ARUP

Sunshine Coast Airport

Sunshine Coast Airport - Traffic Impact Assessment

Airport North Precinct Traffic Impact Assessment

Reference: 307887-00 Sunshine Coast Airport Airport North Precinct Traffic Impact Assessment

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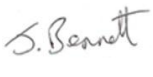
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1. Executive Summary

This Traffic Impact Assessment (TIA) has been prepared by Arup on behalf of Sunshine Coast Airport (SCA), with input from Sunshine Coast Council (SCC), to support the Precinct Master Plan (PMP) submission for the Airport North Precinct (i.e. Precinct 5, consisting of sub-precincts 5A and 5B), refer Figure 1-1. The assessment provides a holistic evaluation of the traffic and transport implications of the Sunshine Coast Airport Priority Development Area (PDA). The TIA responds to requirements of the Sunshine Coast Airport Priority Development Area Development Scheme (the Development Scheme), which came into effect in September 2024 following the PDA declaration in June 2023. The TIA has been prepared taking into account SCC input into traffic and transport implications.



Figure 1-1: SCA PDA Precinct Plan (Source: Sunshine Coast Airport Priority Development Area Scheme, 2024)

The TIA incorporates the QLD Government announcements, including the introduction of *"The Wave"* high-frequency transit corridor and the planned duplication of the Sunshine Motorway. These initiatives, while external to the PDA, are expected to significantly influence travel behaviour and network performance from 2032.

The SCA PDA covers approximately 460 hectares and sets the framework for a world-class aviation and employment precinct. This assessment evaluates the staged implementation of the Development Scheme by analysing the cumulative transport impacts arising from planned and proposed development across the Gateway, Airport North, and Aerospace Precincts, as well as forecast increases in passenger volumes through the SCA Aviation terminal.

1.1 Purpose and approach

This TIA supports the submission of the PMP for the Airport North Precinct and identifies the potential impact of the PDA development traffic on the surrounding road network and road safety. The assessment has been informed by traffic modelling that aligns with the requirements of the Department of Transport and Main Roads (TMR) *Guide to Traffic Impact Assessment* (GTIA, 2018). The mitigation measures identified in this report reduce the impacts on the surrounding community and road network in alignment with the allowances within the guidelines.

This TIA forms part of a suite of documents being prepared to support the Airport North Precinct PMP submission.

1.2 Strategic context

Sunshine Coast Airport (SCA) is located approximately 10 km north of the Maroochydore City Centre and serviced over 1.7 million airline passengers in FY2025. The Aviation terminal is accessed via David Low Way, North Shore Connection Road and Airport Drive, all of which connect to the Sunshine Motorway, providing regional access across the Sunshine Coast.

The SCA PDA Development Scheme regulates land use and development within the PDA and aims to catalyse economic growth, improve connectivity, and support airport operations.

The SCA PDA boundary is shown in Figure 1-2.

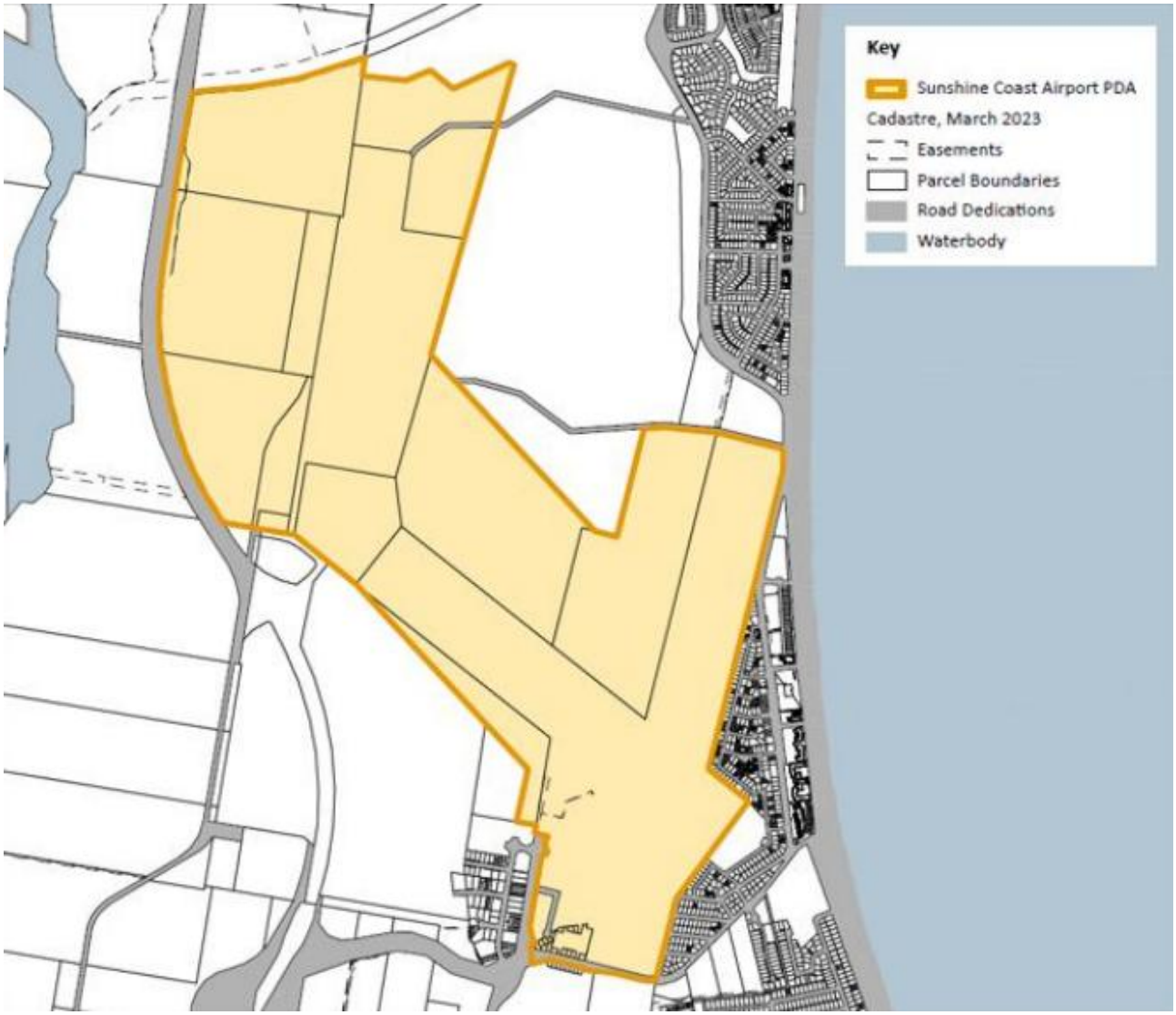

Key
Sunshine Coast Airport PDA
Cadastre, March 2023
Easements
Parcel Boundaries
Road Dedications
Waterbody

Figure 1-2: SCA PDA boundary map (Source: SCA PDA Development Scheme, 2024)

1.3 Existing and future transport infrastructure

1.3.1 Existing transport infrastructure

Existing transport infrastructure, internal and external to the Airport, is shown in

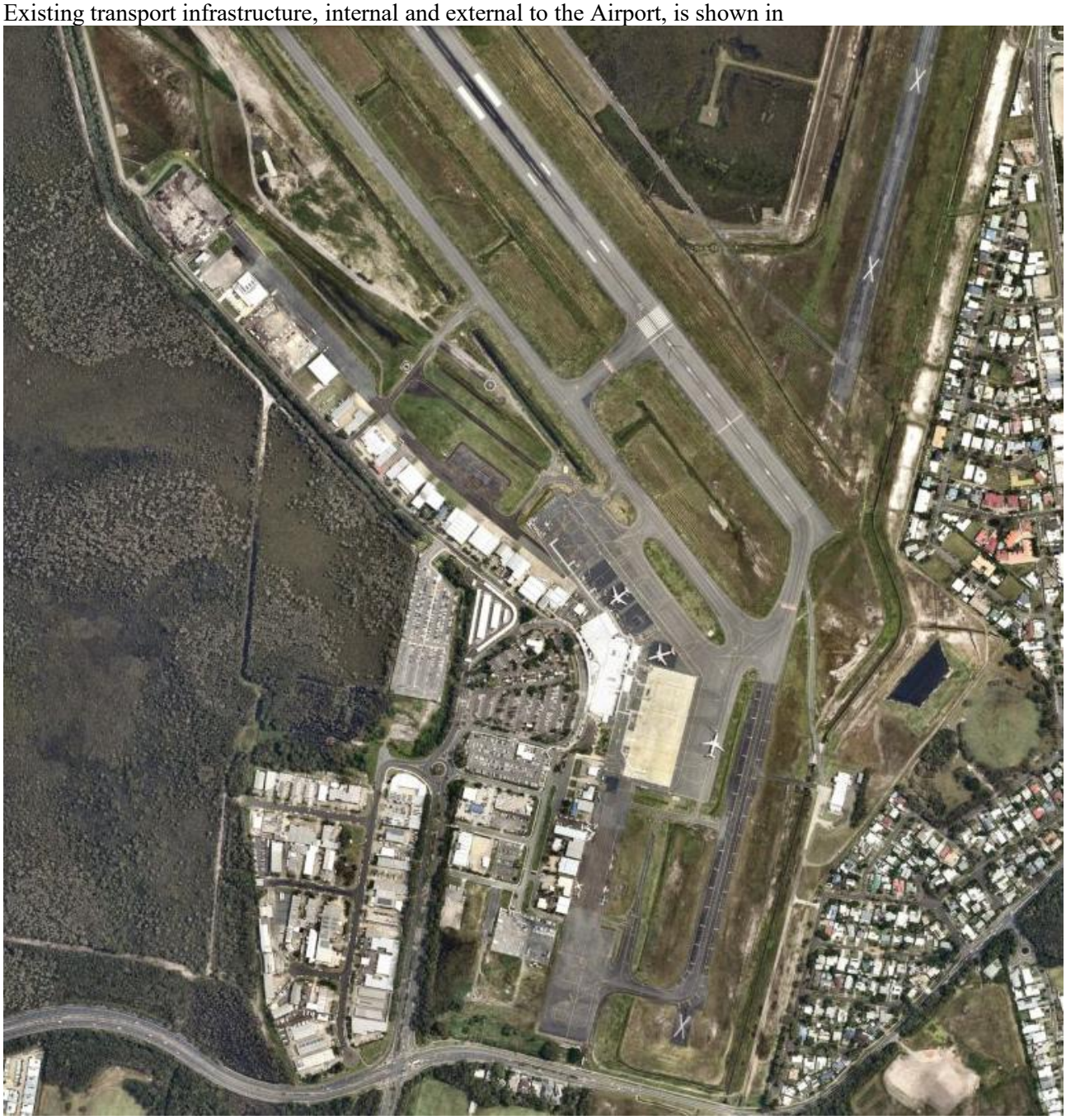


Figure 1-3. This highlights:

- Public transport stops;
- Principal cycle network; and
- Existing airport-controlled passenger parking areas.

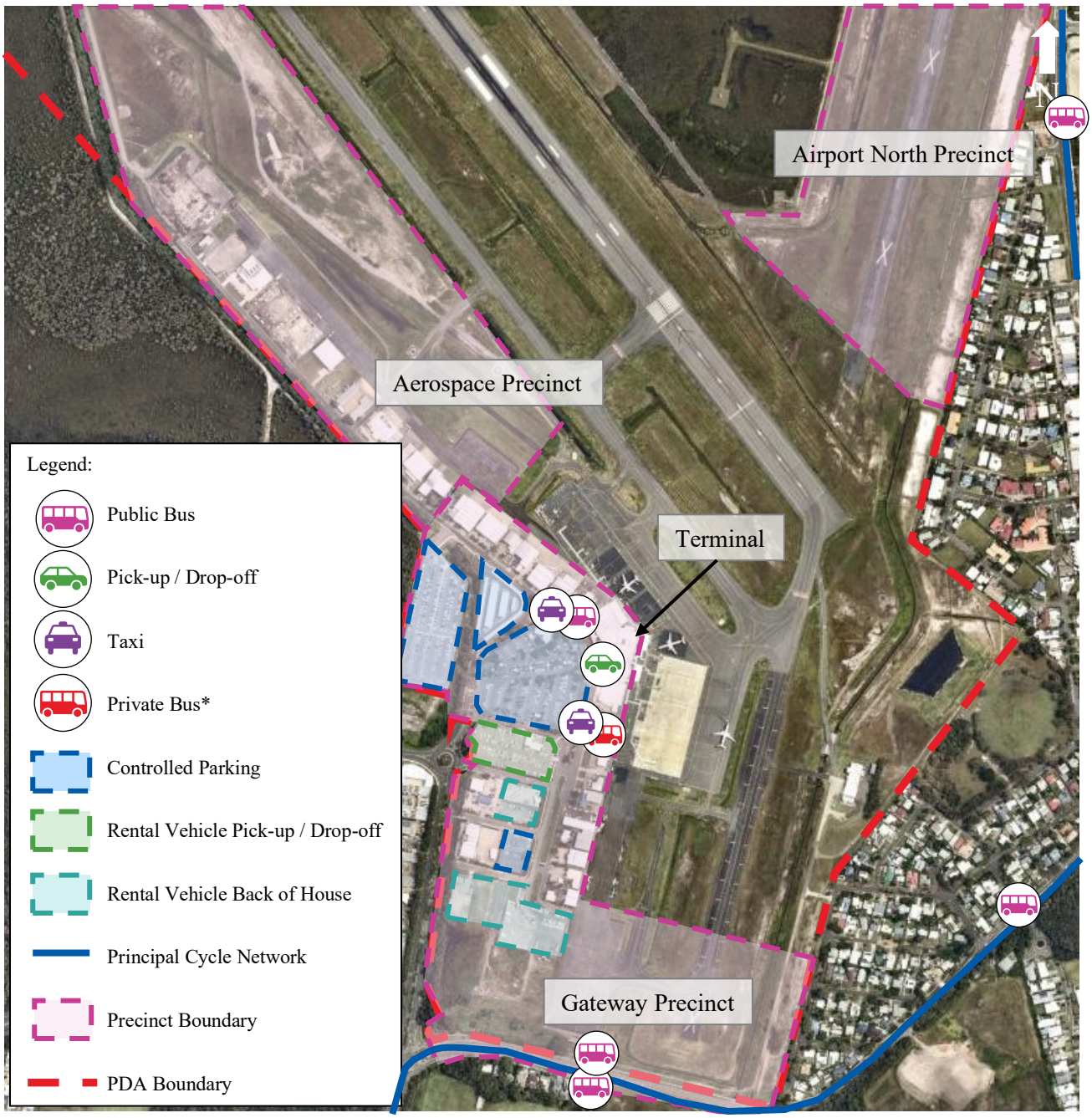


Figure 1-3: Existing transport infrastructure

*Private bus parking has temporarily relocated due to the Terminal expansion construction

1.3.2 Future transport infrastructure

Planning is underway for several transport projects on the Sunshine Coast that will provide better connectivity and access throughout the region. Projects within the vicinity of SCA that will influence the travel patterns of the residents and visitors in the area are:

- "The Wave" – a high frequency rail and bus rapid transit (BRT) line connecting Beerwah to SCA. Heavy rail will be provided between Beerwah and Birtinya where there will be an interchange to connect to the 'Metro-style' BRT. The BRT will extend the mass public transit infrastructure from Birtinya to the SCA. "The Wave" will increase the frequency and capacity of public transport around SCA and the broader Sunshine Coast region, as shown in Figure 1-4. "The Wave" is being delivered by the QLD Government with targeted completion prior to the 2032 Brisbane Olympics.
- Sunshine Motorway – new south-facing motorway ramps at West Coolum Road will be provided as well as a new interchange at Yandina Coolum Road and duplication of the motorway from David Low Way to Yandina Coolum Road, as shown in Figure 1-5. These upgrades will provide additional capacity to the

road network and improved access to the motorway. No timing on the completion of the Sunshine Motorway upgrades is available, however these were included in the endorsed regional traffic model for 2031.

These upgrade projects are reflected in the regional modelling assumptions included in this TIA.

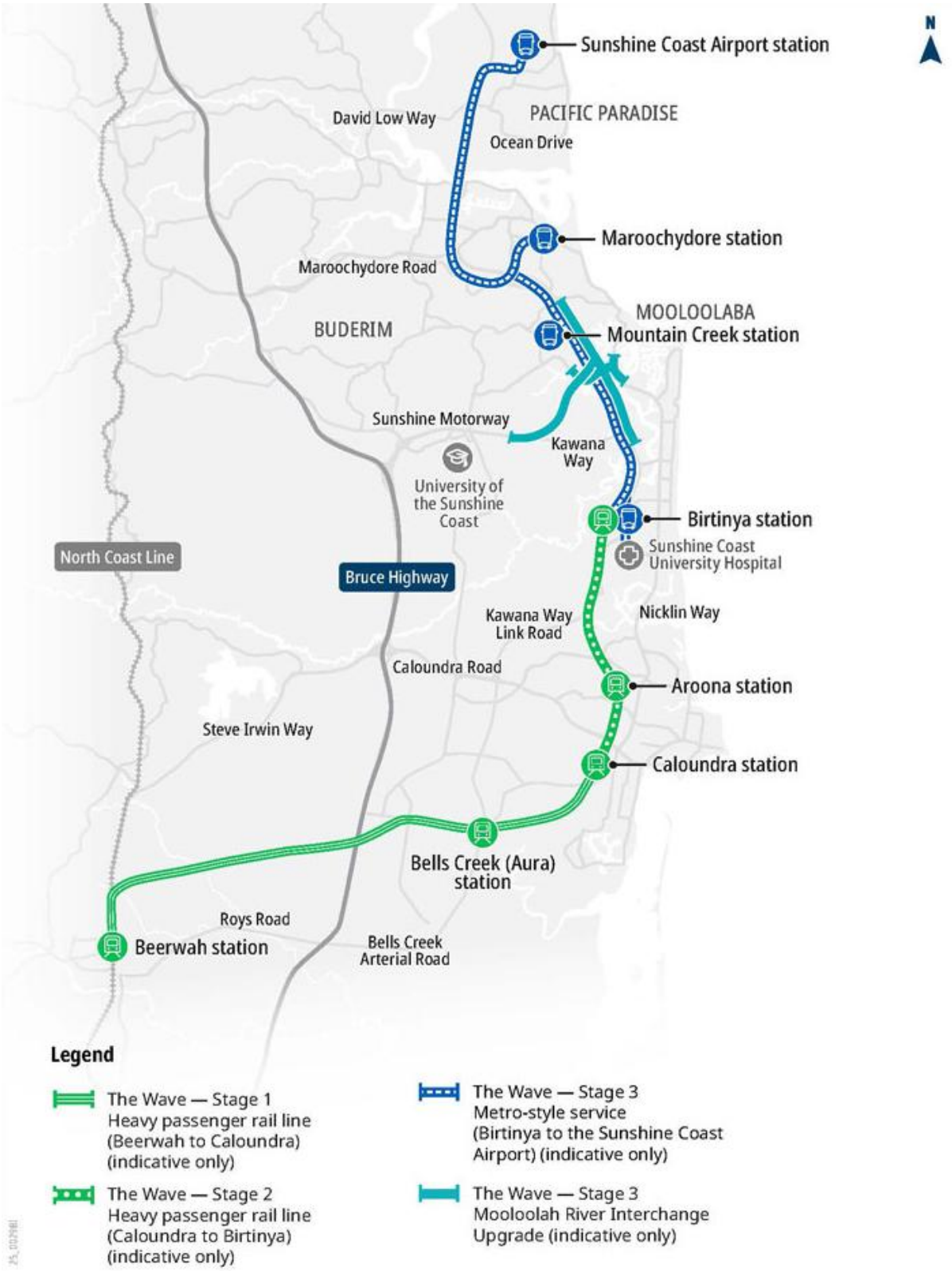


Figure 1-4: "The Wave" location map (Source: TMR, 2025[1])

