L2	8	0	8	0.0	0.859	79.5	LOS F	7.3	53.9	1.00	0.97	1.38	20.7
26a	R1	173	6	182	3.5	*0.859	78.0	LOS F	7.8	56.0	1.00	0.97	1.37	23.2
Appro	bach	203	9	214	4.4	0.859	78.3	LOS F	7.8	56.0	1.00	0.97	1.37	22.3
North	: Brou	ghton St												
7b	L3	1	0	1	0.0	0.264	64.9	LOS E	2.5	20.5	0.96	0.74	0.96	22.7
7	L2	25	7	26	28.0	0.264	64.3	LOS E	2.5	20.5	0.96	0.74	0.96	11.5
7a	L1	14	0	15	0.0	0.264	62.5	LOS E	2.5	20.5	0.96	0.74	0.96	18.3
9	R2	80	3	84	3.8	*0.764	75.9	LOS F	5.8	41.6	1.00	0.87	1.22	18.7
Appro	bach	120	10	126	8.3	0.764	71.8	LOS F	5.8	41.6	0.99	0.83	1.13	17.3
West	: Cante	erbury Ro	ł											
10	L2	29	0	31	0.0	*0.858	12.0	LOS A	28.1	204.6	0.48	0.53	0.48	46.1
10a	L1	265	18	279	6.8	0.858	10.9	LOS A	28.1	204.6	0.48	0.53	0.48	47.6
11	T1	1642	67	1728	4.1	0.858	6.3	LOS A	28.5	206.2	0.48	0.48	0.48	48.7
Appro	bach	1936	85	2038	4.4	0.858	7.1	LOS A	28.5	206.2	0.48	0.49	0.48	48.4
All Vehic	les	3185	163	3353	5.1	0.859	18.6	LOS B	28.5	206.2	0.59	0.56	0.62	37.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Moveme	ent Peri	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
SouthEast: Tir	ncombe	St									
P5 Full	40	42	10.4	LOS B	0.1	0.1	0.40	0.40	37.7	35.5	0.94
East: Canterb	ury Rd										

# Site: TCS 855 [Canterbury Rd / Jeffrey St / Tincombe St / Broughton St - AM - Construction (Site Folder: AM)]

Canterbury Rd / Jeffrey St / Tincombe St / Broughton St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service		EUE Diet 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	пvј %	v/c	sec		veh	m Dist		Rale	Cycles	km/h
East:	Cante	rbury Rd												
4b	L3	12	0	13	0.0	0.399	18.4	LOS B	16.7	124.0	0.52	0.48	0.52	35.7
5	T1	917	65	965	7.1	0.570	22.5	LOS B	22.1	166.7	0.67	0.60	0.67	34.0
6	R2	13	10	14	76.9	*0.570	41.8	LOS C	22.1	166.7	0.87	0.76	0.87	19.4
Appro	bach	942	75	992	8.0	0.570	22.7	LOS B	22.1	166.7	0.67	0.60	0.67	33.8
North	East:	Jeffrey St												
24b	L3	22	3	23	13.6	0.859	80.5	LOS F	7.3	53.9	1.00	0.97	1.38	15.9
24	L2	8	0	8	0.0	0.859	79.5	LOS F	7.3	53.9	1.00	0.97	1.38	20.7
26a	R1	173	6	182	3.5	*0.859	78.0	LOS F	7.8	56.0	1.00	0.97	1.37	23.2
Appro	bach	203	9	214	4.4	0.859	78.3	LOS F	7.8	56.0	1.00	0.97	1.37	22.3
North	: Brou	ghton St												
7b	L3	1	0	1	0.0	0.375	66.3	LOS E	3.3	29.4	0.97	0.76	0.97	22.4
7	L2	35	17	37	48.6	0.375	65.9	LOS E	3.3	29.4	0.97	0.76	0.97	11.2
7a	L1	14	0	15	0.0	0.375	63.9	LOS E	3.3	29.4	0.97	0.76	0.97	18.0
9	R2	80	3	84	3.8	*0.764	75.9	LOS F	5.8	41.6	1.00	0.87	1.22	18.7
Appro	bach	130	20	137	15.4	0.764	71.8	LOS F	5.8	41.6	0.99	0.83	1.13	16.8
West	: Cante	erbury Ro	I											
10	L2	40	11	42	27.5	*0.870	13.1	LOS A	30.1	221.6	0.50	0.55	0.51	44.7
10a	L1	265	18	279	6.8	0.870	11.7	LOS A	30.1	221.6	0.50	0.55	0.51	47.0
11	T1	1644	69	1731	4.2	0.870	7.1	LOS A	30.8	223.2	0.50	0.50	0.51	47.7
Appro	bach	1949	98	2052	5.0	0.870	7.8	LOS A	30.8	223.2	0.50	0.51	0.51	47.5
All Vehic	les	3224	202	3394	6.3	0.870	19.2	LOS B	30.8	223.2	0.60	0.58	0.64	36.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perl	formand	ce							
Mov	Input	Dem.	Aver.	Level of A	<b>VERAGE</b>	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
SouthEast: Tir	ncombe	St									
P5 Full	40	42	10.4	LOS B	0.1	0.1	0.40	0.40	37.7	35.5	0.94
East: Canterb	ury Rd										

## Site: TCS 855 [Canterbury Rd / Jeffrey St / Tincombe St / Broughton St - AM - TTP (Site Folder: AM)]

Canterbury Rd / Jeffrey St / Tincombe St / Broughton St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU	MES	FLO	WS	Satn	Delay	Service	QUE		Que	Stop	No.	Speed
		veh/h	⊓vj veh/h	veh/h	нvј %	v/c	sec		ven. veh	m Dist		Rate	Cycles	km/h
East:	Cante	rbury Rd												
4b	L3	12	0	13	0.0	0.399	17.1	LOS B	16.2	121.5	0.50	0.45	0.50	37.1
5	T1	934	82	983	8.8	0.570	21.4	LOS B	22.2	170.1	0.65	0.59	0.65	34.8
6	R2	13	10	14	76.9	*0.570	41.1	LOS C	22.2	170.1	0.86	0.76	0.86	19.6
Appro	bach	959	92	1009	9.6	0.570	21.6	LOS B	22.2	170.1	0.66	0.59	0.66	34.5
North	East:	Jeffrey St	:											
24b	L3	22	3	23	13.6	1.289	330.3	LOS F	17.0	124.6	1.00	1.60	2.93	5.4
24	L2	8	0	8	0.0	1.289	329.4	LOS F	17.0	124.6	1.00	1.60	2.93	7.0
26a	R1	173	6	182	3.5	* 1.289	327.9	LOS F	18.0	129.8	1.00	1.61	2.93	8.0
Appro	bach	203	9	214	4.4	1.289	328.3	LOS F	18.0	129.8	1.00	1.61	2.93	7.7
North	: Brou	ghton St												
7b	L3	1	0	1	0.0	0.375	66.3	LOS E	3.3	29.4	0.97	0.76	0.97	22.4
7	L2	35	17	37	48.6	0.375	65.9	LOS E	3.3	29.4	0.97	0.76	0.97	11.2
7a	L1	14	0	15	0.0	0.375	63.9	LOS E	3.3	29.4	0.97	0.76	0.97	18.0
9	R2	80	3	84	3.8	*0.764	75.9	LOS F	5.8	41.6	1.00	0.87	1.22	18.7
Appro	bach	130	20	137	15.4	0.764	71.8	LOS F	5.8	41.6	0.99	0.83	1.13	16.8
West	: Cante	erbury Ro	1											
10	L2	40	11	42	27.5	0.911	16.9	LOS B	41.3	312.2	0.60	0.65	0.65	41.6
10a	L1	265	18	279	6.8	0.911	15.5	LOS B	41.3	312.2	0.60	0.65	0.65	44.6
11	T1	1739	164	1831	9.4	*0.911	10.9	LOS A	41.6	314.9	0.60	0.62	0.65	43.3
Appro	bach	2044	193	2152	9.4	0.911	11.6	LOS A	41.6	314.9	0.60	0.62	0.65	43.5
All Vehic	les	3336	314	3512	9.4	1.289	36.1	LOS C	41.6	314.9	0.66	0.68	0.81	27.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Movem	ent Perl	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
SouthEast: Til	ncombe	St									
P5 Full	40	42	9.3	LOS A	0.1	0.1	0.38	0.38	36.6	35.5	0.97
East: Canterb	ury Rd										

## Site: TCS 1153 [Marrickville Rd / Petersham Rd - Future Base (Site Folder: PM)]

Marrickville Rd / Petersham Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INP VOLU [ Total	UT IMES HV]	DEM, FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Pete	ersham Re	d	ven/m	70	v/C	360	_	Ven	111	_		_	N111/11
1	L2	57	1	60	1.8	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	33.0
2	T1	28	0	29	0.0	0.321	16.1	LOS B	2.0	14.2	0.88	0.74	0.88	37.8
3	R2	18	0	19	0.0	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	30.9
Appro	bach	103	1	108	1.0	0.321	19.4	LOS B	2.0	14.2	0.88	0.74	0.88	34.3
East:	Marrio	kville Rd												
4	L2	26	0	27	0.0	0.385	10.6	LOS A	4.7	33.9	0.66	0.58	0.66	37.9
5	T1	660	17	695	2.6	0.385	7.2	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
6	R2	4	0	4	0.0	0.385	10.6	LOS A	4.7	33.6	0.66	0.57	0.66	40.5
Appro	bach	690	17	726	2.5	0.385	7.3	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
North	: Pete	rsham Ro	Ł											
7	L2	34	0	36	0.0	0.478	22.2	LOS B	3.3	23.2	0.92	0.76	0.92	35.0
8	T1	95	0	100	0.0	*0.478	16.7	LOS B	3.3	23.2	0.92	0.76	0.92	38.2
9	R2	33	2	35	6.1	0.478	21.3	LOS B	3.3	23.2	0.92	0.76	0.92	36.3
Appro	bach	162	2	171	1.2	0.478	18.8	LOS B	3.3	23.2	0.92	0.76	0.92	37.2
West	: Marri	ckville Ro	ł											
11	T1	424	13	446	3.1	*0.507	9.9	LOS A	5.6	40.1	0.69	0.71	0.69	35.6
12	R2	168	1	177	0.6	0.507	16.3	LOS B	3.4	24.2	0.79	0.79	0.79	35.9
Appro	bach	592	14	623	2.4	0.507	11.7	LOS A	5.6	40.1	0.72	0.73	0.72	35.7
All Vehic	les	1547	34	1628	2.2	0.507	11.0	LOS A	5.6	40.1	0.72	0.66	0.72	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Petersham Rd											
P1 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	175.9	208.6	1.19
East: Marrickv	ille Rd										
P2 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.4	215.7	1.19
North: Petersh	am Rd										

## Site: TCS 1153 [Marrickville Rd / Petersham Rd - Construction (Site Folder: PM)]

Marrickville Rd / Petersham Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INP VOLU [ Total	UT IMES HV]	DEM, FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Pete	ersham Re	d	ven/m	70	v/C	360	_	Ven	111	_		_	N111/11
1	L2	57	1	60	1.8	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	33.0
2	T1	28	0	29	0.0	0.321	16.1	LOS B	2.0	14.2	0.88	0.74	0.88	37.8
3	R2	18	0	19	0.0	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	30.9
Appro	bach	103	1	108	1.0	0.321	19.4	LOS B	2.0	14.2	0.88	0.74	0.88	34.3
East:	Marrio	kville Rd												
4	L2	26	0	27	0.0	0.385	10.6	LOS A	4.7	33.9	0.66	0.58	0.66	37.9
5	T1	660	17	695	2.6	0.385	7.2	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
6	R2	4	0	4	0.0	0.385	10.6	LOS A	4.7	33.6	0.66	0.57	0.66	40.5
Appro	bach	690	17	726	2.5	0.385	7.3	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
North	: Pete	rsham Ro	Ł											
7	L2	34	0	36	0.0	0.478	22.2	LOS B	3.3	23.2	0.92	0.76	0.92	35.0
8	T1	95	0	100	0.0	*0.478	16.7	LOS B	3.3	23.2	0.92	0.76	0.92	38.2
9	R2	33	2	35	6.1	0.478	21.3	LOS B	3.3	23.2	0.92	0.76	0.92	36.3
Appro	bach	162	2	171	1.2	0.478	18.8	LOS B	3.3	23.2	0.92	0.76	0.92	37.2
West	: Marri	ckville Ro	ł											
11	T1	424	13	446	3.1	*0.507	9.9	LOS A	5.6	40.1	0.69	0.71	0.69	35.6
12	R2	168	1	177	0.6	0.507	16.3	LOS B	3.4	24.2	0.79	0.79	0.79	35.9
Appro	bach	592	14	623	2.4	0.507	11.7	LOS A	5.6	40.1	0.72	0.73	0.72	35.7
All Vehic	les	1547	34	1628	2.2	0.507	11.0	LOS A	5.6	40.1	0.72	0.66	0.72	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Petersham Rd											
P1 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	175.9	208.6	1.19
East: Marrickv	ille Rd										
P2 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.4	215.7	1.19
North: Petersh	nam Rd										

# Site: TCS 1153 [Marrickville Rd / Petersham Rd - TTP (Site Folder: PM)]

Marrickville Rd / Petersham Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfoi	rmance										
Mov ID	Turn	INP VOLU [ Total	UT IMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Pete	ersham Re	d	ven/n	70	V/C	Sec	_	ven	111	_	_	_	K111/11
1	L2	57	1	60	1.8	0.366	21.8	LOS B	2.1	14.8	0.91	0.75	0.91	32.4
2	T1	28	0	29	0.0	0.366	17.2	LOS B	2.1	14.8	0.91	0.75	0.91	37.2
3	R2	18	0	19	0.0	0.366	21.8	LOS B	2.1	14.8	0.91	0.75	0.91	30.4
Appro	bach	103	1	108	1.0	0.366	20.6	LOS B	2.1	14.8	0.91	0.75	0.91	33.7
East:	Marrio	kville Rd												
4	L2	26	0	27	0.0	0.444	10.1	LOS A	4.9	37.2	0.65	0.57	0.65	38.3
5	T1	710	67	747	9.4	0.444	6.7	LOS A	5.1	38.2	0.65	0.57	0.65	38.2
6	R2	4	0	4	0.0	0.444	10.2	LOS A	5.1	38.2	0.65	0.56	0.65	40.8
Appro	bach	740	67	779	9.1	0.444	6.9	LOS A	5.1	38.2	0.65	0.57	0.65	38.3
North	: Pete	rsham Ro	t											
7	L2	34	0	36	0.0	0.542	23.4	LOS B	3.4	24.3	0.95	0.79	0.97	34.4
8	T1	95	0	100	0.0	*0.542	18.0	LOS B	3.4	24.3	0.95	0.79	0.97	37.5
9	R2	33	2	35	6.1	0.542	22.6	LOS B	3.4	24.3	0.95	0.79	0.97	35.7
Appro	bach	162	2	171	1.2	0.542	20.1	LOS B	3.4	24.3	0.95	0.79	0.97	36.6
West	: Marri	ckville Ro	ł											
11	T1	424	13	446	3.1	*0.503	9.1	LOS A	5.6	40.0	0.66	0.69	0.66	36.4
12	R2	168	1	177	0.6	0.503	15.7	LOS B	3.1	21.9	0.77	0.78	0.77	36.2
Appro	bach	592	14	623	2.4	0.503	11.0	LOS A	5.6	40.0	0.69	0.72	0.69	36.3
All Vehic	les	1597	84	1681	5.3	0.542	10.6	LOS A	5.6	40.0	0.71	0.66	0.72	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	Noveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
				Rate							
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Petersham Rd											
P1 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	175.9	208.6	1.19
East: Marrickv	ille Rd										
P2 Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.4	215.7	1.19
North: Petersh	nam Rd										

## Site: TCS 1167 [Canterbury Rd / Wonga St Future Base (Site Folder: AM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	nt Perfor	mance										
Mov ID	Turn	INF VOLU	PUT JMES	DEM FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		l Iotai veh/h	HV J veh/h	i rotar veh/h	нvј %	v/c	sec		ر ven. veh	Dist j m		Rate	Cycles	km/h
East:	Cante	rbury Ro	ł											
5	T1	1115	47	1174	4.2	0.451	7.6	LOS A	19.8	143.9	0.72	0.65	0.72	49.6
6	R2	193	8	203	4.1	*0.578	45.9	LOS D	9.7	70.5	1.00	0.93	1.00	26.3
Appro	bach	1308	55	1377	4.2	0.578	13.3	LOS A	19.8	143.9	0.76	0.69	0.76	43.4
North	: Won	ga St												
7	L2	176	5	185	2.8	0.380	36.8	LOS C	7.4	53.2	0.86	0.79	0.86	28.6
9	R2	67	4	71	6.0	*0.804	63.2	LOS E	3.9	28.6	1.00	0.91	1.39	26.6
Appro	bach	243	9	256	3.7	0.804	44.1	LOS D	7.4	53.2	0.90	0.82	1.01	27.9
West	: Cante	erbury R	d											
10	L2	15	0	16	0.0	*0.799	17.0	LOS B	27.8	206.0	0.68	0.63	0.68	45.4
11	T1	1741	118	1833	6.8	0.799	11.4	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
Appro	bach	1756	118	1848	6.7	0.799	11.5	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
All Vehic	les	3307	182	3481	5.5	0.804	14.6	LOS B	27.9	206.6	0.73	0.67	0.73	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormand	e							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	UE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
North: Wonga	St										
P3 Full	29	31	8.8	LOS A	0.0	0.0	0.42	0.42	35.0	34.0	0.97
West: Canterb	ury Rd										
P4 Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians	56	59	25.0	LOS C	0.1	0.1	0.66	0.66	50.8	33.5	0.66

## Site: TCS 1167 [Canterbury Rd / Wonga St Construction (Site Folder: AM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV ]	لDEM FLO Total ]	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m			,	km/h
East:	Cante	rbury Ro	1											
5	T1	1115	47	1174	4.2	0.451	7.6	LOS A	19.8	143.9	0.72	0.65	0.72	49.6
6	R2	193	8	203	4.1	*0.578	45.9	LOS D	9.7	70.5	1.00	0.93	1.00	26.3
Appro	bach	1308	55	1377	4.2	0.578	13.3	LOS A	19.8	143.9	0.76	0.69	0.76	43.4
North	: Won	ga St												
7	L2	176	5	185	2.8	0.380	36.8	LOS C	7.4	53.2	0.86	0.79	0.86	28.6
9	R2	67	4	71	6.0	*0.804	63.2	LOS E	3.9	28.6	1.00	0.91	1.39	26.6
Appro	bach	243	9	256	3.7	0.804	44.1	LOS D	7.4	53.2	0.90	0.82	1.01	27.9
West	: Cante	erbury R	d											
10	L2	15	0	16	0.0	*0.799	17.0	LOS B	27.8	206.0	0.68	0.63	0.68	45.4
11	T1	1741	118	1833	6.8	0.799	11.4	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
Appro	bach	1756	118	1848	6.7	0.799	11.5	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
All Vehic	les	3307	182	3481	5.5	0.804	14.6	LOS B	27.9	206.6	0.73	0.67	0.73	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormand	e							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	UE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
North: Wonga	St										
P3 Full	29	31	8.8	LOS A	0.0	0.0	0.42	0.42	35.0	34.0	0.97
West: Canterb	ury Rd										
P4 Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians	56	59	25.0	LOS C	0.1	0.1	0.66	0.66	50.8	33.5	0.66

# Site: TCS 1167 [Canterbury Rd / Wonga St TTP (Site Folder: AM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Cante	rbury Ro	1											
5 6 Appro	T1 R2 bach	1119 206 1325	51 21 72	1178 217 1395	4.6 10.2 5.4	0.454 * 0.662 0.662	7.1 66.5 16.3	LOS A LOS E LOS B	21.7 12.2 21.7	158.1 93.0 158.1	0.65 1.00 0.70	0.59 0.98 0.65	0.65 1.01 0.70	50.3 21.5 41.0
North	: Won	ga St												
7 9	L2 R2	201 67	30 4	212 71	14.9 6.0	0.495 <b>*</b> 0.964	45.1 91.1	LOS D LOS F	10.6 5.2	83.4 38.4	0.90 1.00	0.81 1.07	0.90 1.80	25.9 21.9
Appro	oach	268	34	282	12.7	0.964	56.6	LOS E	10.6	83.4	0.92	0.87	1.12	24.4
West	: Cante	erbury R	d											
10 11	L2 T1	15 1811	0 188	16 1906	0.0 10.4	* 0.832 0.832	19.7 14.1	LOS B LOS A	37.0 37.1	281.9 282.5	0.72 0.72	0.68 0.68	0.73 0.73	43.8 43.3
Appro	oach	1826	188	1922	10.3	0.832	14.2	LOS A	37.1	282.5	0.72	0.68	0.73	43.3
All Vehic	les	3419	294	3599	8.6	0.964	18.3	LOS B	37.1	282.5	0.73	0.68	0.75	39.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormand	e							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
North: Wonga	St										
P3 Full	29	31	9.2	LOS A	0.0	0.0	0.39	0.39	35.4	34.0	0.96
West: Canterb	ury Rd										
P4 Full	27	28	52.3	LOS E	0.1	0.1	0.93	0.93	77.7	33.0	0.42
All Pedestrians	56	59	30.0	LOS D	0.1	0.1	0.65	0.65	55.8	33.5	0.60

## Site: TCS 1167 [Canterbury Rd / Wonga St Future Base (Site Folder: PM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM/ FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
East:	Cante	rbury Ro	1											
5	T1	1775	56	1868	3.2	0.764	11.3	LOS A	37.1	266.9	0.78	0.73	0.78	45.9
6	R2	328	2	345	0.6	*0.584	35.5	LOS C	12.9	91.0	1.00	0.93	1.00	29.6
Appro	bach	2103	58	2214	2.8	0.764	15.0	LOS B	37.1	266.9	0.82	0.76	0.82	42.0
North	: Won	ga St												
7	L2	198	5	208	2.5	0.267	24.2	LOS B	6.5	46.5	0.68	0.74	0.68	33.5
9	R2	154	0	162	0.0	*0.873	62.5	LOS E	9.0	63.3	1.00	1.01	1.42	26.8
Appro	bach	352	5	371	1.4	0.873	41.0	LOS C	9.0	63.3	0.82	0.86	1.00	29.7
West	: Cante	erbury R	d											
10	L2	65	2	68	3.1	*0.758	16.7	LOS B	18.8	133.8	0.62	0.59	0.63	45.3
11	T1	1219	21	1283	1.7	0.758	11.0	LOS A	19.3	136.9	0.63	0.57	0.63	45.9
Appro	bach	1284	23	1352	1.8	0.758	11.3	LOS A	19.3	136.9	0.63	0.58	0.63	45.8
All Vehic	les	3739	86	3936	2.3	0.873	16.2	LOS B	37.1	266.9	0.75	0.70	0.77	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	orman	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	UE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
North: Wonga	St										
P3 Full	29	31	16.8	LOS B	0.1	0.1	0.58	0.58	43.0	34.0	0.79
West: Canterb	ury Rd										
P4 Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians	56	59	29.1	LOS C	0.1	0.1	0.74	0.74	54.9	33.5	0.61
## Site: TCS 1167 [Canterbury Rd / Wonga St Construction (Site Folder: PM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Cante	rbury Ro	1											
5 6 Appro	T1 R2 bach	1775 328 2103	56 2 58	1868 345 2214	3.2 0.6 2.8	0.764 * 0.584 0.764	11.3 35.5 15.0	LOS A LOS C LOS B	37.1 12.9 37.1	266.9 91.0 266.9	0.78 1.00 0.82	0.73 0.93 0.76	0.78 1.00 0.82	45.9 29.6 42.0
North	: Won	ga St												
7 9	L2 R2	198 154	5 0	208 162	2.5 0.0	0.267 <b>*</b> 0.873	24.2 62.5	LOS B LOS E	6.5 9.0	46.5 63.3	0.68 1.00	0.74 1.01	0.68 1.42	33.5 26.8
Appro	bach	352	5	371	1.4	0.873	41.0	LOS C	9.0	63.3	0.82	0.86	1.00	29.7
West	: Cante	erbury R	d											
10 11	L2 T1	65 1219	2 21	68 1283	3.1 1.7	* 0.758 0.758	16.7 11.0	LOS B LOS A	18.8 19.3	133.8 136.9	0.62 0.63	0.59 0.57	0.63 0.63	45.3 45.9
Appro	bach	1284	23	1352	1.8	0.758	11.3	LOS A	19.3	136.9	0.63	0.58	0.63	45.8
All Vehic	les	3739	86	3936	2.3	0.873	16.2	LOS B	37.1	266.9	0.75	0.70	0.77	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE I Ped	UE Dist 1	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m		naic	sec	m	m/sec
North: Wonga	St										
P3 Full	29	31	16.8	LOS B	0.1	0.1	0.58	0.58	43.0	34.0	0.79
West: Canterb	ury Rd										
P4 Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians	56	59	29.1	LOS C	0.1	0.1	0.74	0.74	54.9	33.5	0.61

## Site: TCS 1167 [Canterbury Rd / Wonga St TTP (Site Folder: PM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Cante	rbury Ro	1											
5 6 Appro	T1 R2 bach	1803 384 2187	84 58 142	1898 404 2302	4.7 15.1 6.5	0.814 * 0.712 0.814	12.2 43.2 17.7	LOS A LOS D LOS B	40.4 15.0 40.4	294.2 118.4 294.2	0.80 1.00 0.84	0.75 0.97 0.79	0.81 1.01 0.84	45.0 27.0 39.9
North	: Won	ga St												
7 9	L2 R2	203 154	10 0	214 162	4.9 0.0	0.252 <b>*</b> 0.873	21.0 62.5	LOS B LOS E	6.1 9.0	44.6 63.3	0.63 1.00	0.73 1.01	0.63 1.42	35.0 26.8
Appro	oach	357	10	376	2.8	0.873	38.9	LOS C	9.0	63.3	0.79	0.85	0.97	30.3
West	: Cante	erbury R	d											
10 11	L2 T1	65 1241	2 43	68 1306	3.1 3.5	* 0.878 0.878	23.2 17.4	LOS B LOS B	27.1 27.6	194.9 199.2	0.79 0.79	0.79 0.78	0.88 0.87	41.7 40.5
Appro	oach	1306	45	1375	3.4	0.878	17.7	LOS B	27.6	199.2	0.79	0.78	0.87	40.6
All Vehic	les	3850	197	4053	5.1	0.878	19.6	LOS B	40.4	294.2	0.82	0.79	0.87	38.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE Dict 1	Que	Stop	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m		Rale	sec	m	m/sec
North: Wonga	St										
P3 Full	29	31	19.9	LOS B	0.1	0.1	0.63	0.63	46.0	34.0	0.74
West: Canterb	ury Rd										
P4 Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians	56	59	30.7	LOS D	0.1	0.1	0.77	0.77	56.5	33.5	0.59