[1] https://www.tmr.qld.gov.au/projects/the-wave-stages-1-and-2-rail

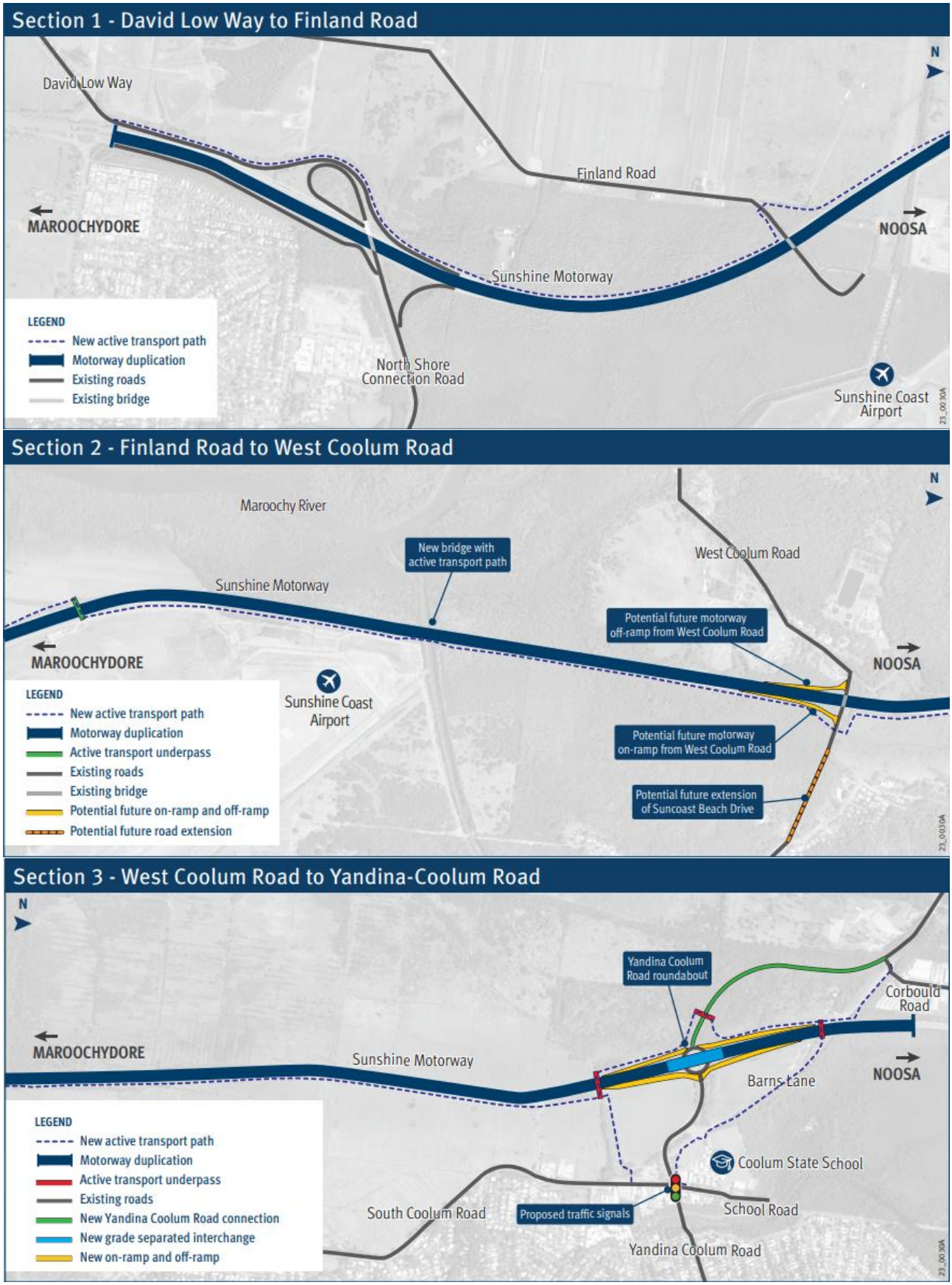


Figure 1-5: Sunshine Motorway upgrade project area (Source: TMR, 2024[2])

[2] https://www.tmr.qld.gov.au/projects/sunshine-motorway-mooloolaba-peregian-david-low-way-to-yandina-coolum-road

1.4 PDA development

The aim of the PDA Development Scheme is to support the long-term passenger growth and operations of the airport while enabling economic growth opportunities through land use diversification, which aligns with the aim to create a modern competitive airport. The development will generate traffic, which has the potential to impact the external road network. The development scheme requires these impacts to be mitigated in line with TMR guidelines. The proposed land uses of the airport include an expanded range of aviation, aerospace business, employment and tourism opportunities to promote the region and attract investment.

A summary of the proposed land uses across the PDA is provided in Table 1-1.

Table 1-1: SCA PDA land use mix

Land use	Scale
GATEWAY PRECINCT	
Accommodation	
Short term accommodation	250 rooms
Retail	
Service station	240m^2 GFA
Food and drink	800m^2 GFA
Fast food (major)	600m^2 GFA
Fast food (minor)	200m^2 GFA
Aircraft sales and service	1,100m^2 GFA
Car wash	6 bays (2 automatic, 4 manual)
Supermarket (limited line)	1,500m^2 GFA
Specialty shops	1,100m^2 GFA
Commercial / Mixed Use	
Office / Education / Research and technology industry / service industry / Air services	19,850m^2 GFA
Health care	1,250m^2 GFA
Industrial	
Cold storage based freight forwarding facility	2,500m^2 GFA
Light industry (Low impact industry, research and technology industry, service industry and warehouse)	19,000m^2 GFA
Other	
Child care centre	150 children (1,400m^2 GFA)
Indoor recreation	500m^2 GFA
Tourism attraction	1,900m^2 GFA
AIRPORT NORTH PRECINCT	
Accommodation	

Land use	Scale
Short term accommodation	300 rooms
Resort accommodation	300 rooms
Retirement living	250 rooms
Retail	
Food and drink / Specialty shops	5,778m^2 GFA
Bulky goods retail	1,118m^2 GFA
Commercial and industrial	
Office	776m^2 GFA
Light industry (Low impact industry, research and technology industry, service industry and warehouse)	33,886m^2 GFA
Other	
Indoor Recreation	2,012m^2 GFA
AEROSPACE PRECINCT	
Commercial and industrial	
Light industry	25,000m^2 GFA

1.5 Access and network integration

Access to the SCA PDA is proposed via five access intersections with four on David Low Way. These are:

- The existing North Shore Connection Road / David Low Way / Airport Drive signalised intersection.
- A new signalised intersection on David Low Way, approximately 400m east of Airport Drive.
- A new priority-controlled intersection on Airport Drive at Electra Lane.
- The addition of a fourth leg to the David Low Way / Green Turtle Place intersection (currently unsignalised but required to be signalised by adjacent residential development).
- A new priority-controlled left-in / left-out (LILO) intersection on David Low Way, approximately 550m north of Green Turtle Place.

No internal roads are proposed to connect the Airport North Precinct to the other PDA precincts internal roads.

1.5.1 Gateway Precinct

The Gateway Precinct will have access via the existing North Shore Connection Road / David Low Way / Airport Drive signalised intersection as well as a new signalised intersection on David Low Way, approximately 400m to the east of Airport Drive. Provision has been made for a future connection from David Low Way to Mudjimba Beach Road, located as a fourth leg to the proposed David Low Way / Gateway Precinct Access signalised intersection. The timing of the provision of this connection assumed to be prior to the connection into the Gateway Precinct. The modelled intersection configuration for the Gateway Precinct is shown in Figure 1-6.

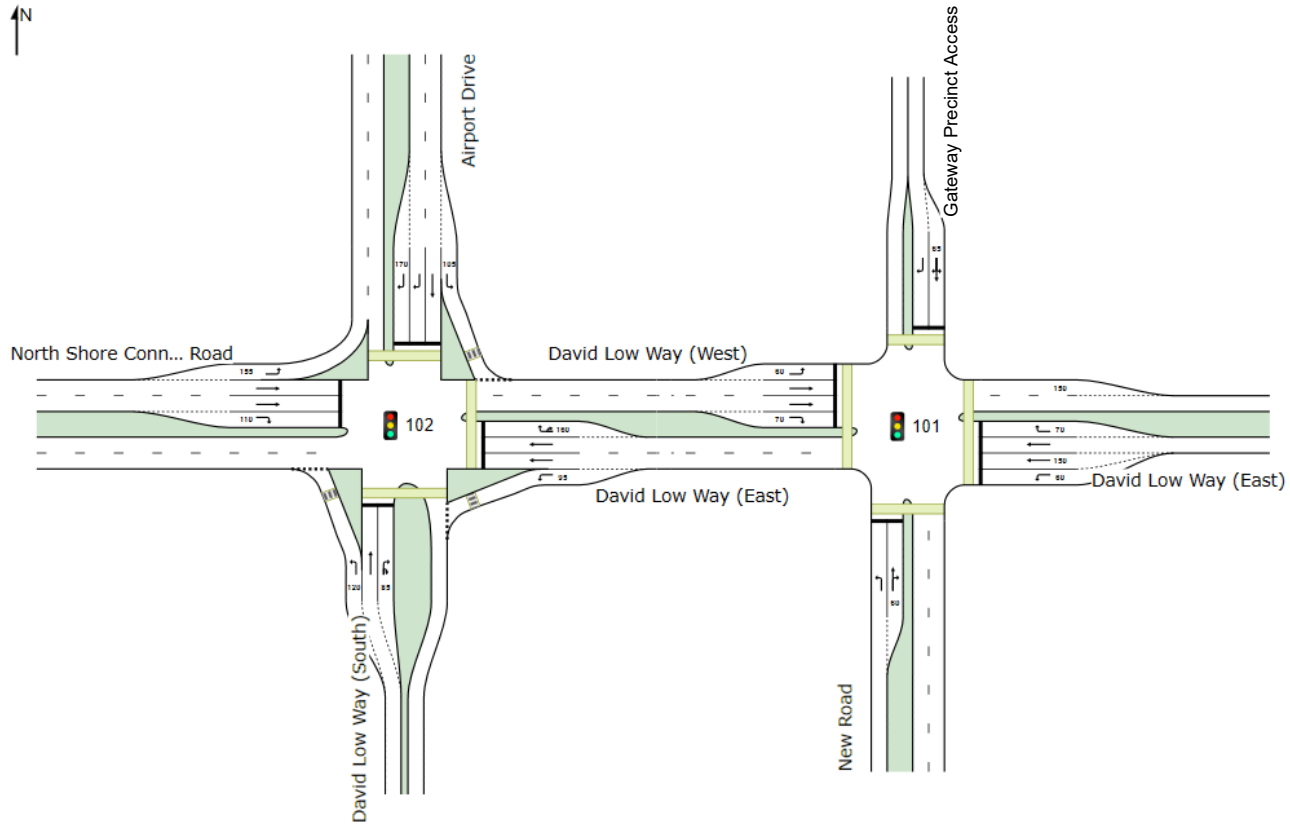


Figure 1-6: Gateway Precinct access

1.5.2 Airport North Precinct

The Airport North Precinct is proposed to be primarily accessed via the addition of a fourth leg to the David Low Way / Green Turtle Place intersection. It is assumed that the David Low Way / Green Turtle Place intersection will be signalised prior to the commencement of development of the Airport North Precinct. The proposed intersection configuration for the main Airport North Precinct access is shown in Figure 1-7.

Additionally, there is proposed to be a LILO intersection access at the northern end of the Airport North Precinct. The proposed intersection configuration for the Airport North Precinct northern LILO access is shown below in Figure 1-8.

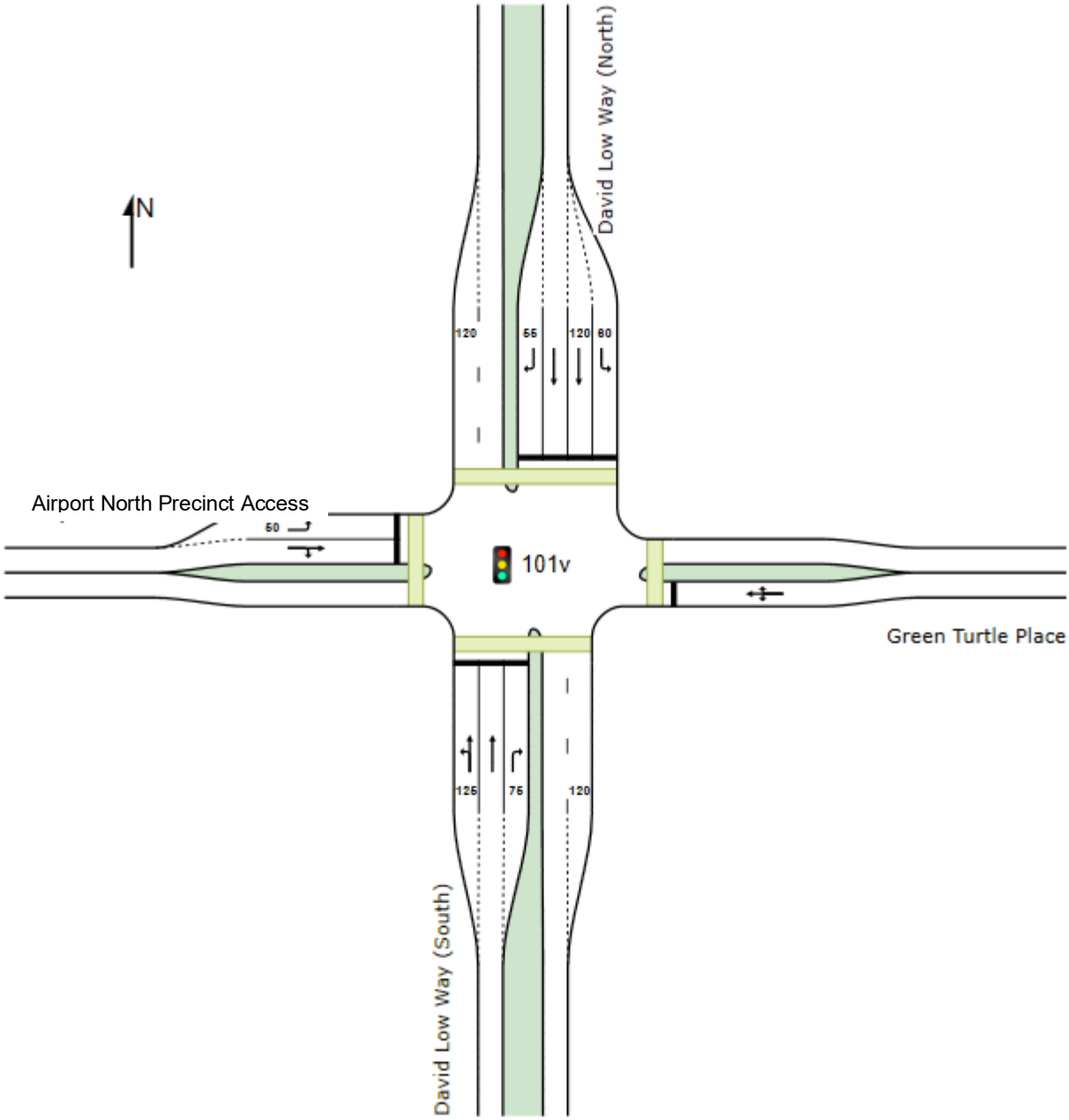


Figure 1-7: Airport North Precinct main access

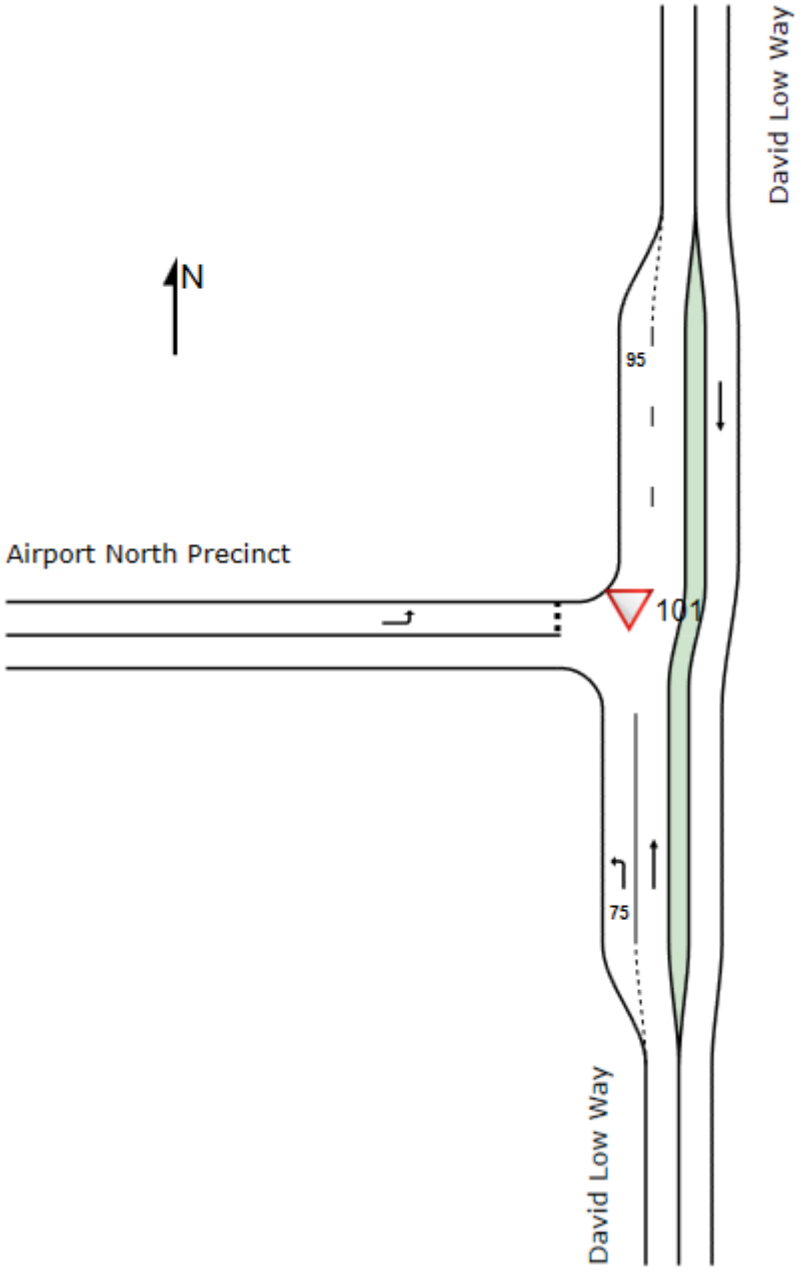


Figure 1-8: Airport North Precinct northern LILO access

1.6 Assessment key findings

1.6.1 Trip generation

Trip generation for both the interim GAP (Gateway and Aerospace Precinct only) and Full Masterplan scenarios have been calculated using trip generation rates from various sources, including the ITE Trip Generation Manual, DTMR trip generation data, and the Transport for NSW Guide to Transport Impact Assessment. These trip generation rates are consistent with the rates adopted for the previous Gateway Precinct TIA.