# Site: TCS 1203 [Chapel Rd / Rickard Rd - Future Base (Site Folder: AM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
Sout	n: Cha	pel Rd	VEII/II	VEII/II	70	v/C	360	_	VEIT	111	_		_	K111/11
1	L2	89	0	94	0.0	0.336	16.6	LOS B	2.6	18.6	0.84	0.72	0.84	21.5
2	T1	186	3	196	1.6	0.336	14.9	LOS B	2.6	18.6	0.88	0.71	0.88	27.0
Appr	oach	275	3	289	1.1	0.336	15.4	LOS B	2.6	18.6	0.87	0.71	0.87	25.2
East:	Ricka	rd Rd												
4	L2	80	3	84	3.8	0.471	22.0	LOS B	3.0	22.0	0.93	0.77	0.93	29.0
5	T1	241	13	254	5.4	0.471	16.4	LOS B	3.2	23.7	0.93	0.75	0.93	31.0
6	R2	93	25	98	26.9	0.443	24.3	LOS B	1.9	16.6	0.95	0.77	0.95	25.9
Appr	oach	414	41	436	9.9	0.471	19.2	LOS B	3.2	23.7	0.93	0.76	0.93	29.2
North	n: Chap	oel Rd												
7	L2	118	25	124	21.2	0.174	11.8	LOS A	1.4	11.4	0.58	0.71	0.58	33.9
8	T1	231	9	243	3.9	*0.823	24.8	LOS B	6.5	46.7	1.00	1.02	1.46	21.4
9	R2	34	1	36	2.9	0.823	27.9	LOS B	6.5	46.7	1.00	1.02	1.47	15.0
Appr	oach	383	35	403	9.1	0.823	21.1	LOS B	6.5	46.7	0.87	0.92	1.19	24.0
West	: Ricka	ard Rd												
10	L2	67	1	71	1.5	*0.734	24.3	LOS B	5.7	40.7	0.99	0.92	1.23	22.1
11	T1	458	9	482	2.0	0.734	19.1	LOS B	5.9	42.1	0.99	0.92	1.22	29.0
12	R2	129	0	136	0.0	*0.487	23.5	LOS B	2.7	18.6	0.96	0.78	0.96	20.0
Appr	oach	654	10	688	1.5	0.734	20.5	LOS B	5.9	42.1	0.98	0.89	1.17	26.4
All Vehic	les	1726	89	1817	5.2	0.823	19.5	LOS B	6.5	46.7	0.93	0.84	1.07	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	lovem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel Rd											
P1 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: Rickard	Rd										
P2 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	183.3	219.5	1.20
North: Chapel	Rd										

# Site: TCS 1203 [Chapel Rd / Rickard Rd - Construction (Site Folder: AM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLL [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV ]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Cha	pel Rd												
1	L2	89	0	94	0.0	0.336	16.6	LOS B	2.6	18.6	0.84	0.72	0.84	21.5
2	T1	186	3	196	1.6	0.336	14.9	LOS B	2.6	18.6	0.88	0.71	0.88	27.0
Appro	oach	275	3	289	1.1	0.336	15.4	LOS B	2.6	18.6	0.87	0.71	0.87	25.2
East:	Ricka	rd Rd												
4	L2	90	13	95	14.4	0.501	22.3	LOS B	3.1	23.3	0.93	0.77	0.93	28.6
5	T1	241	13	254	5.4	0.501	16.5	LOS B	3.5	25.4	0.93	0.76	0.93	30.9
6	R2	93	25	98	26.9	0.443	24.3	LOS B	1.9	16.6	0.95	0.77	0.95	25.9
Appro	oach	424	51	446	12.0	0.501	19.4	LOS B	3.5	25.4	0.94	0.76	0.94	29.1
North	: Chap	oel Rd												
7	L2	118	25	124	21.2	0.174	11.8	LOS A	1.4	11.4	0.58	0.71	0.58	33.9
8	T1	231	9	243	3.9	*0.823	24.8	LOS B	6.5	46.7	1.00	1.02	1.46	21.4
9	R2	34	1	36	2.9	0.823	27.9	LOS B	6.5	46.7	1.00	1.02	1.47	15.0
Appro	oach	383	35	403	9.1	0.823	21.1	LOS B	6.5	46.7	0.87	0.92	1.19	24.0
West	: Ricka	ard Rd												
10	L2	67	1	71	1.5	*0.734	24.3	LOS B	5.7	40.7	0.99	0.92	1.23	22.1
11	T1	458	9	482	2.0	0.734	19.1	LOS B	5.9	42.1	0.99	0.92	1.22	29.0
12	R2	129	0	136	0.0	*0.487	23.5	LOS B	2.7	18.6	0.96	0.78	0.96	20.0
Appro	oach	654	10	688	1.5	0.734	20.5	LOS B	5.9	42.1	0.98	0.89	1.17	26.4
All Vehic	les	1736	99	1827	5.7	0.823	19.6	LOS B	6.5	46.7	0.93	0.84	1.07	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	lovem	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel	Rd										
P1 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: Rickard	Rd										
P2 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	183.3	219.5	1.20
North: Chapel	Rd										

# Site: TCS 1203 [Chapel Rd / Rickard Rd - TTP (Site Folder: AM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
	0	veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Cha	pel Rd												
1	L2	89	0	94	0.0	0.282	16.8	LOS B	3.0	22.0	0.77	0.69	0.77	22.6
2	T1	202	19	213	9.4	0.282	14.9	LOS B	3.0	22.0	0.80	0.67	0.80	27.0
Appro	oach	291	19	306	6.5	0.282	15.5	LOS B	3.0	22.0	0.79	0.68	0.79	25.7
East:	Ricka	rd Rd												
4	L2	90	13	95	14.4	0.413	23.9	LOS B	3.6	27.2	0.89	0.76	0.89	27.7
5	T1	241	13	254	5.4	0.413	18.1	LOS B	4.0	29.1	0.89	0.73	0.89	29.5
6	R2	93	25	98	26.9	0.554	30.9	LOS C	2.5	21.7	0.98	0.80	1.06	22.8
Appro	oach	424	51	446	12.0	0.554	22.1	LOS B	4.0	29.1	0.91	0.75	0.93	27.2
North	: Chap	oel Rd												
7	L2	118	25	124	21.2	0.161	13.2	LOS A	1.7	13.9	0.57	0.71	0.57	32.7
8	T1	245	23	258	9.4	*0.647	21.1	LOS B	6.8	51.1	0.93	0.84	0.99	23.4
9	R2	34	1	36	2.9	0.647	24.2	LOS B	6.8	51.1	0.93	0.84	0.99	16.2
Appro	oach	397	49	418	12.3	0.647	19.0	LOS B	6.8	51.1	0.83	0.80	0.87	25.2
West	: Ricka	ard Rd												
10	L2	67	1	71	1.5	*0.609	24.5	LOS B	6.3	44.7	0.94	0.81	0.97	22.0
11	T1	458	9	482	2.0	0.609	19.3	LOS B	6.4	45.9	0.94	0.80	0.97	28.8
12	R2	129	0	136	0.0	*0.609	30.1	LOS C	3.5	24.4	0.99	0.82	1.10	17.2
Appro	oach	654	10	688	1.5	0.609	22.0	LOS B	6.4	45.9	0.95	0.81	0.99	25.5
All Vehic	les	1766	129	1859	7.3	0.647	20.3	LOS B	6.8	51.1	0.89	0.77	0.92	25.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel Rd											
P1 Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16
East: Rickard	Rd										
P2 Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	188.2	219.5	1.17
North: Chapel	Rd										

# Site: TCS 1203 [Chapel Rd / Rickard Rd - Future Base (Site Folder: PM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV 1	DEM FLO [ Total	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh	CK OF EUE Dist 1	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Rate	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	195	1	205	0.5	0.433	19.2	LOS B	6.3	44.0	0.80	0.74	0.80	19.8
2	T1	294	2	309	0.7	0.433	18.6	LOS B	6.3	44.0	0.85	0.72	0.85	24.6
Appro	oach	489	3	515	0.6	0.433	18.8	LOS B	6.3	44.0	0.83	0.73	0.83	22.6
East:	Ricka	rd Rd												
4	L2	157	6	165	3.8	*0.872	38.7	LOS C	13.6	97.2	1.00	1.08	1.42	21.2
5	T1	609	6	641	1.0	0.872	32.7	LOS C	14.8	104.2	1.00	1.08	1.40	21.3
6	R2	238	32	251	13.4	*0.915	47.1	LOS D	9.7	75.7	1.00	1.12	1.71	17.7
Appro	oach	1004	44	1057	4.4	0.915	37.0	LOS C	14.8	104.2	1.00	1.09	1.48	20.2
North	: Chap	oel Rd												
7	L2	199	27	209	13.6	0.247	14.4	LOS A	3.4	26.8	0.59	0.73	0.59	32.4
8	T1	367	8	386	2.2	* 0.903	39.2	LOS C	16.0	114.2	1.00	1.14	1.51	16.3
9	R2	34	1	36	2.9	0.903	42.2	LOS C	16.0	114.2	1.00	1.14	1.51	11.8
Appro	oach	600	36	632	6.0	0.903	31.1	LOS C	16.0	114.2	0.86	1.01	1.21	19.9
West	: Ricka	ard Rd												
10	L2	87	0	92	0.0	0.620	27.7	LOS B	7.6	54.2	0.94	0.81	0.96	20.0
11	T1	437	12	460	2.7	0.620	22.3	LOS B	7.6	54.2	0.93	0.79	0.95	26.6
12	R2	122	0	128	0.0	0.415	30.5	LOS C	3.5	24.8	0.94	0.78	0.94	17.0
Appro	oach	646	12	680	1.9	0.620	24.6	LOS B	7.6	54.2	0.93	0.79	0.95	23.8
All Vehic	les	2739	95	2883	3.5	0.915	29.6	LOS C	16.0	114.2	0.92	0.94	1.18	21.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel Rd											
P1 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
East: Rickard	Rd										
P2 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	193.2	219.5	1.14
North: Chapel	Rd										

# Site: TCS 1203 [Chapel Rd / Rickard Rd - Construction (Site Folder: PM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV 1	DEM FLO [ Total	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh	ACK OF EUE Dist 1	Prop. Que	Effective Stop Rate	Aver. No. Cvcles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Cha	pel Rd												
1	L2	195	1	205	0.5	0.433	19.2	LOS B	6.3	44.0	0.80	0.74	0.80	19.8
2	T1	294	2	309	0.7	0.433	18.6	LOS B	6.3	44.0	0.85	0.72	0.85	24.6
Appro	oach	489	3	515	0.6	0.433	18.8	LOS B	6.3	44.0	0.83	0.73	0.83	22.6
East:	Ricka	rd Rd												
4	L2	167	16	176	9.6	0.896	42.0	LOS C	14.4	104.7	1.00	1.13	1.51	20.1
5	T1	609	6	641	1.0	*0.896	35.7	LOS C	15.9	112.5	1.00	1.12	1.49	20.1
6	R2	238	32	251	13.4	*0.915	47.1	LOS D	9.7	75.7	1.00	1.12	1.71	17.7
Appro	oach	1014	54	1067	5.3	0.915	39.4	LOS C	15.9	112.5	1.00	1.12	1.54	19.5
North	: Chap	oel Rd												
7	L2	199	27	209	13.6	0.247	14.4	LOS A	3.4	26.8	0.59	0.73	0.59	32.4
8	T1	367	8	386	2.2	*0.903	39.2	LOS C	16.0	114.2	1.00	1.14	1.51	16.3
9	R2	34	1	36	2.9	0.903	42.2	LOS C	16.0	114.2	1.00	1.14	1.51	11.8
Appro	oach	600	36	632	6.0	0.903	31.1	LOS C	16.0	114.2	0.86	1.01	1.21	19.9
West	: Ricka	ard Rd												
10	L2	87	0	92	0.0	0.620	27.7	LOS B	7.6	54.2	0.94	0.81	0.96	20.0
11	T1	437	12	460	2.7	0.620	22.3	LOS B	7.6	54.2	0.93	0.79	0.95	26.6
12	R2	122	0	128	0.0	0.415	30.5	LOS C	3.5	24.8	0.94	0.78	0.94	17.0
Appro	oach	646	12	680	1.9	0.620	24.6	LOS B	7.6	54.2	0.93	0.79	0.95	23.8
All Vehic	les	2749	105	2894	3.8	0.915	30.5	LOS C	16.0	114.2	0.92	0.95	1.20	20.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel Rd											
P1 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
East: Rickard	Rd										
P2 Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	193.2	219.5	1.14
North: Chapel	Rd										

# Site: TCS 1203 [Chapel Rd / Rickard Rd - TTP (Site Folder: PM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total	PUT JMES HV 1	DEM FLO [ Total	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE [ Veh.	CK OF EUE Dist 1	Prop. Que	Effective Stop Rate	Aver. No. Cvcles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m			- ,	km/h
South	n: Chaj	oel Rd												
1	L2	195	1	205	0.5	0.505	21.4	LOS B	7.4	52.9	0.79	0.74	0.79	18.8
2	T1	312	20	328	6.4	0.505	20.2	LOS B	7.4	52.9	0.83	0.71	0.83	23.6
Appro	oach	507	21	534	4.1	0.505	20.6	LOS B	7.4	52.9	0.82	0.72	0.82	21.7
East:	Ricka	rd Rd												
4	L2	167	16	176	9.6	*0.867	42.2	LOS C	15.5	112.9	1.00	1.06	1.35	20.0
5	T1	609	6	641	1.0	0.867	36.0	LOS C	17.0	120.2	1.00	1.05	1.33	20.0
6	R2	238	32	251	13.4	* 0.890	48.4	LOS D	10.5	82.3	1.00	1.04	1.52	17.4
Appro	oach	1014	54	1067	5.3	0.890	39.9	LOS C	17.0	120.2	1.00	1.05	1.38	19.3
North	: Chap	el Rd												
7	L2	199	27	209	13.6	0.235	14.7	LOS B	3.8	29.3	0.56	0.72	0.56	32.1
8	T1	387	28	407	7.2	*0.891	41.0	LOS C	18.7	138.8	1.00	1.11	1.40	15.8
9	R2	34	1	36	2.9	0.891	44.0	LOS D	18.7	138.8	1.00	1.11	1.40	11.5
Appro	oach	620	56	653	9.0	0.891	32.7	LOS C	18.7	138.8	0.86	0.99	1.13	19.3
West	: Ricka	rd Rd												
10	L2	87	0	92	0.0	0.614	30.6	LOS C	8.9	63.5	0.94	0.80	0.94	18.6
11	T1	437	12	460	2.7	0.614	25.1	LOS B	8.9	63.5	0.92	0.78	0.92	25.0
12	R2	122	0	128	0.0	0.403	34.1	LOS C	4.1	28.5	0.93	0.78	0.93	15.8
Appro	oach	646	12	680	1.9	0.614	27.5	LOS B	8.9	63.5	0.93	0.78	0.93	22.2
All Vehic	les	2787	143	2934	5.1	0.891	31.9	LOS C	18.7	138.8	0.92	0.92	1.12	20.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	lovem	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of .	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chapel Rd											
P1 Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	194.9	215.2	1.10
East: Rickard	Rd										
P2 Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	198.2	219.5	1.11
North: Chapel	Rd										

# Site: TCS 1299 [Haldon St / The Boulevarde - Future Base (Site Folder: AM)]

Haldon St / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 83 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Halo	lon St												
1	L2	47	8	49	17.0	0.315	22.7	LOS B	1.9	15.2	0.91	0.73	0.91	33.5
2	T1	261	21	275	8.0	*0.906	45.8	LOS D	11.4	85.4	0.98	1.08	1.44	27.1
Appro	oach	308	29	324	9.4	0.906	42.2	LOS C	11.4	85.4	0.97	1.02	1.36	27.8
East:	The B	oulevard	е											
4	L2	20	0	21	0.0	0.398	32.7	LOS C	3.4	26.1	0.93	0.78	0.93	30.4
5	T1	89	12	94	13.5	0.398	28.2	LOS B	3.4	26.1	0.93	0.78	0.93	17.8
6	R2	216	14	227	6.5	*0.923	59.1	LOS E	11.6	85.7	1.00	1.11	1.61	15.1
Appro	oach	325	26	342	8.0	0.923	49.0	LOS D	11.6	85.7	0.98	1.00	1.38	16.5
North	n: Hald	on St												
7	L2	104	3	109	2.9	0.189	20.0	LOS B	3.6	26.1	0.65	0.67	0.65	28.4
8	T1	243	18	256	7.4	0.759	29.5	LOS C	13.7	99.4	0.92	0.99	1.00	31.6
9	R2	159	1	167	0.6	*0.759	36.3	LOS C	13.7	99.4	0.97	1.05	1.06	21.3
Appro	oach	506	22	533	4.3	0.759	29.7	LOS C	13.7	99.4	0.88	0.94	0.95	28.4
West	: The E	Boulevard	de											
10	L2	160	3	168	1.9	0.225	21.7	LOS B	4.4	31.5	0.69	0.73	0.69	26.6
11	T1	191	31	201	16.2	*0.931	56.4	LOS D	12.9	102.9	1.00	1.21	1.62	10.9
12	R2	43	6	45	14.0	0.931	61.1	LOS E	12.9	102.9	1.00	1.21	1.62	21.6
Appro	oach	394	40	415	10.2	0.931	42.8	LOS D	12.9	102.9	0.87	1.01	1.24	17.3
All Vehic	les	1533	117	1614	7.6	0.931	39.7	LOS C	13.7	102.9	0.92	0.99	1.20	23.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. E	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Haldon St											
P1 Full	70	74	32.2	LOS D	0.2	0.2	0.88	0.88	56.0	31.0	0.55
East: The Bou	levarde										
P2 Full	20	21	15.7	LOS B	0.0	0.0	0.61	0.61	41.1	33.0	0.80
North: Haldon	St										

## Site: TCS 1299 [Haldon St / The Boulevarde - Construction (Site Folder: AM)]

Haldon St / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	h: Hald	lon St												
1 2	L2 T1	54 269	15 29	57 283	27.8 10.8	0.332 <b>*</b> 0.955	23.3 59.7	LOS B LOS E	2.2 14.3	17.7 109.6	0.90 0.98	0.74 1.18	0.90 1.59	32.9 23.8
Appr	oach	323	44	340	13.6	0.955	53.6	LOS D	14.3	109.6	0.97	1.11	1.48	24.8
East:	The B	oulevard	е											
4	L2	20	0	21	0.0	0.399	35.9	LOS C	3.8	28.9	0.94	0.79	0.94	29.2
5	T1	89	12	94	13.5	0.399	31.4	LOS C	3.8	28.9	0.94	0.79	0.94	16.6
6	R2	216	14	227	6.5	*0.957	71.6	LOS F	13.4	99.3	1.00	1.16	1.72	13.2
Appr	oach	325	26	342	8.0	0.957	58.4	LOS E	13.4	99.3	0.98	1.04	1.46	14.6
North	n: Hald	on St												
7	L2	104	3	109	2.9	0.182	20.0	LOS B	3.8	27.4	0.62	0.66	0.62	28.4
8	T1	251	26	264	10.4	0.731	29.4	LOS C	14.4	105.9	0.90	0.97	0.94	31.7
9	R2	159	1	167	0.6	*0.731	36.2	LOS C	14.4	105.9	0.95	1.02	0.99	21.3
Appr	oach	514	30	541	5.8	0.731	29.6	LOS C	14.4	105.9	0.86	0.92	0.89	28.5
West	: The E	Boulevard	de											
10	L2	160	3	168	1.9	0.219	22.3	LOS B	4.7	33.3	0.67	0.73	0.67	26.3
11	T1	191	31	201	16.2	*0.974	73.3	LOS F	15.8	127.4	1.00	1.31	1.77	8.8
12	R2	48	11	51	22.9	0.974	78.1	LOS F	15.8	127.4	1.00	1.31	1.77	18.5
Appr	oach	399	45	420	11.3	0.974	53.4	LOS D	15.8	127.4	0.87	1.08	1.33	15.1
All Vehic	les	1561	145	1643	9.3	0.974	46.6	LOS D	15.8	127.4	0.91	1.02	1.24	21.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Haldon St											
P1 Full	70	74	34.8	LOS D	0.2	0.2	0.88	0.88	58.6	31.0	0.53
East: The Bou	levarde										
P2 Full	20	21	15.6	LOS B	0.0	0.0	0.59	0.59	41.0	33.0	0.80
North: Haldon	St										

# Site: TCS 1299 [Haldon St / The Boulevarde - TTP (Site Folder: AM)]

Haldon St / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 88 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	n: Halo	lon St												
1	L2	54	15	57	27.8	0.323	24.6	LOS B	2.6	21.3	0.89	0.74	0.89	32.3
2	T1	269	29	283	10.8	*0.931	52.6	LOS D	13.2	100.8	0.98	1.13	1.50	25.4
Appr	oach	323	44	340	13.6	0.931	47.9	LOS D	13.2	100.8	0.96	1.06	1.40	26.2
East:	The B	oulevard	е											
4	L2	20	0	21	0.0	0.479	34.6	LOS C	4.4	36.5	0.95	0.79	0.95	29.7
5	T1	102	25	107	24.5	0.479	30.1	LOS C	4.4	36.5	0.95	0.79	0.95	17.1
6	R2	216	14	227	6.5	*0.953	69.2	LOS E	13.0	96.4	1.00	1.16	1.72	13.5
Appr	oach	338	39	356	11.5	0.953	55.3	LOS D	13.0	96.4	0.98	1.03	1.44	15.1
North	n: Hald	on St												
7	L2	104	3	109	2.9	0.602	29.4	LOS C	13.0	97.3	0.86	0.77	0.86	24.5
8	T1	251	26	264	10.4	0.602	24.8	LOS B	13.0	97.3	0.86	0.77	0.86	33.7
9	R2	159	1	167	0.6	*0.628	40.8	LOS C	6.7	47.2	0.99	0.86	1.02	19.0
Appr	oach	514	30	541	5.8	0.628	30.7	LOS C	13.0	97.3	0.90	0.80	0.91	28.0
West	: The B	Boulevard	de											
10	L2	160	3	168	1.9	0.226	22.8	LOS B	4.7	33.4	0.69	0.73	0.69	26.1
11	T1	261	101	275	38.7	*0.980	76.0	LOS F	21.3	195.7	1.00	1.42	1.78	8.6
12	R2	48	11	51	22.9	0.980	80.7	LOS F	21.3	195.7	1.00	1.42	1.78	18.1
Appr	oach	469	115	494	24.5	0.980	58.3	LOS E	21.3	195.7	0.89	1.19	1.41	13.7
All Vehic	les	1644	228	1731	13.9	0.980	47.0	LOS D	21.3	195.7	0.93	1.01	1.26	20.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Haldon St											
P1 Full	70	74	33.8	LOS D	0.2	0.2	0.88	0.88	57.6	31.0	0.54
East: The Bou	levarde										
P2 Full	20	21	21.2	LOS C	0.0	0.0	0.69	0.69	46.5	33.0	0.71
North: Haldon	St										

## Site: TCS 1299 [Haldon St / The Boulevarde - Future Base (Site Folder: PM)]

Haldon St / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Hald	lon St	V011/11	Ven/m	,,,	10		_	Voli		_		_	NIII/II
1	L2	100	9	105	9.0	0.310	17.2	LOS B	2.2	16.4	0.85	0.74	0.85	35.9
2	T1	275	14	289	5.1	*0.891	38.8	LOS C	10.9	79.6	0.96	1.08	1.45	29.2
Appro	oach	375	23	395	6.1	0.891	33.0	LOS C	10.9	79.6	0.93	0.99	1.29	30.5
East:	The B	oulevard	le											
4	L2	27	2	28	7.4	0.701	33.6	LOS C	6.5	50.3	0.99	0.90	1.12	30.1
5	T1	165	23	174	13.9	0.701	29.0	LOS C	6.5	50.3	0.99	0.90	1.12	17.6
6	R2	234	2	246	0.9	*0.925	52.3	LOS D	10.9	76.7	1.00	1.15	1.68	16.4
Appro	oach	426	27	448	6.3	0.925	42.1	LOS C	10.9	76.7	1.00	1.03	1.43	17.7
North	: Hald	on St												
7	L2	103	3	108	2.9	0.473	20.6	LOS B	8.8	64.0	0.77	0.70	0.77	29.4
8	T1	234	13	246	5.6	0.473	16.0	LOS B	8.8	64.0	0.77	0.70	0.77	37.9
9	R2	162	4	171	2.5	*0.519	28.6	LOS C	5.1	36.4	0.95	0.79	0.95	23.3
Appro	oach	499	20	525	4.0	0.519	21.0	LOS B	8.8	64.0	0.82	0.73	0.82	32.3
West	: The E	Boulevard	de											
10	L2	194	4	204	2.1	0.341	24.0	LOS B	5.4	38.2	0.80	0.77	0.80	25.4
11	T1	148	20	156	13.5	*0.899	44.8	LOS D	8.4	65.6	1.00	1.13	1.61	12.9
12	R2	41	5	43	12.2	0.899	49.4	LOS D	8.4	65.6	1.00	1.13	1.61	24.3
Appro	oach	383	29	403	7.6	0.899	34.8	LOS C	8.4	65.6	0.90	0.95	1.20	20.2
All Vehic	les	1683	99	1772	5.9	0.925	32.2	LOS C	10.9	79.6	0.91	0.91	1.17	25.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Haldon St											
P1 Full	70	74	27.5	LOS C	0.1	0.1	0.89	0.89	51.4	31.0	0.60
East: The Bou	levarde										
P2 Full	20	21	14.5	LOS B	0.0	0.0	0.64	0.64	39.9	33.0	0.83
North: Haldon	St										

## Site: TCS 1299 [Haldon St / The Boulevarde - Construction (Site Folder: PM)]

Haldon St / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Hald	lon St												
1 2	L2 T1	107 283	16 22	113 298	15.0 7.8	0.304 <b>*</b> 0.876	18.0 40.2	LOS B LOS C	2.6 12.2	20.4 90.8	0.82 0.94	0.74 1.03	0.82 1.33	35.2 28.7
Appro	oach	390	38	411	9.7	0.876	34.1	LOS C	12.2	90.8	0.91	0.95	1.19	30.0
East:	The B	oulevard	е											
4	L2	27	2	28	7.4	0.641	35.6	LOS C	7.1	54.9	0.98	0.85	1.01	29.3
5	T1	165	23	174	13.9	0.641	31.0	LOS C	7.1	54.9	0.98	0.85	1.01	16.8
6	R2	234	2	246	0.9	*0.904	53.1	LOS D	11.6	81.9	1.00	1.08	1.53	16.3
Appro	oach	426	27	448	6.3	0.904	43.4	LOS D	11.6	81.9	0.99	0.98	1.30	17.4
North	n: Hald	on St												
7	L2	103	3	108	2.9	0.480	22.2	LOS B	10.1	74.8	0.76	0.69	0.76	28.3
8	T1	242	21	255	8.7	0.480	17.6	LOS B	10.1	74.8	0.76	0.69	0.76	37.1
9	R2	162	4	171	2.5	*0.509	31.3	LOS C	5.8	41.6	0.94	0.80	0.94	22.2
Appro	oach	507	28	534	5.5	0.509	22.9	LOS B	10.1	74.8	0.82	0.73	0.82	31.4
West	: The E	Boulevard	de											
10	L2	194	4	204	2.1	0.345	26.9	LOS B	6.1	43.7	0.80	0.77	0.80	24.0
11	T1	148	20	156	13.5	*0.881	47.7	LOS D	9.5	75.2	1.00	1.09	1.48	12.3
12	R2	46	10	48	21.7	0.881	52.4	LOS D	9.5	75.2	1.00	1.09	1.48	23.5
Appro	oach	388	34	408	8.8	0.881	37.9	LOS C	9.5	75.2	0.90	0.93	1.14	19.3
All Vehic	les	1711	127	1801	7.4	0.904	34.0	LOS C	12.2	90.8	0.90	0.89	1.10	25.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Haldon	St										
P1 Full	70	74	29.8	LOS C	0.1	0.1	0.87	0.87	53.7	31.0	0.58
East: The Bou	levarde										
P2 Full	20	21	15.6	LOS B	0.0	0.0	0.63	0.63	41.0	33.0	0.80
North: Haldon	St										