Using these rates, the Gateway and Aerospace Precincts are expected to generate approximately 1,375 trips and 1,450 trips in the weekday AM and PM peak hours respectively. The Full Masterplan is projected to generate approximately 2,950 and 3,225 trips in the weekday AM and PM peaks respectively. The Sunshine Coast is currently a heavily car dependent area with limited public transport available to / from and surrounding the SCA. The modal split for the Gateway, Aerospace and Airport North Precincts reflects this car dependency however, allowances in the trip generation have been made to account for the planned delivery of “The Wave”.

1.6.2 Sunshine Coast Council Regional Model

Subnetwork traffic models of the SCA and surrounding network were calibrated by SCC and provided to Arup for use for this TIA. These subnetworks were cordoned from SCC's VISUM simulation-based assignment (SBA) regional model. The model incorporates planned future infrastructure upgrades, such as the Sunshine Motorway upgrades described in Section 1.3.2, and forecasts of traffic growth on the surrounding state and local controlled road network based on expected future population growth and land use changes through 2041.

1.6.2.1 External road infrastructure upgrades

The future year models provided by SCC assumed several road infrastructure upgrades will be in place by 2031. The key future road upgrades include:

- New south facing ramps connecting West Coolum Road with the Sunshine Motorway. These are a TMR / SCC commitment and proposed to be operational by 2028.
- New grade separated interchange at Sunshine Motorway / Yandina Coolum Road. This is a TMR project with the business case currently underway. There is no current commitment on timing, but this is included in the base 2031 model from SCC.
- New road network for Twin Waters West development which will be accessed through additional intersection legs at David Low Way / Ocean Drive and Stillwater Drive / Esperance Drive. These intersection and road network upgrades have been commenced by Stockland and is estimated to be completed in 2026-2027.
- New road near North Shore Multisports connecting David Low Way and Mudjimba Beach Road. This is a SCC-led connection in the Local Government Infrastructure Plan and there is no current commitment on timing of provision, but this is included in the base 2031 model from SCC.

These assumptions were carried over into all future scenarios modelled for this assessment.

1.6.2.2 Background (surrounding) traffic growth

Background traffic growth has been calculated using the 2031 and 2041 demand matrices provided. For the 2034 scenarios, the surrounding growth was calculated through linear interpolation between 2031 and 2041 demand matrices. This growth was then used to extrapolate from 2041, to calculate the 2044 demand matrices.

1.6.3 Traffic impact

The access and frontage impact and network delay assessments identified moderate development impacts to the network due to the SCA PDA. Overall network delays are expected to increase by 6.31% as a result of the Gateway and Aerospace Precincts and 28.30% (relative to the Gateway and Aerospace Precincts) as a result of the Full Masterplan. All access intersections are expected to operate within acceptable limits. Impacts are expected to be mitigated by targeted mitigation measures, as outlined in Section 1.7.1.

1.6.4 Road safety

The road safety assessment identified a number of safety issues at the assessed intersections. These included:

- Increased turning volumes as a result of the development increasing the potential for head-on and angle collisions between vehicles.
- Lack of adequate pedestrian and cycling infrastructure.
- Insufficient crossing facilities increasing jaywalking likelihood and increased risk of collisions between pedestrians and vehicles.

These road safety findings have been addressed through the development and the mitigations proposed outlined in Section 1.7.2.

1.7 Recommendations and mitigations

1.7.1 Traffic impact

To mitigate the potential estimated impacts of the Gateway and Aerospace Precincts on the surrounding road network, the following upgrades are recommended:

- Signalisation of the David Low Way / Mudjimba Esplanade intersection, as shown in Figure 1-9.
- To mitigate the impacts of the Full Masterplan beyond the mitigation measures identified for the Gateway and Aerospace Precincts, the following upgrades are proposed:
  - Increasing the length of the short lane to 50m and adjustment of the lane allocation on the western leg to have a full-length right turn lane and short all-movements lane at the David Low Way / Green Turtle Place / Airport North Access intersection, as shown in Figure 1-10.

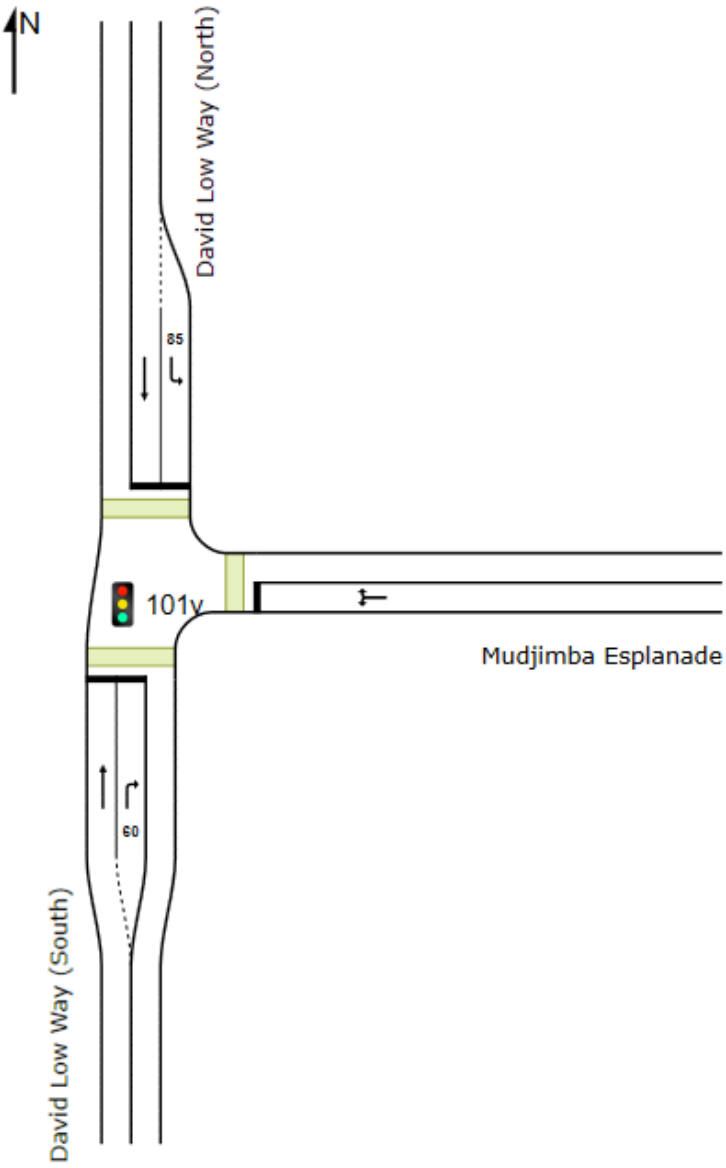


Figure 1-9: Upgraded David Low Way / Mudjimba Esplanade intersection

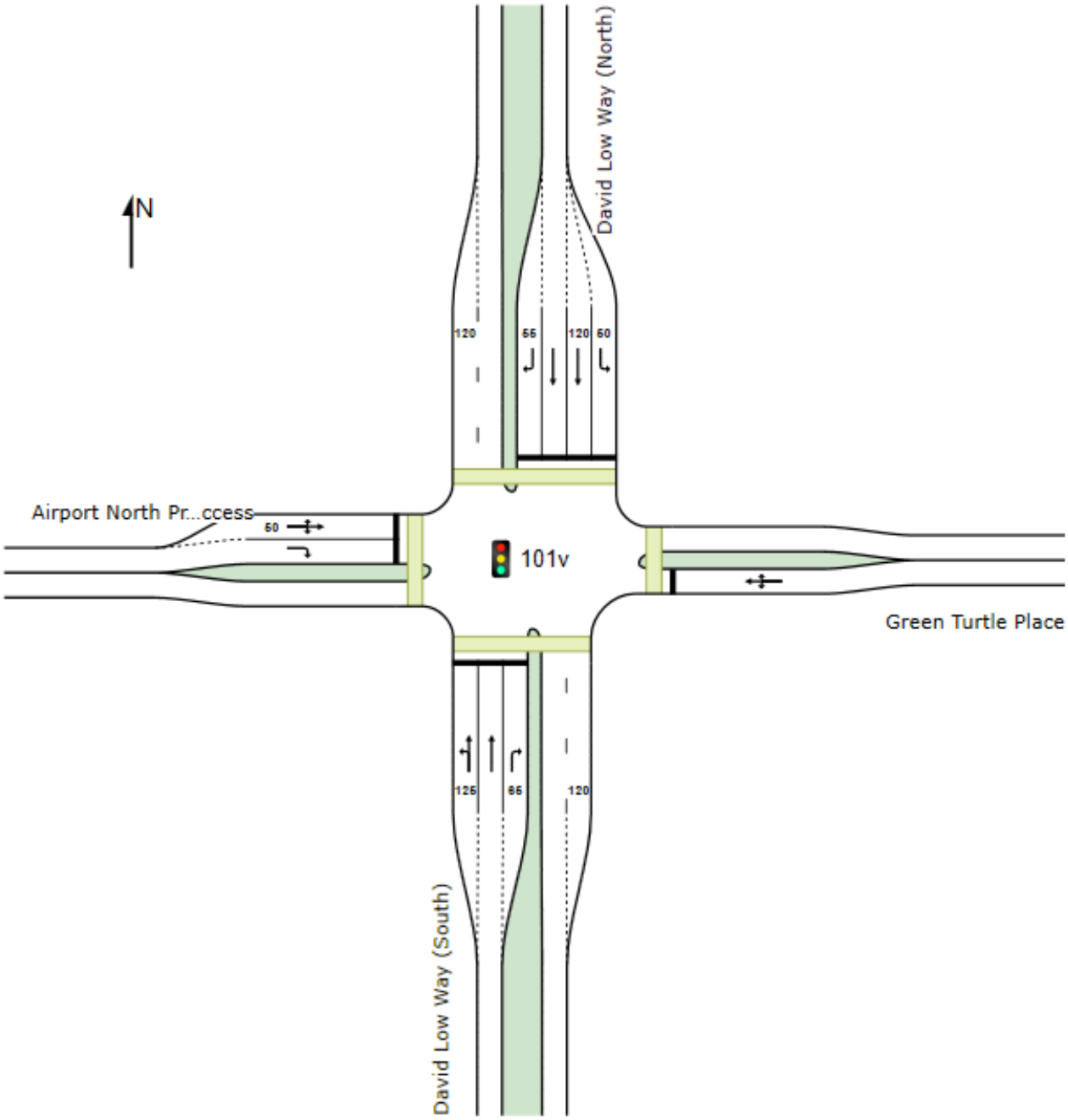


Figure 1-10: Upgraded David Low Way / Green Turtle Place / Airport North Precinct Access intersection

With the inclusion of these proposed upgrades, overall network delays are expected to increase by 6.20% as a result of the Gateway and Aerospace Precincts and 6.52% as a result of the Full Masterplan. These do not satisfy the no net worsening criteria set out in TMR's GTIA.

A mitigation measure optioneering assessment was undertaken to identify potential other mitigation measures to bring the no net worsening down to below a 5% increase. The assessment identified potential upgrades at two intersections. These upgrades are:

- Yandina Coolum Road / South Coolum Road / School Road
  - Upgrade option 1: Conversion of the left turn lane on the southern leg into a left turn slip lane with two-phase signalisation for pedestrians.
  - Upgrade option 2: Addition of a short second right turn lane on the western leg and corresponding short second exit lane on the southern leg.

- David Low Way / Sunshine Motorway Ramps
  - Upgrade option 1: Addition of roundabout metering signals.
  - Upgrade option 2: Provision of a second circulating lane on the eastern side of the roundabout and reallocation of lane movements on the northern approach.

The potential mitigation measures were assessed under eight scenarios testing different combinations of the mitigation measures. Table 1-2 outlines the results of the mitigation measure optioneering exercise and demonstrates that any combination of the additional potential mitigation measures limits the delay increase to less than 5%, consistent with the requirements of TMR's GTIA. Under some combinations of upgrades, the net intersection delay is improved from the base case scenario (i.e. there is less delay across the impact assessment area than prior to the Airport development).

Table 1-2: Net intersection delay results for additional mitigation measure optioneering

Scenario	Upgrades provided at GAP	Upgrades provided at MP	GAP increase in delay	MP increase in delay
1	Yandina Coolum Road Option 1	Sunshine Motorway Ramps Option 1	2.20%	3.01%
2	Sunshine Motorway Ramps Option 1	Yandina Coolum Road Option 1	1.36%	3.86%
3	Yandina Coolum Road Option 2	Sunshine Motorway Ramps Option 1	-0.14%	2.03%
4	Sunshine Motorway Ramps Option 1	Yandina Coolum Road Option 2	1.36%	0.52%
5	Yandina Coolum Road Option 1	Sunshine Motorway Ramps Option 2	2.20%	4.64%
6	Sunshine Motorway Ramps Option 2	Yandina Coolum Road Option 1	3.64%	3.19%
7	Yandina Coolum Road Option 2	Sunshine Motorway Ramps Option 2	-0.14%	3.70%
8	Sunshine Motorway Ramps Option 2	Yandina Coolum Road Option 2	3.64%	-0.08%

1.7.2 Road safety

A road safety impact assessment has been carried out to identify the existing safety risks in the study area and any new or modified risks that result from the Gateway and Aerospace Precincts and Full Masterplan. This assessment has identified the need to implement the following mitigation measures:

- Signalisation of the David Low Way / Mudjimba Esplanade intersection to reduce the likelihood of head-on and angle crashes between vehicles, as there is a history of crashes at this intersection.
- Provision of signalised crossings on all legs of the David Low Way / Mudjimba Esplanade upgraded intersection to provide safe crossing opportunities for pedestrians across David Low Way and Mudjimba Esplanade.

1.8 Conclusion

This traffic impact assessment confirms that the SCA PDA can be developed in a manner that maintains the safety, efficiency, and resilience of the surrounding road network, provided that mitigation measures are delivered in alignment with the staging of development. The proposed upgrades will ensure that the PDA supports regional economic, environmental, and mobility outcomes as the Sunshine Coast continues to grow.

2. Introduction

Arup has been engaged by Sunshine Coast Airport (SCA) to examine the traffic implications of the development of the Sunshine Coast Airport, including the Gateway Precinct, Airport North and Aerospace Precincts and growth in aviation passengers, as a requirement of the *Sunshine Coast Airport Priority Development Area Development Scheme (Development Scheme, 2024)* at the Sunshine Coast Airport, Friendship Avenue, Marcoola. The scope of this Traffic Impact Assessment (TIA) is to compile, analyse and document the impact of the Priority Development Area (PDA) on the operation of the transport network and demonstrate how these impacts can be avoided, reduced, managed or mitigated (if required). This assessment used the refined land used of the proposed Gateway Precinct Masterplan.

This TIA includes:

- A review of background conditions including land use zoning, road network hierarchy / configuration and public and active transport facilities.
- A review of the trip generation and distribution from the development.
- An assessment of the existing potential road safety issues and intersection delay impacts on the surrounding road network.
- An outline of recommendations and mitigation measures if applicable.

The analysis described in this report has been carried out in accordance with the Department of Transport and Main Roads (TMR) *Guide to Traffic Impact Assessment (GTIA, 2018)* and seeks to ensure that the proposed development does not compromise the safety, efficiency and infrastructure condition of the surrounding road network.

2.1 Background

Traffic and transport studies were undertaken to inform the development of the Development Scheme, including a traffic assessment of the PDA to identify future site access arrangements, car parking provision and active and public transport facilities, prepared by Pekol Traffic and Transport (PTT)[3].

Arup also supported the development of the Development Scheme by undertaking a traffic modelling assessment, as an addendum to the PTT report, to estimate the potential road network traffic impacts of the PDA. The assessment documented the estimated traffic performance of the 2043 road network with the PDA traffic demands and associated proposed road network changes against the future base case traffic demands and an unchanged 2043 local road network.

Since the approval of the Development Scheme, key future infrastructure provisions surrounding the site have been announced by the QLD Government, including “The Wave” mass transit metro public transport system, refer Section 2.1.1 for more detail.

In 2025, Arup prepared a TIA to support the development of the Gateway Precinct Master Plan. This report considered the traffic impacts of the whole of the PDA and identified upgrades to mitigate the impacts of the proposed development.

The previous work conducted by PTT and Arup has been expanded on in this report to support the Airport North Precinct planned use. This report has been prepared based on the latest planning assumptions.

2.1.1 Public transport assumptions and background

Part of Sunshine Coast Council’s (SCC) *Integrated Transport Strategy (ITS, 2019)* involves the provision of mass transit within the Sunshine Coast region. At the time of the development of SCC’s *Sunshine Coast Public Transport* (SCPT) project, the plan included:

[3] Sunshine Coast Airport Priority Development Area Traffic Assessment, prepared by Pekol Traffic and Transport 25 June 2024

- An upgraded existing heavy rail running from Beerwah to Nambour.
- A new heavy rail connection linking Beerwah to Caloundra, Kawana and Maroochydore along the CAMCOS corridor (later known as Direct Sunshine Coast Rail Line).
- A new local mass transit system along the coastal corridor.
- An improved high frequency bus network connecting to other key destinations such as the hinterland.
- An improved supporting network of feeder buses, park n rides and active transport connections.

These elements are outlined in Figure 2-1.



Figure 2-1: Sunshine Coast Mass Transit Public Transport High Level Master Plan (Source: SCC[4])

As part of the *Brisbane 2032 Olympic Games Delivery Plan* announced by the QLD Government on 25 March 2025, "The Wave" was announced as a seamless public transport route to SCA to be delivered by 2032. The announcement highlighted that "The Wave" would:

- Deliver Stages 1 and 2 of the Direct Sunshine Coast Rail Line, providing heavy rail between Beerwah and Birtinya (generally utilising the original CAMCOS alignment).
- Provide a 'Metro style' bus rapid transit (BRT) service from Birtinya to SCA with stations at Mountain Creek and Maroochydore.
- Build the Mooloolah River Interchange and two extra lanes on the Sunshine Coast Motorway north of Kawana Way.