# Site: TCS 1299 [Haldon St / The Boulevarde - TTP (Site Folder: PM)]

Haldon St / The Boulevarde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Hald	lon St												
1	L2 T1	107	16 22	113 208	15.0	0.347	22.3	LOS B	3.5 18 3	27.5 136 0	0.86	0.75	0.86	33.0 20.4
Appro	oach	390	38	411	9.7	0.998	63.4	LOS E	18.3	136.9	0.94	1.17	1.54	20.4
East:	The B	oulevard	е											
4	L2	27	2	28	7.4	0.970	79.2	LOS F	16.8	151.9	0.97	1.36	1.75	18.7
5	T1 R2	227 234	85 2	239 246	37.4 0 0	* 0.970	74.7 37.5	LOS F	16.8 9.8	151.9 68 9	0.97	1.36 0.84	1.75	8.8 20.2
Appro	oach	488	89	514	18.2	0.970	57.1	LOS E	16.8	151.9	0.94	1.11	1.38	14.0
North	n: Hald	on St												
7	L2	103	3	108	2.9	0.557	28.7		12.5	92.8	0.83	0.75	0.83	24.8
8	11 02	242	21	255 171	8.7 2.5	0.557	24.1 41.0		7 1	92.8 50.4	0.83	0.75	0.83	34.1 19.7
Appro	oach	507	28	534	5.5	0.651	30.7	LOS C	12.5	92.8	0.99	0.79	0.90	27.9
West	: The E	Boulevard	de											
10	L2	194	4	204	2.1	0.374	31.6	LOS C	7.1	50.9	0.83	0.78	0.83	22.1
11	T1	170	42	179	24.7	* 1.003	88.1	LOS F	15.7	132.8	1.00	1.41	1.96	7.6
12	R2	46	10	48	21.7	1.003	92.8	LOS F	15.7	132.8	1.00	1.41	1.96	16.5
Appro	oach	410	56	432	13.7	1.003	61.9	LOS E	15.7	132.8	0.92	1.11	1.43	13.8
All Vehic	les	1795	211	1889	11.8	1.003	52.1	LOS D	18.3	151.9	0.92	1.03	1.29	19.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Haldon	St										
P1 Full	70	74	27.3	LOS C	0.1	0.1	0.78	0.78	51.2	31.0	0.61
East: The Bou	levarde										
P2 Full	20	21	20.7	LOS C	0.0	0.0	0.68	0.68	46.1	33.0	0.72
North: Haldon	St										

## Site: TCS 1303 [New Canterbury Rd / Duntroon St - Future Base (Site Folder: AM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO' [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh	ACK OF EUE Dist ] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Dunt	troon St												
1 3b Appro	L2 R3 pach	6 79 85	0 1 1	6 83 89	0.0 1.3 1.2	0.031 *0.473 0.473	45.8 49.0 48.8	LOS D LOS D LOS D	0.3 3.6 3.6	1.8 25.7 25.7	0.92 0.98 0.98	0.65 0.77 0.77	0.92 0.98 0.98	32.8 32.5 32.5
South	nEast:	New Cat	erbury R	d										
21b	L3	16	0	17	0.0	0.120	10.2	LOSA	1.9	14.0	0.31	0.63	0.31	51.8
Appro	bach	547 563	38	593	6.7	0.342	9.1	LOSA	6.8	50.5 50.5	0.37	0.66	0.37	50.4 50.4
West	New	Canterbu	ury Rd											
12a 12	R1 R2	1072 55	82 1	1128 58	7.6 1.8	* 0.494 0.494	9.9 11.3	LOS A LOS A	11.6 10.3	86.8 76.1	0.46 0.47	0.68 0.69	0.46 0.47	50.1 49.2
Appro	bach	1127	83	1186	7.4	0.494	10.0	LOS A	11.6	86.8	0.46	0.68	0.46	50.1
All Vehic	les	1775	122	1868	6.9	0.494	11.6	LOS A	11.6	86.8	0.45	0.68	0.45	48.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormand	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
	Vol.	Flow	Delay	Service	QUE [ Ped	:UE Dist 1	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Duntroe	on St										
P1 Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: Ne	w Cater	bury Rd									
P5 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Ca	nterbury	/ Rd									
P4 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians	150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

## Site: TCS 1303 [New Canterbury Rd / Duntroon St - Construction (Site Folder: AM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU	PUT JMES	DEM/ FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI		Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ lotal veh/h	HV J veh/h	[ lotal veh/h	HVJ %	v/c	sec		ر ven. veh	Dist J m		Rate	Cycles	km/h
South	n: Dun	troon St												
1	L2	6	0	6	0.0	0.031	45.8	LOS D	0.3	1.8	0.92	0.65	0.92	32.8
3b	R3	79	1	83	1.3	*0.473	49.0	LOS D	3.6	25.7	0.98	0.77	0.98	32.5
Appro	bach	85	1	89	1.2	0.473	48.8	LOS D	3.6	25.7	0.98	0.77	0.98	32.5
South	nEast:	New Cat	erbury R	d										
21b	L3	16	0	17	0.0	0.120	10.2	LOS A	1.9	14.0	0.31	0.63	0.31	51.8
21a	L1	547	38	576	6.9	0.342	9.1	LOS A	6.8	50.5	0.37	0.66	0.37	50.4
Appro	bach	563	38	593	6.7	0.342	9.1	LOS A	6.8	50.5	0.36	0.66	0.36	50.4
West	New	Canterbu	ury Rd											
12a	R1	1072	82	1128	7.6	*0.494	9.9	LOS A	11.6	86.8	0.46	0.68	0.46	50.1
12	R2	55	1	58	1.8	0.494	11.3	LOS A	10.3	76.1	0.47	0.69	0.47	49.2
Appro	bach	1127	83	1186	7.4	0.494	10.0	LOS A	11.6	86.8	0.46	0.68	0.46	50.1
All Vehic	les	1775	122	1868	6.9	0.494	11.6	LOS A	11.6	86.8	0.45	0.68	0.45	48.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
	1.0	1/1			[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Duntroe	on St										
P1 Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: Ne	w Cater	bury Rd									
P5 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Ca	nterbury	Rd									
P4 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians	150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

## Site: TCS 1303 [New Canterbury Rd / Duntroon St - TTP (Site Folder: AM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM/ FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Dun	troon St												
1	L2	6	0	6	0.0	0.035	47.0	LOS D	0.3	1.8	0.93	0.65	0.93	32.4
3b	R3	79	1	83	1.3	*0.526	50.4	LOS D	3.7	26.2	0.99	0.77	0.99	32.1
Appro	bach	85	1	89	1.2	0.526	50.1	LOS D	3.7	26.2	0.99	0.77	0.99	32.1
South	nEast:	New Cat	erbury R	d										
21b	L3	16	0	17	0.0	0.122	9.9	LOS A	1.8	13.8	0.30	0.63	0.30	52.0
21a	L1	555	46	584	8.3	0.346	8.8	LOS A	6.7	50.1	0.35	0.65	0.35	50.6
Appro	bach	571	46	601	8.1	0.346	8.8	LOS A	6.7	50.1	0.35	0.65	0.35	50.7
West	New	Canterbu	ury Rd											
12a	R1	1129	139	1188	12.3	*0.531	9.8	LOS A	12.3	95.0	0.46	0.68	0.46	50.3
12	R2	55	1	58	1.8	0.531	11.1	LOS A	11.0	84.4	0.47	0.69	0.47	49.4
Appro	bach	1184	140	1246	11.8	0.531	9.9	LOS A	12.3	95.0	0.46	0.69	0.46	50.2
All Vehic	les	1840	187	1937	10.2	0.531	11.4	LOS A	12.3	95.0	0.45	0.68	0.45	49.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
	1.0	1/1			[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Duntroe	on St										
P1 Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: Ne	w Cater	bury Rd									
P5 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Ca	nterbury	Rd									
P4 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians	150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

## Site: TCS 1303 [New Canterbury Rd / Duntroon St - Future Base (Site Folder: PM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL	PUT JMES	DEM/ FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %	v/c	sec		[ Veh. veh	Dist ] m		Rate	Cycles	km/h
South	n: Dunt	troon St												
1	L2	29	0	31	0.0	0.301	53.2	LOS D	1.4	9.8	0.99	0.72	0.99	30.3
3b	R3	33	0	35	0.0	*0.391	54.7	LOS D	1.6	11.3	1.00	0.73	1.00	31.0
Appro	bach	62	0	65	0.0	0.391	54.0	LOS D	1.6	11.3	1.00	0.72	1.00	30.7
South	nEast:	New Cat	erbury R	d										
21b	L3	101	1	106	1.0	0.482	9.9	LOS A	9.7	70.0	0.37	0.68	0.37	51.9
21a	L1	1177	49	1239	4.2	0.482	8.0	LOS A	10.2	73.7	0.37	0.67	0.37	51.1
Appro	bach	1278	50	1345	3.9	0.482	8.1	LOS A	10.2	73.7	0.37	0.67	0.37	51.2
West	New	Canterbu	ury Rd											
12a	R1	709	23	746	3.2	*0.662	9.7	LOS A	13.3	95.2	0.46	0.68	0.46	50.7
12	R2	60	1	63	1.7	0.662	11.3	LOS A	13.3	95.2	0.53	0.72	0.53	49.2
Appro	bach	769	24	809	3.1	0.662	9.8	LOS A	13.3	95.2	0.46	0.69	0.46	50.6
All Vehic	les	2109	74	2220	3.5	0.662	10.1	LOS A	13.3	95.2	0.42	0.68	0.42	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	WERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Diet 1	Que	Stop Rate	Time	Dist. 3	Speed
	ped/h	ped/h	sec		ped	m		Itale	sec	m	m/sec
South: Duntroe	on St										
P1 Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: Ne	w Cater	bury Rd									
P5 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Ca	nterbury	/ Rd									
P4 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians	150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

## Site: TCS 1303 [New Canterbury Rd / Duntroon St - Construction (Site Folder: PM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL	PUT JMES	DEM, FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %	v/c	sec		[ Veh. veh	Dist] m		Rate	Cycles	km/h
South	n: Dun	troon St												
1	L2	29	0	31	0.0	0.301	53.2	LOS D	1.4	9.8	0.99	0.72	0.99	30.3
3b	R3	33	0	35	0.0	*0.391	54.7	LOS D	1.6	11.3	1.00	0.73	1.00	31.0
Appro	bach	62	0	65	0.0	0.391	54.0	LOS D	1.6	11.3	1.00	0.72	1.00	30.7
South	nEast:	New Cat	erbury R	d										
21b	L3	101	1	106	1.0	0.482	9.9	LOS A	9.7	70.0	0.37	0.68	0.37	51.9
21a	L1	1177	49	1239	4.2	0.482	8.0	LOS A	10.2	73.7	0.37	0.67	0.37	51.1
Appro	bach	1278	50	1345	3.9	0.482	8.1	LOS A	10.2	73.7	0.37	0.67	0.37	51.2
West	New	Canterbu	ury Rd											
12a	R1	709	23	746	3.2	*0.662	9.7	LOS A	13.3	95.2	0.46	0.68	0.46	50.7
12	R2	60	1	63	1.7	0.662	11.3	LOS A	13.3	95.2	0.53	0.72	0.53	49.2
Appro	bach	769	24	809	3.1	0.662	9.8	LOS A	13.3	95.2	0.46	0.69	0.46	50.6
All Vehic	les	2109	74	2220	3.5	0.662	10.1	LOS A	13.3	95.2	0.42	0.68	0.42	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
	1.0	1/1			[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Duntroe	on St										
P1 Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: Ne	w Cater	bury Rd									
P5 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Ca	nterbury	Rd									
P4 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians	150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

## Site: TCS 1303 [New Canterbury Rd / Duntroon St - TTP (Site Folder: PM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLU	PUT JMES	DEM/ FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ Iotal veh/h	HV J veh/h	[ lotal veh/h	HV J %	v/c	sec		[ Veh. veh	Dist J m		Rate	Cycles	km/h
South	n: Dunt	roon St												
1	L2	29	0	31	0.0	0.417	61.1	LOS E	1.6	11.2	1.00	0.71	1.00	28.3
3b	R3	33	0	35	0.0	*0.543	63.1	LOS E	1.9	13.1	1.00	0.75	1.08	28.9
Appro	bach	62	0	65	0.0	0.543	62.2	LOS E	1.9	13.1	1.00	0.73	1.04	28.6
South	nEast:	New Cat	terbury R	d										
21b	L3	101	1	106	1.0	0.506	9.7	LOS A	10.6	78.5	0.35	0.67	0.35	52.0
21a	L1	1227	99	1292	8.1	0.506	7.8	LOS A	11.0	82.6	0.35	0.67	0.35	51.3
Appro	bach	1328	100	1398	7.5	0.506	8.0	LOS A	11.0	82.6	0.35	0.67	0.35	51.3
West	New	Canterbu	ury Rd											
12a	R1	724	38	762	5.2	*0.695	9.8	LOS A	15.0	109.3	0.45	0.68	0.45	50.6
12	R2	60	1	63	1.7	0.695	11.6	LOS A	15.0	109.3	0.54	0.73	0.54	49.0
Appro	bach	784	39	825	5.0	0.695	10.0	LOS A	15.0	109.3	0.46	0.69	0.46	50.5
All Vehic	les	2174	139	2288	6.4	0.695	10.2	LOS A	15.0	109.3	0.41	0.68	0.41	49.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
	1.0	1.0			[Ped	Dist ]		Rate			,
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Duntroe	on St										
P1 Full	50	53	42.4	LOS E	0.1	0.1	0.92	0.92	66.3	31.0	0.47
SouthEast: Ne	w Cater	bury Rd									
P5 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	70.7	34.4	0.49
West: New Ca	nterbury	/ Rd									
P4 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	70.5	34.1	0.48
All Pedestrians	150	158	43.7	LOS E	0.1	0.1	0.94	0.94	69.2	33.2	0.48

## Site: TCS 1329 [Burwood Rd / Leylands Parade - Future Base (Site Folder: PM)]

Burwood Rd / Leylands Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLL [ Total	PUT JMES HV ]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Burv	vood Rd												
1	L2	64	0	67	0.0	0.206	20.2	LOS B	3.1	22.9	0.70	0.65	0.70	38.8
2	T1	512	59	539	11.5	* 1.029	82.5	LOS F	36.0	275.4	0.96	1.59	1.99	14.5
3	R2	46	2	48	4.3	1.029	96.7	LOS F	36.0	275.4	1.00	1.73	2.17	17.9
Appro	oach	622	61	655	9.8	1.029	77.1	LOS F	36.0	275.4	0.94	1.50	1.87	16.6
East:	Leyla	nds Pde												
4	L2	35	1	37	2.9	0.314	18.9	LOS B	5.6	40.2	0.70	0.61	0.70	38.5
5	T1	201	4	212	2.0	0.314	14.3	LOS A	5.6	40.2	0.70	0.61	0.70	40.2
6	R2	205	4	216	2.0	*0.661	32.3	LOS C	6.8	48.1	0.98	0.88	1.04	24.2
Appro	oach	441	9	464	2.0	0.661	23.0	LOS B	6.8	48.1	0.83	0.74	0.86	33.2
North	: Burw	ood Rd												
7	L2	48	1	51	2.1	0.531	22.0	LOS B	10.1	74.7	0.81	0.72	0.81	31.1
8	T1	314	25	331	8.0	0.531	17.5	LOS B	10.1	74.7	0.81	0.72	0.81	32.7
9	R2	62	1	65	1.6	0.536	42.7	LOS D	2.4	17.0	1.00	0.76	1.05	24.5
Appro	oach	424	27	446	6.4	0.536	21.7	LOS B	10.1	74.7	0.84	0.72	0.85	30.7
West	: Leyla	inds Pde												
10	L2	195	4	205	2.1	0.912	48.9	LOS D	15.0	106.8	1.00	1.18	1.54	23.6
11	T1	129	3	136	2.3	*0.912	44.5	LOS D	15.0	106.8	1.00	1.18	1.54	28.3
Appro	oach	324	7	341	2.2	0.912	47.2	LOS D	15.0	106.8	1.00	1.18	1.54	25.7
All Vehic	les	1811	104	1906	5.7	1.029	45.6	LOS D	36.0	275.4	0.90	1.08	1.32	23.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Burwoo	od Rd										
P1 Full	50	53	30.2	LOS D	0.1	0.1	0.93	0.93	56.8	34.5	0.61
East: Leylands	s Pde										
P2 Full	50	53	30.2	LOS D	0.1	0.1	0.93	0.93	56.8	34.5	0.61
North: Burwoo	d Rd										

## Site: TCS 1329 [Burwood Rd / Leylands Parade - Construction (Site Folder: PM)]

Burwood Rd / Leylands Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total	UT IMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
Couth		veh/h	veh/h	veh/h	%	V/C	sec	_	veh	m	_	_	_	km/h
Sout	1: Burv													
1	L2	64	0	67	0.0	0.200	20.1	LOS B	3.5	26.5	0.66	0.63	0.66	38.8
2	T1	529	76	557	14.4	* 1.000	69.4	LOS E	34.6	270.2	0.94	1.39	1.67	16.4
3	R2	46	2	48	4.3	1.000	82.7	LOS F	34.6	270.2	0.98	1.52	1.83	19.9
Appro	bach	639	78	673	12.2	1.000	65.4	LOS E	34.6	270.2	0.91	1.33	1.58	18.5
East:	Leyla	nds Pde												
4	L2	35	1	37	2.9	0.326	21.8	LOS B	6.6	47.0	0.72	0.63	0.72	36.9
5	T1	201	4	212	2.0	0.326	17.2	LOS B	6.6	47.0	0.72	0.63	0.72	38.7
6	R2	205	4	216	2.0	*0.694	39.5	LOS C	7.9	55.9	0.99	0.96	1.07	21.7
Appro	bach	441	9	464	2.0	0.694	28.0	LOS B	7.9	55.9	0.84	0.78	0.89	31.0
North	: Burw	/ood Rd												
7	L2	48	1	51	2.1	0.524	22.4	LOS B	11.4	87.9	0.78	0.70	0.78	30.9
8	T1	331	42	348	12.7	0.524	17.8	LOS B	11.4	87.9	0.78	0.70	0.78	32.5
9	R2	62	1	65	1.6	0.572	47.9	LOS D	2.7	19.4	1.00	0.78	1.08	23.1
Appro	bach	441	44	464	10.0	0.572	22.5	LOS B	11.4	87.9	0.81	0.71	0.82	30.3
West	: Leyla	inds Pde												
10	L2	195	4	205	2.1	0.974	71.6	LOS F	19.8	141.3	1.00	1.32	1.78	18.9
11	T1	129	3	136	2.3	*0.974	67.2	LOS E	19.8	141.3	1.00	1.32	1.78	23.4
Appro	bach	324	7	341	2.2	0.974	69.8	LOS E	19.8	141.3	1.00	1.32	1.78	20.8
All Vehic	les	1845	138	1942	7.5	1.000	47.0	LOS D	34.6	270.2	0.89	1.05	1.27	23.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Burwoo	od Rd										
P1 Full	50	53	35.2	LOS D	0.1	0.1	0.94	0.94	61.8	34.5	0.56
East: Leylands	s Pde										
P2 Full	50	53	35.2	LOS D	0.1	0.1	0.94	0.94	61.8	34.5	0.56
North: Burwoo	d Rd										

## Site: TCS 1329 [Burwood Rd / Leylands Parade - TTP (Site Folder: PM)]

Burwood Rd / Leylands Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfo	rmance										
Mov ID	Turn	INF VOLU [ Total	PUT JMES HV]	DEM FLO [ Total	AND WS HV]	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: Burv	vood Rd	VEII/II	VEII/II	/0	v/C	360	_	ven	111	_		_	N111/11
1	L2	64	0	67	0.0	0.203	20.3	LOS B	4.0	30.9	0.63	0.61	0.63	38.8
2	T1	557	104	586	18.7	* 1.014	81.5	LOS F	43.3	348.7	0.95	1.40	1.66	14.7
3	R2	46	2	48	4.3	1.014	97.5	LOS F	43.3	348.7	1.00	1.54	1.84	17.8
Appro	bach	667	106	702	15.9	1.014	76.7	LOS F	43.3	348.7	0.92	1.33	1.58	16.6
East:	Leyla	nds Pde												
4	L2	35	1	37	2.9	0.368	24.7	LOS B	7.6	53.9	0.74	0.64	0.74	35.4
5	T1	201	4	212	2.0	0.368	20.1	LOS B	7.6	53.9	0.74	0.64	0.74	37.3
6	R2	205	4	216	2.0	*0.720	45.4	LOS D	9.0	63.7	1.00	0.99	1.10	20.1
Appro	bach	441	9	464	2.0	0.720	32.2	LOS C	9.0	63.7	0.86	0.81	0.90	29.4
North	: Burw	ood Rd												
7	L2	48	1	51	2.1	0.566	22.7	LOS B	12.6	98.7	0.75	0.67	0.75	30.7
8	T1	341	52	359	15.2	0.566	18.1	LOS B	12.6	98.7	0.75	0.67	0.75	32.3
9	R2	62	1	65	1.6	0.615	53.3	LOS D	3.1	21.9	1.00	0.80	1.12	21.8
Appro	bach	451	54	475	12.0	0.615	23.4	LOS B	12.6	98.7	0.79	0.69	0.80	29.8
West	: Leyla	inds Pde												
10	L2	195	4	205	2.1	0.968	74.3	LOS F	21.3	151.8	1.00	1.26	1.67	18.5
11	T1	129	3	136	2.3	*0.968	69.9	LOS E	21.3	151.8	1.00	1.26	1.67	22.9
Appro	bach	324	7	341	2.2	0.968	72.6	LOS F	21.3	151.8	1.00	1.26	1.67	20.4
All Vehic	les	1883	176	1982	9.3	1.014	52.8	LOS D	43.3	348.7	0.89	1.04	1.25	21.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Burwood Rd											
P1 Full	50	53	40.2	LOS E	0.1	0.1	0.95	0.95	66.8	34.5	0.52
East: Leylands	s Pde										
P2 Full	50	53	40.2	LOS E	0.1	0.1	0.95	0.95	66.8	34.5	0.52
North: Burwoo	d Rd										

## Site: TCS 1363 [Fifth Ave / Ninth Ave - Future Base (Site Folder: AM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Ninth	Ave												
5 6 Appro	T1 R2 bach	133 231 364	3 8 11	140 243 383	2.3 3.5 3.0	0.135 * 0.558 0.558	5.9 17.5 13.3	LOS A LOS B LOS A	1.6 4.5 4.5	11.6 32.2 32.2	0.52 0.92 0.77	0.42 0.79 0.66	0.52 0.92 0.77	43.8 35.5 38.0
North	: Fifth	Ave												
7 9	L2 R2	185 128	5 5	195 135	2.7 3.9	0.235 <b>*</b> 0.452	13.2 25.4	LOS A LOS B	2.8 3.1	20.2 22.1	0.64 0.94	0.72 0.78	0.64 0.94	38.1 34.7
Appro	oach	313	10	329	3.2	0.452	18.2	LOS B	3.1	22.1	0.77	0.74	0.77	36.4
West	: Ninth	Ave												
10 11	L2 T1	99 289	2 2	104 304	2.0 0.7	* 0.505 0.505	23.8 17.0	LOS B LOS B	4.0 4.6	28.5 32.1	0.93 0.89	0.78 0.73	0.93 0.89	36.2 35.1
Appro	oach	388	4	408	1.0	0.505	18.7	LOS B	4.6	32.1	0.90	0.74	0.90	35.4
All Vehic	les	1065	25	1121	2.3	0.558	16.7	LOS B	4.6	32.2	0.82	0.71	0.82	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE Dict 1	Que	Stop	Time	Dist. S	Speed
	ped/h	ped/h	sec		ped	m		Nale	sec	m	m/sec
East: Ninth Av	е										
P2 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Av	е										
P3 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Av	/e										
P4 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians	150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

## Site: TCS 1363 [Fifth Ave / Ninth Ave - Construction (Site Folder: AM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veb/b	DEM FLO [ Total veb/b	AND WS HV] %	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Ninth	Ave												
5 6	T1 R2	133 231	3 8	140 243	2.3 3.5	0.135 * 0.558	5.9 17.5	LOS A LOS B	1.6 4.5	11.6 32.2	0.52 0.92	0.42 0.79	0.52 0.92	43.8 35.5
Appro	bach	364	11	383	3.0	0.558	13.3	LOS A	4.5	32.2	0.77	0.66	0.77	38.0
North	: Fifth	Ave												
7	L2	185	5	195	2.7	0.235	13.2	LOS A	2.8	20.2	0.64	0.72	0.64	38.1
9	R2	128	5	135	3.9	*0.452	25.4	LOS B	3.1	22.1	0.94	0.78	0.94	34.7
Appro	bach	313	10	329	3.2	0.452	18.2	LOS B	3.1	22.1	0.77	0.74	0.77	36.4
West	: Ninth	Ave												
10	L2	99	2	104	2.0	* 0.505	23.8	LOS B	4.0	28.5	0.93	0.78	0.93	36.2
11	T1	289	2	304	0.7	0.505	17.0	LOS B	4.6	32.1	0.89	0.73	0.89	35.1
Appro	bach	388	4	408	1.0	0.505	18.7	LOS B	4.6	32.1	0.90	0.74	0.90	35.4
All Vehic	les	1065	25	1121	2.3	0.558	16.7	LOS B	4.6	32.2	0.82	0.71	0.82	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e:							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE		Que	Stop	Time	Dist. S	Speed
	ped/h	ped/h	sec		ped	m Dist j		Rale	sec	m	m/sec
East: Ninth Av	е										
P2 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Av	е										
P3 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Av	/e										
P4 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians	150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

#### Site: TCS 1363 [Fifth Ave / Ninth Ave - TTP (Site Folder: AM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLL	JMES	FLO	WS	Satn	Delay	Service	QUE	EUE	Que	Stop	No.	Speed
		[ Total	HV ]	[ Total	HV ]				[Veh.	Dist]		Rate	Cycles	
		veh/h	veh/h	veh/h	%	V/C	sec		veh	m				km/h
East:	Ninth	Ave												
5	T1	142	12	149	8.5	0.142	4.9	LOS A	1.6	12.0	0.48	0.39	0.48	44.7
6	R2	231	8	243	3.5	*0.529	16.2	LOS B	4.3	30.8	0.89	0.79	0.89	36.3
Appro	bach	373	20	393	5.4	0.529	11.9	LOS A	4.3	30.8	0.74	0.64	0.74	38.9
North	: Fifth	Ave												
7	L2	185	5	195	2.7	0.258	14.7	LOS B	3.0	21.8	0.69	0.73	0.69	37.2
9	R2	128	5	135	3.9	*0.602	28.4	LOS B	3.3	24.0	0.99	0.83	1.09	33.5
Appro	oach	313	10	329	3.2	0.602	20.3	LOS B	3.3	24.0	0.81	0.77	0.85	35.4
West	: Ninth	Ave												
10	L2	99	2	104	2.0	*0.567	22.1	LOS B	4.3	31.9	0.90	0.77	0.91	37.1
11	T1	327	40	344	12.2	0.567	15.6	LOS B	4.8	37.0	0.86	0.72	0.87	35.9
Appro	oach	426	42	448	9.9	0.567	17.1	LOS B	4.8	37.0	0.87	0.73	0.88	36.3
All Vehic	les	1112	72	1171	6.5	0.602	16.3	LOS B	4.8	37.0	0.81	0.71	0.82	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian	Movem	ent Perf	formand	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossin	g Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist. 3	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: Ninth A	Ave										
P2 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth A	Ave										
P3 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth	Ave										
P4 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians	150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

## Site: TCS 1363 [Fifth Ave / Ninth Ave - Future Base (Site Folder: PM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL	PUT JMES	DEM FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF EUE	Prop.   Que	Effective Stop	Aver. No.	Aver. Speed
		veh/h	⊓vj veh/h	veh/h	⊓vj %	v/c	sec		veh	m m		Rale	Cycles	km/h
East:	Ninth	Ave												
5	T1	296	4	312	1.4	0.311	7.2	LOS A	4.2	29.9	0.61	0.52	0.61	42.6
6	R2	245	0	258	0.0	*0.629	19.8	LOS B	5.0	35.3	0.95	0.83	1.01	34.3
Appro	oach	541	4	569	0.7	0.629	12.9	LOS A	5.0	35.3	0.76	0.66	0.79	38.3
North	: Fifth	Ave												
7	L2	226	5	238	2.2	0.273	12.8	LOS A	3.4	24.2	0.63	0.72	0.63	38.4
9	R2	183	6	193	3.3	*0.571	25.1	LOS B	4.4	31.8	0.96	0.81	0.98	34.8
Appro	oach	409	11	431	2.7	0.571	18.3	LOS B	4.4	31.8	0.78	0.76	0.79	36.5
West	: Ninth	Ave												
10	L2	127	0	134	0.0	*0.585	26.2	LOS B	4.1	28.4	0.97	0.82	1.02	34.8
11	T1	261	0	275	0.0	0.585	18.1	LOS B	5.0	34.8	0.91	0.76	0.94	34.6
Appro	oach	388	0	408	0.0	0.585	20.7	LOS B	5.0	34.8	0.93	0.78	0.96	34.7
All Vehic	les	1338	15	1408	1.1	0.629	16.8	LOS B	5.0	35.3	0.82	0.73	0.84	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	VERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
	1/1	1/1			[ Ped	Dist J		Rate			,
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: Ninth Av	е										
P2 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Av	е										
P3 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Av	/e										
P4 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians	150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

## Site: TCS 1363 [Fifth Ave / Ninth Ave - Construction (Site Folder: PM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	nt Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM, FLO [ Total veh/h	AND WS HV] %	Deg. Satn	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Ninth	Ave												
5	T1	296	4	312	1.4	0.311	7.2	LOS A	4.2	29.9	0.61	0.52	0.61	42.6
6	R2	245	0	258	0.0	* 0.629	19.8	LOSB	5.0	35.3	0.95	0.83	1.01	34.3
Appro	bach	541	4	569	0.7	0.629	12.9	LOSA	5.0	35.3	0.76	0.66	0.79	38.3
North	: Fifth	Ave												
7	L2	226	5	238	2.2	0.273	12.8	LOS A	3.4	24.2	0.63	0.72	0.63	38.4
9	R2	183	6	193	3.3	*0.571	25.1	LOS B	4.4	31.8	0.96	0.81	0.98	34.8
Appro	bach	409	11	431	2.7	0.571	18.3	LOS B	4.4	31.8	0.78	0.76	0.79	36.5
West	: Ninth	Ave												
10	L2	127	0	134	0.0	*0.585	26.2	LOS B	4.1	28.4	0.97	0.82	1.02	34.8
11	T1	261	0	275	0.0	0.585	18.1	LOS B	5.0	34.8	0.91	0.76	0.94	34.6
Appro	bach	388	0	408	0.0	0.585	20.7	LOS B	5.0	34.8	0.93	0.78	0.96	34.7
All Vehic	les	1338	15	1408	1.1	0.629	16.8	LOS B	5.0	35.3	0.82	0.73	0.84	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE Dict 1	Que	Stop	Time	Dist. S	Speed
	ped/h	ped/h	sec		ped	m		Nale	sec	m	m/sec
East: Ninth Av	е										
P2 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Av	е										
P3 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Av	/e										
P4 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians	150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

#### Site: TCS 1363 [Fifth Ave / Ninth Ave - TTP (Site Folder: PM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov ID	Turn	INF VOLI	PUT JMES	DEM. FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA Que	CK OF	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %	v/c	sec		[ Veh. veh	Dist] m		Rate	Cycles	km/h
East:	Ninth	Ave												
5	T1	330	38	347	11.5	0.366	6.9	LOS A	4.7	36.4	0.61	0.52	0.61	42.9
6	R2	245	0	258	0.0	*0.604	18.6	LOS B	5.0	34.7	0.94	0.81	0.97	35.0
Appro	oach	575	38	605	6.6	0.604	11.9	LOS A	5.0	36.4	0.75	0.65	0.76	39.0
North	: Fifth	Ave												
7	L2	226	5	238	2.2	0.285	13.5	LOS A	3.5	25.3	0.66	0.73	0.66	38.0
9	R2	183	6	193	3.3	*0.642	26.9	LOS B	4.6	33.4	0.98	0.85	1.09	34.1
Appro	bach	409	11	431	2.7	0.642	19.5	LOS B	4.6	33.4	0.80	0.79	0.85	35.9
West	: Ninth	Ave												
10	L2	127	0	134	0.0	*0.579	25.1	LOS B	4.1	29.3	0.95	0.81	0.99	35.4
11	T1	273	12	287	4.4	0.579	17.2	LOS B	4.9	35.9	0.89	0.75	0.91	35.0
Appro	oach	400	12	421	3.0	0.579	19.7	LOS B	4.9	35.9	0.91	0.77	0.94	35.1
All Vehic	les	1384	61	1457	4.4	0.642	16.4	LOS B	5.0	36.4	0.81	0.72	0.84	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian	Movem	ent Perf	formand	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossin	g Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist. 3	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: Ninth A	Ave										
P2 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth A	Ave										
P3 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth	Ave										
P4 Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians	150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

## CCG MOVEMENT SUMMARY

#### □ Common Control Group: CCG1 [CCG1]

#### ■ Network: N101 [Punchbowl Rd / The Boulevarde / South Terrace Future Base (Network Folder: PM)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 113 seconds (CCG User-Given Phase Times)

Vehi	cle Mo	vement	Perfor	mance	e (CC	G)								
Mov ID	Turn [	DEMAND	FLOW	S ARRI	VAL	Deg. Satn	Aver. Delav	Level of Service	95% B/	ACK OF	Prop.	EffectiveA Stop	ver. No.	Aver. Speed
		[ Total	HV]	[ Total	HV ]		Dolay	0011100	[ Veh.	Dist ]	Que	Rate	Cycles	opecu
011	T00 (7	veh/h	%	veh/h	%	v/c	sec		veh	m	_	_	_	km/h
Site:	ICS 17	44 [Punc	hbowl F	kd / The	Bou	levarde Ful	ure Base							
East:	The Bo	oulevarde												
4a	L1	480	2.0	480	2.0	0.496	25.5	LOS B	18.1	128.7	0.74	0.79	0.74	8.5
6b	R3	247	1.7	247	1.7	0.832	60.7	LOS E	14.7	104.6	1.00	0.93	1.22	15.7
Appro	bach	727	1.9	727	1.9	0.832	37.5	LOS C	18.1	128.7	0.83	0.84	0.90	12.8
North	East: P	unchbow	l Rd											
24b	L3	91	0.0	91	0.0	0.567	30.3	LOS C	20.3	145.9	0.78	0.71	0.78	26.6
25	T1	827	3.8	827	3.8	0.567	24.2	LOS B	20.3	145.9	0.78	0.71	0.78	25.4
Appro	bach	918	3.4	918	3.4	0.567	24.8	LOS B	20.3	145.9	0.78	0.71	0.78	25.5
South	West:	Punchbov	wl Rd											
31	T1	641	3.0	641	3.0	0.477	7.7	LOS A	12.6	90.7	0.39	0.36	0.39	45.6
32a	R1	421	0.0	421	0.0	0.679	35.3	LOS C	15.2	106.1	0.87	0.98	0.87	11.2
Appro	bach	1062	1.8	1062	1.8	0.679	18.7	LOS B	15.2	106.1	0.58	0.61	0.58	28.1
All Ve	hicles	2707	2.4	2707	2.4	0.832	25.8	LOS B	20.3	145.9	0.72	0.70	0.74	22.4
Site:	TCS 17	44 [Punc	hbowl F	Rd / Sou	ith Te	rrace Futu	re Base]							
North	East: P	unchbow	'l Rd											
25	T1	843	3.4	843	3.4	0.629	2.8	LOS A	8.5	61.4	0.20	0.19	0.20	55.5
26	R2	452	0.0	452	0.0	*0.808	44.0	LOS D	15.2	106.1	0.93	0.88	1.00	25.6
Appro	bach	1295	2.2	1295	2.2	0.808	17.2	LOS B	15.2	106.1	0.46	0.43	0.48	39.6
North	West: S	South Ter	race											
27	L2	625	0.0	625	0.0	0.682	23.8	LOS B	22.5	157.7	0.72	0.81	0.72	33.3
29	R2	128	0.0	128	0.0	*0.974	94.7	LOS F	9.4	65.6	0.94	1.13	1.78	23.0
Appro	bach	754	0.0	754	0.0	0.974	35.9	LOS C	22.5	157.7	0.75	0.86	0.90	29.5
South	West:	Punchbov	wl Rd											
30	L2	213	0.0	213	0.0	0.918	64.6	LOS E	22.8	161.3	0.91	1.05	1.30	28.9
31	T1	431	2.9	431	2.9	*0.918	39.5	LOS C	22.8	161.3	0.84	0.80	0.98	25.9
Appro	bach	643	2.0	643	2.0	0.918	47.8	LOS D	22.8	161.3	0.86	0.88	1.08	27.3
All Ve	hicles	2692	1.5	2692	1.5	0.974	29.8	LOS C	22.8	161.3	0.64	0.66	0.74	32.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

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

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.

Pedestrian Mov	vement	Perforn	nance (C	CG)					
Mov	Dem.	Aver.	Level of	AVERAGE BACK OF	Prop.	Effective	Travel	Travel	Aver.
ID Crossing	Flow	Delay	Service	QUEUE	Que	Stop	Time	Dist.	Speed

## CCG MOVEMENT SUMMARY

#### □ Common Control Group: CCG1 [CCG1]

#### ■ Network: N101 [Punchbowl Rd / The Boulevarde / South Terrace Construction (Network Folder: PM)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 113 seconds (CCG User-Given Phase Times)

Vehi	cle Mo	vement	Perfor	mance	e (CC	G)								
Mov D	Turn (	DEMAND	FLOW	S ARRI	VAL	Deg. Satn	Aver. Delav	Level of Service	95% BA		Prop.	EffectiveA	ver. No.	Aver.
		[ Total	HV]	[ Total	HV ]	Jain	Delay	Oervice	[ Veh.	Dist ]	Que	Rate	Cycles	opeeu
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
Site:	TCS 17	44 [Punc	hbowl F	Rd / The	Bou	levarde Co	nstruction	]						
East:	The Bo	oulevarde												
4a	L1	480	2.0	480	2.0	0.496	25.5	LOS B	18.1	128.7	0.74	0.79	0.74	8.5
6b	R3	251	2.9	251	2.9	0.852	62.7	LOS E	15.3	109.5	1.00	0.94	1.26	15.3
Appro	bach	731	2.3	731	2.3	0.852	38.2	LOS C	18.1	128.7	0.83	0.84	0.92	12.6
North	East: P	unchbow	l Rd											
24b	L3	94	3.4	94	3.4	0.575	30.3	LOS C	20.4	147.8	0.78	0.72	0.78	26.5
25	T1	831	4.2	831	4.2	0.575	24.2	LOS B	20.4	147.8	0.79	0.71	0.79	25.3
Appro	bach	924	4.1	924	4.1	0.575	24.9	LOS B	20.4	147.8	0.78	0.71	0.78	25.5
South	West:	Punchbov	vl Rd											
31	T1	644	3.4	644	3.4	0.481	7.8	LOS A	12.8	92.3	0.40	0.36	0.40	45.5
32a	R1	421	0.0	421	0.0	0.682	35.6	LOS C	15.2	106.1	0.87	0.99	0.87	11.1
Appro	bach	1065	2.1	1065	2.1	0.682	18.8	LOS B	15.2	106.1	0.58	0.61	0.58	28.0
All Ve	hicles	2720	2.8	2720	2.8	0.852	26.1	LOS B	20.4	147.8	0.72	0.71	0.74	22.3
Site:	TCS 17	44 [Punc	hbowl F	Rd / Sou	ith Te	rrace Cons	truction]							
North	East: P	unchbow	l Rd											
25	T1	843	3.4	843	3.4	0.629	2.8	LOS A	8.5	61.4	0.20	0.19	0.20	55.5
26	R2	455	0.7	455	0.7	*0.819	44.9	LOS D	15.1	106.1	0.94	0.89	1.02	25.3
Appro	bach	1298	2.4	1298	2.4	0.819	17.6	LOS B	15.1	106.1	0.46	0.43	0.49	39.3
North	West: S	South Teri	race											
27	L2	628	0.5	628	0.5	0.688	23.9	LOS B	22.7	159.9	0.72	0.81	0.72	33.3
29	R2	128	0.0	128	0.0	* 0.977	95.8	LOS F	9.4	66.1	0.94	1.13	1.79	22.8
Appro	bach	757	0.4	757	0.4	0.977	36.1	LOS C	22.7	159.9	0.76	0.86	0.90	29.4
South	West:	Punchbov	vl Rd											
30	L2	213	0.0	213	0.0	0.926	67.3	LOS E	23.3	164.7	0.92	1.06	1.33	28.3
31	T1	431	2.9	431	2.9	* 0.926	40.5	LOS C	23.3	164.7	0.84	0.81	0.99	25.6
Appro	bach	643	2.0	643	2.0	0.926	49.4	LOS D	23.3	164.7	0.86	0.89	1.10	26.9
All Ve	hicles	2698	1.8	2698	1.8	0.977	30.4	LOS C	23.3	164.7	0.64	0.66	0.75	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

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

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.

Pedestrian Mov	vement	Perforn	nance (C	CG)					
Mov	Dem.	Aver.	Level of	AVERAGE BACK OF	Prop.	Effective	Travel	Travel	Aver.
ID Crossing	Flow	Delay	Service	QUEUE	Que	Stop	Time	Dist.	Speed

## CCG MOVEMENT SUMMARY

#### □ Common Control Group: CCG1 [CCG1]

#### Network: N101 [Punchbowl Rd / The Boulevarde / South Terrace TTP (Network Folder: PM)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 113 seconds (CCG User-Given Phase Times)

Vehi	cle Mo	vement	Perfor	mance	e (CC	G)								
Mov	Turn [	DEMAND	FLOW	S ARRI	VAL	Deg.	Aver.	Level of	95% B	ACK OF	Prop.	EffectiveA	ver. No.	Aver.
טו		[ Total	HV ]	[ Total	₩3   HV ]	Sam	Delay	Service	[ Veh.	Dist ]	Que	Rate	Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
Site:	TCS 17	44 [Puncl	hbowl F	Rd / The	Boul	evarde TTI	P]							
East:	The Bo	oulevarde												
4a	L1	545	13.7	545	13.7	0.628	27.5	LOS B	22.5	159.5	0.81	0.83	0.81	7.9
6b	R3	251	2.9	251	2.9	0.852	62.7	LOS E	15.3	109.5	1.00	0.94	1.26	15.3
Appro	bach	796	10.3	796	10.3	0.852	38.6	LOS C	22.5	159.5	0.87	0.86	0.95	12.1
North	East: P	unchbow	l Rd											
24b	L3	94	3.4	94	3.4	0.694	32.1	LOS C	26.7	193.2	0.84	0.77	0.84	25.7
25	T1	831	4.2	831	4.2	0.694	26.4	LOS B	26.7	193.2	0.84	0.77	0.85	24.1
Appro	bach	924	4.1	924	4.1	0.694	27.0	LOS B	26.7	193.2	0.84	0.77	0.85	24.3
South	West:	Punchbov	vl Rd											
31	T1	644	3.4	644	3.4	0.481	7.7	LOS A	12.7	91.5	0.39	0.36	0.39	45.6
32a	R1	444	5.2	444	5.2	0.788	44.9	LOS D	15.2	106.1	0.96	1.08	1.02	9.2
Appro	bach	1088	4.2	1088	4.2	0.788	22.9	LOS B	15.2	106.1	0.62	0.65	0.65	24.9
All Ve	hicles	2808	5.9	2808	5.9	0.852	28.7	LOS C	26.7	193.2	0.77	0.75	0.80	20.7
Site:	TCS 17	44 [Puncl	hbowl F	Rd / Sou	uth Te	rrace TTP]								
North	East: P	unchbow	l Rd											
25	T1	908	10.3	908	10.3	0.724	5.7	LOS A	14.8	106.1	0.40	0.37	0.40	51.5
26	R2	455	0.7	455	0.7	*0.819	47.6	LOS D	15.1	106.1	0.97	0.90	1.05	24.4
Appro	bach	1363	7.1	1363	7.1	0.819	19.7	LOS B	15.1	106.1	0.59	0.55	0.62	37.8
North	West: S	South Terr	race											
27	L2	628	0.5	628	0.5	0.688	23.9	LOS B	22.7	159.9	0.72	0.81	0.72	33.3
29	R2	128	0.0	128	0.0	*0.977	95.8	LOS F	9.4	66.1	0.94	1.13	1.79	22.8
Appro	bach	757	0.4	757	0.4	0.977	36.1	LOS C	22.7	159.9	0.76	0.86	0.90	29.4
South	West:	Punchbov	vl Rd											
30	L2	213	0.0	213	0.0	1.012	112.4	LOS F	34.3	242.9	1.00	1.32	1.76	20.8
31	T1	454	7.9	454	7.9	* 1.012	59.8	LOS E	34.3	242.9	0.88	0.95	1.21	20.2
Appro	bach	666	5.4	666	5.4	1.012	76.6	LOS F	34.3	242.9	0.92	1.06	1.38	20.5
All Ve	hicles	2786	4.9	2786	4.9	1.012	37.8	LOS C	34.3	242.9	0.71	0.76	0.88	29.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

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

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.

Pedestrian Mov	vement	Perforn	nance (C	CG)					
Mov	Dem.	Aver.	Level of	AVERAGE BACK OF	Prop.	Effective	Travel	Travel	Aver.
ID Crossing	Flow	Delay	Service	QUEUE	Que	Stop	Time	Dist.	Speed

## Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - AM (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLL [ Total veh/h	UT IMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh	ACK OF EUE Dist ] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	well Stre	et											
1	L2	85	25	89	29.4	0.475	29.8	LOS C	12.8	96.9	0.79	0.79	0.79	25.9
3	R2	558	11	587	2.0	*0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	18.5
Appro	bach	643	36	677	5.6	0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	19.9
North	: Loca	I Access	Road											
7	L2	3	2	3	66.7	*0.470	56.7	LOS E	3.0	38.6	0.97	0.77	0.97	12.8
9	R2	50	50	53	100.0	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.6
Appro	bach	53	52	56	98.1	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.3
West	: Bank	stown Cit	ty Plaza											
11	T1	24	24	25	100.0	*0.468	47.7	LOS D	3.6	47.4	0.95	0.77	0.95	22.2
12	R2	43	43	45	100.0	0.468	51.7	LOS D	3.6	47.4	0.95	0.77	0.95	20.9
Appro	bach	67	67	71	100.0	0.468	50.2	LOS D	3.6	47.4	0.95	0.77	0.95	21.3
All Vehic	les	763	155	803	20.3	0.475	33.4	LOS C	13.9	98.9	0.81	0.79	0.81	20.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	nt Perf	ormano	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist 1	Prop. Et Que	ffective Stop Rate	Travel Time	Travel Dist. 3	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	II Street										
P1 Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Te	rrace										
P2 Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local A	ccess Ro	bad									
P3 Full	69	73	2.6	LOS A	0.0	0.0	0.22	0.22	23.4	27.0	1.15
West: Banksto	wn City I	Plaza									
P4 Full	85	89	10.4	LOS B	0.1	0.1	0.61	0.61	35.2	32.2	0.91
All Pedestrians	357	376	30.7	LOS D	0.6	0.6	0.72	0.72	54.4	30.8	0.57

## Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - AM - Construction (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLC [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	CK OF EUE Dist ] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	well Stre	et											
1	L2	85	25	89	29.4	0.475	29.8	LOS C	12.8	96.9	0.79	0.79	0.79	25.9
3	R2	558	11	587	2.0	*0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	18.5
Appro	oach	643	36	677	5.6	0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	19.9
North	: Loca	I Access	Road											
7	L2	3	2	3	66.7	<b>*</b> 0.470	56.7	LOS E	3.0	38.6	0.97	0.77	0.97	12.8
9	R2	50	50	53	100.0	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.6
Appro	oach	53	52	56	98.1	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.3
West	: Bank	stown Ci	ty Plaza											
11	T1	24	24	25	100.0	*0.468	47.7	LOS D	3.6	47.4	0.95	0.77	0.95	22.2
12	R2	43	43	45	100.0	0.468	51.7	LOS D	3.6	47.4	0.95	0.77	0.95	20.9
Appro	oach	67	67	71	100.0	0.468	50.2	LOS D	3.6	47.4	0.95	0.77	0.95	21.3
All Vehic	les	763	155	803	20.3	0.475	33.4	LOS C	13.9	98.9	0.81	0.79	0.81	20.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	nt Perf	ormano	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Et Que	fective Stop Rate	Travel Time	Travel Dist. S	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	ell Street										
P1 Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Te	errace										
P2 Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local A	ccess Ro	bad									
P3 Full	69	73	2.6	LOS A	0.0	0.0	0.22	0.22	23.4	27.0	1.15
West: Banksto	wn City I	Plaza									
P4 Full	85	89	10.4	LOS B	0.1	0.1	0.61	0.61	35.2	32.2	0.91
All Pedestrians	357	376	30.7	LOS D	0.6	0.6	0.72	0.72	54.4	30.8	0.57

## Site: TCS 1817 [Restwell St / South Terrace / Bankstown City

Plaza - AM - TTP (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	well Stre	et											
1	L2	85	25	89	29.4	0.556	35.1	LOS C	14.2	107.6	0.86	0.82	0.86	24.4
3	R2	562	15	592	2.7	*0.556	34.9	LOS C	15.4	110.3	0.86	0.82	0.86	17.0
Appro	bach	647	40	681	6.2	0.556	34.9	LOS C	15.4	110.3	0.86	0.82	0.86	18.3
North	: Loca	I Access	Road											
7	L2	3	2	3	66.7	*0.577	57.1	LOS E	4.0	51.2	0.98	0.81	1.03	12.7
9	R2	66	66	69	100.0	0.577	57.8	LOS E	4.0	51.2	0.98	0.81	1.03	19.5
Appro	bach	69	68	73	98.6	0.577	57.8	LOS E	4.0	51.2	0.98	0.81	1.03	19.3
West	: Bank	stown Ci	ty Plaza											
11	T1	62	62	65	100.0	*0.562	44.1	LOS D	5.6	72.7	0.95	0.79	0.95	23.1
12	R2	43	43	45	100.0	0.562	48.2	LOS D	5.6	72.7	0.95	0.79	0.95	21.7
Appro	bach	105	105	111	100.0	0.562	45.8	LOS D	5.6	72.7	0.95	0.79	0.95	22.5
All Vehic	les	821	213	864	25.9	0.577	38.2	LOS C	15.4	110.3	0.88	0.81	0.89	19.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	nt Perf	ormano	e:							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Et Que	fective Stop Rate	Travel Time	Travel Dist. S	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	ell Street										
P1 Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Te	errace										
P2 Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local A	ccess Ro	bad									
P3 Full	69	73	2.8	LOS A	0.1	0.1	0.23	0.23	23.6	27.0	1.14
West: Banksto	wn City I	Plaza									
P4 Full	85	89	12.5	LOS B	0.1	0.1	0.67	0.67	37.3	32.2	0.86
All Pedestrians	357	376	31.2	LOS D	0.6	0.6	0.74	0.74	54.9	30.8	0.56

## Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - PM (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h	UT IMES HV] veh/h	DEM FLC [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	well Stre	et											
1	L2	136	43	143	31.6	0.573	24.8	LOS B	17.6	133.9	0.76	0.80	0.76	27.5
3	R2	798	6	840	0.8	*0.573	25.0	LOS B	19.5	137.6	0.76	0.80	0.76	20.2
Appro	oach	934	49	983	5.2	0.573	25.0	LOS B	19.5	137.6	0.76	0.80	0.76	21.7
North	: Loca	I Access	Road											
7	L2	6	0	6	0.0	*0.563	65.1	LOS E	2.2	25.9	1.00	0.79	1.10	11.6
9	R2	29	29	31	100.0	0.563	66.5	LOS E	2.2	25.9	1.00	0.79	1.10	18.2
Appro	oach	35	29	37	82.9	0.563	66.2	LOS E	2.2	25.9	1.00	0.79	1.10	17.3
West	: Bank	stown Cit	ty Plaza											
11	T1	31	31	33	100.0	*0.570	50.8	LOS D	4.1	53.9	0.98	0.81	1.01	21.6
12	R2	42	42	44	100.0	0.570	54.8	LOS D	4.1	53.9	0.98	0.81	1.01	20.3
Appro	oach	73	73	77	100.0	0.570	53.1	LOS D	4.1	53.9	0.98	0.81	1.01	20.9
All Vehic	les	1042	151	1097	14.5	0.573	28.3	LOS B	19.5	137.6	0.78	0.80	0.79	21.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	nt Perf	ormano	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist 1	Prop. Ef Que	fective Stop Rate	Travel Time	Travel Dist. 3	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	ell Street										
P1 Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Te	errace										
P2 Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local A	ccess Ro	bad									
P3 Full	69	73	1.3	LOS A	0.0	0.0	0.16	0.16	22.1	27.0	1.22
West: Banksto	wn City I	Plaza									
P4 Full	85	89	8.1	LOS A	0.1	0.1	0.53	0.53	32.9	32.2	0.98
All Pedestrians	357	376	29.9	LOS C	0.6	0.6	0.69	0.69	53.6	30.8	0.58
### Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - PM - Construction (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLC [ Total veh/h	AND WS HV ] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	well Stre	et											
1	L2	136	43	143	31.6	0.573	24.8	LOS B	17.6	133.9	0.76	0.80	0.76	27.5
Appro	R2 Dach	934	49	983	0.8 5.2	* 0.573 0.573	25.0	LOS B	19.5	137.6	0.76	0.80	0.76	20.2
North	: Loca	l Access	Road											
7	L2	6	0	6	0.0	*0.563	65.1	LOS E	2.2	25.9	1.00	0.79	1.10	11.6
9	R2	29	29	31	100.0	0.563	66.5	LOS E	2.2	25.9	1.00	0.79	1.10	18.2
Appro	oach	35	29	37	82.9	0.563	66.2	LOS E	2.2	25.9	1.00	0.79	1.10	17.3
West	: Bank	stown Ci	ty Plaza											
11	T1	31	31	33	100.0	*0.570	50.8	LOS D	4.1	53.9	0.98	0.81	1.01	21.6
12	R2	42	42	44	100.0	0.570	54.8	LOS D	4.1	53.9	0.98	0.81	1.01	20.3
Appro	oach	73	73	77	100.0	0.570	53.1	LOS D	4.1	53.9	0.98	0.81	1.01	20.9
All Vehic	les	1042	151	1097	14.5	0.573	28.3	LOS B	19.5	137.6	0.78	0.80	0.79	21.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	nt Perf	ormano	e:							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Ef Que	fective Stop Rate	Travel Time	Travel Dist. S	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	ell Street										
P1 Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Te	errace										
P2 Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local A	ccess Ro	bad									
P3 Full	69	73	1.3	LOS A	0.0	0.0	0.16	0.16	22.1	27.0	1.22
West: Banksto	wn City I	Plaza									
P4 Full	85	89	8.1	LOS A	0.1	0.1	0.53	0.53	32.9	32.2	0.98
All Pedestrians	357	376	29.9	LOS C	0.6	0.6	0.69	0.69	53.6	30.8	0.58

### Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - PM - TTP (Site Folder: General)]