Figure 2-2 shows an impression of "The Wave" with Figure 2-3 showing the location map and indicative route of the "The Wave".



Figure 2-2: Artist impression of "The Wave" at Birtinya interchange (Source: The 2032 Delivery Plan, 2025)

[4] https://www.sunshinecoast.qld.gov.au/council/planning-and-projects/major-regional-projects/sunshine-coast-mass-transit-project/future-transport-plan

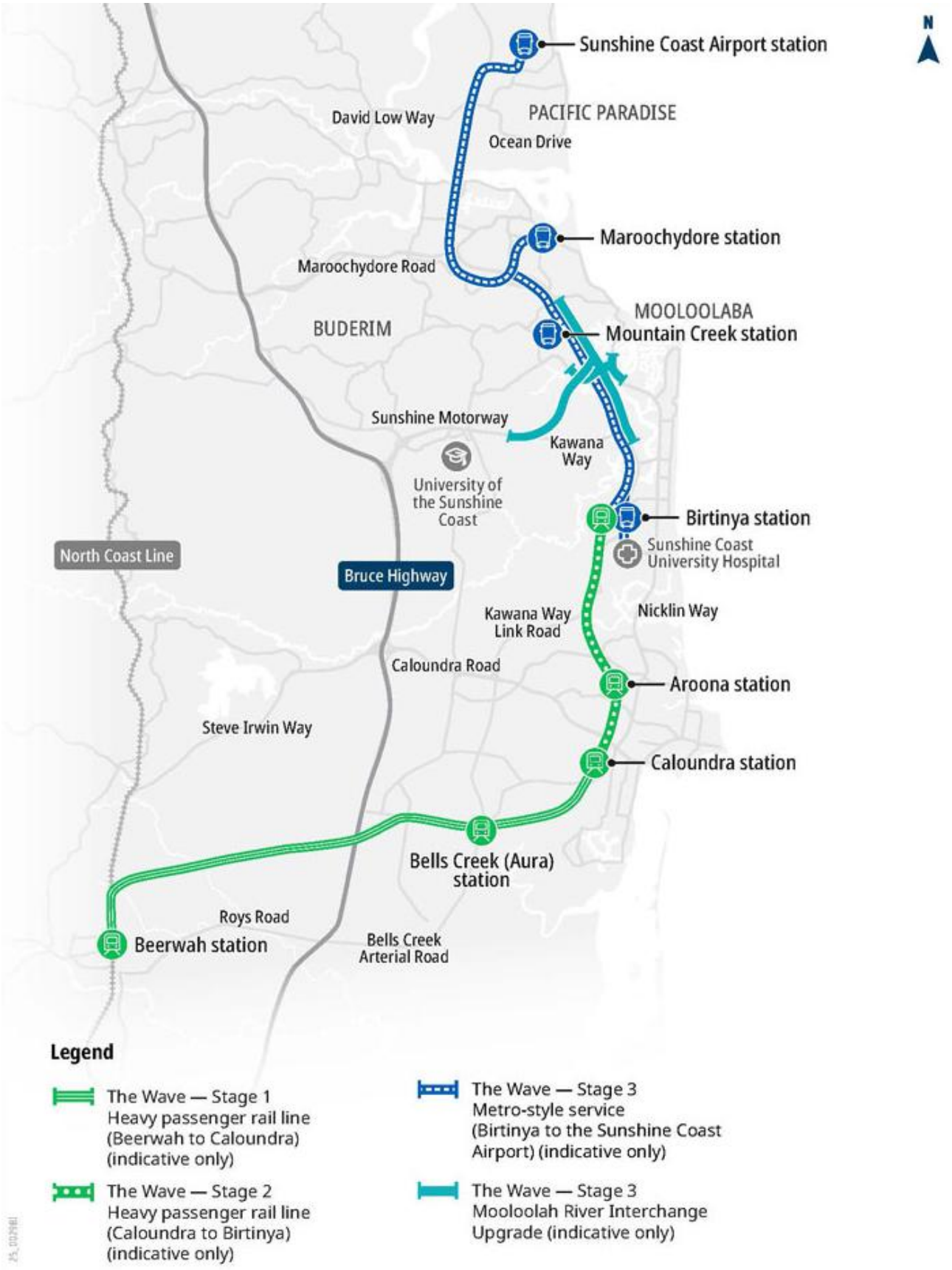


Figure 2-3: "The Wave" location map (Source: TMR, 2025[5])

[5] https://www.tmr.qld.gov.au/projects/the-wave-stages-1-and-2-rail

2.2 Purpose of report

This report provides a detailed traffic assessment of the proposed SCA PDA (including terminal growth), to support the development process for the PDA, and specifically the Airport North Precinct.

2.3 Study area

The subject site consists of 13 land parcels (Lot 699 on SP296245, Lot 98 on SP176239, Lot 1 on RP133655, Lot 898 on CG4782, Lot 101 on CP883235, Lot 857 on CG4403, Lots 51, 52, 53 and 54 on SP298053, Lot 1 on SP269581, Lot 1106 on SP206556 and Lot 1105 on SP206553) and comprises an area of approximately 535 hectares. The development site is located near existing residential and industrial areas and is within the Sunshine Coast Council (SCC) local government area. The location of the development is shown in Figure 2-4.

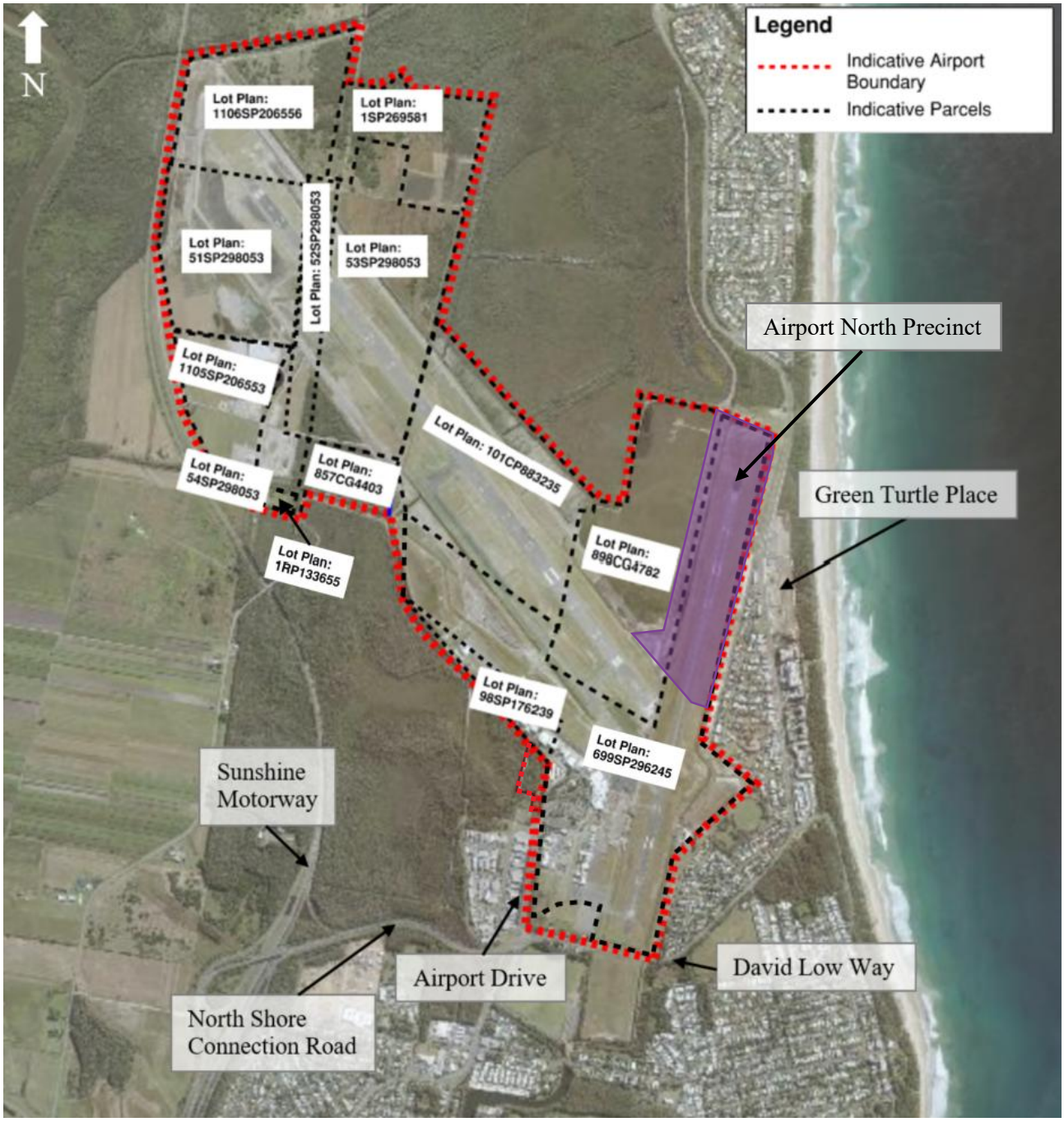


Figure 2-4: Overview of Sunshine Coast Airport area and surrounding road network

2.4 Limits of report

This TIA has been produced based on information supplied by other members of the project team (incl. Sunshine Coast Airport) and the regional traffic model from Sunshine Coast Council. While Arup has taken care in the preparation of this report, it neither accepts liability nor responsibility whatsoever in respect of:

- Any use of this report by any third party (other than the approving authority); and
- Any third party (other than the approving authority) whose interests may be affected by any decision made regarding the contents of this report.

2.5 Safety in design

Within the scope of our activities, which includes any proposed network changes required to accommodate additional traffic generated by the PDA, we identify safety in design issues and potential hazards, whenever reasonably practicable within our field of expertise and scope of traffic services. Due to our upfront role on this project in this early phase, it is not considered reasonably practicable to identify all potential hazards which may occur throughout the life of a project, including during construction activities.

3. Existing Conditions

The following sub-sections provide an overview of existing/background conditions including current land use zoning, transport network and public and active transport facilities. References have been made to the PDA Development Scheme, SCC Planning Scheme 2014 and relevant TMR publications.

3.1 Land use and zoning

The SCA PDA is split into six precincts which outline where different land uses and development within the PDA are preferred and permitted. Figure 3-1 demonstrates the SCA PDA precinct plan. Additionally, the SCA site is surrounded by environmental, industrial and residential uses.



Figure 3-1: SCA PDA Precinct Plan (Source: Sunshine Coast Airport Priority Development Area Scheme, 2024)

3.2 Surrounding road network details

The SCA fronts David Low Way, with direct access via Airport Drive at the Gateway Precinct (Precinct 2, as identified in Figure 3-1. An overview of the road hierarchy in the vicinity of the development site is provided in Figure 3-2, with further details for key roads provided in the following subsections.

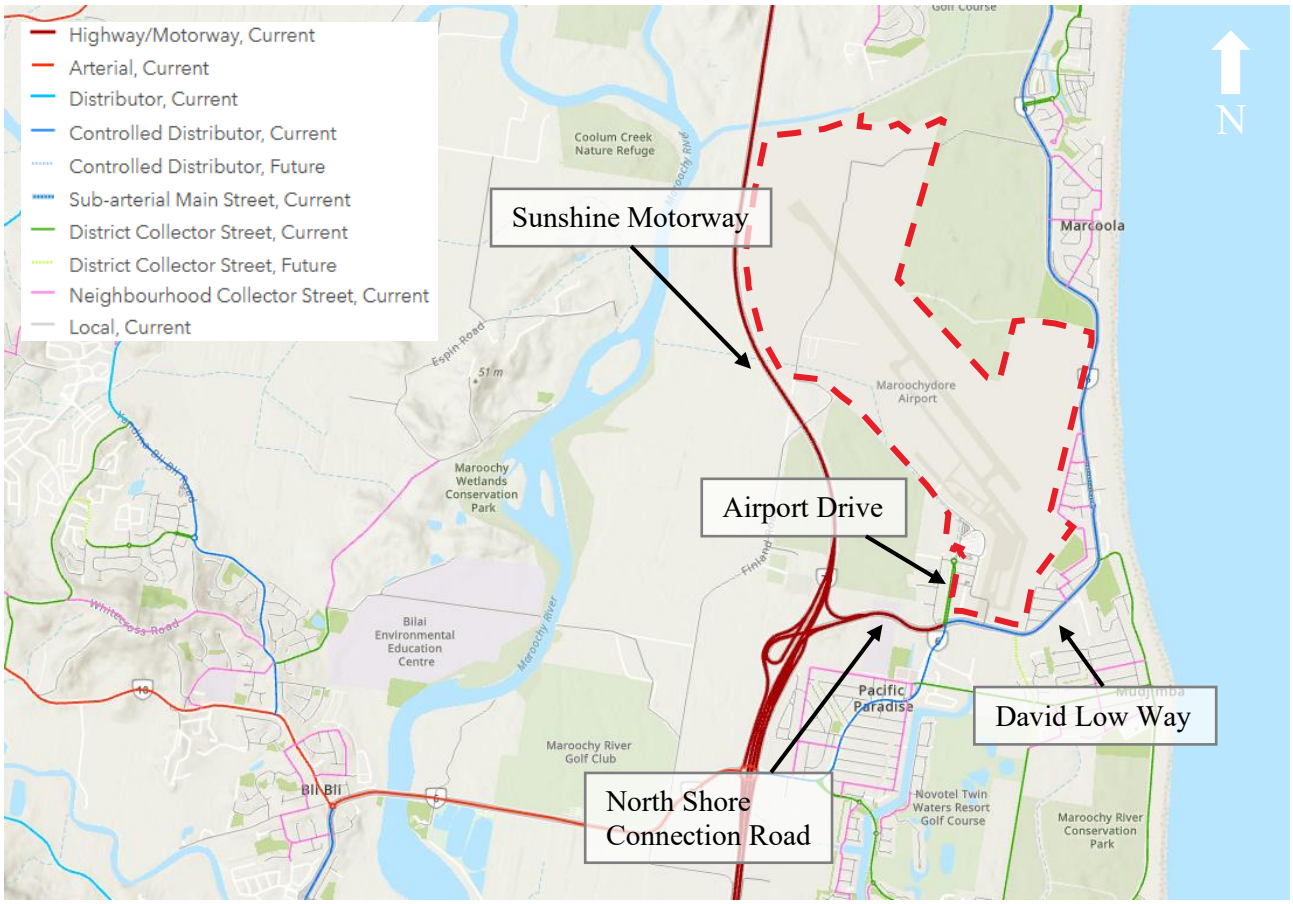


Figure 3-2: Sunshine Coast Council Transport Hierarchy (Source: SCC Planning Scheme 2014)

3.2.1 Sunshine Motorway

Sunshine Motorway is a north-south oriented motorway within the Sunshine Coast region, with an Annual Average Daily Traffic (AADT) volume of approximately 34,000 vehicle per day (vpd) between Mount Coolum and Pacific Paradise. The highway, controlled by TMR, is a dual carriageway road featuring single lanes in each direction past and north of SCA and a 100km/h posted speed limit. Sunshine Motorway becomes a four-lane carriageway road featuring two lanes in each direction further south of the site between David Low Way and North Shore Connection Road interchange. Vehicle access between Sunshine Motorway and SCA is typically provided by north and southbound free flow off ramps at North Shore Connection Road.

No pedestrian or cycle facilities are provided along the Sunshine Motorway in the vicinity of the SCA. However, a shared path runs adjacent to the Sunshine Motorway from the David Low Way interchange in Pacific Paradise to the Bradman Avenue interchange in Maroochydore with connections to local footpaths at either end.

3.2.2 North Shore Connection Road

North Shore Connection Road is classified as a highway / motorway and is an east-west road controlled by TMR. It has an AADT volume of approximately 17,800 vpd and is a dual carriageway road with two lanes in each direction and a posted speed limit of 70 km/h, which reduces to 60 km/h on approach to the SCA entrance road (i.e. Airport Drive).

North Shore Connection Road is a direct connection to the Sunshine Coast Motorway on and off-ramps and does not have pedestrian or cycle facilities.

3.2.3 David Low Way

David Low Way is a state-controlled road classified as a controlled distributor running in a generally north-south direction between Maroochydore and Noosa. David Low Way bends to run in the east-west direction along the southern SCA frontage. At the North Shore Connection Road / David Low Way / Airport Drive intersection, David Low Way comprises the southern and eastern legs. In this area David Low Way carries an AADT volume of 15,800 vpd and has a posted speed limit of 60 km/h, with one lane of traffic in each direction.

On-road cycle facilities are provided inconsistently along lengths of David Low Way with the provided widths generally 1.5m. Similarly, the provision of footpaths along David Low Way is inconsistent with gaps along the length, with the provided footpaths generally 1.5m in width. However, within proximity to the SCA site, there is a 1.8–2.0m wide footpath on the northern side of David Low Way (which becomes the western side as the road rounds a bend) between Runway Drive and Wayne Avenue.

3.2.4 Airport Drive

Airport Drive is a north–south oriented road, classified as a district collector street managed by SCC. It is a four-lane, two-way road with a posted speed limit of 60 km/h and no road shoulders. A 2.0m wide footpath is provided along the eastern side of the road.

Note: The AADT data for Airport Drive is obtained from the *Sunshine Coast Airport Priority Development Area Traffic Impact Assessment* conducted by PTT in June 2024. The AADT on Airport Drive is estimated at approximately 3,700 vpd.

3.2.5 Green Turtle Place

Green Turtle Place is a currently unclassified road under the jurisdiction of SCC. It is a two-lane two-way road with a speed limit of 50km/h specified as the Queensland urban default speed limit in areas with no posted speed limit. Green Turtle Place has formal and informal on-street parking and a 1.5m wide footpath on the western side of the road. A raised zebra crossing is provided at the northern end, connecting pedestrians and cyclists from David Low Way / Green Turtle Pace intersection to a shared path along the Mudjimba-Marcoola foreshore.

3.3 Existing Airport operations

3.3.1 Aviation volumes

According to passenger volumes provided by SCA the SCA terminal accommodated a total of 1,634,366 passengers during the 2025 financial year. Of these 1,634,366 passengers, 1,599,133 passengers are associated with domestic travel and 35,233 passengers for international travel.

3.3.2 Airport infrastructure

SCA currently has a single terminal, supported by a number of maintenance facilities and workshops, car parking areas and other passenger transport facilities. Figure 3-3 highlights the locations of these passenger transport facilities within the existing airport precinct, as well as providing context to the location relative to the SCA PDA defined precincts.

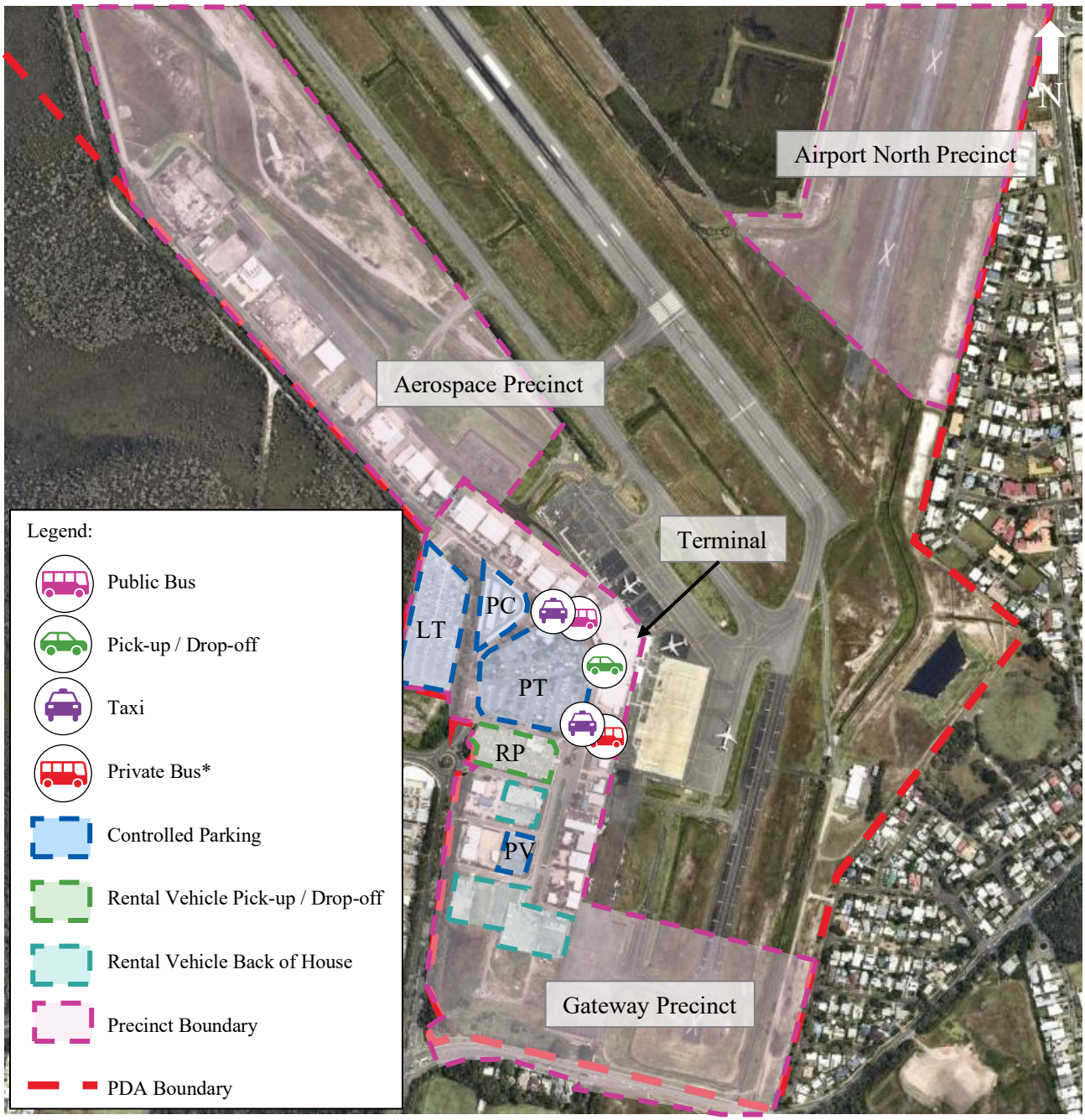


Figure 3-3: Airport passenger transport infrastructure

*Private bus parking has temporarily relocated due to the Terminal expansion construction

3.3.2.1 On-site controlled car parking areas

As part of the PTT traffic assessment, a review of on-site car parking availability and occupancy was undertaken based on boom gate and booked parking data provided by SCA for 18 to 24 February 2024. Table 3-1 outlines the key findings from this parking analysis, which indicate that all on-site car parking areas, except for the Value Parking area, are at or near capacity during the peak. It should be noted that the data for this assessment is for February, and no adjustments have been made to account for the seasonality of airport parking and its impact on latent demand. The PTT traffic assessment notes that traffic on the surrounding road network in February is 95% of the average monthly traffic volumes, the second lowest out of all months with December being the only month with lower traffic volumes. Therefore, it can be expected that the peak occupancies demonstrated in the parking data are likely to be higher most of the time.

PTT noted that the peak occupancies above 100% could reflect vehicles entering full parking areas to look for a parking space.

Table 3-1: Existing on-site parking occupancy (Source: PTT, 2024)

Attribute	Long Term Parking (LT)	Covered Parking (PC)	Terminal Parking (PT)	Value Parking (PV)	Rental Parking (RP)
Capacity (spaces)	547	165	419	72	230
Weekday					
Peak occupancy	91%	107%	91%	46%	78%
85th Percentile Occupancy	88%	102%	85%	43%	68%
Busiest Hour	10:00 – 11:00	10:00 – 11:00	11:00 – 12:00	08:00 – 09:00	10:00 – 11:00
Busiest Hour – Arrivals and Departures (vph)	31	18	128	20	133
Weekend					
Peak Occupancy	105%	92%	116%	22%	70%
85th Percentile Occupancy	104%	86%	106%	19%	63%
Busiest Hour	11:00 – 12:00	11:00 – 12:00	11:00 – 12:00	08:00 – 09:00	10:00 – 11:00
Busiest Hour – Arrivals and Departures (vph)	28	14	132	2	106

3.4 Existing traffic volumes

3.4.1 Previous traffic count data

As part of the previous traffic assessment, PTT conducted a six-day traffic and speed count survey from 19 to 25 February 2024 at six locations within the SCA boundary, as shown in Figure 3-4.

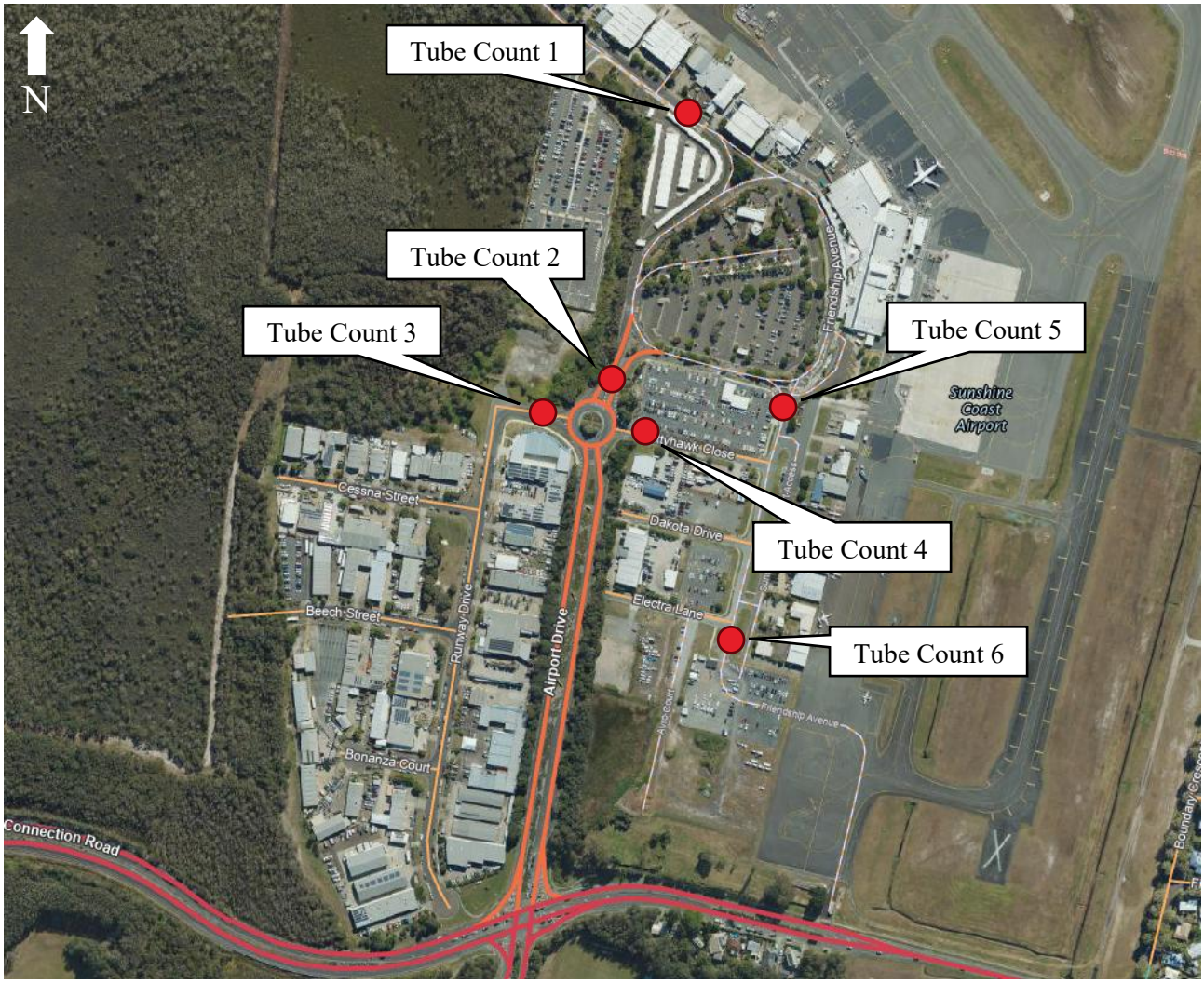


Figure 3-4: Internal count survey locations (Source: PTT, 2024)

The weekday average vehicles per day (vpd) volumes obtained from these tube counts are shown in Table 3-2.

Table 3-2: Traffic counts on internal roads (Source: PTT, 2024)

Tube Counter	Location	Weekday average volume (vpd)
Tube Count 1	Friendship Avenue (N)	400
Tube Count 2	Friendship Avenue (NW)	3,500
Tube Count 3	Runway Drive	2,050
Tube Count 4	Kittyhawk Close	950
Tube Count 5	Friendship Avenue (NE)	550
Tube Count 6	Friendship Avenue (S)	350

Turning movement surveys were also undertaken at the North Shore Connection Road / David Low Way / Airport Drive signalised intersection on Tuesday, 20 February 2024 and Saturday, 24 February 2024. Table 3-3 outlines the peak hour and observed peak volume and attributes at this intersection.

Table 3-3: Traffic count data (Source: PTT, 2024)

Attribute	AM Peak	PM Peak	Weekend Peak
Peak hour	07:45 – 08:45	15:15 – 16:15	10:30 – 11:30
Volume (vph)	2,170	2,250	2,380
% Heavy vehicles	2.9%	3.1%	1.1%
Peak flow factor	96.3%	99.1%	99.5%

3.5 Existing intersection and network performance

3.5.1 Traffic model

A 2024 base year subnetwork model of the SCA and surrounding network was calibrated by SCC and provided to Arup for the purpose of use for this TIA. This subnetwork was cordoned from SCC's VISUM simulation-based assignment (SBA) regional model.

Figure 3-5 shows the extents of the subnetwork, which includes the road network between the Maroochy River to the South, Yandina Coolum Road to the North, and Sunshine Motorway to the West.

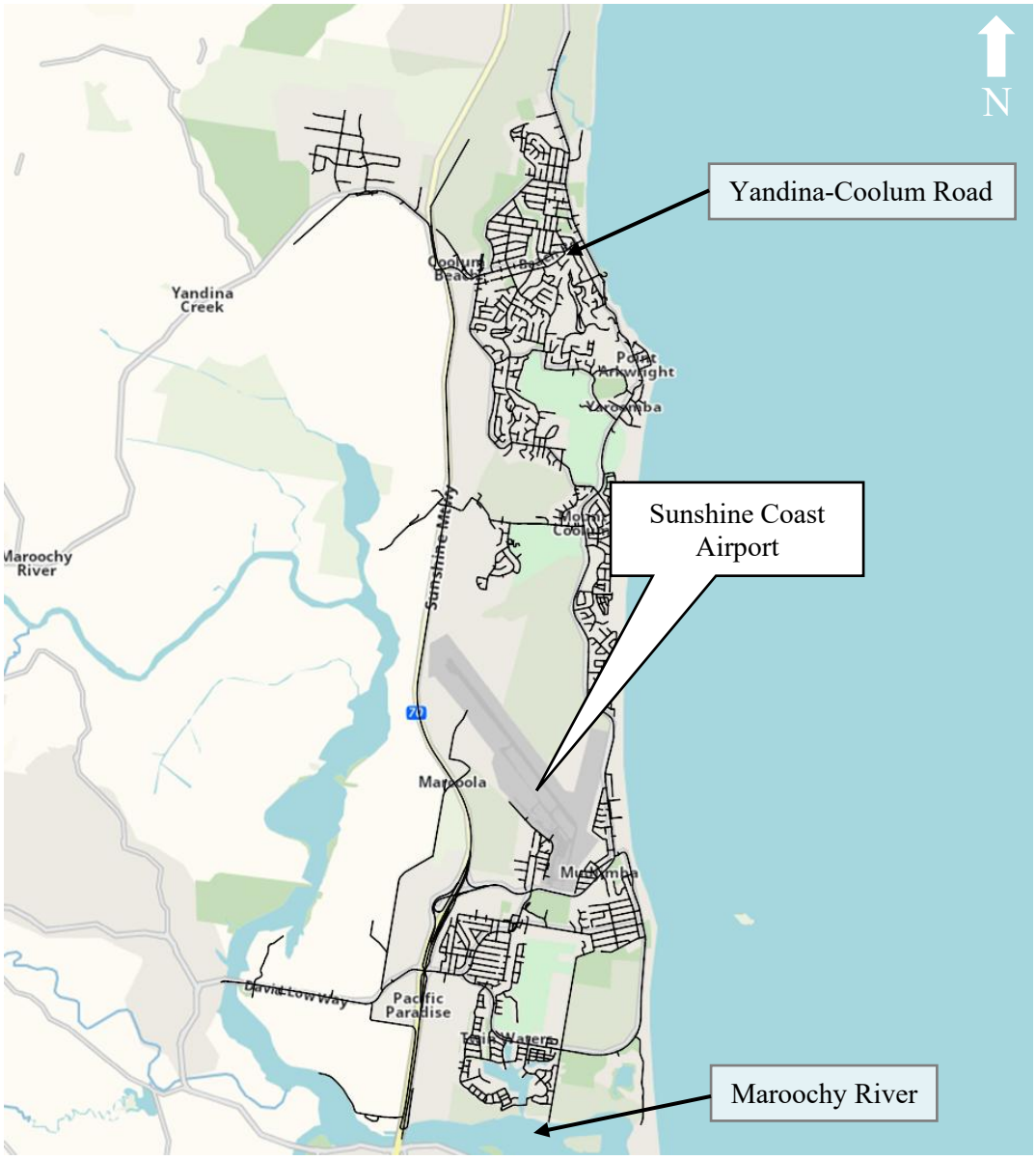


Figure 3-5: Extents of SCA traffic model

SCC has provided a technical note, included in Appendix A, summarising the calibration of the SCA traffic model. The note demonstrates that the model achieved an acceptable level of calibration for the period between 07:00 to 21:00. Calibration was undertaken using observed data from 112 individual link and 272 turn count locations spread across the modelled area and included key locations such as the Sunshine Motorway and David Low Way. Calibration targets were based on the Main Roads Western Australia (MRWA) Mesoscopic and Hybrid Modelling Guidelines which used Geoffrey E. Havers (GEH) statistic, root mean square error (RMSE), and R-Squared (R^2) and slope comparison between modelled and observed values. These statistical tools are regarded as best practice and industry standard for traffic flow calibration.

It should be noted that VISUM is an industry accepted tool used within Australia and internationally. Within Queensland, several government agencies utilise VISUM models to plan and model future year road traffic scenarios in order to assess the impacts of infrastructure and policy changes, as well as inform decision making. In addition to the Sunshine Coast Region, other notable areas with VISUM models include City of Moreton Bay and Bundaberg Region. These agencies spend significant resources to maintain and ensure that their VISUM models are up to date and meet industry standards. Therefore, it is considered that the use of the SCC VISUM model to be appropriate for this TIA.

3.5.2 Network volumes

Figure 3-6 to Figure 3-8 show the traffic link volume plots from the base year SCA model. The plots include weekday AM and PM peak hour volumes and weekday daily link volumes.



Figure 3-6: 2024 Modelled link volumes during AM peak hour



Figure 3-7: 2024 Modelled link volumes during PM peak hour



Figure 3-8: 2024 Modelled daily link volumes

3.5.3 Key intersection performance

Intersection performance was assessed using SIDRA 9.1 intersection models which used turning movement volumes from the SCA traffic model and the following parameters:

- Geometrical configuration of the intersections measured from Nearmap
- 95% Peak Flow Factor (PFF)
- The proportion of heavy vehicles as per Table 3-3Table
- Signal phasing and cycle times from TMR
- SIDRA default values for all other parameters.

The proportion of heavy vehicles that has been assumed and used in the model from Table 3-3 (i.e. 3% HV) has been taken from the previous assumptions based on nearby traffic counts at David Low Way / Airport Drive completed on 20 February 2024, as noted above. This was considered the most up to date traffic count

in the location and was therefore used in a previous modelling exercise with SCC and SCA completed on 25 June 2024.

A review of 2020 tube count data in the area showed the observed daily HV% ranged from 6.8% to 18.8% within the Airport internal roads. This suggests a higher HV% than 3%, however it should be noted that these values represent daily HV%. The analysis conducted in this report only represents AM and PM peak hours, which aligns with the observed data collected in 2024 which shows a ~3% HV% for the AM and PM peaks.

Table 3.4 of the RTA Guide to Traffic Generating Developments highlights that the proportions between cars and HVs vary significantly throughout the day for industrial estates. During the AM and PM peaks higher proportions of cars are expected as workers arrive and depart. During the middle of the day, higher HV proportions are expected as goods are moved. This highlights that applying daily HV% may lead to overestimation of trips during the AM and PM peak.

Two key intersections were assessed which include:

1. North Shore Connection Road / David Low Way / Airport Drive
2. David Low Way / Green Turtle Place.

It should be noted that the SCC regional traffic model does not include traffic demand for Green Turtle Place. To assess the existing operations of the David Low Way / Green Turtle Place intersection, turning volumes into and out of Green Turtle Place are required. To estimate these turning volumes, a trip generation rate of 0.8 trips per dwelling in the peak hour was applied to the number of houses on Green Turtle Place to estimate the traffic demand, with directional distribution based on the volumes of traffic on David Low Way.

The intersections' operational performance has been assessed in terms of Degree of Saturation (DOS) and Level of Service (LOS).

Parameters from *Austroads Guide to Traffic Management Part 3: Transport Studies and Analysis Methods* will be used to determine if the intersections are operating within the acceptable limits of operations.

For this assessment, intersection operations are considered acceptable if the overall intersection LOS is LOS D or better, individual turn movement delays do not exceed LOS E and the DOS does not exceed the following limits:

- 80% for priority-controlled intersections
- 85% for roundabout intersections
- 90% for signalised intersections.

The delays applicable to each LOS classification as shown below in Table 3-4.