Plaza - PM - TTP (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL	PUT JMES	DEM FLC	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %	v/c	sec		[ Veh. veh	Dist ] m		Rate	Cycles	km/h
South	n: Rest	well Stre	eet											
1	L2	136	43	143	31.6	0.648	28.5	LOS C	19.8	152.9	0.83	0.83	0.83	26.3
3	R2	820	28	863	3.4	*0.648	28.7	LOS C	21.8	156.9	0.83	0.83	0.83	18.8
Appro	bach	956	71	1006	7.4	0.648	28.7	LOS C	21.8	156.9	0.83	0.83	0.83	20.3
North	: Loca	I Access	Road											
7	L2	6	0	6	0.0	*0.627	62.5	LOS E	3.2	39.6	1.00	0.82	1.13	12.0
9	R2	47	47	49	100.0	0.627	63.9	LOS E	3.2	39.6	1.00	0.82	1.13	18.5
Appro	bach	53	47	56	88.7	0.627	63.7	LOS E	3.2	39.6	1.00	0.82	1.13	18.0
West	: Bank	stown Ci	ty Plaza											
11	T1	49	49	52	100.0	*0.662	52.0	LOS D	5.3	69.0	0.99	0.89	1.10	21.5
12	R2	42	42	44	100.0	0.662	56.0	LOS D	5.3	69.0	0.99	0.89	1.10	20.2
Appro	bach	91	91	96	100.0	0.662	53.8	LOS D	5.3	69.0	0.99	0.89	1.10	20.9
All Vehic	les	1100	209	1158	19.0	0.662	32.5	LOS C	21.8	156.9	0.85	0.83	0.87	20.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	nt Perf	ormano	e:							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Ef Que	fective Stop Rate	Travel Time	Travel Dist. S	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	ell Street										
P1 Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Te	errace										
P2 Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local A	ccess Ro	bad									
P3 Full	69	73	1.8	LOS A	0.0	0.0	0.18	0.18	22.6	27.0	1.20
West: Banksto	wn City I	Plaza									
P4 Full	85	89	9.1	LOS A	0.1	0.1	0.57	0.57	33.9	32.2	0.95
All Pedestrians	357	376	30.2	LOS D	0.6	0.6	0.71	0.71	53.9	30.8	0.57

## Site: TCS 2789 [Joseph St / Georges Av - Future Base (Site Folder: AM)]

Joseph St / Georges Av Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehi	cle M	ovemer	t Perfo	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% B/	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU	JMES	FLO	WS	Satn	Delay	Service	QU	EUE	Que	Stop	No.	Speed
		veh/h	rrvj veh/h	veh/h	нvј %	v/c	sec		ven. veh	m Dist		Rate	Cycles	km/h
South	n: Jose	eph St												
1	L2	26	2	27	7.7	0.870	33.7	LOS C	38.6	286.8	0.94	0.96	1.06	40.5
2	T1	2339	166	2462	7.1	*0.870	27.1	LOS B	38.7	287.1	0.91	0.93	1.04	42.4
3	R2	173	8	182	4.6	0.659	29.2	LOS C	5.1	37.3	0.99	0.82	1.04	38.6
Appro	oach	2538	176	2672	6.9	0.870	27.3	LOS B	38.7	287.1	0.91	0.93	1.04	42.0
East:	Georg	ge Ave												
4	L2	76	6	80	7.9	0.303	34.2	LOS C	4.9	36.0	0.85	0.74	0.85	35.2
5	T1	208	8	219	3.8	0.523	34.8	LOS C	7.0	50.8	0.92	0.77	0.92	32.3
6	R2	8	1	8	12.5	0.523	41.1	LOS C	7.0	50.8	0.95	0.78	0.95	29.4
Appro	oach	292	15	307	5.1	0.523	34.8	LOS C	7.0	50.8	0.91	0.76	0.91	33.0
North	: Jose	ph St												
7	L2	28	0	29	0.0	0.772	34.4	LOS C	21.8	162.6	0.94	0.87	0.99	34.2
8	T1	1485	122	1563	8.2	0.772	27.9	LOS B	22.0	165.0	0.93	0.86	0.98	41.9
9	R2	72	2	76	2.8	*0.629	54.8	LOS D	3.6	25.5	1.00	0.80	1.11	25.5
Appro	oach	1585	124	1668	7.8	0.772	29.2	LOS C	22.0	165.0	0.93	0.86	0.99	40.8
West	: Geor	ges Av												
10	L2	91	3	96	3.3	0.307	36.8	LOS C	4.8	34.2	0.86	0.77	0.86	32.2
11	T1	157	3	165	1.9	* 0.706	42.2	LOS C	8.2	58.0	0.97	0.85	1.06	29.5
12	R2	49	1	52	2.0	0.706	48.6	LOS D	8.2	58.0	1.00	0.87	1.11	33.4
Appro	oach	297	7	313	2.4	0.706	41.6	LOS C	8.2	58.0	0.94	0.83	1.00	30.9
All Vehic	les	4712	322	4960	6.8	0.870	29.3	LOS C	38.7	287.1	0.92	0.89	1.01	40.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: George	Ave										
P2 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
North: Joseph	St										
P3 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	213.2	226.1	1.06
All	100	105	39.3	LOS D	0.1	0.1	0.94	0.94	209.0	220.7	1.06

## Site: TCS 2789 [Joseph St / Georges Av - Construction (Site Folder: AM)]

Joseph St / Georges Av Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehi	cle M	ovemer	t Perfo	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% B/	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service	QU [ \/ob	EUE Dict 1	Que	Stop	No.	Speed
		veh/h	⊓vj veh/h	veh/h	⊓vj %	v/c	sec		ven. veh	m Dist j		Rale	Cycles	km/h
South	n: Jose	eph St												
1	L2	26	2	27	7.7	0.870	33.7	LOS C	38.6	286.8	0.94	0.96	1.06	40.5
2	T1	2339	166	2462	7.1	*0.870	27.1	LOS B	38.7	287.1	0.91	0.93	1.04	42.4
3	R2	173	8	182	4.6	0.659	29.2	LOS C	5.1	37.3	0.99	0.82	1.04	38.6
Appro	oach	2538	176	2672	6.9	0.870	27.3	LOS B	38.7	287.1	0.91	0.93	1.04	42.0
East:	Georg	ge Ave												
4	L2	76	6	80	7.9	0.303	34.2	LOS C	4.9	36.0	0.85	0.74	0.85	35.2
5	T1	208	8	219	3.8	0.523	34.8	LOS C	7.0	50.8	0.92	0.77	0.92	32.3
6	R2	8	1	8	12.5	0.523	41.1	LOS C	7.0	50.8	0.95	0.78	0.95	29.4
Appro	oach	292	15	307	5.1	0.523	34.8	LOS C	7.0	50.8	0.91	0.76	0.91	33.0
North	: Jose	ph St												
7	L2	28	0	29	0.0	0.772	34.4	LOS C	21.8	162.6	0.94	0.87	0.99	34.2
8	T1	1485	122	1563	8.2	0.772	27.9	LOS B	22.0	165.0	0.93	0.86	0.98	41.9
9	R2	72	2	76	2.8	*0.629	54.8	LOS D	3.6	25.5	1.00	0.80	1.11	25.5
Appro	oach	1585	124	1668	7.8	0.772	29.2	LOS C	22.0	165.0	0.93	0.86	0.99	40.8
West	: Geor	ges Av												
10	L2	91	3	96	3.3	0.307	36.8	LOS C	4.8	34.2	0.86	0.77	0.86	32.2
11	T1	157	3	165	1.9	* 0.706	42.2	LOS C	8.2	58.0	0.97	0.85	1.06	29.5
12	R2	49	1	52	2.0	0.706	48.6	LOS D	8.2	58.0	1.00	0.87	1.11	33.4
Appro	oach	297	7	313	2.4	0.706	41.6	LOS C	8.2	58.0	0.94	0.83	1.00	30.9
All Vehic	les	4712	322	4960	6.8	0.870	29.3	LOS C	38.7	287.1	0.92	0.89	1.01	40.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: George	Ave										
P2 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
North: Joseph	St										
P3 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	213.2	226.1	1.06
All	100	105	39.3	LOS D	0.1	0.1	0.94	0.94	209.0	220.7	1.06

# Site: TCS 2789 [Joseph St / Georges Av - TTP (Site Folder: AM)]

Joseph St / Georges Av Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% B/	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU Total	JMES	FLO [ Total	WS HV1	Satn	Delay	Service	QUI [\/eb	EUE Diet 1	Que	Stop Rate	No.	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Tale	Cycles	km/h
South	n: Jose	eph St												
1	L2	26	2	27	7.7	0.874	34.4	LOS C	39.2	291.7	0.94	0.97	1.07	40.2
2	T1	2345	172	2468	7.3	*0.874	27.8	LOS B	39.3	292.1	0.91	0.94	1.05	42.0
3	R2	173	8	182	4.6	0.709	30.8	LOS C	5.4	39.2	1.00	0.84	1.11	37.8
Appro	oach	2544	182	2678	7.2	0.874	28.1	LOS B	39.3	292.1	0.92	0.94	1.06	41.6
East:	Georg	ge Ave												
4	L2	76	6	80	7.9	0.305	34.2	LOS C	4.9	36.2	0.85	0.74	0.85	35.2
5	T1	208	8	219	3.8	0.526	35.4	LOS C	7.0	51.0	0.93	0.77	0.93	32.1
6	R2	8	1	8	12.5	0.526	41.9	LOS C	7.0	51.0	0.96	0.78	0.96	29.1
Appro	oach	292	15	307	5.1	0.526	35.3	LOS C	7.0	51.0	0.91	0.76	0.91	32.9
North	n: Jose	ph St												
7	L2	28	0	29	0.0	0.760	33.0	LOS C	21.4	160.5	0.93	0.85	0.96	34.8
8	T1	1491	128	1569	8.6	0.760	26.5	LOS B	21.7	162.8	0.91	0.84	0.96	42.8
9	R2	80	10	84	12.5	*0.770	57.7	LOS E	4.1	32.0	1.00	0.87	1.32	24.8
Appro	oach	1599	138	1683	8.6	0.770	28.2	LOS B	21.7	162.8	0.92	0.84	0.97	41.4
West	: Geor	ges Av												
10	L2	101	13	106	12.9	0.318	35.5	LOS C	4.8	36.4	0.84	0.77	0.84	32.8
11	T1	157	3	165	1.9	*0.731	43.1	LOS D	8.6	61.5	0.98	0.86	1.09	29.2
12	R2	49	1	52	2.0	0.731	49.3	LOS D	8.6	61.5	1.00	0.88	1.13	33.1
Appro	oach	307	17	323	5.5	0.731	41.6	LOS C	8.6	61.5	0.94	0.84	1.02	30.9
All Vehic	les	4742	352	4992	7.4	0.874	29.4	LOS C	39.3	292.1	0.92	0.89	1.02	40.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: George	Ave										
P2 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
North: Joseph	St										
P3 Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	213.2	226.1	1.06
All	100	105	39.3	LOS D	0.1	0.1	0.94	0.94	209.0	220.7	1.06

## Site: TCS 2789 [Joseph St / Georges Av - Future Base (Site Folder: PM)]

Joseph St / Georges Av Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehi	cle M	ovemer	nt Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLO	WS	Satn	Delay	Service		EUE	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	нvј %	v/c	sec		ven. veh	m Dist		Rate	Cycles	km/h
Sout	n: Jose	eph St												
1	L2	61	0	64	0.0	0.623	23.5	LOS B	23.5	169.8	0.73	0.68	0.73	47.6
2	T1	1753	72	1845	4.1	0.623	16.9	LOS B	23.5	170.6	0.71	0.65	0.71	49.7
3	R2	94	2	99	2.1	*0.374	33.7	LOS C	3.4	24.6	0.94	0.77	0.94	36.6
Appr	oach	1908	74	2008	3.9	0.623	17.9	LOS B	23.5	170.6	0.73	0.66	0.73	48.7
East:	Georg	ge Ave												
4	L2	184	5	194	2.7	0.476	38.6	LOS C	11.0	78.4	0.87	0.79	0.87	33.8
5	T1	259	3	273	1.2	*0.822	50.5	LOS D	13.7	96.7	0.97	0.94	1.14	27.1
6	R2	20	0	21	0.0	0.822	59.0	LOS E	13.7	96.7	1.00	0.97	1.21	24.7
Appr	oach	463	8	487	1.7	0.822	46.2	LOS D	13.7	96.7	0.93	0.88	1.03	29.6
North	n: Jose	ph St												
7	L2	31	1	33	3.2	*0.862	42.1	LOS C	39.4	283.7	0.97	0.96	1.07	30.9
8	T1	1998	67	2103	3.4	0.862	35.4	LOS C	39.7	286.0	0.95	0.94	1.05	37.8
9	R2	125	1	132	0.8	*0.785	65.1	LOS E	7.6	53.5	1.00	0.88	1.23	23.0
Appr	oach	2154	69	2267	3.2	0.862	37.3	LOS C	39.7	286.0	0.95	0.94	1.06	36.6
West	: Geor	ges Av												
10	L2	83	0	87	0.0	0.312	45.6	LOS D	5.6	39.2	0.88	0.77	0.88	28.9
11	T1	169	2	178	1.2	0.715	52.2	LOS D	9.4	66.7	0.98	0.84	1.05	26.6
12	R2	28	1	29	3.6	0.715	58.8	LOS E	9.4	66.7	1.00	0.86	1.10	30.1
Appr	oach	280	3	295	1.1	0.715	50.9	LOS D	9.4	66.7	0.95	0.82	1.01	27.6
All Vehic	les	4805	154	5058	3.2	0.862	31.2	LOS C	39.7	286.0	0.86	0.81	0.92	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Novem	ent Perf	orman	ce							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: George	Ave										
P2 Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	214.8	215.2	1.00
North: Joseph	St										
P3 Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	223.2	226.1	1.01
All	100	105	49.3	LOS E	0.2	0.2	0.95	0.95	219.0	220.7	1.01

## Site: TCS 2789 [Joseph St / Georges Av - Construction (Site Folder: PM)]

Joseph St / Georges Av Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehi	cle M	ovemer	nt Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLO	WS	Satn	Delay	Service	QUI	EUE	Que	Stop	No.	Speed
		[ Iotai veh/h	HV J veh/h	[ Iotai veh/h	нvј %	v/c	sec		Į veh. veh	Dist j m		Rate	Cycles	km/h
Sout	n: Jose	eph St												
1	L2	61	0	64	0.0	0.623	23.5	LOS B	23.5	169.8	0.73	0.68	0.73	47.6
2	T1	1753	72	1845	4.1	0.623	16.9	LOS B	23.5	170.6	0.71	0.65	0.71	49.7
3	R2	94	2	99	2.1	*0.374	33.7	LOS C	3.4	24.6	0.94	0.77	0.94	36.6
Appr	oach	1908	74	2008	3.9	0.623	17.9	LOS B	23.5	170.6	0.73	0.66	0.73	48.7
East:	Georg	ge Ave												
4	L2	184	5	194	2.7	0.476	38.6	LOS C	11.0	78.4	0.87	0.79	0.87	33.8
5	T1	259	3	273	1.2	*0.822	50.5	LOS D	13.7	96.7	0.97	0.94	1.14	27.1
6	R2	20	0	21	0.0	0.822	59.0	LOS E	13.7	96.7	1.00	0.97	1.21	24.7
Appr	oach	463	8	487	1.7	0.822	46.2	LOS D	13.7	96.7	0.93	0.88	1.03	29.6
North	n: Jose	ph St												
7	L2	31	1	33	3.2	*0.862	42.1	LOS C	39.4	283.7	0.97	0.96	1.07	30.9
8	T1	1998	67	2103	3.4	0.862	35.4	LOS C	39.7	286.0	0.95	0.94	1.05	37.8
9	R2	125	1	132	0.8	*0.785	65.1	LOS E	7.6	53.5	1.00	0.88	1.23	23.0
Appr	oach	2154	69	2267	3.2	0.862	37.3	LOS C	39.7	286.0	0.95	0.94	1.06	36.6
West	: Geor	ges Av												
10	L2	83	0	87	0.0	0.312	45.6	LOS D	5.6	39.2	0.88	0.77	0.88	28.9
11	T1	169	2	178	1.2	0.715	52.2	LOS D	9.4	66.7	0.98	0.84	1.05	26.6
12	R2	28	1	29	3.6	0.715	58.8	LOS E	9.4	66.7	1.00	0.86	1.10	30.1
Appr	oach	280	3	295	1.1	0.715	50.9	LOS D	9.4	66.7	0.95	0.82	1.01	27.6
All Vehic	les	4805	154	5058	3.2	0.862	31.2	LOS C	39.7	286.0	0.86	0.81	0.92	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Movem	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
East: George	Ave										
P2 Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	214.8	215.2	1.00
North: Joseph	St										
P3 Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	223.2	226.1	1.01
All	100	105	49.3	LOS E	0.2	0.2	0.95	0.95	219.0	220.7	1.01

# Site: TCS 2789 [Joseph St / Georges Av - TTP (Site Folder: PM)]

Joseph St / Georges Av Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehi	cle M	ovemer	nt Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLO	WS	Satn	Delay	Service	QUI	EUE	Que	Stop	No.	Speed
		veh/h	HV J veh/h	l Iotai veh/h	нvј %	v/c	sec		ι ven. veh	Dist j m		Rate	Cycles	km/h
Sout	n: Jose	eph St												
1	L2	61	0	64	0.0	0.628	23.6	LOS B	23.7	171.9	0.73	0.68	0.73	47.6
2	T1	1761	80	1854	4.5	0.628	16.9	LOS B	23.7	172.7	0.72	0.65	0.72	49.6
3	R2	94	2	99	2.1	*0.352	33.3	LOS C	3.4	24.6	0.93	0.76	0.93	36.7
Appr	oach	1916	82	2017	4.3	0.628	18.0	LOS B	23.7	172.7	0.73	0.66	0.73	48.6
East:	Georg	ge Ave												
4	L2	184	5	194	2.7	0.503	40.4	LOS C	11.4	81.5	0.89	0.80	0.89	33.2
5	T1	259	3	273	1.2	*0.867	54.5	LOS D	14.1	99.7	0.98	0.98	1.22	26.0
6	R2	20	0	21	0.0	0.867	64.0	LOS E	14.1	99.7	1.00	1.03	1.31	23.6
Appr	oach	463	8	487	1.7	0.867	49.3	LOS D	14.1	99.7	0.94	0.91	1.09	28.7
North	n: Jose	ph St												
7	L2	31	1	33	3.2	*0.875	44.0	LOS D	41.0	296.5	0.98	0.98	1.10	30.2
8	T1	2006	75	2112	3.7	0.875	37.4	LOS C	41.4	298.8	0.95	0.96	1.08	36.9
9	R2	137	13	144	9.5	*0.855	68.8	LOS E	8.7	65.9	1.00	0.94	1.37	22.2
Appr	oach	2174	89	2288	4.1	0.875	39.4	LOS C	41.4	298.8	0.96	0.96	1.10	35.6
West	: Geor	ges Av												
10	L2	93	10	98	10.8	0.338	45.4	LOS D	5.8	43.3	0.88	0.78	0.88	28.9
11	T1	169	2	178	1.2	0.776	55.0	LOS D	10.1	71.7	0.98	0.88	1.12	25.9
12	R2	28	1	29	3.6	0.776	61.7	LOS E	10.1	71.7	1.00	0.90	1.17	29.2
Appr	oach	290	13	305	4.5	0.776	52.6	LOS D	10.1	71.7	0.95	0.85	1.05	27.0
All Vehic	les	4843	192	5098	4.0	0.875	32.7	LOS C	41.4	298.8	0.86	0.83	0.95	38.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Ped	lestrian I	Novem	ent Perf	orman	e							
Mov	Oreceirer	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID	Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
East	: George	Ave										
P2	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	214.8	215.2	1.00
Nort	h: Joseph	St										
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	223.2	226.1	1.01
All		100	105	49.3	LOS E	0.2	0.2	0.95	0.95	219.0	220.7	1.01

### Site: TCS 2816 [Beamish Street / Amy Street Future Base (Site Folder: AM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop.   Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Bear	mish St												
1 2	L2 T1	72 481	1 45	76 506	1.4 9.4	* 0.481 0.481	10.1 6.7	LOS A LOS A	10.9 10.9	81.5 81.5	0.52 0.52	0.50 0.50	0.52 0.52	35.6 30.0
Appro	bach	553	46	582	8.3	0.481	7.1	LOS A	10.9	81.5	0.52	0.50	0.52	31.3
North	: Bear	nish St												
8 9	T1 R2	511 3	45 0	538 3	8.8 0.0	0.404 0.404	3.8 7 4	LOS A	7.5 7.5	56.4 56.4	0.39 0.39	0.35 0.35	0.39 0.39	33.9 37.2
Appro	bach	514	45	541	8.8	0.404	3.8	LOSA	7.5	56.4	0.39	0.35	0.39	33.9
West	: Amy	St												
10	L2	34	0	36	0.0	*0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
Appro	bach	34	0	36	0.0	0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
All Vehic	les	1101	91	1159	8.3	0.481	6.8	LOS A	10.9	81.5	0.47	0.43	0.47	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Beamis	sh St										
P1 Full	180	189	34.5	LOS D	0.4	0.4	0.93	0.93	55.7	27.5	0.49
North: Beamis	h St										
P3 Full	120	126	34.4	LOS D	0.3	0.3	0.93	0.93	55.6	27.5	0.49
West: Amy St											
P4 Full	354	373	3.1	LOS A	0.2	0.2	0.28	0.28	25.8	29.5	1.14
All Pedestrians	654	688	17.5	LOS B	0.4	0.4	0.58	0.58	39.5	28.6	0.72

### Site: TCS 2816 [Beamish Street / Amy Street Construction (Site Folder: AM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU	PUT JMES	DEM. FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUE	ACK OF	Prop. E Que	ffective Stop	Aver. No.	Aver. Speed
		veh/h	HV J veh/h	i lotai veh/h	HVJ %	v/c	sec		ر ven. veh	Dist j m		Rate	Cycles	km/h
South	n: Beai	mish St												
1	L2	72	1	76	1.4	*0.481	10.1	LOS A	10.9	81.5	0.52	0.50	0.52	35.6
2	T1	481	45	506	9.4	0.481	6.7	LOS A	10.9	81.5	0.52	0.50	0.52	30.0
Appro	bach	553	46	582	8.3	0.481	7.1	LOS A	10.9	81.5	0.52	0.50	0.52	31.3
North	: Bear	nish St												
8	T1	511	45	538	8.8	0.404	3.8	LOS A	7.5	56.4	0.39	0.35	0.39	33.9
9	R2	3	0	3	0.0	0.404	7.4	LOS A	7.5	56.4	0.39	0.35	0.39	37.2
Appro	bach	514	45	541	8.8	0.404	3.8	LOS A	7.5	56.4	0.39	0.35	0.39	33.9
West	: Amy	St												
10	L2	34	0	36	0.0	*0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
Appro	bach	34	0	36	0.0	0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
All Vehic	les	1101	91	1159	8.3	0.481	6.8	LOS A	10.9	81.5	0.47	0.43	0.47	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Beamis	sh St										
P1 Full	180	189	34.5	LOS D	0.4	0.4	0.93	0.93	55.7	27.5	0.49
North: Beamis	h St										
P3 Full	120	126	34.4	LOS D	0.3	0.3	0.93	0.93	55.6	27.5	0.49
West: Amy St											
P4 Full	354	373	3.1	LOS A	0.2	0.2	0.28	0.28	25.8	29.5	1.14
All Pedestrians	654	688	17.5	LOS B	0.4	0.4	0.58	0.58	39.5	28.6	0.72

### Site: TCS 2816 [Beamish Street / Amy Street TTP (Site Folder: AM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop.   Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Bear	mish St												
1 2	L2 T1	72 494	1 58	76 520	1.4 11.7	* 0.501 0.501	10.2 6.8	LOS A LOS A	11.3 11.3	86.5 86.5	0.53 0.53	0.50 0.50	0.53 0.53	35.5 29.8
Appro	bach	566	59	596	10.4	0.501	7.3	LOS A	11.3	86.5	0.53	0.50	0.53	31.2
North	: Bear	nish St												
8	T1	549	83	578	15.1	0.459	4.1	LOS A	8.6	67.7	0.41	0.37	0.41	33.6
9	R2	3	0	3	0.0	0.459	7.6	LOS A	8.6	67.7	0.41	0.37	0.41	37.1
Appro	bach	552	83	581	15.0	0.459	4.1	LOS A	8.6	67.7	0.41	0.37	0.41	33.6
West	: Amy	St												
10	L2	34	0	36	0.0	*0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
Appro	bach	34	0	36	0.0	0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
All Vehic	les	1152	142	1213	12.3	0.501	6.9	LOS A	11.3	86.5	0.49	0.45	0.49	31.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	ce							
Mov .	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Beamis	sh St										
P1 Full	180	189	34.5	LOS D	0.4	0.4	0.93	0.93	55.7	27.5	0.49
North: Beamis	h St										
P3 Full	120	126	34.4	LOS D	0.3	0.3	0.93	0.93	55.6	27.5	0.49
West: Amy St											
P4 Full	354	373	3.1	LOS A	0.2	0.2	0.28	0.28	25.8	29.5	1.14
All Pedestrians	654	688	17.5	LOS B	0.4	0.4	0.58	0.58	39.5	28.6	0.72

### Site: TCS 2816 [Beamish Street / Amy Street Future Base (Site Folder: PM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Beai	mish St												
1	L2	105	32	111	30.5	*0.631	16.9	LOS B	17.3	126.4	0.74	0.69	0.74	32.0
2	T1	505	1	532	0.2	0.631	13.3	LOS A	17.3	126.4	0.74	0.69	0.74	24.3
Appro	bach	610	33	642	5.4	0.631	14.0	LOS A	17.3	126.4	0.74	0.69	0.74	26.6
North	: Bear	nish St												
8	T1	554	33	583	6.0	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.8
9	R2	6	0	6	0.0	0.504	11.8	LOS A	12.2	89.8	0.58	0.52	0.58	34.7
Appro	bach	560	33	589	5.9	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.9
West	: Amy	St												
10	L2	142	0	149	0.0	*0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
Appro	bach	142	0	149	0.0	0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
All Vehic	les	1312	66	1381	5.0	0.631	14.4	LOS A	17.3	126.4	0.70	0.63	0.70	26.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestria	n Moveme	ent Perl	formand	ce							
Mov	Input	Dem.	Aver.	Level of a	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossir	ng Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist ]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Bear	mish St										
P1 Full	180	189	27.4	LOS C	0.4	0.4	0.83	0.83	48.6	27.5	0.57
North: Bear	nish St										
P3 Full	120	126	27.4	LOS C	0.2	0.2	0.83	0.83	48.5	27.5	0.57
West: Amy	St										
P4 Full	354	373	5.7	LOS A	0.3	0.3	0.38	0.38	28.4	29.5	1.04
All Pedestrians	654	688	15.7	LOS B	0.4	0.4	0.59	0.59	37.7	28.6	0.76

### Site: TCS 2816 [Beamish Street / Amy Street Construction (Site Folder: PM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total	PUT JMES HV 1	DEM FLO [ Total	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF EUE Dist 1	Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m			0,000	km/h
South	n: Beai	mish St												
1	L2	105	32	111	30.5	*0.631	16.9	LOS B	17.3	126.4	0.74	0.69	0.74	32.0
2	T1	505	1	532	0.2	0.631	13.3	LOS A	17.3	126.4	0.74	0.69	0.74	24.3
Appro	oach	610	33	642	5.4	0.631	14.0	LOS A	17.3	126.4	0.74	0.69	0.74	26.6
North	: Bear	nish St												
8	T1	554	33	583	6.0	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.8
9	R2	6	0	6	0.0	0.504	11.8	LOS A	12.2	89.8	0.58	0.52	0.58	34.7
Appro	oach	560	33	589	5.9	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.9
West	: Amy	St												
10	L2	142	0	149	0.0	*0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
Appro	oach	142	0	149	0.0	0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
All Vehic	les	1312	66	1381	5.0	0.631	14.4	LOS A	17.3	126.4	0.70	0.63	0.70	26.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	lovem	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Beamis	sh St										
P1 Full	180	189	27.4	LOS C	0.4	0.4	0.83	0.83	48.6	27.5	0.57
North: Beamis	h St										
P3 Full	120	126	27.4	LOS C	0.2	0.2	0.83	0.83	48.5	27.5	0.57
West: Amy St											
P4 Full	354	373	5.7	LOS A	0.3	0.3	0.38	0.38	28.4	29.5	1.04
All Pedestrians	654	688	15.7	LOS B	0.4	0.4	0.59	0.59	37.7	28.6	0.76