Table 3-4: Level of service benchmarks for priority-controlled intersections, roundabouts and signalised intersections

Level of Service	Average delay per vehicle in seconds (sec)		
	Priority-controlled intersections	Roundabouts	Signalised intersections
A	$d \leq 10$	$d \leq 10$	$d \leq 10$
B	$10 < d \leq 15$	$10 \leq d \leq 20$	$10 < d \leq 20$
C	$15 < d \leq 25$	$20 \leq d \leq 35$	$20 < d \leq 35$
D	$25 < d \leq 35$	$35 \leq d \leq 50$	$35 < d \leq 55$
E	$35 < d \leq 50$	$50 \leq d \leq 70$	$55 < d \leq 80$
F	$50 < d$	$70 < d$	$80 < d$

3.5.3.1 *North Shore Connection Road / David Low Way / Airport Drive*

The North Shore Connection Road / David Low Way / Airport Drive signalised intersection is shown in Figure 3-9 along with its equivalent SIDRA representation. The intersection has been assessed on a 90 second cycle time with the phasing as shown in Figure 3-10.

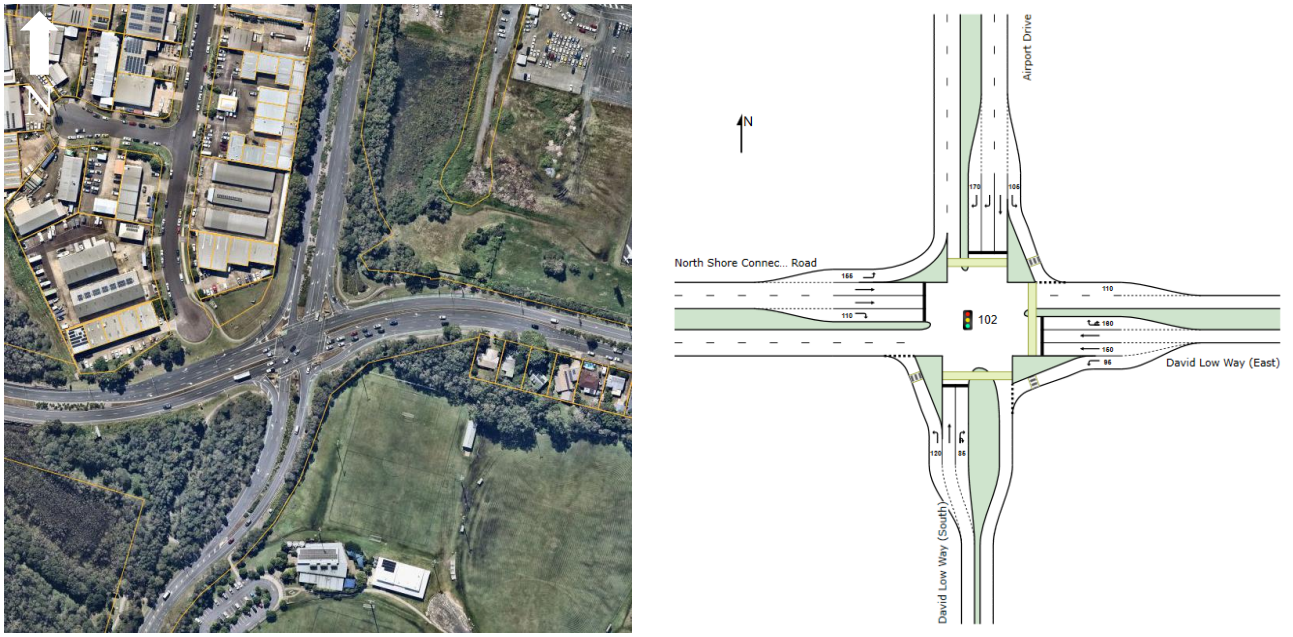


Figure 3-9: North Shore Connection Road / David Low Way / Airport Drive intersection layout

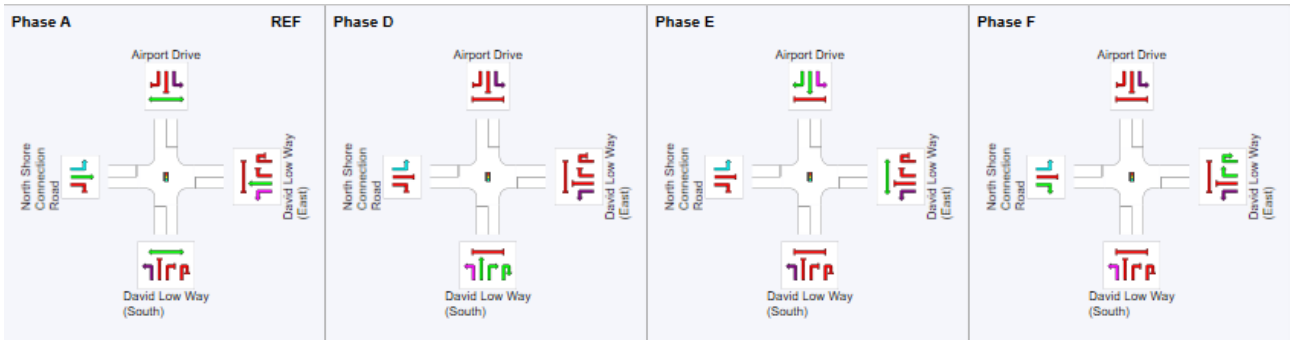


Figure 3-10: North Shore Connection Road / David Low Way / Airport Drive intersection phasing

A summary of the existing operations for the intersection is provided in Table 3-5, with detailed outputs provided in Appendix B. The intersection is operating within acceptable limits with low levels of delays (LOS C) and DOS less than 90%. All individual turn delays do not exceed LOS E and generally queues are able to be accommodated within the short turn lanes provided, except for the short right turn lane on David Low Way (south) in the PM peak.

Table 3-5: Summary of existing North Shore Connection Road / David Low Way / Airport Drive operations

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak	67.8	22.9	C	138.5
PM Peak	75.1	32.0	C	121.0

3.5.3.2 *David Low Way / Green Turtle Place*

The David Low Way / Green Turtle Place priority-controlled intersection is shown in Figure 3-11 along with its equivalent SIDRA representation.



Figure 3-11: David Low Way / Green Turtle Place intersection layout

A summary of the existing operations for the intersection is provided in Table 3-6, with detailed outputs provided in Appendix B. The intersection is generally operating within acceptable limits with low levels of delays (LOS A) and DOS less than 80%. However, in the AM peak, the right turn movement from Green Turtle Place is operating at LOS F with delays of greater than 60 seconds for vehicles wishing to undertake this movement. This indicates that upgrades are required to this intersection prior to the SCA PDA to ensure acceptable operations. An upgrade to a signalised intersection has been conditioned as part of the residential development on Green Turtle Place.

Table 3-6: Summary of existing David Low Way / Green Turtle Place operations

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak	43.9	0.7	A	3.2
PM Peak	30.6	0.3	A	0.3

3.6 Existing road safety issues

Safety on the surrounding road network has been considered in this assessment. Road safety is a relative measure benchmarked against an existing condition or an acceptable risk threshold. The identified safety risks relevant to the development impact assessment area are:

- Pedestrian visibility is compromised on the left turning lane from David Low Way onto North Shore Connection Road due to excessive vegetation. A pedestrian crossing point along the western kerb line requires a minimum Crossing Sight Distance (CSD) of 84 metres to ensure visibility of approaching vehicles.
- The left turn slip lanes at the North Shore Connection Road / David Low Way / Airport Drive signalised intersection are not signalised and the western leg of the intersection does not have a crossing. Crossings on all legs and controlled left turns are now required for new upgrades on the state-controlled road network under TMR's *Road Safety Policy*. Whilst the current intersection pre-dates the TMR *Road Safety Policy*, there is an increased risk of collisions between pedestrians and motorists at slip lanes and where crossings are not provided on all legs of a signalised intersection.
- The current cross-section of David Low Way in proximity to the SCA site offers limited and inconsistent road shoulder width in the westbound / southbound direction, which is considered insufficient to safely accommodate on-road bike riders.

- There is no designated pedestrian crossing points near the bus stop pair on David Low Way (Stop ID: 301720 & 301648) located approximately 300m east of Airport Drive intersection.
- There are a number of sections of missing footpath along David Low Way between Airport Drive and Green Turtle Place, particularly between Wayne Avenue and Keith Royal Drive on the western side and along majority of the eastern side (which becomes the southern side). There is also limited crossing provisions to direct pedestrians to the existing pathways and bus stops. This absence presents a safety and accessibility issue for pedestrians and encourages crossing in unsafe areas.
- The wide crossing distance at Fourth Avenue, near its T-intersection with David Low Way, poses a safety risk to pedestrians due to potential conflicts with left-turning vehicles.

These risks have been further assessed as part of the road safety risk assessment in Section 6.4 of this report.

3.6.1 Crash history

A review of the latest open-source crash data was conducted for the road network surrounding the SCA site. Crash locations recorded between 1 July 2020 and 30 June 2025 are shown in Figure 3-12. During this period, a total of 48 crashes were reported on the state-controlled and internal SCA road network surrounding the SCA site.

The recorded crashes primarily involved rear-end collisions and loss of control and hit-object crashes, with outcomes ranging from minor injuries to hospital-level treatment. A fatality occurred on David Low Way in 2022 involving a manoeuvring type crash. Figure 3-12 and Table 3-7 provide an overview of the crash locations and corresponding DCA (Definition for Classifying Accidents) codes. Note, only crashes on the state-controlled road network and on Airport Drive have been numbered and summarised below. It should be noted though that there was a crash that caused a fatality on Finland Road in 2022. This crash was a single vehicle run off road and hit object crash.

Based on the available crash history, the key contributing factors within proximity of the SCA site appear to be:

1. Driver behaviour, including failure to maintain appropriate following distance and speed, leading to rear-end collisions.
2. Reduced visibility and high approach speeds, particularly at roundabouts.
3. Loss of control, potentially linked to road alignment and high-speed environments.
4. Large amounts of on-street parking and access to David Low Way through Marcoola, where drivers are more likely to be unfamiliar with the road environment due to the tourist nature of the area.

A summary of crashes by severity (Table 3-8), crash type (Table 3-9) and hour of day (Figure 3-13) are provided below. Some of the key findings of the review are below:

- Of the 48 injury crashes recorded, 58% of the crashes resulted in Fatal or Serious Injury (FSI). There was one fatal crash recorded on David Low Way.
- On average there are approximately 10 crashes p.a. including 0.2 fatalities per year.
- Rear-end crashes made up approximately 46% of all crashes recorded.
- Approximately 31% of all crashes occurred between 3pm-5pm with a further 27% recorded between 7am-9am.

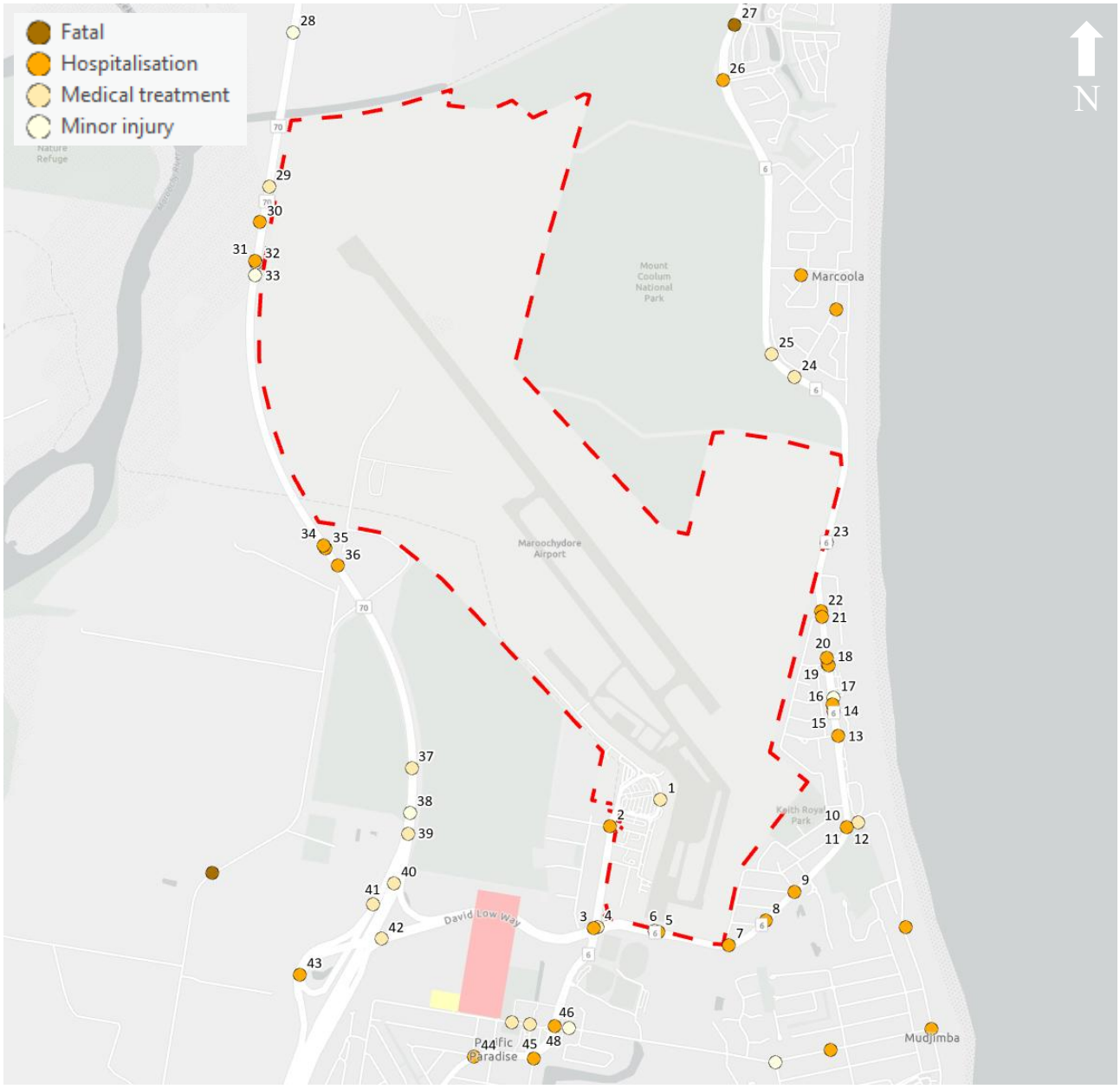


Figure 3-12: Location of crashes within the study area between 2020 and 2025

Table 3-7: Crash history from July 2020 to June 2025

Ref.	Crash Location	Crash Year	Crash DCA Code	Crash Severity
1	Friendship Avenue (crash ref: 269278)	2024	004	Medical Treatment
2	Airport Drive (crash ref: 136147)	2021	708	Hospitalisation
3	David Low Way (crash ref: 324198)	2024	808	Hospitalisation
4	Airport Drive (crash ref: 330096)	2022	302	Medical Treatment
5	David Low Way (crash ref: 163861)	2020	301	Hospitalisation
6	David Low Way (crash ref: 314135)	2023	301	Medical Treatment
7	David Low Way (crash ref: 294015)	2023	803	Hospitalisation

Ref.	Crash Location	Crash Year	Crash DCA Code	Crash Severity
8	David Low Way (crash ref: 276803)	2022	303	Hospitalisation
9	David Low Way (crash ref: 205975)	2021	703	Hospitalisation
10	David Low Way (crash ref: 205964)	2021	202	Hospitalisation
11	David Low Way (crash ref: 323950)	2023	101	Hospitalisation
12	David Low Way (crash ref: 375510)	2022	303	Hospitalisation
13	David Low Way (crash ref: 324383)	2021	804	Hospitalisation
14	David Low Way (crash ref: 97910)	2024	408	Medical Treatment
15	David Low Way (crash ref: 293720)	2024	408	Hospitalisation
16	David Low Way (crash ref: 396080)	2022	703	Hospitalisation
17	David Low Way (crash ref: 95281)	2024	301	Minor Injury
18	David Low Way (crash ref: 198646)	2025	408	Hospitalisation
19	David Low Way (crash ref: 163872)	2020	301	Hospitalisation
20	David Low Way (crash ref: 206930)	2023	303	Hospitalisation
21	David Low Way (crash ref:289902)	2024	408	Hospitalisation
22	David Low Way (crash ref: 163860)	2020	408	Hospitalisation
23	David Low Way (crash ref: 125406)	2022	301	Medical Treatment
24	David Low Way (crash ref: 97926)	2024	302	Medical Treatment
25	David Low Way (crash ref: 396181)	2021	201	Medical Treatment
26	David Low Way (crash ref: 324170)	2023	408	Hospitalisation
27	David Low Way (crash ref: 375512)	2022	400	Fatal
28	Sunshine Motorway (crash ref: 396357)	2020	301	Minor Injury
29	Sunshine Motorway (crash ref: 395154)	2021	301	Medical Treatment
30	Sunshine Motorway (crash ref: 195823)	2022	301	Hospitalisation
31	Sunshine Motorway (crash ref: 296356)	2020	701	Hospitalisation
32	Sunshine Motorway (crash ref: 136127)	2020	301	Minor Injury
33	Sunshine Motorway (crash ref: 324387)	2021	301	Minor Injury
34	Sunshine Motorway (crash ref: 293859)	2024	301	Hospitalisation
35	Sunshine Motorway (crash ref: 125913)	2022	301	Hospitalisation
36	Sunshine Motorway (crash ref: 202251)	2022	301	Hospitalisation
37	Sunshine Motorway (crash ref: 205351)	2021	301	Medical Treatment
38	Sunshine Motorway (crash ref: 125472)	2025	308	Minor Injury

Ref.	Crash Location	Crash Year	Crash DCA Code	Crash Severity
39	Sunshine Motorway (crash ref: 205346)	2021	804	Medical Treatment
40	Sunshine Motorway (crash ref: 386418)	2023	301	Medical Treatment
41	Sunshine Motorway (crash ref: 290936)	2023	301	Medical Treatment
42	Sunshine Motorway (crash ref: 202273)	2022	703	Medical Treatment
43	North Shore Road (crash ref: 136143)	2020	607	Hospitalisation
44	David Low Way (crash ref: 324479)	2021	408	Hospitalisation
45	Moomba Street (crash ref: 388476)	2024	201	Hospitalisation
46	Mudjimba Beach Road (crash ref: 125386)	2022	104	Hospitalisation
47	Mudjimba Beach Road (crash ref: 163386)	2020	104	Medical Treatment
48	Mudjimba Beach Road (crash ref: 278332)	2024	301	Minor Injury

Table 3-8: Crashes by severity

Crash Severity	Number of Crashes
Fatal	1
Hospitalisation	27
Medical Treatment	14
Minor Injury	6
Total	**48**

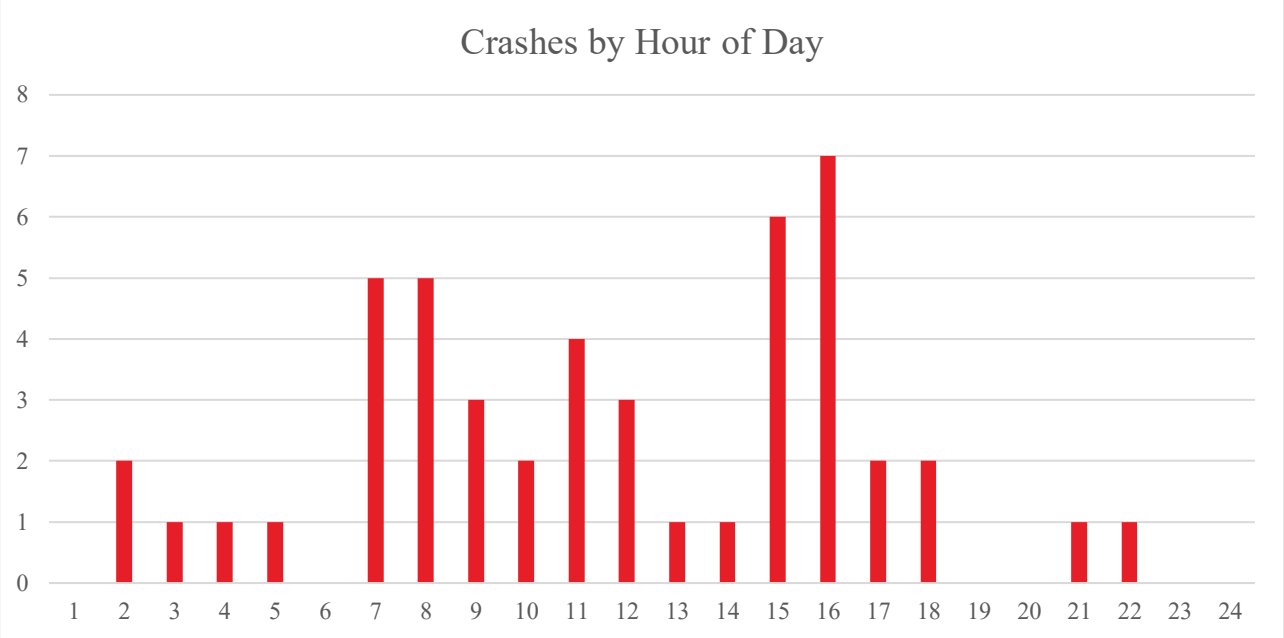


Figure 3-13: Crashes by hour of day

Table 3-9: Crashes by DCA code

DCA Group	Crash Type	Number of Crashes
	Pedestrian	1
	Intersection from adjacent approach	3
	Head-on	2
	Opposing vehicles turning	1
	Rear-end	22
	Parallel lanes turning	1
	Vehicle leaving driveway	7
	Off carriageway on straight	1
	Off carriageway on straight hit object	5
	Off carriageway on curve hit object	3
	Other	2
	Total	**48**

3.7 Existing public transport

Public transport services at the SCA are currently limited, with only one bus stop (Stop ID: 302267) located on the west side of Friendship Avenue near the departure gate. This stop is serviced by Bus Route 622, which operates two separate services (northbound and southbound) – one to Maroochydore Bus Station and the other to Noosa Junction Bus Station – at approximately one-hour intervals between 5:45am and 8:19pm. Additionally, two more bus stops (inbound and outbound) are located on David Low Way (near Airport Drive), approximately 1.2 km from the airport terminal building. The inbound stop (Stop ID: 301720) services Route 622 towards Maroochydore Station, while the outbound stop (Stop ID: 301648) services Route 622 towards Noosa Junction Station.

There is an existing bus dept in the Runway Drive Industrial Estate, which uses Airport Drive and Runway Drive to access / egress the Dept. Hence the perception of frequency of buses to / from the airport could be misleading to a casual bystander.

An overview of the broader public transport network and its connection to key destinations is shown in Figure 3-14. Based on this assessment, inadequate public transport options are available within a reasonable walking distance of the SCA, especially with consideration for the types of visitors (often carrying heavy and awkward luggage).



Figure 3-14: Bus stop infrastructure near the site (Source: QLD Globe)

3.8 Existing active transport

Active transport facilities within the vicinity of the SCA are limited, with no dedicated cycle lanes or off-road cycle infrastructure provided along internal roads. A 2.0m wide footpath is provided on the eastern side of Airport Drive. Internal roads such as Airport Drive, Runway Drive, and Friendship Avenue are not designated as part of TMR's South East Queensland Principal Cycle Network Plan (SEQ PCNP). However, SCC's 2031 Strategic Network of Pedestrian and Cycle Links outlines Airport Drive as a future district on-road cycleway.

David Low Way is designated as a Principal Cycle Route, as per the SEQ PCNP, shown in Figure 3-15. The Principal Routes are designated as follows, as per the Priority Route Maps addendum to the SEQ PCNP:

Sunshine Motorway: Priority B, indicating a longer-term delivery timeframe for delivery within the next 10-15 years (from 2019)

- David Low Way between Sunshine Motorway and Mudjimba Esplanade: Priority A, indicating this area is a focus of delivery in the next 10 years (from 2019)
- David Low Way north of Mudjimba Esplanade: Existing

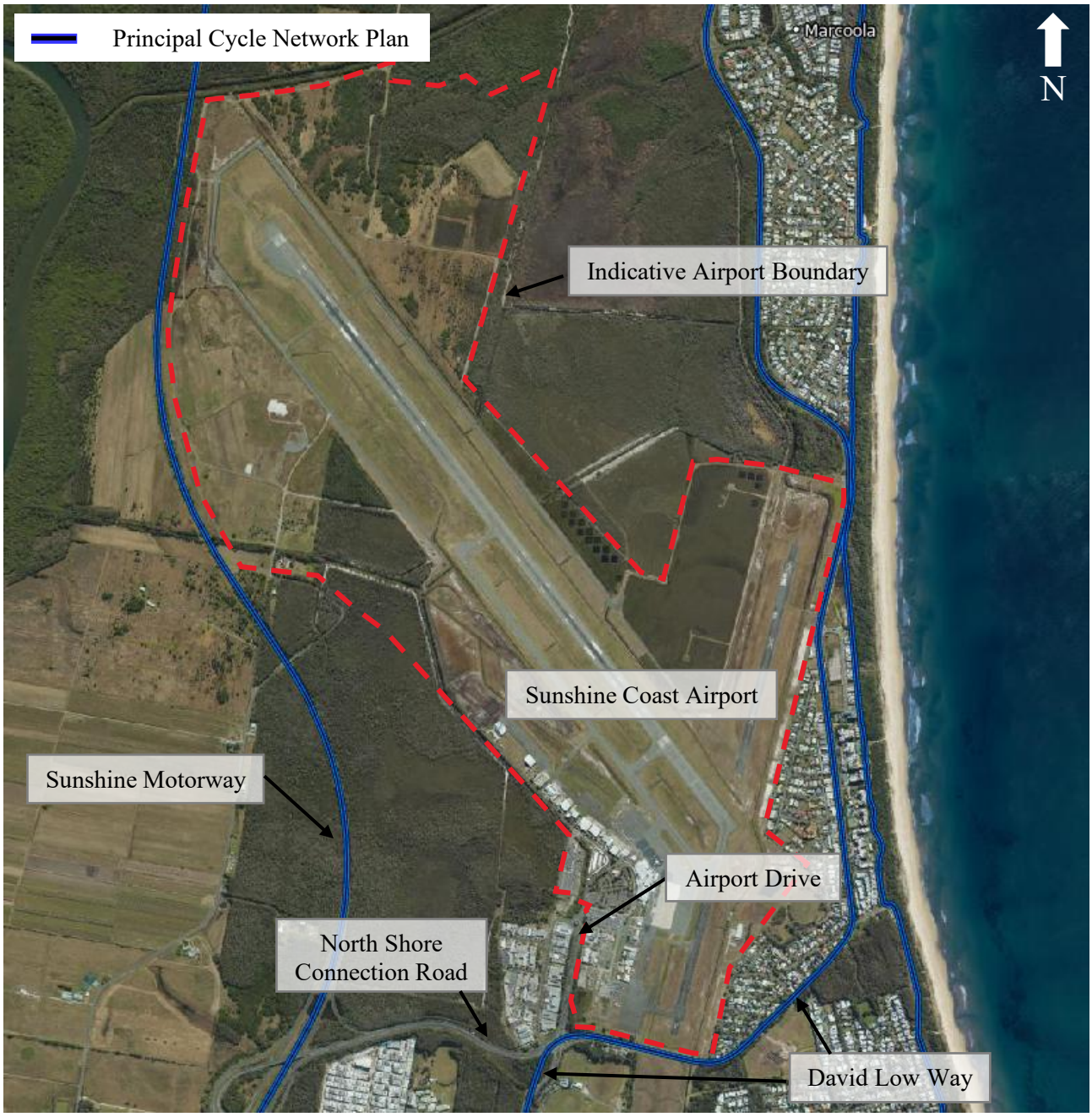


Figure 3-15: Overview of principal cycle network near the site (Source: QLD Globe)

Currently, on-road cycle facilities along David Low Way are limited. A designated cycle lane or shoulder is available in both directions north of Mudjimba Esplanade and only the eastbound / northbound direction south of Mudjimba Esplanade, with a typical width ranging from approximately 1.2 – 2.0m. Additionally, a 2.5 – 4.0m wide shared path runs adjacent to the Sunshine Motorway further south of the SCA site, from the David Low Way interchange to the Bradman Avenue interchange in Maroochydore.

A 2.0m wide footpath exists along Airport Drive. Footpaths along David Low Way in the vicinity of the SCA are generally 2.0m or less in width with gaps in the footpath network along both sides of the road between Airport Drive and Green Turtle Place.

4. Proposed Development Details

4.1 Sunshine Coast Airport Priority Development Area

The Development Scheme came into effect on the 27 September 2024. The aim of the Development Scheme is to

> *"…help create a world-class airport precinct that connects the local community and welcomes visitors. The Development Scheme unlocks opportunities that will attract investment, drive economic growth, and create jobs both on and off airport."*

The SCA PDA covers the Airport site and splits the site into six precinct areas as shown in Figure 4-1.



Figure 4-1: SCA PDA Precinct Plan (Source: Sunshine Coast Priority Development Area Scheme, 2024)

As part of the assessment of the PDA, Precinct Master Plans (PMP) for the Gateway and Airport North Precincts are required to be prepared and lodged with the first development application in that precinct. The PMPs are required to be supported by a TIA for the whole of the PDA.

4.1.1 Precinct land uses

4.1.1.1 Gateway Precinct

The first phase of development within the SCA PDA is proposed to be within the Gateway Precinct. Therefore, as part of the requirements of the Development Scheme, the Precinct Master Plan for the Gateway Precinct has been prepared and has been assessed as part of this TIA. The proposed Master Plan is shown in Figure 4-2 with the associated land use mix included in Table 4-1.

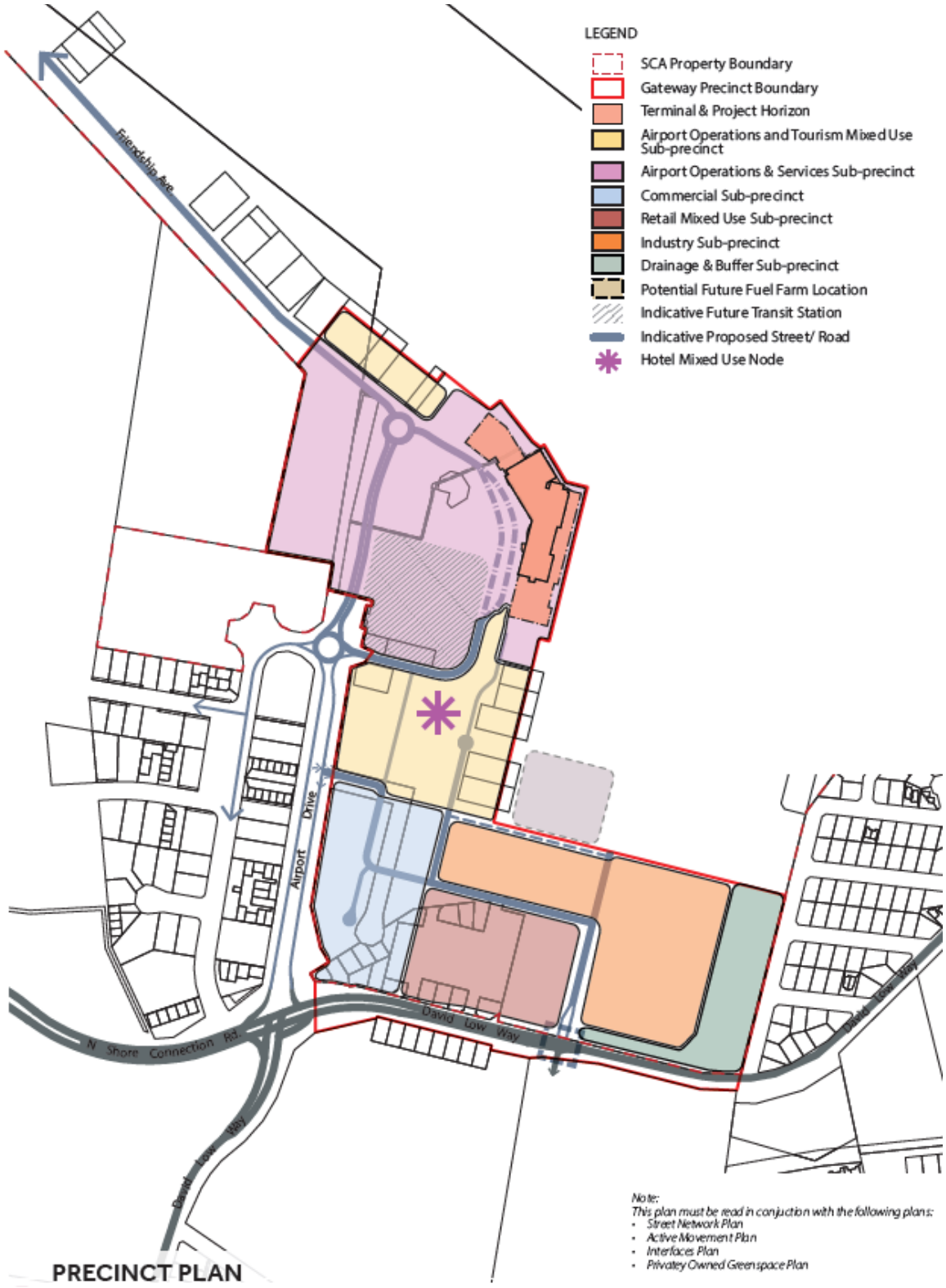


Figure 4-2: Gateway Precinct Master Plan

Table 4-1: Gateway Precinct land use mix

Land use	Scale
Accommodation	
Short term accommodation	250 rooms
Retail	
Service station	240m^2 GFA
Food and drink	800m^2 GFA
Fast food (major)	600m^2 GFA
Fast food (minor)	200m^2 GFA
Aircraft sales and service	1,100m^2 GFA
Car wash	6 bays (2 automatic, 4 manual)
Supermarket (limited line)	1,500m^2 GFA
Specialty shops	1,100m^2 GFA
Commercial / Mixed Use	
Office / Education / Research and technology industry / service industry / Air services	19,850m^2 GFA
Health care	1,250m^2 GFA
Industrial	
Cold storage based freight forwarding facility	2,500m^2 GFA
Light industry (Low impact industry, research and technology industry, service industry and warehouse)	19,000m^2 GFA
Other	
Child care centre	150 children (1,400m2 GFA)
Indoor recreation	500m^2 GFA
Tourism attraction	1,900m^2 GFA

It should be noted that the Office use described in Table incorporates the commercial mixed-use sites C1, C2 and C3 which include Education facility and Research and technology industry uses. The exact GFA for these uses has not been confirmed at this stage. As described in Section 5.1.1, commercial office use has the highest trip generation rate of these uses and so analysis of these sites assuming all is office use is considered conservative.

4.1.1.2 Airport North Precinct

The proposed masterplan for the Airport North Precinct is shown in Figure 4-3 with the associated land use mix included in Table 4-2. It should be noted that for sub-precincts B1, B2, B3, C1 and C2, the exact GFA for each different land use has not been provided. At the direction of SCA, the land use assumption with the highest trip generation rate was adopted for each sub-precinct within the Airport North Precinct Plan to provide a conservative assessment. The land use assumption assumed for each sub-precinct are shown in Table 4-3.