### Site: TCS 2816 [Beamish Street / Amy Street TTP (Site Folder: PM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop.   Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Bear	mish St												
1 2	L2 T1	105 561	32 57	111 591	30.5 10.2	* 0.698 0.698	16.0 12.4	LOS B LOS A	19.1 19.1	149.4 149.4	0.75 0.75	0.70 0.70	0.75 0.75	32.5 25.0
Appro	bach	666	89	701	13.4	0.698	13.0	LOS A	19.1	149.4	0.75	0.70	0.75	27.0
North: Bea		nish St												
8	T1	566	45	596	8.0	0.507	7.3	LOS A	11.9	88.7	0.55	0.50	0.55	29.7
9	R2	6	0	6	0.0	0.507	10.9	LOS A	11.9	88.7	0.55	0.50	0.55	35.2
Appro	bach	572	45	602	7.9	0.507	7.4	LOS A	11.9	88.7	0.55	0.50	0.55	29.8
West	: Amy	St												
10	L2	142	0	149	0.0	*0.715	44.1	LOS D	6.2	43.1	1.00	0.89	1.16	22.8
Appro	bach	142	0	149	0.0	0.715	44.1	LOS D	6.2	43.1	1.00	0.89	1.16	22.8
All Vehic	les	1380	134	1453	9.7	0.715	13.9	LOS A	19.1	149.4	0.69	0.64	0.71	26.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	Novem	ent Perf	ormano	ce							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	EUE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Beamis	sh St										
P1 Full	180	189	29.1	LOS C	0.4	0.4	0.86	0.86	50.3	27.5	0.55
North: Beamis	sh St										
P3 Full	120	126	29.1	LOS C	0.2	0.2	0.85	0.85	50.2	27.5	0.55
West: Amy St											
P4 Full	354	373	5.0	LOS A	0.3	0.3	0.36	0.36	27.7	29.5	1.07
All Pedestrians	654	688	16.0	LOS B	0.4	0.4	0.59	0.59	38.0	28.6	0.75

### Site: TCS 3340 [New Canterbury Rd / Frazer St - Future Base (Site Folder: AM)]

New Canterbury Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	nt Perfor	mance										
Mov ID	Turn	INF VOLI	PUT JMES	DEM/ FLO	AND WS	Deg. Satn	Aver. Delay	Level of Service	95% BA QUI	ACK OF	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %	v/c	sec		[ Veh. veh	Dist ] m		Rate	Cycles	km/h
South	n: New	Canterb	oury Rd											
2	T1	846	44	891	5.2	0.520	6.3	LOS A	14.3	102.3	0.47	0.45	0.47	50.9
3	R2	306	6	322	2.0	*0.520	20.1	LOS B	14.3	102.3	0.73	0.79	0.73	38.8
Appro	oach	1152	50	1213	4.3	0.520	9.9	LOS A	14.3	102.3	0.54	0.54	0.54	47.1
East:	Fraze	r St												
4	L2	82	8	86	9.8	0.098	18.5	LOS B	2.1	15.9	0.53	0.70	0.53	37.9
6	R2	68	1	72	1.5	*0.355	51.8	LOS D	3.4	23.9	0.97	0.76	0.97	27.8
Appro	oach	150	9	158	6.0	0.355	33.6	LOS C	3.4	23.9	0.73	0.73	0.73	32.0
North	: New	Canterb	ury Rd											
7	L2	129	2	136	1.6	0.140	18.2	LOS B	3.3	23.5	0.54	0.71	0.54	42.0
8	T1	364	24	383	6.6	*0.709	28.6	LOS C	15.3	113.5	0.86	0.76	0.88	34.5
Appro	oach	493	26	519	5.3	0.709	25.9	LOS B	15.3	113.5	0.78	0.75	0.79	36.5
All Vehic	les	1795	85	1889	4.7	0.709	16.3	LOS B	15.3	113.5	0.62	0.61	0.62	41.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	orman	e							
Mov	Input	Dem.	Aver.	Level of .	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
D Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: New Ca	anterbur	y Rd									
P1 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Frazer S	t										
P2 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
All Pedestrians	100	105	44.3	LOS E	0.1	0.1	0.94	0.94	208.5	213.6	1.02

### Site: TCS 3340 [New Canterbury Rd / Frazer St - Construction (Site Folder: AM)]

New Canterbury Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	nt Perfor	mance										
Mov ID	Turn	INF VOLU [ Total veh/h	PUT JMES HV] veh/h	DEM/ FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: New	Canterb	oury Rd											
2 3 Appro	T1 R2 bach	846 306 1152	44 6 50	891 322 1213	5.2 2.0 4.3	0.520 * 0.520 0.520	6.3 20.1 9.9	LOS A LOS B LOS A	14.3 14.3 14.3	102.3 102.3 102.3	0.47 0.73 0.54	0.45 0.79 0.54	0.47 0.73 0.54	50.9 38.8 47.1
East:	Fraze	r St												
4 6	L2 R2	82 68	8 1	86 72	9.8 1.5	0.098 <b>*</b> 0.355	18.5 51.8	LOS B LOS D	2.1 3.4	15.9 23.9	0.53 0.97	0.70 0.76	0.53 0.97	37.9 27.8
Appro	oach	150	9	158	6.0	0.355	33.6	LOS C	3.4	23.9	0.73	0.73	0.73	32.0
North	: New	Canterb	ury Rd											
7 8	L2 T1	129 364	2 24	136 383	1.6 6.6	0.140 <b>*</b> 0.709	18.2 28.6	LOS B LOS C	3.3 15.3	23.5 113.5	0.54 0.86	0.71 0.76	0.54 0.88	42.0 34.5
Appro	oach	493	26	519	5.3	0.709	25.9	LOS B	15.3	113.5	0.78	0.75	0.79	36.5
All Vehic	les	1795	85	1889	4.7	0.709	16.3	LOS B	15.3	113.5	0.62	0.61	0.62	41.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	ormano	e							
Mov	Input	Dem.	Aver.	Level of A	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	UE Dist ]	Que	Stop Rate	Time	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: New Ca	anterbur	y Rd									
P1 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Frazer S	t										
P2 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
All Pedestrians	100	105	44.3	LOS E	0.1	0.1	0.94	0.94	208.5	213.6	1.02

### Site: TCS 3340 [New Canterbury Rd / Frazer St - TTP (Site Folder: AM)]

New Canterbury Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total	PUT JMES HV 1	DEM FLO [ Total	AND WS HV 1	Deg. Satn	Aver. Delay	Level of Service	95% B/ QUI [ Veh.	ACK OF EUE Dist 1	Prop. Que	Effective Stop Rate	Aver. No. Cvcles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m			- ,	km/h
South	n: New	Canterb	ury Rd											
2	T1	846	44	891	5.2	0.575	5.9	LOS A	16.3	119.3	0.47	0.45	0.47	51.6
3	R2	363	63	382	17.4	*0.575	22.5	LOS B	13.5	107.1	0.76	0.87	0.76	36.8
Appro	bach	1209	107	1273	8.9	0.575	10.9	LOS A	16.3	119.3	0.56	0.57	0.56	46.2
East:	Fraze	r St												
4	L2	82	8	86	9.8	0.094	17.5	LOS B	2.0	15.2	0.51	0.69	0.51	38.6
6	R2	68	1	72	1.5	*0.355	51.8	LOS D	3.4	23.9	0.97	0.76	0.97	27.8
Appro	bach	150	9	158	6.0	0.355	33.0	LOS C	3.4	23.9	0.72	0.72	0.72	32.2
North	: New	Canterb	ury Rd											
7	L2	129	2	136	1.6	0.146	19.3	LOS B	3.5	24.5	0.56	0.71	0.56	41.3
8	T1	364	24	383	6.6	*0.753	32.1	LOS C	16.4	121.3	0.89	0.81	0.95	32.8
Appro	bach	493	26	519	5.3	0.753	28.8	LOS C	16.4	121.3	0.80	0.79	0.85	35.0
All Vehic	les	1852	142	1949	7.7	0.753	17.4	LOS B	16.4	121.3	0.64	0.64	0.65	41.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian M	loveme	ent Perf	orman	e							
Mov	Input	Dem.	Aver.	Level of .	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
D Crossing	Vol.	Flow	Delay	Service	QUE [ Ped	:UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: New Ca	anterbur	y Rd									
P1 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Frazer S	t										
P2 Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
All Pedestrians	100	105	44.3	LOS E	0.1	0.1	0.94	0.94	208.5	213.6	1.02

### Site: TCS 4074 [Restwell Street / Raymond Street - Future

Base (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh	CK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	twell Stre	et											
1 2	L2 T1	194 333	0 32	204 351	0.0 9.6	0.458 <b>*</b> 0.900	21.7 32.5	LOS B LOS C	4.5 11.2	31.2 85.1	0.90 1.00	0.78 1.27	0.90 1.64	21.9 14.8
Appro	bach	527	32	555	6.1	0.900	28.5	LOS C	11.2	85.1	0.96	1.09	1.36	17.3
East:	Raym	ond St												
4	L2	103	2	108	1.9	0.119	10.6	LOS A	1.4	10.1	0.56	0.65	0.56	30.8
5	T1	210	0	221	0.0	*0.810	27.6	LOS B	6.2	43.1	1.00	1.03	1.39	23.8
6	R2	63	4	66	6.3	0.271	26.2	LOS B	1.6	11.5	0.93	0.74	0.93	22.3
Appro	bach	376	6	396	1.6	0.810	22.7	LOS B	6.2	43.1	0.87	0.88	1.08	25.0
North	: Rest	well Stree	et											
8	T1	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
Appro	bach	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
West	: Gree	nfield Pa	rade											
10	L2	373	0	393	0.0	*0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
Appro	bach	373	0	393	0.0	0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
All Vehic	les	1315	77	1384	5.9	0.900	27.7	LOS B	12.0	85.1	0.94	1.05	1.31	20.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian I	Noveme	ent Perf	forman	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Et Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwo	ell Street										
P1 Full	46	48	17.7	LOS B	0.1	0.1	0.84	0.84	42.3	32.0	0.76
East: Raymor	id St										
P2 Full	80	84	17.7	LOS B	0.1	0.1	0.84	0.84	41.5	31.0	0.75
North: Restwe	ell Street										
P3 Full	1	1	16.0	LOS B	0.0	0.0	0.80	0.80	37.2	27.5	0.74
West: Greenfi	eld Para	de									
P4 Full	50	53	16.8	LOS B	0.1	0.1	0.82	0.82	37.6	27.0	0.72
P4S <sup>Slip/</sup>	50	53	7.3	LOS A	0.0	0.0	0.54	0.54	26.0	24.3	0.93

### Site: TCS 4074 [Restwell Street / Raymond Street -

Construction (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLL [ Total veh/h	PUT IMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	CK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	twell Stre	et											
1 2	L2 T1	194 333	0 32	204 351	0.0 9.6	0.458 <b>*</b> 0.900	21.7 32.5	LOS B LOS C	4.5 11.2	31.2 85.1	0.90 1.00	0.78 1.27	0.90 1.64	21.9 14.8
Appro	bach	527	32	555	6.1	0.900	28.5	LOS C	11.2	85.1	0.96	1.09	1.36	17.3
East:	Raym	ond St												
4	L2	103	2	108	1.9	0.119	10.6	LOS A	1.4	10.1	0.56	0.65	0.56	30.8
5	T1	210	0	221	0.0	*0.810	27.6	LOS B	6.2	43.1	1.00	1.03	1.39	23.8
6	R2	71	12	75	16.9	0.335	26.7	LOS B	1.8	14.3	0.94	0.75	0.94	22.1
Appro	bach	384	14	404	3.6	0.810	22.9	LOS B	6.2	43.1	0.87	0.88	1.08	24.9
North	: Rest	well Stree	et											
8	T1	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
Appro	bach	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
West	: Gree	nfield Pa	rade											
10	L2	373	0	393	0.0	*0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
Appro	bach	373	0	393	0.0	0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
All Vehic	les	1323	85	1393	6.4	0.900	27.7	LOS B	12.0	85.1	0.94	1.05	1.31	20.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	orman	e							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of . Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Ef Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	ell Street										
P1 Full	46	48	17.7	LOS B	0.1	0.1	0.84	0.84	42.3	32.0	0.76
East: Raymon	d St										
P2 Full	80	84	17.7	LOS B	0.1	0.1	0.84	0.84	41.5	31.0	0.75
North: Restwe	ll Street										
P3 Full	1	1	16.0	LOS B	0.0	0.0	0.80	0.80	37.2	27.5	0.74
West: Greenfie	eld Parac	de									
P4 Full	50	53	16.8	LOS B	0.1	0.1	0.82	0.82	37.6	27.0	0.72
P4S <sup>Slip/</sup>	50	53	7.3	LOS A	0.0	0.0	0.54	0.54	26.0	24.3	0.93

# Site: TCS 4074 [Restwell Street / Raymond Street - TTP (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh	CK OF UE Dist ] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	twell Stre	et											
1 2	L2 T1	194 333	0 32	204 351	0.0 9.6	0.458 <b>*</b> 0.900	21.7 32.5	LOS B LOS C	4.5 11.2	31.2 85.1	0.90 1.00	0.78 1.27	0.90 1.64	21.9 14.8
Appro	oach	527	32	555	6.1	0.900	28.5	LOS C	11.2	85.1	0.96	1.09	1.36	17.3
East:	Raym	ond St												
4	L2	103	2	108	1.9	0.119	10.6	LOS A	1.4	10.1	0.56	0.65	0.56	30.8
5	T1	210	0	221	0.0	*0.810	27.6	LOS B	6.2	43.1	1.00	1.03	1.39	23.8
6	R2	84	25	88	29.8	0.444	27.4	LOS B	2.2	19.1	0.96	0.77	0.96	21.8
Appro	oach	397	27	418	6.8	0.810	23.2	LOS B	6.2	43.1	0.88	0.87	1.08	24.7
North	: Rest	well Stre	et											
8	T1	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
Appro	oach	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
West	: Gree	nfield Pa	rade											
10	L2	373	0	393	0.0	*0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
Appro	oach	373	0	393	0.0	0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
All Vehic	les	1336	98	1406	7.3	0.900	27.7	LOS B	12.0	85.1	0.94	1.04	1.31	20.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian M	loveme	ent Perf	orman	e							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of . Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Ef Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restwe	ell Street										
P1 Full	46	48	17.7	LOS B	0.1	0.1	0.84	0.84	42.3	32.0	0.76
East: Raymon	d St										
P2 Full	80	84	17.7	LOS B	0.1	0.1	0.84	0.84	41.5	31.0	0.75
North: Restwe	ll Street										
P3 Full	1	1	16.0	LOS B	0.0	0.0	0.80	0.80	37.2	27.5	0.74
West: Greenfie	eld Parac	de									
P4 Full	50	53	16.8	LOS B	0.1	0.1	0.82	0.82	37.6	27.0	0.72
P4S <sup>Slip/</sup>	50	53	7.3	LOS A	0.0	0.0	0.54	0.54	26.0	24.3	0.93

# Site: TCS 4074 [Restwell Street / Raymond Street - Future Base (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	twell Stre	et											
1 2	L2 T1	186 252	0 26	196 265	0.0 10.3	0.335 <b>*</b> 0.953	23.5 54.7	LOS B LOS D	5.2 12.7	36.5 97.0	0.81 1.00	0.76 1.38	0.81 1.82	21.1 10.4
Appro	bach	438	26	461	5.9	0.953	41.4	LOS C	12.7	97.0	0.92	1.12	1.39	13.9
East:	Raym	ond St												
4	L2	261	2	275	0.8	0.237	9.5	LOS A	4.1	28.7	0.46	0.64	0.46	31.6
5	T1	408	0	429	0.0	*0.964	56.0	LOS D	21.7	151.6	1.00	1.44	1.74	16.8
6	R2	116	7	122	6.0	0.305	28.8	LOS C	3.6	26.2	0.87	0.77	0.87	21.3
Appro	bach	785	9	826	1.1	0.964	36.5	LOS C	21.7	151.6	0.80	1.07	1.19	20.3
North	: Rest	well Stree	et											
8	T1	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
Appro	bach	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
West	: Gree	nfield Pa	rade											
10	L2	535	0	563	0.0	* 0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
Appro	bach	535	0	563	0.0	0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
All Vehic	les	1794	71	1888	4.0	0.965	44.1	LOS D	29.4	205.5	0.89	1.16	1.38	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Moveme	ent Perf	orman	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Et Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restw	ell Street										
P1 Full	46	48	23.3	LOS C	0.1	0.1	0.82	0.82	47.9	32.0	0.67
East: Raymo	nd St										
P2 Full	80	84	26.7	LOS C	0.1	0.1	0.87	0.87	50.5	31.0	0.61
North: Restw	ell Street										
P3 Full	1	1	17.9	LOS B	0.0	0.0	0.71	0.71	39.0	27.5	0.70
West: Greent	ield Para	de									
P4 Full	50	53	25.8	LOS C	0.1	0.1	0.86	0.86	46.5	27.0	0.58
P4S <sup>Slip/</sup>	50	53	9.8	LOS A	0.1	0.1	0.53	0.53	28.5	24.3	0.85

### Site: TCS 4074 [Restwell Street / Raymond Street -

Construction (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INF VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	twell Stre	et											
1 2	L2 T1	186 252	0 26	196 265	0.0 10.3	0.335 <b>*</b> 0.953	23.5 54.7	LOS B LOS D	5.2 12.7	36.5 97.0	0.81 1.00	0.76 1.38	0.81 1.82	21.1 10.4
Appro	oach	438	26	461	5.9	0.953	41.4	LOS C	12.7	97.0	0.92	1.12	1.39	13.9
East:	Raym	ond St												
4	L2	261	2	275	0.8	0.237	9.5	LOS A	4.1	28.7	0.46	0.64	0.46	31.6
5	T1	408	0	429	0.0	*0.964	56.0	LOS D	21.7	151.6	1.00	1.44	1.74	16.8
6	R2	124	15	131	12.1	0.344	29.2	LOS C	3.9	29.8	0.88	0.77	0.88	21.2
Appro	oach	793	17	835	2.1	0.964	36.5	LOS C	21.7	151.6	0.81	1.07	1.18	20.3
North	: Rest	well Stre	et											
8	T1	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
Appro	oach	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
West	: Gree	nfield Pa	rade											
10	L2	535	0	563	0.0	*0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
Appro	oach	535	0	563	0.0	0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
All Vehic	les	1802	79	1897	4.4	0.965	44.1	LOS D	29.4	205.5	0.89	1.16	1.37	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Moveme	ent Perf	orman	ce							
Mov ID Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Et Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Restw	ell Street										
P1 Full	46	48	23.3	LOS C	0.1	0.1	0.82	0.82	47.9	32.0	0.67
East: Raymo	nd St										
P2 Full	80	84	26.7	LOS C	0.1	0.1	0.87	0.87	50.5	31.0	0.61
North: Restw	ell Street										
P3 Full	1	1	17.9	LOS B	0.0	0.0	0.71	0.71	39.0	27.5	0.70
West: Greent	ield Para	de									
P4 Full	50	53	25.8	LOS C	0.1	0.1	0.86	0.86	46.5	27.0	0.58
P4S <sup>Slip/</sup>	50	53	9.8	LOS A	0.1	0.1	0.53	0.53	28.5	24.3	0.85

# Site: TCS 4074 [Restwell Street / Raymond Street - TTP (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLL [ Total veh/h	PUT JMES HV] veh/h	DEM FLO [ Total veh/h	AND WS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Rest	well Stre	et											
1 2	L2 T1	186 252	0 26	196 265	0.0 10.3	0.335 <b>*</b> 0.953	23.5 54.7	LOS B LOS D	5.2 12.7	36.5 97.0	0.81 1.00	0.76 1.38	0.81 1.82	21.1 10.4
Appro	oach	438	26	461	5.9	0.953	41.4	LOS C	12.7	97.0	0.92	1.12	1.39	13.9
East:	Raym	ond St												
4	L2	261	2	275	0.8	0.237	9.5	LOS A	4.1	28.7	0.46	0.64	0.46	31.6
5	T1	408	0	429	0.0	*0.964	56.0	LOS D	21.7	151.6	1.00	1.44	1.74	16.8
6	R2	186	77	196	41.4	0.663	33.2	LOS C	6.6	62.7	0.96	0.86	1.05	19.9
Appro	oach	855	79	900	9.2	0.964	36.9	LOS C	21.7	151.6	0.83	1.07	1.20	20.1
North	: Rest	well Stree	et											
8	T1	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
Appro	oach	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
West	: Gree	nfield Pa	rade											
10	L2	535	0	563	0.0	* 0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
Appro	oach	535	0	563	0.0	0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
All Vehic	les	1864	141	1962	7.6	0.965	44.0	LOS D	29.4	205.5	0.90	1.16	1.38	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestriar	n Moveme	ent Peri	forman	ce							
Mov ID Crossin	Input 9 Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE QUE [ Ped	BACK OF UE Dist ]	Prop. Et Que	fective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Rest	well Street										
P1 Full	46	48	23.3	LOS C	0.1	0.1	0.82	0.82	47.9	32.0	0.67
East: Raym	ond St										
P2 Full	80	84	26.7	LOS C	0.1	0.1	0.87	0.87	50.5	31.0	0.61
North: Rest	well Street										
P3 Full	1	1	17.9	LOS B	0.0	0.0	0.71	0.71	39.0	27.5	0.70
West: Green	nfield Parac	de									
P4 Full	50	53	25.8	LOS C	0.1	0.1	0.86	0.86	46.5	27.0	0.58
P4S <sup>Slip/</sup>	50	53	9.8	LOS A	0.1	0.1	0.53	0.53	28.5	24.3	0.85

# Site: TCS 4408 [French Ave / Chapel Rd - Future Base (Site Folder: AM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service	QUI	EUE Diet 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	пvј %	v/c	sec		veh	m		Rale	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	16	0	17	0.0	0.088	11.8	LOS A	0.6	4.4	0.65	0.55	0.65	39.6
2	T1	258	23	272	8.9	*0.439	7.3	LOS A	3.0	22.7	0.74	0.64	0.74	40.0
3	R2	42	1	44	2.4	0.439	13.0	LOS A	3.0	22.7	0.76	0.66	0.76	37.8
Appro	oach	316	24	333	7.6	0.439	8.3	LOS A	3.0	22.7	0.74	0.64	0.74	39.6
East:	Frenc	h Ave												
4	L2	39	2	41	5.1	0.139	17.1	LOS B	0.6	4.1	0.88	0.71	0.88	28.5
5	T1	57	2	60	3.5	*0.305	12.1	LOS A	1.4	9.7	0.89	0.71	0.89	34.6
6	R2	37	0	39	0.0	0.305	16.7	LOS B	1.4	9.7	0.89	0.71	0.89	32.0
Appro	oach	133	4	140	3.0	0.305	14.9	LOS B	1.4	9.7	0.89	0.71	0.89	32.2
North	: Chap	oel Rd												
7	L2	15	0	16	0.0	0.308	12.5	LOS A	2.3	17.5	0.72	0.61	0.72	40.0
8	T1	315	33	332	10.5	0.308	7.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.5
9	R2	51	1	54	2.0	0.308	12.6	LOS A	1.9	14.5	0.72	0.64	0.72	39.1
Appro	oach	381	34	401	8.9	0.308	8.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.3
West	: Fren	ch Ave												
10	L2	30	1	32	3.3	0.105	17.0	LOS B	0.4	3.1	0.88	0.70	0.88	30.9
11	T1	68	1	72	1.5	0.236	11.8	LOS A	1.1	7.9	0.88	0.68	0.88	35.8
12	R2	11	0	12	0.0	0.236	16.4	LOS B	1.1	7.9	0.88	0.68	0.88	33.7
Appro	bach	109	2	115	1.8	0.236	13.7	LOS A	1.1	7.9	0.88	0.68	0.88	34.2
All Vehic	les	939	64	988	6.8	0.439	9.7	LOS A	3.0	22.7	0.77	0.65	0.77	37.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestria	n Movem	ent Per	forman	се							
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Clossi	ng Vol.	Flow	Delay	Service	QUI [ Ped	=UE Dist ]	Que	Stop Rate	lime	Dist.	Speed
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Cha	pel Rd										
P1 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23
East: Frenc	h Ave										
P2 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23

## Site: TCS 4408 [French Ave / Chapel Rd - Construction (Site Folder: AM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service	QUI	EUE Diet 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	пvј %	v/c	sec		ven.	m		Rale	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	16	0	17	0.0	0.088	11.8	LOS A	0.6	4.4	0.65	0.55	0.65	39.6
2	T1	258	23	272	8.9	*0.439	7.3	LOS A	3.0	22.7	0.74	0.64	0.74	40.0
3	R2	42	1	44	2.4	0.439	13.0	LOS A	3.0	22.7	0.76	0.66	0.76	37.8
Appro	oach	316	24	333	7.6	0.439	8.3	LOS A	3.0	22.7	0.74	0.64	0.74	39.6
East:	Frenc	h Ave												
4	L2	39	2	41	5.1	0.139	17.1	LOS B	0.6	4.1	0.88	0.71	0.88	28.5
5	T1	57	2	60	3.5	*0.305	12.1	LOS A	1.4	9.7	0.89	0.71	0.89	34.6
6	R2	37	0	39	0.0	0.305	16.7	LOS B	1.4	9.7	0.89	0.71	0.89	32.0
Appro	oach	133	4	140	3.0	0.305	14.9	LOS B	1.4	9.7	0.89	0.71	0.89	32.2
North	: Chap	oel Rd												
7	L2	15	0	16	0.0	0.308	12.5	LOS A	2.3	17.5	0.72	0.61	0.72	40.0
8	T1	315	33	332	10.5	0.308	7.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.5
9	R2	51	1	54	2.0	0.308	12.6	LOS A	1.9	14.5	0.72	0.64	0.72	39.1
Appro	oach	381	34	401	8.9	0.308	8.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.3
West	: Fren	ch Ave												
10	L2	30	1	32	3.3	0.105	17.0	LOS B	0.4	3.1	0.88	0.70	0.88	30.9
11	T1	68	1	72	1.5	0.236	11.8	LOS A	1.1	7.9	0.88	0.68	0.88	35.8
12	R2	11	0	12	0.0	0.236	16.4	LOS B	1.1	7.9	0.88	0.68	0.88	33.7
Appro	bach	109	2	115	1.8	0.236	13.7	LOS A	1.1	7.9	0.88	0.68	0.88	34.2
All Vehic	les	939	64	988	6.8	0.439	9.7	LOS A	3.0	22.7	0.77	0.65	0.77	37.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestria	Pedestrian Movement Performance											
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.	
ID Clossi	ng Vol.	Flow	Delay	Service	QUI [ Ped	=UE Dist ]	Que	Stop Rate	lime	Dist.	Speed	
	ped/h	ped/h	sec		ped	m			sec	m	m/sec	
South: Cha	pel Rd											
P1 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23	
East: Frenc	h Ave											
P2 Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23	

# Site: TCS 4408 [French Ave / Chapel Rd - TTP (Site Folder: AM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemer	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service		EUE Dict 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Itale	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	16	0	17	0.0	0.075	10.7	LOS A	0.7	5.1	0.52	0.47	0.52	41.1
2	T1	274	39	288	14.2	0.374	6.1	LOS A	3.3	25.6	0.60	0.55	0.60	42.1
3	R2	42	1	44	2.4	*0.374	11.7	LOS A	3.3	25.6	0.62	0.56	0.62	39.5
Appro	oach	332	40	349	12.0	0.374	7.0	LOS A	3.3	25.6	0.60	0.54	0.60	41.6
East:	Frenc	h Ave												
4	L2	39	2	41	5.1	0.155	21.8	LOS B	0.8	5.5	0.90	0.71	0.90	25.6
5	T1	57	2	60	3.5	*0.353	17.0	LOS B	1.8	13.2	0.92	0.73	0.92	31.3
6	R2	37	0	39	0.0	0.353	21.6	LOS B	1.8	13.2	0.92	0.73	0.92	28.5
Appro	oach	133	4	140	3.0	0.353	19.7	LOS B	1.8	13.2	0.91	0.73	0.91	28.9
North	: Chap	oel Rd												
7	L2	15	0	16	0.0	0.251	11.3	LOS A	2.5	19.4	0.58	0.50	0.58	41.6
8	T1	329	47	346	14.3	0.251	5.8	LOS A	2.5	19.4	0.58	0.52	0.58	42.7
9	R2	51	1	54	2.0	0.251	11.3	LOS A	2.1	15.9	0.58	0.55	0.58	40.6
Appro	oach	395	48	416	12.2	0.251	6.7	LOS A	2.5	19.4	0.58	0.52	0.58	42.3
West	: Fren	ch Ave												
10	L2	30	1	32	3.3	0.117	21.6	LOS B	0.6	4.1	0.90	0.70	0.90	28.0
11	T1	68	1	72	1.5	0.271	16.6	LOS B	1.5	10.7	0.90	0.70	0.90	32.3
12	R2	11	0	12	0.0	0.271	21.1	LOS B	1.5	10.7	0.90	0.70	0.90	30.1
Appro	oach	109	2	115	1.8	0.271	18.4	LOS B	1.5	10.7	0.90	0.70	0.90	30.9
All Vehic	les	969	94	1020	9.7	0.374	9.9	LOS A	3.3	25.6	0.67	0.58	0.67	37.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Pedestrian Movement Performance											
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.	
ID Crossing	Vol.	Flow	Delay	Service		EUE	Que	Stop	lime	Dist.	Speed	
	ned/h	ned/h	200		[ Pea	DISL J		Rale	202	m	m/sec	
South: Chape	I Rd	peu/m	360		peu				360		11/360	
P1 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20	
East: French A	Ave											
P2 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20	

### Site: TCS 4408 [French Ave / Chapel Rd - Future Base (Site Folder: PM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA		Prop.	Effective	Aver.	Aver.
ID		Total	JMES HV 1	FLO [ Total	WS HV 1	Sath	Delay	Service	QUI [Veh.	EUE Dist 1	Que	Stop Rate	NO. Cvcles	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Cha	pel Rd												
1	L2	89	0	94	0.0	0.138	10.3	LOS A	1.3	9.4	0.51	0.61	0.51	38.6
2	T1	472	36	497	7.6	*0.688	9.2	LOS A	8.7	64.6	0.79	0.76	0.85	37.1
3	R2	76	0	80	0.0	0.688	15.1	LOS B	8.7	64.6	0.81	0.77	0.88	35.6
Appro	oach	637	36	671	5.7	0.688	10.1	LOS A	8.7	64.6	0.75	0.74	0.81	37.1
East:	Frenc	h Ave												
4	L2	48	0	51	0.0	0.218	23.0	LOS B	1.0	6.8	0.93	0.72	0.93	25.1
5	T1	64	0	67	0.0	*0.465	18.5	LOS B	2.2	15.4	0.96	0.76	0.96	30.4
6	R2	41	1	43	2.4	0.465	23.0	LOS B	2.2	15.4	0.96	0.76	0.96	27.5
Appro	oach	153	1	161	0.7	0.465	21.1	LOS B	2.2	15.4	0.95	0.75	0.95	28.1
North	: Chap	oel Rd												
7	L2	44	0	46	0.0	0.479	11.6	LOS A	5.9	43.6	0.65	0.59	0.65	41.0
8	T1	527	34	555	6.5	0.479	7.2	LOS A	5.9	43.6	0.69	0.62	0.69	40.0
9	R2	109	0	115	0.0	0.479	17.2	LOS B	3.8	27.1	0.83	0.74	0.83	33.8
Appro	oach	680	34	716	5.0	0.479	9.1	LOS A	5.9	43.6	0.71	0.64	0.71	38.6
West	: Frend	ch Ave												
10	L2	53	0	56	0.0	0.240	23.1	LOS B	1.1	7.5	0.94	0.73	0.94	27.3
11	T1	60	0	63	0.0	0.423	18.3	LOS B	2.0	13.8	0.95	0.75	0.95	30.5
12	R2	36	0	38	0.0	0.423	22.9	LOS B	2.0	13.8	0.95	0.75	0.95	28.3
Appro	oach	149	0	157	0.0	0.423	21.1	LOS B	2.0	13.8	0.94	0.74	0.94	28.8
All Vehic	les	1619	71	1704	4.4	0.688	11.7	LOS A	8.7	64.6	0.77	0.70	0.79	35.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Pedestrian Movement Performance											
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.	
ID Crossing	Vol.	Flow	Delay	Service		EUE	Que	Stop	lime	Dist.	Speed	
	ned/h	ned/h	200		[ Pea	DISL J		Rale	202	m	m/sec	
South: Chape	I Rd	peu/m	360		peu				360		11/360	
P1 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20	
East: French A	Ave											
P2 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20	

### Site: TCS 4408 [French Ave / Chapel Rd - Construction (Site Folder: PM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	rmance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO	WS	Satn	Delay	Service		EUE Dict 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Trate	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	89	0	94	0.0	0.138	10.3	LOS A	1.3	9.4	0.51	0.61	0.51	38.6
2	T1	472	36	497	7.6	*0.688	9.2	LOS A	8.7	64.6	0.79	0.76	0.85	37.1
3	R2	76	0	80	0.0	0.688	15.1	LOS B	8.7	64.6	0.81	0.77	0.88	35.6
Appro	oach	637	36	671	5.7	0.688	10.1	LOS A	8.7	64.6	0.75	0.74	0.81	37.1
East:	Frenc	h Ave												
4	L2	48	0	51	0.0	0.218	23.0	LOS B	1.0	6.8	0.93	0.72	0.93	25.1
5	T1	64	0	67	0.0	*0.465	18.5	LOS B	2.2	15.4	0.96	0.76	0.96	30.4
6	R2	41	1	43	2.4	0.465	23.0	LOS B	2.2	15.4	0.96	0.76	0.96	27.5
Appro	oach	153	1	161	0.7	0.465	21.1	LOS B	2.2	15.4	0.95	0.75	0.95	28.1
North	: Chap	oel Rd												
7	L2	44	0	46	0.0	0.479	11.6	LOS A	5.9	43.6	0.65	0.59	0.65	41.0
8	T1	527	34	555	6.5	0.479	7.2	LOS A	5.9	43.6	0.69	0.62	0.69	40.0
9	R2	109	0	115	0.0	0.479	17.2	LOS B	3.8	27.1	0.83	0.74	0.83	33.8
Appro	oach	680	34	716	5.0	0.479	9.1	LOS A	5.9	43.6	0.71	0.64	0.71	38.6
West	: Fren	ch Ave												
10	L2	53	0	56	0.0	0.240	23.1	LOS B	1.1	7.5	0.94	0.73	0.94	27.3
11	T1	60	0	63	0.0	0.423	18.3	LOS B	2.0	13.8	0.95	0.75	0.95	30.5
12	R2	36	0	38	0.0	0.423	22.9	LOS B	2.0	13.8	0.95	0.75	0.95	28.3
Appro	oach	149	0	157	0.0	0.423	21.1	LOS B	2.0	13.8	0.94	0.74	0.94	28.8
All Vehic	les	1619	71	1704	4.4	0.688	11.7	LOS A	8.7	64.6	0.77	0.70	0.79	35.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian	Pedestrian Movement Performance											
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.	
ID Crossing	Vol.	Flow	Delay	Service		EUE	Que	Stop	lime	Dist.	Speed	
	ned/h	ned/h	200		[ Pea	DISL J		Rale	202	m	m/sec	
South: Chape	I Rd	peu/m	360		peu				360		11/360	
P1 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20	
East: French A	Ave											
P2 Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20	

# Site: TCS 4408 [French Ave / Chapel Rd - TTP (Site Folder: PM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehi	cle M	ovemen	t Perfor	mance										
Mov	Turn	INF	PUT	DEM	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU [ Total		FLO	WS	Satn	Delay	Service		EUE Diet 1	Que	Stop	No.	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		Trate	Cycles	km/h
South	n: Cha	pel Rd												
1	L2	89	0	94	0.0	0.124	9.3	LOS A	1.4	9.9	0.41	0.56	0.41	39.9
2	T1	490	54	516	11.0	*0.622	7.4	LOS A	9.0	68.0	0.68	0.65	0.68	39.8
3	R2	76	0	80	0.0	0.622	13.2	LOS A	9.0	68.0	0.71	0.65	0.71	37.8
Appro	oach	655	54	689	8.2	0.622	8.3	LOS A	9.0	68.0	0.64	0.64	0.64	39.5
East:	Frenc	h Ave												
4	L2	48	0	51	0.0	0.272	29.0	LOS C	1.2	8.7	0.96	0.73	0.96	22.2
5	T1	64	0	67	0.0	*0.594	25.2	LOS B	2.9	20.2	0.99	0.82	1.10	26.9
6	R2	41	1	43	2.4	0.594	29.8	LOS C	2.9	20.2	0.99	0.82	1.10	23.9
Appro	oach	153	1	161	0.7	0.594	27.6	LOS B	2.9	20.2	0.98	0.79	1.06	24.7
North	: Chap	oel Rd												
7	L2	44	0	46	0.0	0.433	10.4	LOS A	6.0	44.9	0.53	0.49	0.53	42.7
8	T1	547	54	576	9.9	0.433	5.9	LOS A	6.0	44.9	0.57	0.54	0.57	42.2
9	R2	109	0	115	0.0	0.433	15.1	LOS B	4.2	30.4	0.70	0.68	0.70	35.7
Appro	oach	700	54	737	7.7	0.433	7.7	LOS A	6.0	44.9	0.59	0.56	0.59	40.7
West	: Fren	ch Ave												
10	L2	53	0	56	0.0	0.300	29.1	LOS C	1.4	9.7	0.96	0.74	0.96	24.4
11	T1	60	0	63	0.0	0.533	24.7	LOS B	2.6	18.0	0.98	0.79	1.03	27.2
12	R2	36	0	38	0.0	0.533	29.3	LOS C	2.6	18.0	0.98	0.79	1.03	24.8
Appro	oach	149	0	157	0.0	0.533	27.4	LOS B	2.6	18.0	0.98	0.77	1.00	25.6
All Vehic	les	1657	109	1744	6.6	0.622	11.5	LOS A	9.0	68.0	0.68	0.63	0.69	35.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

Pedestrian Movement Performance											
Mov	Input	Dem.	Aver.	Level of	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service		EUE	Que	Stop	Time	Dist.	Speed
	1.0	1.0			[ Ped	Dist J		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Chape	l Rd										
P1 Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16
East: French /	Ave										
P2 Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



Appendix B – Community Consultation Report – Sydenham to Bankstown Temporary Transport Plan – Proposed temporary kerbside changes – Dulwich Hill, Marrickville and Sydenham stations – Inner West Council

# Community Consultation Report

Sydenham to Bankstown Temporary Transport Plan – Proposed temporary kerbside changes

Dulwich Hill, Marrickville and Sydenham stations – Inner West Council

24 May 2022

transport.nsw.gov.au



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#### Introduction

Sydney Metro is Australia's largest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms at Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

As part of the Sydney Metro City and Southwest project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown received planning approval on 19 December 2018. All stations will be fully accessible with lifts and level access between platforms and trains.

The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to metro standards.

The next set of upgrade works will take place between Sydenham and Bankstown stations from Saturday 2 July 2022 to Friday 15 July 2022. This closure has been planned to take place in the July school holidays when there are fewer customers on the rail network.

To keep customers moving, Transport for NSW (TfNSW) is implementing a Sydenham to Bankstown Temporary Transport Plan (TTP) where frequent buses will replace trains during this time. To accommodate these buses and ensure minimal disruption to traffic, some temporary changes to kerbside parking are proposed around stations between Sydenham and Bankstown as well as Lidcombe and Central.

#### **Purpose of this report**

This report provides an overview of community consultation undertaken for temporary kerbside changes around Dulwich Hill, Marrickville and Sydenham stations which were proposed to support the Sydenham to Bankstown Temporary Transport Plan.

A summary of the feedback received is provided along with any changes that have been made to the Plan in response to feedback,

#### Proposed temporary kerbside changes

Representatives from the Temporary Transport Plan project team met with officers from Inner West Council on 21 April 2022 to provide a briefing on the Temporary Transport Plan. This included information on the operation of buses to support customers during the closure of the T3 line between Sydenham to Bankstown in the July school holidays.

Temporary kerbside changes at Dulwich Hill, Marrickville and Sydenham were proposed to support the bus operation and initial feedback was sought.

The following kerbside changes were proposed to local residents and businesses:

#### **Dulwich Hill**

- Extend the bus zone on the northern side of Dudley Street utilising:
  - One loading zone space (7 metres) currently signed between 8.30am and 6pm, Monday to Friday and between 8.30am and 12.30pm on Saturday.
  - Three parking spaces (18 metres) currently signed as 30 minute parking between 8.30am and 6pm Monday to Friday and between 8.30am and 12.30pm on Saturday.
- Extend the bus zone on the southern side of Dudley Street utilising one parking space (7 metres) currently signed as unrestricted parking.

#### Marrickville

• Extend the bus zone on the western side of Illawarra Road by utilising one parking space (7 metres) currently signed as 1-hour parking between 8.30am and 6pm.

#### Sydenham

- Create a bus zone on the southern side of Lower Railway Parade (between Marrickville Road and Sydenham Road) currently 45 degree parking utilising:
  - o 46 parking spaces (122 metres) currently signed All-day parking
  - 11 parking spaces (32 metres) currently signed 4-hour 8.30am to 6pm, Monday to Friday.
- Create a bus zone on the northern side of Burrows Avenue (prior to Gleeson Avenue) utilising 14 parking spaces (50 metres) currently signed unrestricted parking.
- Create a bus zone on the southern side of Burrows Avenue (prior to Gleeson Avenue) utilising 9 parking spaces (58 metres) currently signed unrestricted parking.
- Create a bus zone on the north-eastern side of Railway Road (prior to Gleeson Avenue) utilising 3 parking spaces (18 metres) currently signed 2-hour parking 8.00am to 10pm, Monday to Friday
- Extend the bus zone on the eastern side of Gleeson Avenue (between Burrows Avenue and Unwins Bridge Road) utilising 2 parking spaces (12 metres) currently signed 1-hour 9.00am to 3.30pm, Monday to Friday.

#### **Community Consultation**

Community consultation on the proposed temporary parking changes in Dulwich Hill, Marrickville and Sydenham, was undertaken for a two week period between Thursday 28 April 2022 and Thursday 12 May, 2022.

Community notifications were delivered to residents and businesses by a professional distribution company operating under a COVID Safe Plan.

The objective of the consultation was to raise awareness of the proposed temporary parking changes needed to operate additional buses for the planned closure of the T3 Bankstown Line.

Local businesses and residents were asked to provide their feedback to help the project team refine bus operations in and around station precincts.

The consultation program consisted of the following activities:

#### TRANSPORT

- Letter box drop of 3769 notifications to businesses and residents within a 200 metre radius of the three station locations
  - o Dulwich Hill 883 notifications
  - o Marrickville 1218 notifications
  - o Sydenham 225 notifications.
- A 24/7 phone number 1800 131 786 to receive feedback, answer any questions and provide the community with more information
- A project web page was created to provide more information, digital copies of the notifications and information about how to provide feedback.

Copies of the community consultation materials are available in the Appendices.

#### **Consultation feedback received**

Station precinct	Community feedback received	TfNSW response
Dulwich Hill	Nil received	Temporary kerbside changes are the same as the previous TTP in Dec 21 - Jan 22 with no reported issues.
Marrickville	Nil received	Temporary kerbside changes are reduced from the previous TTP in Dec 21 - Jan 22 with no reported issues.
Sydenham	Nil received	Temporary kerbside changes are altered to the TTP in Dec 21 - Jan 22.
	Inner West Council Suggest providing signage in advance along Burrows Avenue to avoid people parking long term i.e. airport parking.	TfNSW will ensure additional signage is placed well in advance to provide clear information on upcoming parking restrictions. Burrows Avenue has been used previously for temporary bus operations with no known issues.

#### **Consultation outcomes**

TfNSW has prepared submissions to local councils and their traffic committees for the Sydenham to Bankstown Temporary Transport Plan. As part of these submissions, community consultation has been undertaken with local residents and businesses in proximity to the bus zones around stations on the proposed temporary parking changes.

Some changes to the initial temporary parking proposal for the Inner West have been implemented based on initial feedback from Inner West Council officers as well as Sydney Metro in regards to their work program.

There were no submissions received from the community on the proposed temporary parking changes during the consultation period of between Thursday 28 April 2022 and Thursday 12 May, 2022.

Based on no feedback, objections or issues raised by local residents and businesses on the temporary parking changes, no further changes to the temporary parking plans are proposed.
#### Appendix A – Community notifications for temporary kerbside changes

Community notifications were distributed via letter box drop. Examples of the notifications are provided below.

#### Dulwich Hill - 883 community notifications distributed



#### Marrickville - 1218 community notifications distributed

Transport for NSW	Map of the proposed temporary kerbside change
NSW	hap of the proposed temporal provide shange
25 April, 2022 GOVERNMENT	Proposed parking
Proposed Temporary Parking Changes	zone extension
T3 Bankstown Line upgrade work – Marrickville Station	Anne ge get Anne ge
What is happening?	Methanilo Dark
The NSW Government is delivering Sydney Metro, Australia's biggest public transport project extending from Sydney's north west, under Sydney Harbour through new underground city stations and beyond to Bankstown in Sydney's south west.	Marrickville Station
The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to metro standards.	
The next set of upgrade work will take place between Sydenham and Bankstown from Saturday 2 July 2022 to Friday 15 July 2022. This closure has been planned to take place in the July school holidays when there are fewer customers on the rail network.	annaniana ar
To keep customers moving, frequent buses will replace trains during this time. To accommodate these additional buses and ensure minimal disruption to traffic, some temporary changes to parking are proposed around Marrickville Station.	Harden Part Annual Annual S
What do I need to know?	
rom 2am Saturday 2 July to 2am Friday 15 July 2022, the following temporary kerbside change is proposed:	About Sydney Metro: Sydney Metro City & Southwest
<ul> <li>Extend the bus zone on the western side of Illawarra Road by utilising one parking space (7 metres) currently signed as 1-hour parking between 8.30am and 6pm.</li> </ul>	Sydney Metro is Australia's biggest public transport project. As part of the Sydney Metro City and Southwest project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown received planning approval on 19 December 2018, All stations will be fully accessible with first and level access between platforms and trains.
The proposed temporary parking change will allow for the safe operation of buses and will only be in place Juring these two weeks. Please see the map on the back of this notification for information about the emporary parking change.	Work to upgrade the T3 Bankstown Line between Sydenham and Bankstown is underway including cabling; services and utilities works and station upgrades including stairs and lifts.
Provide your Feedback	For more information: https://www.sydneymetro.info/citysouthwest/sydenham-bankstown
TOYIGE YOUL FEEDDALK	amparent channels 这份文件创造你所在地区公共交通工程项目的重要信息,如果你需要传译服务,请数电翻译与传译服务机构,电话 131 450、要求他们为
and around the station precinct. Provide your feedback by Spm 12 May, 2022 via the following hannels:	你能得交通工程的(Transporter NSW),包含是 1800 171 366,作业历会为你做期间。 Traditional Officese 进行分布会局部在市场资本并交通工程运行的客事理由,如果需要通道服用 建铁管制提出通道服用服用 管部 1914-00 军令法研究所
mail: TIPComms@transnort.nsw.sov.au	按通交通工程的(Transport for NSW)、電紅是 1000 171 386。傳羅員會為你做翻譯。
Phone: 1800 171 386	Anabic غار الإخرار في خارك فور خان الرجار الحرية بالم وخد خانية والم الم الم الم الم الم الم الم الم الم
For more information: mysydney.nsw.gov.au/sydenhamtobankstown	. شرح تاباب رجه تعليا قديماني آندري 1365 قد عاري للهو شراب دين عند شالحدارها فيلمريب المحيثين را دورد إسلطار 131 500 قد عاري ا
	April 2021
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1of2	Transport.now.gov.au Page 2 of 2

#### Sydenham - 219 community notifications distributed





# Appendix B – Community notifications distribution maps

#### Marrickville distribution







# Appendix C – Temporary Transport Plan project web page

Community notifications and links for further information were placed online at <a href="http://www.mysydney.nsw.gov.au/SydenhamtoBankstown">www.mysydney.nsw.gov.au/SydenhamtoBankstown</a>

Refer to the screenshot below:

SYDENHA	M TO BANKSTOWN 2022 UPGRAE	DE
🕴 View All Projects	VIEW ON PROJECT SITE	
	T3 SYDENHAM TO BIRRONG TEMPORARY RAIL CLOSURE – Saturday 2 July to Saturday 16 July 2022	MORE INFORMATION
	The NSW Government is delivering Sydney Metro Australia's biggest public transport project extending from Sydney's north west, under Sydney Harbour through new underground city stations and beyond to Bankstown in Sydney's south west.	≱ About Sydney Metro
	The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the reliations is being upgraded and converted to metro standards.	
	The next stage of major work to upgrade the T3 Bankstown Line between Bankstown and Sydenham to metro standards will take place over the July school holiday period, when there are fewer customers on the rail network.	
	The T3 Bankstown Line between Sydenham and Birrong stations will be temporarily closed from 2 Saturday July to Saturday 16 July 2022 for these important upgrade works	
	To keep customers moving, rail replacement bus services will be provided during this period.	
	Consultation with the local community is now open on proposed temporary parking changes to accommodate the additional bus services and keep our customers moving during the upgrade works. View the notifications and maps below for information about the proposed temporary parking changes around your station:	
	Inner West - Consultation open 28 April to 12 May, 2022 • <u>Sydenham</u> • Marrichitle	
	Dutwich Hill	
	Lidcombe	
	Canterbury Bankstown - Consultation open 2 May to 16 May 2022 - Huristone Park - Canterbury - Campzie - Beimore - Lakemba - Wiley, Park - Punchbowli - Bankstown	
	Transport for NSW Will consider any feedback received, and work with the relevant Councils on the changes to temporary parking.	
	Residents and businesses can provide their feedback on the proposed kerbside changes via email at <u>TTPComms@transport.nsw.gov.au</u> or telephone 1800 171 386	
	Final transport plans to keep customers moving during the upgrade will be shared with the community well in advance to give people planty of time to plan ahead	
	For all the latest Sydney Metro project news visit	

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Metro Body of Knowledge (MBoK)

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Appendix C – Community Consultation Report – Sydenham to Bankstown Temporary Transport Plan – Proposed temporary kerbside changes – Lidcombe Station – Cumberland Council

# Community Consultation Report

Sydenham to Bankstown Temporary Transport Plan – Proposed temporary kerbside changes

Lidcombe station – Cumberland Council

24 May 2022

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#### Introduction

Sydney Metro is Australia's largest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms at Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

As part of the Sydney Metro City and Southwest project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown received planning approval on 19 December 2018. All stations will be fully accessible with lifts and level access between platforms and trains.

The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to metro standards.

The next set of upgrade works will take place between Sydenham and Bankstown stations from Saturday 2 July 2022 to Friday 15 July 2022. This closure has been planned to take place in the July school holidays when there are fewer customers on the rail network.

To keep customers moving, Transport for NSW (TfNSW) is implementing a Sydenham to Bankstown Temporary Transport Plan (TTP) where frequent buses will replace trains during this time. To accommodate these buses and ensure minimal disruption to traffic, some temporary changes to kerbside parking are proposed around stations between Sydenham and Bankstown as well as Lidcombe and Central.

#### **Purpose of this report**

This report provides an overview of community consultation undertaken for temporary kerbside changes around Lidcombe station which are proposed to support the Sydenham to Bankstown Temporary Transport Plan.

A summary of the feedback received is provided along with any changes that have been made to the Plan in response to feedback,

#### Proposed temporary kerbside changes

Representatives from the Temporary Transport Plan project team met with officers from Cumberland Council on 21 April, 2022 to provide a briefing on the Sydenham to Bankstown Temporary Transport Plan. This included information on the operation of buses to support customers during the closure of the T3 line between Sydenham to Bankstown in the July school holidays.

Temporary kerbside changes near Lidcombe station were proposed to support the bus operation and initial feedback was sought.

The following kerbside changes were proposed to local residents and businesses:

#### Lidcombe

- Create a bus zone on Church Street, southern side, utilising 28 parking spaces (100 metres) currently 45 degree angled parking and signed 2-hour parking 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday.
- Create a bus stop on Church Street, southern side, utilising six taxi spaces (45 metres) currently signed taxi zone.
- Relocate the current taxi zone on Church Street to two locations on the opposite side of Church Street (northern side):
  - utilising three parking spaces near John Street currently signed ½ (half hour)
     8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday
  - utilising four parking spaces (24 metres) currently signed as three spaces unrestricted and one space 2-hour parking 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these two weeks.

#### **Community Consultation**

Community consultation on the proposed temporary parking changes in Lidcombe was undertaken for a two week period between Thursday 28 April 2022 and Thursday 12 May, 2022.

Community notifications were delivered to residents and businesses by a professional distribution company operating under a COVID Safe Plan.

The objective of the consultation was to raise awareness of the proposed temporary parking changes needed to operate additional buses for the planned closure of the T3 Bankstown Line between Sydenham and Bankstown.

Local businesses and residents were asked to provide their feedback to help the project team refine bus operations in and around the station precinct.

The consultation program consisted of the following activities:

- Letter box drop of 596 notifications to businesses and residents within a 200 metres radius of Lidcombe station
- A 24/7 phone number 1800 131 786 to receive feedback, answer any questions and provide the community with more information
- A project web page was created to provide more information, digital copies of the notifications and information about how to provide feedback

Copies of the community consultation materials are available in the Appendices.

#### **Consultation feedback received**

Station precinct	Community feedback received	TfNSW response
Lidcombe	Nil received	Temporary kerbside changes for the July school holiday period are the same as the previous TTP in Dec 21 - Jan 22 with no reported issues.

#### **Consultation outcomes**

TfNSW has prepared submissions to local councils and their traffic committees for the Sydenham to Bankstown Temporary Transport Plan. As part of these submissions, community consultation has been undertaken with local residents and businesses in proximity to the bus zones around stations on the proposed temporary parking changes.

There were no submissions received from the community on the proposed temporary parking changes in Lidcombe during the consultation period of between Thursday 28 April 2022 and Thursday 12 May, 2022.

Based on no feedback, objections or issues raised by local residents and businesses on the temporary parking changes, no further changes to the temporary parking plans are proposed.

#### Appendix A – Community notification for temporary kerbside changes

Community notifications were distributed via letter box drop. An example of the notification is provided below.

#### Lidcombe - 596 community notifications distributed



# Appendix B – Community notification distribution map

# Lidcombe distribution



# Appendix C – Temporary Transport Plan project web page

Community notifications and links for further information were placed online at <a href="http://www.mysydney.nsw.gov.au/SydenhamtoBankstown">www.mysydney.nsw.gov.au/SydenhamtoBankstown</a>

Refer to the screenshot below:

SYDENHA	M TO BANKSTOWN 2022 UPGRAE	DE
🕴 View All Projects	VIEW ON PROJECT SITE	
	T3 SYDENHAM TO BIRRONG TEMPORARY RAIL CLOSURE – Saturday 2 July to Saturday 16 July 2022	MORE INFORMATION
	The NSW Government is delivering Sydney Metro Australia's biggest public transport project extending from Sydney's north west, under Sydney Harbour through new underground city stations and beyond to Bankstown in Sydney's south west.	≱ About Sydney Metro
	The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the reliations is being upgraded and converted to metro standards.	
	The next stage of major work to upgrade the T3 Bankstown Line between Bankstown and Sydenham to metro standards will take place over the July school holiday period, when there are fewer customers on the rail network.	
	The T3 Bankstown Line between Sydenham and Birrong stations will be temporarily closed from 2 Saturday July to Saturday 16 July 2022 for these important upgrade works	
	To keep customers moving, rail replacement bus services will be provided during this period.	
	Consultation with the local community is now open on proposed temporary parking changes to accommodate the additional bus services and keep our customers moving during the upgrade works. View the notifications and maps below for information about the proposed temporary parking changes around your station:	
	Inner West - Consultation open 28 April to 12 May, 2022 • <u>Sydenham</u> • Marrichitle	
	Dutwich Hill	
	Lidcombe	
	Canterbury Bankstown - Consultation open 2 May to 16 May 2022 - Huristone Park - Canterbury - Canterbury - Campsie - Belmore - Lakemba - Wiley, Park - Punchbowli - Bankstown	
	Transport for NSW Will consider any feedback received, and work with the relevant Councils on the changes to temporary parking.	
	Residents and businesses can provide their feedback on the proposed kerbside changes via email at <u>TTPComms@transport.nsw.gov.au</u> or telephone 1800 171 386	
	Final transport plans to keep customers moving during the upgrade will be shared with the community well in advance to give people planty of time to plan ahead	
	For all the latest Sydney Metro project news visit	

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#### Unclassified

Metro Body of Knowledge (MBoK)

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Appendix D – Community Consultation Report – Sydenham to Bankstown Temporary Transport Plan – Proposed temporary kerbside changes - Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury, Hurlstone Park stations – Canterbury Bankstown Council

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Unclassified

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TfNSW54\_Consistency Assessment - Mid year shutdown July 2022\_ final\_1.0

# Community Consultation Report

Sydenham to Bankstown Temporary Transport Plan – Proposed temporary kerbside changes

Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury, Hurlstone Park stations –

**Canterbury Bankstown Council** 

27 May 2022

transport.nsw.gov.au



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#### Introduction

Sydney Metro is Australia's largest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms at Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

As part of the Sydney Metro City and Southwest project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown received planning approval on 19 December 2018. All stations will be fully accessible with lifts and level access between platforms and trains.

The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to metro standards.

The next set of upgrade works will take place between Sydenham and Bankstown stations from Saturday 2 July 2022 to Friday 15 July 2022. This closure has been planned to take place in the July school holidays when there are fewer customers on the rail network.

To keep customers moving, Transport for NSW (TfNSW) is implementing a Sydenham to Bankstown Temporary Transport Plan (TTP) where frequent buses will replace trains during this time. To accommodate these buses and ensure minimal disruption to traffic, some temporary changes to kerbside parking are proposed around stations between Sydenham and Bankstown as well as Bankstown and Lidcombe.

#### **Purpose of this report**

This report provides an overview of community consultation undertaken for temporary kerbside changes around Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park stations which are proposed to support the Sydenham to Bankstown Temporary Transport Plan.

A summary of the feedback received is provided along with any changes that have been made to the Plan in response to feedback,

#### Proposed temporary kerbside changes

Representatives from the Temporary Transport Plan project team met with officers from Canterbury Bankstown Council on 13 April, 2022 to provide a briefing on the Sydenham to Bankstown Temporary Transport Plan. This included information on the operation of buses to support customers during the closure of the T3 line between Sydenham to Bankstown in the July school holidays.

Temporary kerbside changes near Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park stations were proposed to support the bus operation and initial feedback was sought. The following kerbside changes were proposed to local residents and businesses:

#### Bankstown

- Bus Zone extension within the Bankstown Station bus interchange utilising 11 parking spaces (60 metres) currently signed 1-hour between 8.30am and 6.30pm, Monday to Fridays and between 8.30am and 12.30pm on Saturday.
- Bus Zone on West Terrace, eastern side, utilising 13 parking spaces (80 metres) currently signed 2-hour parking between 8.30am and 6.30pm, Monday to Fridays and between 8.30am and 12.30pm on Saturdays.
- Bus Zone on Restwell Street, western side, utilising 25 metres of total space, currently signed no parking zone (18 metres) and 5 minute parking 8.00am to 6.30pm Monday to Friday (7 metres). One space for 5 minute parking will remain in place at the southern end near Stewart Lane.

#### Punchbowl

• The Boulevarde, between Matthews Street and Arthur Street, southern side, utilising two parking spaces (11 metres) currently signed ½ (half hour) parking between 8.30am and 6pm, Monday to Friday and between 8.30am and 12.30pm on Saturdays.

#### Wiley Park

- Create a bus zone on The Boulevarde, northern side, utilising three parking spaces (18 metres) currently signed ½P (half hour parking) between 6am and 7pm, Monday to Friday, and between 9am and 6pm Saturday, Sunday and Public Holidays.
- Extend the existing bus zone on The Boulevarde, southern side, utilising three parking spaces (18 metres) currently signed ½P (half hour parking) between 6am and 7pm, Monday to Friday, and between 9am and 6pm Saturday, Sunday and Public Holidays.

#### Lakemba

- Extend the bus zone on the southern side of The Boulevarde, utilising one 5-minute parking space (7 metres).
- Create a bus zone of the northern side of The Boulevarde, utilising two taxi zone spaces (12 metres). Taxi zone will be relocated to Railway Parade;
- Relocate the taxi zone from The Boulevarde to the southern side of Railway Parade, utilising two parking spaces currently signed ½ (half hour) parking between 8.30am and 6pm Monday to Friday and 8.30am to 12.30pm Saturday.

#### Belmore

- Create a bus standby zone on the northern side of Bridge Road utilising four parking spaces (20 metres) of currently signed unrestricted parking, opposite the leagues club.
- Create a new bus zone on the northern side of Bridge Road by removing two taxi spaces (12 metres).
- Create a new bus zone on the southern side of Bridge Road utilising:
  - Four parking spaces (24 metres) currently signed 2-hour parking between 8.30am and 6pm, Monday to Friday, and 8.30am and 12.30pm, Saturday.
  - One loading zone space (6 metres) between 8.30am and 6pm, Monday to Friday, and between 8.30am and 12.30pm, Saturday.

 Relocate one loading zone space further east on the southern side of Bridge Road between Paragon Lane and Burwood Road, utilising one parking space (7 metres) of 2hour parking between 8.30am and 6pm, Monday to Friday, and between 8.30am and 12.30pm, Saturday.

#### Campsie

#### North Parade

• Create a bus zone on the northern side of North Parade, after Browning Street, utilising thirteen parking spaces (85 metres) of parking currently signed unrestricted parking

#### **Beamish Street**

- Extend the existing bus zone on Beamish Street western side (near Amy Street) utilising three parking spaces (17 metres) currently signed:
  - Two spaces of ½ (half hour) parking between 8.30am and 9.30pm, Monday to Sunday.
  - One loading zone space between 6.30am and 8.30pm, Monday to Sunday.

#### **Duke Street**

- Create two bus zones on the eastern side of Duke Street one zone near South Parade utilising four parking spaces (24 metres) of unrestricted parking, the other near Evaline Street, utilising three parking spaces (21 metres) of unrestricted parking
- Create a bus zone on the western side of Duke Street near South Parade utilising eight parking spaces (58 metres) currently signed No Parking between 8.30am and 9.30am and between 2.30pm and 3.30pm on School Days (11 metres) and unrestricted parking (47 metres)
- Create a bus zone on the western side of Duke Street near Evaline Street, utilising six parking spaces (40 metres) currently signed No Parking 8.30am and 9:30am, and 2:30pm and 3:30pm on School Days.

#### Canterbury

• Create a bus zone on Canterbury Road southern side, near Tincombe Street, utilising nine parking spaces (56 metres) of a clearway zone between 6am and 7pm Monday to Friday and between 9am and 6pm on Saturday, Sunday and Public Holidays.

#### Hurlstone Park

• Extend the no stopping zone on the northern side of Floss Street utilising three parking spaces (20 metres) of unrestricted parking.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these two weeks.

#### **Community Consultation**

Community consultation on the proposed temporary parking changes in Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park was undertaken for a two week period between Monday 2 May 2022 and Monday 16 May, 2022.

Community notifications were delivered to residents and businesses by a professional distribution company operating under a COVID Safe Plan.

The objective of the consultation was to raise awareness of the proposed temporary parking changes needed to operate additional buses for the planned closure of the T3 Bankstown Line between Sydenham and Bankstown.

Local businesses and residents were asked to provide their feedback to help the project team refine bus operations in and around station precincts.

The consultation program consisted of the following activities:

- Letter box drop of 6193 notifications to businesses and residents within a 200 metre radius of Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park stations
- A 24/7 phone number 1800 131 786 to receive feedback, answer any questions and provide the community with more information
- A TfNSW project web page was created to provide more information, digital copies of the notifications and information about how to provide feedback
- Community consultation listed on the NSW Government Have Your Say website.

Copies of the community consultation materials are available in the Appendices.

# TRANSPORT

# **Consultation feedback received**

Station precinct	Community feedback received	TfNSW response
Bankstown	Nil received	Temporary kerbside changes for the July 22 school holiday period are altered from the previous TTP in Dec 21 - Jan 22 (removed South Terrace kerbside changes and introduced Restwell Street kerbside changes).
Punchbowl	Nil received	Temporary kerbside changes for the July 22 school holiday period are the same as the previous TTP in Dec 21 - Jan 22 with no reported issues.
Wiley Park	Nil received	Temporary kerbside changes for the July 22 school holiday period are the same as the previous TTP in Dec 21 - Jan 22 with no reported issues.
Lakemba	Nil received	Temporary kerbside changes for the July 22 school holiday period are the same as the previous TTP in Dec 21 - Jan 22 with no reported issues.
Belmore	Nil received	Temporary kerbside changes for the July 22 school holiday period are the same as the previous TTP in Dec 21 - Jan 22 with no reported issues.
Campsie	Nil received	Temporary kerbside changes for the July 22 school holiday period are altered from the previous TTP in Dec 21 - Jan 22 (removed South Parade kerbside changes and introduced North Parade kerbside changes).
Canterbury	Nil received	Temporary kerbside changes for the July 22 school holiday period are the same as the previous TTP in Dec 21 - Jan 22 with no reported issues.
Hurlstone Park	Nil received	Temporary kerbside changes for the July 22 school holiday period are altered from the previous TTP in Dec 21 - Jan 22 (removed Crinan Street kerbside changes) with no reported issues.

#### **Consultation outcomes**

TfNSW has prepared submissions to local councils and their traffic committees for the Sydenham to Bankstown Temporary Transport Plan. As part of these submissions, community consultation has been undertaken with local residents and businesses in proximity to the bus zones around stations on the proposed temporary parking changes.

There were no submissions received from the community on the proposed temporary parking changes during the consultation period of between Monday 2 May, 2022 and Monday 16 May, 2022.

This was consistent with the previous TTP consultation period in September 2021. Surveying of businesses at that time, found a high awareness of the Sydenham to Bankstown TTP project and the temporary kerbside changes to facilitate bus operations during the school holiday period.

Based on no feedback, objections or issues raised by local residents and businesses on the temporary parking changes, no further changes to the temporary parking plans are proposed.

#### Appendix A – Community notifications for temporary kerbside changes

Community notifications were distributed via letter box drop. Examples of the notifications are provided below.

#### Bankstown - 734 community notifications distributed



#### Punchbowl - 627 community notifications distributed

Transport for NSW 2 May, 2022	Map of the proposed temporary kerbside change
Proposed Temporary Parking	Eititing bus zone ge Propasat parking remoti for bus
Changes	20retetersor
T3 Bankstown Line upgrade work – Punchbowl Station	Station
What is happening?	
The NSW Government is delivering Sydney Metro, Australia's biggest public transport project extending from Sydney's north west, under Sydney Harbour through new underground city stations and beyond to Bankstown in Sydney's south west. The T3 Bankstown Line will remain open for the maiority of construction for the Sydney Metro City	Contraction Contraction Contraction Contraction
and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to metro standards.	and total a start and
The next set of upgrade work will take place between Sydenham and Bankstown from Saturday 2 Judy 2022 to Saturday 16 July 2022. This closure has been planned to take place in the July school holidays when there are fewer customers on the rail network.	the second
To keep customers moving, frequent buses will replace trains during this time. To accommodate these additional buses and ensure minimal disruption to traffic, some temporary changes to parking are proposed around Pounchbow Station.	About Sydney Metro: Sydney Metro: Sydney Metro City & Southwest Sydney Metro is Australia's bigest public transport project. As part of the Sydney Metro City and Sou
What do I need to know?	project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown planning approval on 19 December 2018. All stations will be fully accessible with lifts and level access
From <b>2am Saturday 2 July to 2am Saturday 16 July 2022</b> , the following temporary kerbside change is proposed:	platforms and trains. Work to upgrade the T3 Bankstown Line between Sydenham and Bankstown is underway including cat services and utilities under and statics understate including statics and life.
<ul> <li>The Boulevarde, between Matthews Street and Arthur Street, southern side, utilising two parking spaces (11 metres) currently signed 1/s (half hour) parking between 8.30am and 8pm, Monday Uorhdya and between 8.30am and 12.30pm on Seturdays.</li> </ul>	een voes alle uoniedes works and saaloon uog leudes including saalse alle urites. For more information: <u>Nitry Jwww sydwertoo Info/citysouthwest/sydenham-banktown</u> Simplified Chinese 这次并在省级的东发现公式投资正常项目的重要信息。这家会需要将考察者,该在电解某种将考察有约约,也是131450。要
The proposed temporary parking change will allow for the safe operation of buses and will only be in place during these two weeks. Please see the map on the back of this notification for information about the temporary parking changes.	他们为你接通交通工程部(Transport for NSW),电话是 1800 171 386。作译员会为你数额译, Traditional Chinese 混合文件会合师存在地域公共交通工程项目的重要准备。幼果作需要得获福器,排放電解获得清晰器物质,電話 131 450、要
Provide your Feedback	他們為你接通交通工程部(Transport for NSW),電話是 1800 171 386. 傳譯員會為你做翻譯。
Transport for NSW welcomes community feedback on the proposed change to help refine bus operations in and around the station precinct.	لدقرن فور شکا هوچه المیتران باورنا مورشم شاوع ولنا وجه بشرقه این . بقدتوندیوند باقل افتران کار بوری و تامیران م قویشران هدرمیشت. منابع امدواس هذی 2008 اور دیلاع الدور شرف دون ته شاهه رفته تواصعیه فراهیشی در در دیداهم 2011 فقد و لدغ توطیل و رشان
Provide your feedback by 5pm Monday 16 May 2022 via the following channels: Email: <u>TIPCommsptransport.nsw.gov.au</u> Phone: <u>1800</u> 17 496	
For more information: mysydney.nsw.gov.au/sydenhamtobankstown	May 201 May
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Transport.nsw.gov.au Page	OFFICIAL

#### TRANSPORT

#### Wiley Park - 553 community notifications distributed



#### Lakemba - 718 community notifications distributed

Transport for NSW	Map of the proposed temporary kerbside changes
2 May, 2022	
	Existing bus stop
Proposed Temporary Parking	Proposed parking Care and Care
Changes	remposed for tus zone 3, 3 1 to 1000 mm
T3 Bankstown Line upgrade work – Lakemba Station	The Bauleia
What is happening?	Raiway Pde Lakemba
The NSW Government is delivering Sydney Metro, Australia's biggest public transport project extending from Sydney's north west, under Sydney Harbour through new underground city stations and beyond to Bankstown in Sydney's south west.	and become the second s
The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to metro standards.	The Bardien
The next set of upgrade work will take place between Sydenham and Bankstown from Saturday 2 July 2022 to Saturday 16 July 2022. This closure has been planned to take place in the July school holidays when there are fewer customers on the rain tetwork.	Church State
To keep customers moving, frequent buses will replace trains during this time. To accommodate these additional buses and ensure minimal disruption to traffic, some temporary changes to parking are proposed around Lakemba Station.	Not to scale indicative locations any. About Sydney Metro: Sydney Metro City & Southwest
What do I need to know?	Sydney Metro is Australia's biggest public transport project. As part of the Sydney Metro City and Sout
From 2am Saturday 2 July to 2am Saturday 16 July 2022, the following temporary kerbside changes are proposed:	project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown i planning approval on 19 December 2018. All stations will be fully accessible with lifts and level access b platforms and trains.
<ul> <li>Extend the bus zone on the southern side of The Boulevarde, utilising one 5-minute parking space (7 metres).</li> </ul>	Work to upgrade the T3 Bankstown Line between Sydenham and Bankstown is underway including cabl services and utilities works and station upgrades including stairs and lifts.
<ul> <li>Create a bus zone of the northern side of The Boulevarde, utilising two taxi zone spaces (12 metres). Taxi zone will be relocated to Bailway Parade:</li> </ul>	For more information: https://www.sydneymetro.info/citysouthwest/sydenham-bankstown
<ul> <li>Relocate the taxi zone from The Boulevarde to the southern side of Railway Parade, utilising two parking spaces currently signed ½ (half hour) parking between 8.30am and 6pm Monday to Friday and 8.30am to 12.30pm Saturday.</li> </ul>	Simplified Chinese 这份文学起流音师任成区公共交通工程项目的重要信息,如果的需要件语服务,请服电器译为传读服务机构,电话131.450、要x 他们为你按道交通工程部(Transport for NSW)、电话是 1800.171.388。传译质点为你做翻译。
The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these two weeks. Please see the map on the back of this notification for information about the temporary parking changes.	Traditional Chinese 且否文书会亦作在事成公共交流工程項目的重要信息。如果作要要項源和程,讓軟電調算與傳導和日標構成,電話131450,要 他們為作技過交通工程紙(Transport for NSW),電話是 1800 171 366、傳媒員會為仲貌翻譯,
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Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct.	
Provide your feedback by Snm Monday, 16 May 2022 via the following channels:	May 2022 Print Politik
Email: <u>TTPComms@transport.nsw.gov.au</u> Phone: 1800 171 386	Income Transmitt (MET) (Table 1) a loss of the processing of the p
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#### TRANSPORT

#### Belmore - 446 community notifications distributed



#### Campsie - 910 community notifications distributed



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## Canterbury - 1706 community notifications distributed

Transport for NSW	Map of the proposed temporary kerbside change
2 May, 2022	Proposed parking
Proposed Temporary Parking Change	remove for hus zone Nertin
'3 Bankstown Line upgrade work – Canterbury Station	da and a second second
Vhat is happening?	Mary and the second
he NSW Government is delivering Sydney Metro, Australia's biggest public transport project extending rom Sydney's north west, under Sydney Harbour through new underground city stations and beyond to ankstown in Sydney's south west.	anterbury Station
he T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and outhwest, though some temporary closures are required while the rail line is being upgraded and overted to metro standards.	Timeoniae st
he next set of upgrade work will take place between Sydenham and Bankstown from Saturday 2 July 022 to Saturday 16 July 2022. This closure has been planned to take place in the July school holidays hen there are fewer customers on the rail network.	the months of
a keep customers moving, frequent buses will replace trains during this time. To accommodate these diditional buses and ensure minimal disruption to traffic, some temporary changes to parking are roposed around Canterbury Station.	Not to assert their toget for a long
What do I need to know?	Sydney Metro is Australia's biggest public transport project. As part of the Sydney Metro City and Southwest
rom 2am Saturday 2 July to 2am Saturday 16 July 2022, the following temporary kerbside change is roposed:	project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown receive planning approval on 19 December 2018. All stations will be fully accessible with lifts and level access between platforms and trains.
Create a bus zone on Canterbury Road southern side, near Tincombe Street, utilising nine	Work to upgrade the T3 Bankstown Line between Sydenham and Bankstown is underway including cabling,
parking spaces (56 metres) of a clearway zone between 6am and 7pm Monday to Friday and between 9am and 6pm on Saturday. Sunday and Public Holidays.	For more information: https://www.svdnevmetro.info/citysouthwest/svdenham-bankstown
he proposed temporary parking change will allow for the safe operation of buses and will only be in lace during these two weeks. Please see the map on the back of this notification for information	Simplified Chinese 这句文作他出现你将把起它共见接工程识目的重要信息,现象仿佛是你说服务,编数也能是你你道服务何的,专业131450、要求 他们为你能来见道工程和Transport for NSW, 专动是 1900171380。他说历史为你的翻译,
Jour me temporary parking changes.	Traditional Chinese 建分文社会会由市会地区公共交流工程项目的管理信息,如果你管理课程和准确的管理和保障和准确的问题。●新121450 更少
ransport for NSW velcomes community feedback on the proposed change to help refine bus	他們為你接通交通工程約(Transport for NSW),電話是1800171386. 傳譯員會為你做翻譯。 An-Dio
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## Hurlstone Park - 479 community notifications distributed

2 May, 2022	Property party
Proposed Temporary Parking Change T3 Bankstown Line upgrade work - Hurlstone Park Station What is happening? The NSW Government is delivering Sydney Metro, Australia's biggest public transport project extending from Sydney's north west, under Sydney Metrow through new underground city stations and beyond to Backstrown in Storkey's could west.	Allega and and and and and and and and and an
The T3 Bankstown Line will remain open for the majority of construction for the Sydney Metro City and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to there to standards. The next set of upgrade work will take place between Sydenham and Bankstown from Saturday 2 July Southwest place to tandards. To keep oustomers moving, frequent bases will replace trains during this time. To accommodate these additional buses and ensure minimal diaruption to traffic, some temporary changes to parking are proposed around Huristome Park Station. What do I need to know? Fron 2am Saturday 2 July to 2am Saturday 16 July 2022, the following temporary kerbside change is proposed around Huristome Park Station. • Extending no stopping zone on the northern side of Floss Street utilising three parking space. (20 metro) of unrestricted parking. The proposed temporary parking change will allow for the safe operation of buses and will only be in place during these two weeks. Places eet the map on the back of this notification for information south the targory parking change will allow for the safe operation of buses and will only be in place during these two weeks. Places eet the map on the back of this notification for information south the temporary parking indange. <b>Provide your Feedback</b> Transport for NSW welcomes community feedback on the proposed change to help refine bus pervision and around the station precinct. <b>Provide your feedback by 5pm Monday</b> , <b>16 May 2022</b> via the following channels: <b>Email: <u>TPCommeditereapport now govau</u> From the information: <u>myoydney, new govau</u> <del>find your for more information: <u>myoydney, new govau</u> <del>find your for more information: <u>myoydney, new govau</u> <del>find your for more information: <u>myoydney, new govau</u> <del>find your find your find your find your find your find y</del></del></del></del></b>	<image/> <section-header><section-header><section-header><section-header><text><text><text><text><text><text></text></text></text></text></text></text></section-header></section-header></section-header></section-header>
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# Appendix B – Community notification distribution maps



# Punchbowl distribution



## Wiley Park distribution



# TRANSPORT

#### Lakemba distribution



# Belmore distribution



# Campsie distribution



# TRANSPORT

# Canterbury distribution



Hurlstone Park distribution



# Appendix C – Temporary Transport Plan project web page

Community notifications and links for further information were placed online at <a href="http://www.mysydney.nsw.gov.au/SydenhamtoBankstown">www.mysydney.nsw.gov.au/SydenhamtoBankstown</a>

Refer to the screenshot below:

SYDENHA	M TO BANKSTOWN 2022 LIPGRAF	
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	HTTO DAILANTO WILLEVEL OF GIVE	
View All Projects	VIEW ON PROJECT SITE	
	T3 SYDENHAM TO BIRRONG TEMPORARY RAIL CLOSURE – Saturday 2 July to Saturday 16 July 2022	MORE INFORMATION
	The NSW Government is delivering Sydney Metro Australia's biggest public transport project extending from Sydney's north west under Sydney Harbour through new undersmaled - its delines and Keunord to Restrictions in Sudney a cality west	≽ ⊥bout Sydney Metro
	onen groene og seven siere er jene er benezenne her sieren i sjeneg soon moor. The TT Bank-tend film vill andere en faster andere i state af andere faster in tender.	
	Sydney Metro City and Southwest, though some temporary closures are required while the rail line is being upgraded and converted to metro standards.	
	The next stage of major work to upgrade the 73 Bankstown Line between Bankstown	
	and Sydenham to metro standards will take place over the July school holiday period. When there are fewer customers on the rail network.	
	The T3 Bankstown Line between Sydenham and Birrong stations will be temporarily closed from 2 Saturday July to Saturday 16 July 2022 for these important upgrade works	
	To keep customers making, reli replacement bus services will be provided during this period.	
	Consultation with the local community is now open on proposed temporary parking changes to accommodate the additional bus services and keep our customers moving during the upgrade works. View the notifications and maps below for	
	information about the proposed temporary, parking changes around your station:	
	Inner West - Consultation open 28 April to 12 May 2022	
	Marrichille     Dukrich Hill	
	Cumberland - Consultation open 20 April to 12 May 2022	
	Lidcombe	
	Canterbury Bankstown - Consultation open 2 May to 16 May 2022	
	Huristone Park     Castedruck	
	Campsie	
	Belmore	
	<ul> <li>Laxemba</li> <li>Witey Park</li> </ul>	
	Punchbowl	
	<u>Bankstown</u>	
	Transport for NSW will consider any feedback received, and work with the relevant Councils on the changes to temporary parking.	
	Residents and businesses can provide their feedback on the proposed kerbside changes via email at <u>TTPComms@transport.nsw.gov.av</u> or telephone 1000 171 306	
	Final transport plans to keep customers moving during the upgrade will be shared with the community well in advance to give people planty of time to plan ahead	
	For all the latest Sudney Metro project news with	
	ver an die ratestrakeliek mener brokentigeweinen.	

#### Appendix E – NSW Government Have Your Say website

Sydenham to Bankstown TTP Community Consultation listed on NSW Government Have Your Say website Sydenham to Bankstown TTP | NSW Government

Home > Have your say > Sydenham to Bankstown TTP

# Sydenham to Bankstown TTP

Transport for NSW (TfNSW) seeks your feedback on the Sydenham to Bankstown temporary transport plan (TTP) to support the Metro City and Southwest project.



Consultation period From: 2 May 2022 To: 16 May 2022

See consultation methods

More information Email: Project team Phone: 1800 171 386 Agency Website Consultation Website

#### What's this about?

Sydney Metro is Australia's largest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms at Central.

As part of the Sydney Metro City and Southwest project, the upgrade of the T3 Bankstown Line to metro standards between Sydenham and Bankstown received planning approval on 19 December 2018. All stations will be fully accessible with lifts and level access between platforms and trains.

The T3 Bankstown Line will stay open throughout most of the construction for the Sydney Metro City and Southwest, although some temporary closures are required while the rail line is being upgraded and converted to Metro standards.

The next set of upgrade works will take place between Sydenham and Bankstown stations from Saturday 2 July 2022 to Saturday 16 July 2022. This closure is planned to take place in the July school holidays when there are fewer customers on the rail network.

TfNSW will operate the Sydenham to Bankstown Temporary Transport Plan (TTP), where buses will replace trains during this time. To accommodate these buses and ensure minor disruption to traffic, some temporary changes to kerbside parking are proposed around stations between Sydenham and Bankstown, as well as Lidcombe, and Central.

#### Have your say

Have your say by Monday 16 May 2022.

There are two ways your can submit your feedback listed below.

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