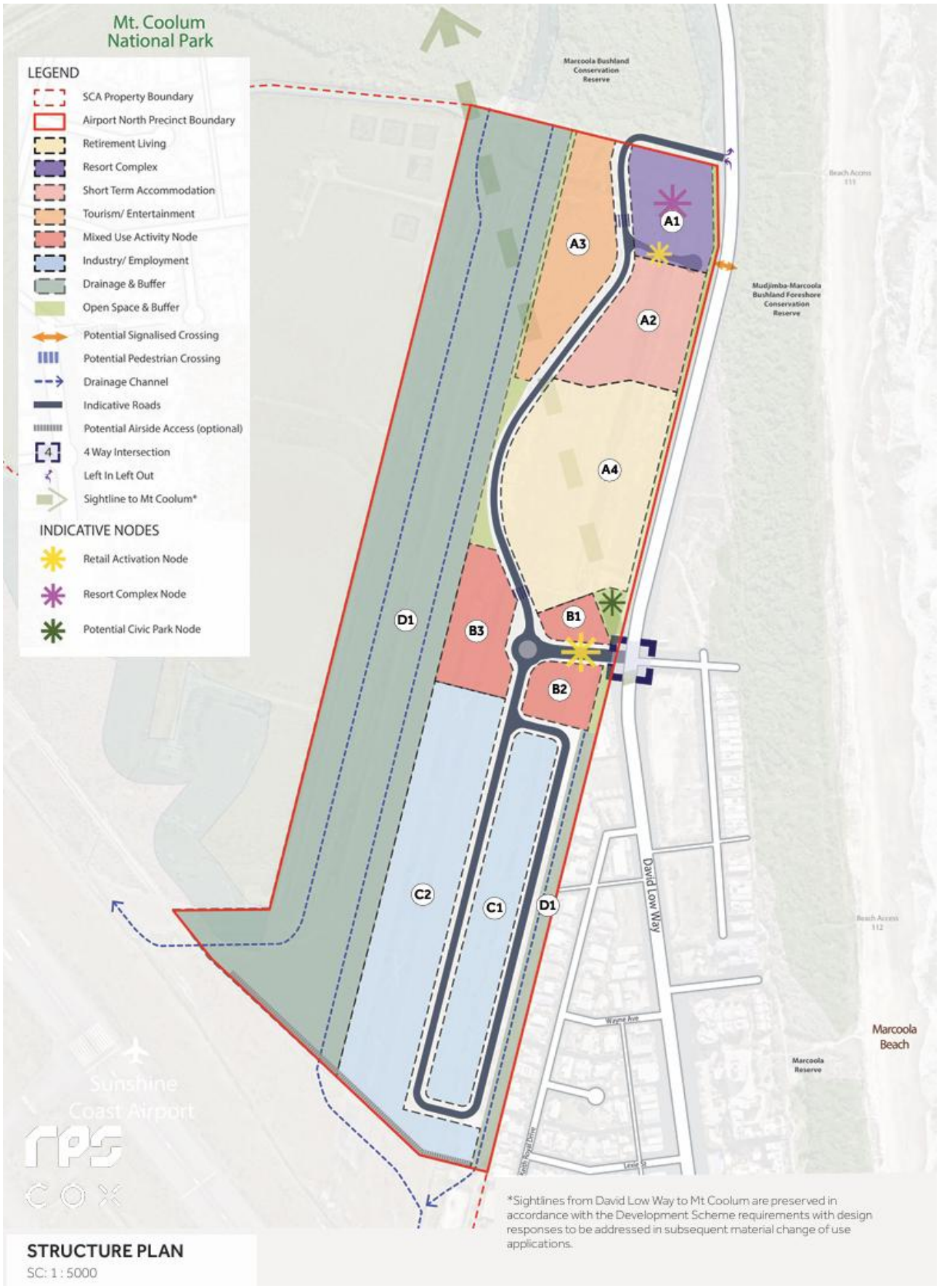


Figure 4-3: Airport North Precinct Master Plan

Table 4-2: Airport North Precinct land use mix

Land use	Scale
Accommodation	
Short term accommodation	300 rooms
Resort accommodation	300 rooms
Retirement living	250 rooms
Retail	
Food and drink / Specialty shops	5,778m^2 GFA
Bulky goods retail	1,118m^2 GFA
Commercial and industrial	
Office	776m^2 GFA
Light industry (Low impact industry, research and technology industry, service industry and warehouse)	33,886m^2 GFA
Other	
Indoor Recreation	2,012m^2 GFA

Table 4-3: Land use assumptions assigned to each Airport North Sub-Precinct

Airport North Sub-Precinct	Land use assumption
A1	Resort accommodation (300 rooms)
A2	Short-term accommodation (300 rooms)
A3	Retirement living (250 rooms) Food and drink (2,122m^2 GFA)
A4	Food and drink (2,880m^2 GFA)
B1	Food and drink (776m^2 GFA) Office (776m^2 GFA)
B2	Food and drink (1,118m^2 GFA)
B3	Food and drink (2,012m^2 GFA)
C1	Indoor recreation (12,628m^2 GFA)
C2	Indoor recreation (21,258m^2 GFA)

4.1.1.3 Aerospace Precinct

The Aerospace is not proposed to be further developed from the SCA PDA assumptions at this stage. Therefore, for the purposes of this assessment, the land uses and scale for the Aerospace Precinct have been assumed to be consistent with those assumed as part of the development of the SCA PDA and taken from that provided in the Gateway PMP Structure Plan. These are shown in Table 4-4.

Table 4-4: Aerospace Precinct land use mix

Land use	Scale
Commercial and industrial	
Light industry	25,000m^2 GFA

4.1.2 Site access

An options analysis of site access options was undertaken / approved as part of the PDA planning process by PTT and concluded that the preferred access into the precincts was as follows:

- Gateway Precinct – all-movements signalised intersection on David Low Way
- Airport North Precinct – the addition of a fourth leg to the David Low Way / Green Turtle Place intersection

The options analysis considered intersection operations, accessibility, safety and cost. The preferred Gateway Precinct access scored highly in the qualitative assessment of the four criteria and then exhibited the best operations of those assessed quantitatively. These assumptions were carried into the Development Scheme, as noted below.

Consistent with the SCA PDA Structural Elements Plan, shown in Figure 4-4, access to the SCA PDA is proposed to be via:

- The existing North Shore Connection Road / David Low Way / Airport Drive signalised intersection
- A new signalised intersection on David Low Way, approximately 400m east of Airport Drive
- A new priority-controlled intersection on Airport Drive at Electra Lane
- The addition of a fourth leg to the David Low Way / Green Turtle Place signalised intersection
- A new priority-controlled left-in / left-out (LILO) intersection on David Low Way, approximately 550m north of Green Turtle Place.

It is assumed that signalisation of the David Low Way / Green Turtle Place intersection will be undertaken by others and be complete prior to the development of the SCA PDA.

The North Shore Connection Road / David Low Way / Airport Drive and David Low Way / Gateway Precinct Access signalised intersections will provide access to the Gateway Precinct, Airport terminal and the Aerospace Precinct. The David Low Way / Green Turtle Place / Airport North Access signalised intersection and the David Low Way / Airport North LILO priority-controlled intersection will provide access to the Airport North Precinct. No internal roads are proposed to connect the Airport North Precinct to the other PDA precincts internal roads.

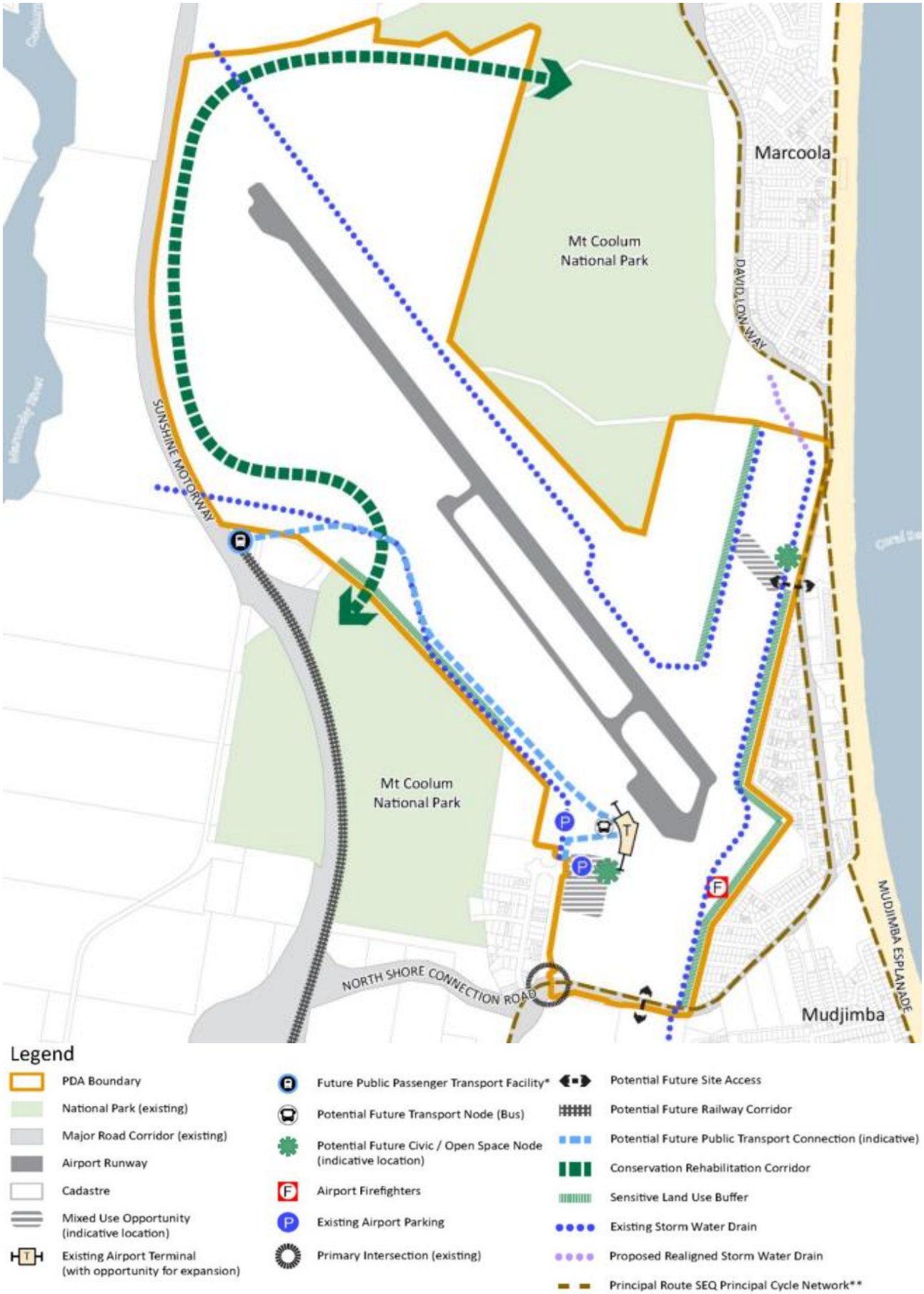


Figure 4-4: SCA PDA Structural Elements Plan (Source: Sunshine Coast Priority Development Area Scheme, 2024)

4.2 Aviation passenger growth

In addition to growth in the area due to the development of the SCA PDA, SCA is expected to increase airport operations with associated increases in aviation passenger growth. The expected future growth is documented in Table 4-5. It should be noted that forecast passenger growth was not provided for 2044, so this was calculated using the same annual growth rate between 2031 and 2043 (4.3%).

Table 4-5: Forecast passenger growth (Source: SCA)

Financial Year	Domestic Pax	International Pax	Total Pax	Annual growth from 2024
2024	1,890,485	12,176	1,902,662	-
2025	1,599,133	35,233	1,634,366	-14.1%*
2026	1,863,197	22,657	1,885,854	-0.4%
2027	1,995,069	22,657	2,017,726	2.0%
2028	2,087,950	51,673	2,139,623	3.0%
2029	2,196,863	76,225	2,273,088	3.6%
2030	2,324,534	84,337	2,408,872	4.0%
2031	2,433,224	120,087	2,553,312	4.3%
2043	4,047,104	152,300	4,199,404	4.3% (64.4% increase from 2031)
2044	-	-	4,377,182	4.3% (71.4% increase from 2031)

*Reduction in passenger volumes related to Bonza Airline withdrawal from domestic market

5. Development Traffic

An assessment of forecast trip generation and distribution has been undertaken for the SCA PDA area. Both weekday morning (AM) and evening (PM) peak periods have been considered as critical peak periods for this assessment.

5.1 Traffic generation

5.1.1 Traffic generation rates

TMR's GTIA outlines the preferred hierarchy of data sources for traffic generation rates. The traffic generation rates for the uses in the SCA PDA have been sourced based on this hierarchy. The traffic generation rates and sources used for the SCA PDA are included in Table 5-1.

These rates are the base rates adopted prior to the application of the trip reduction factors described in Section 5.1.2. Where available, rates for regional or sub-regional areas have been used to more closely replicate the locality of the Sunshine Coast and SCA. The rates adopted are as per the previous Gateway Precinct TIA.

Table 5-1: Adopted trip generation rates

Land use	Source	Weekday AM peak rate (vph)	Weekday PM peak rate (vph)	Daily rate (vpd)
Bulky goods	Transport for NSW Guide to Transport Impact Assessment Version 1.1	- Weekday AM peak is outside of opening hours	1.31 / 100m^2 GFA	16.92 / 100m^2 GFA
Car wash (self-service)	Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition – Self-Service Car Wash	5.54 / wash bay	5.54 / wash bay	108 / wash bay
Car wash (automatic)^	ITE Trip Generation Manual 11th Edition – Automated Car Wash	77.5 / wash bay	77.5 / wash bay	775 / wash bay
Childcare centre*	DTMR Trip Generation Data – Childcare Centres – SEQ Sites	0.65 / child	0.48 / child	2.27 / child
Cold storage-based freight forwarding facility	ITE Trip Generation Manual 11th Edition – High-Cube Cold Storage Warehouse	0.12 / 100m^2 GFA	0.13 / 100m^2 GFA	2.28 / 100m^2 GFA
Education facility	ITE Trip Generation Manual 11th Edition – University / College	0.15 / student	0.15 / student	1.56 / student
Fast food (major)*	DTMR Trip Generation Data – Fast Food Drive Through – SEQ Sites	15.2 / 100m^2 GLFA	40.94 / 100m^2 GFLA	1,272 trips
Fast food (minor)*	DTMR Road Planning and Design Manual 1st Edition	12 / 100m^2 GFA	12 / 100m^2 GFA	531 trips
Food and drink outlet	Transport for NSW Guide to Transport Impact Assessment Version 1.1	2.5 / 100m^2 GFA Weekday AM peak may be outside of opening hours	5 / 100m^2 GFA	60 / 100m^2 GFA
Health care*	DTMR Trip Generation Data – Medical Centres – Brisbane	5.62 / 100m^2 GFLA	5.61 / 100m^2 GFLA	40.47 / 100m^2 GFA

Land use	Source	Weekday AM peak rate (vph)	Weekday PM peak rate (vph)	Daily rate (vpd)
Indoor recreation	Transport for NSW Guide to Transport Impact Assessment Version 1.1	3.6 / 100m^2 GFA	3.6 / 100m^2 GFA	16.9 / 100m^2 GFA
Light industry	DTMR Road Planning and Design Manual 1st Edition	0.9 / 100m^2 GFA	0.9 / 100m^2 GFA	9 / 100m^2 GFA
Office	DTMR Road Planning and Design Manual 1st Edition	2 / 100m^2 GFA	2 / 100m^2 GFA	10 / 100m^2 GFA
Research and technology industry	ITE Trip Generation Manual 11th Edition – Research and Development Centre	1.1 / 100m^2 GFA	1.05 / 100m^2 GFA	11.92 / 100m^2 GFA
Self storage	Stantec & Self Storage Association of Australasia Parking and Traffic Study 2022/23	11.4 for facilities ≥ 6,000m^2 in size	11.4 for facilities ≥ 6,000m2 in size	108.6 for facilities ≥ 6,000m^2 in size
Short term accommodation	Transport for NSW Guide to Transport Impact Assessment Version 1.1	0.4 / unit	0.4 / unit	3 / unit
Service station*	DTMR Trip Generation Data – Service Station – SEQ Sites	30.75 / 100m^2 GLFA	19.78 / 100m^2 GLFA	700 / 100m^2 GFA
Specialty shops	Transport for NSW Guide to Transport Impact Assessment Version 1.1	2.25 / 100m^2 GLFA	4 / 100m^2 GLFA	45.81 / 100m^2 GFA
Supermarket (limited line)*	DTMR Trip Generation Data – Stand Alone Supermarket – SEQ Sites with GLFA < 2,000m2	14.53 / 100m^2 GLFA	14.17 / 100m^2 GLFA	0.695 / m^2 GLFA + 1,327
Tourism attraction^	ITE Trip Generation Manual 11th Edition – Museum	0.3 / 100m^2 GFA	0.2 / 100m^2 GFA	3 / 100m^2 GFA

*Daily rate has been sourced from a different source to the peak rates

^Daily rate has been assumed to be 10 times the peak hour rate, as per industry standard

5.1.2 Reduction factors

TMR's GTIA states that the traffic generation of certain sites may be less than suggested standard trip generation rates. This can be due to a number of factors such as:

- Measures introduced to avoid or manage development traffic demand
- Justifiably high levels of trip internalisation within the site, such that the volume of traffic entering and exiting the site is reduced
- Justifiably high levels of public and active transport usage to access the site
- The presence of a proportion of undiverted and diverted drop-in trips which reduce the volume of new traffic generated

The assumptions adopted are as per the previous Gateway Precinct TIA.

5.1.2.1 Internal trips

Given the mix of land uses within the SCA PDA, it can be expected that there would be a number of trips between uses within the site (e.g. trips between employment uses and supermarket and fast food). The New South Wales Roads and Traffic Authority (RTA) *Guide to Traffic Generating Developments* (2002) allows for reductions of 15% - 25% to account for internal trips. As there are no internal roads linking the Airport

North precinct to the rest of the SCA PDA area, the lower 15% reduction rate has been adopted as there is a certain limiting factor to the extent of internal trips able to be undertaken. This rate has been applied to the retail, supermarket (limited line), fast food, food and drink, child care centre uses, indoor recreation and health care uses.

5.1.2.2 Public transport trips

As mentioned in Section 2.1.1, the implementation of the "The Wave" will provide BRT services to SCA at a higher frequency than current public transport infrastructure. As such, a reduction factor for increased public transport travel to SCA can be reasonably applied. The SCC ITS highlights a region wide mode share target of 10% for public transport trips by 2041, an increase from 3% of current trips. Therefore, a reduction factor of 7% has been adopted and applied across all land uses within the Gateway Precinct.

It should be noted that the adoption of the ITS 10% public transport target mode share is considered to be conservative for SCA. The ITS target is a region-wide target and so accounts for the hinterland and regional areas of the Sunshine Coast Council area where public transport provision is lower than the metropolitan areas. It could be expected that with the introduction of "The Wave" there would be a greater than 10% public transport mode share around SCA.

5.1.2.3 Undiverted drop-in trips

An undiverted drop-in trip is a trip that is considered to already be part of the existing flows on the road network that would have previously passed the development site. Austroads *Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments* (2020) (AGTM Part 12) specifies reduction rates for undiverted drop-in trips for certain development uses.

Table C8.2 in AGTM Part 12 suggests that 35% of trips generated by a fast-food site can be considered to be undiverted drop-in trips. As such, a reduction factor of 35% has been applied to the fast food uses within the SCA PDA.

Table C8.2 also specifies that for shopping centres with gross floor area less than 3,000m^2 a reduction factor of 18% can be applied to account for undiverted drop-in trips and for shopping centres with GFA 3,000m^2 – 20,000m^2 a factor of 28% can be applied. The SCA PDA has two retail areas, in the Gateway Precinct and Airport North precinct, with GFA less than 3,000m^2 but total GFA greater than 3,000m^2. Given there are no internal linking roads between the two precincts, the 18% factor has been applied to both areas rather than a combined 28%.

While no specific rates are outlined for undiverted drop-in trips to a service station, it could be assumed that up 90% of trips generated by the service station could be undiverted drop-in trips. This is considered reasonable given the location of the service station along the key road of David Low Way. It is unlikely that the service station would generate many trips where it is the primary destination in the peak hours.

5.1.3 Traffic generation

A summary of the traffic generation of the SCA PDA is shown in Table 5-2.

As the trip generation has been developed from a first principles methodology, it is anticipated that the trips may be more weighted towards the peak periods than spread out throughout the day. As such, a hybrid traffic generation approach has been adopted which utilises the trip time profiles and trip distributions of external zones (zones outside the PDA development area) with similar land uses from the SCA model. This is discussed in more detail in Section 5.2.

This ensures that the revised trip generation is captured in the model, whilst avoiding applying excess demands during the AM and PM peak periods.

Table 5-2: SCA PDA development traffic generation summary

Land use	AM Peak			PM Peak			Daily		
	In (vph)	Out (vph)	Trips	In (vph)	Out (vph)	Trips	In	Out	Trips
Gateway Precinct									
Total Trips	934	557	1,491	640	1,000	1,640	7,513	7,513	15,025
Internal Trips	42	42	84	56	56	112	510	510	1,020
External Trips	892	515	1,407	585	945	1,530	7,002	7,002	14,005
Undiverted Drop-in Trips	75	75	150	93	93	186	1,440	1,440	2,880
Public Transport Trips	65	39	104	45	70	115	526	526	1,052
New Trips	751	400	1,151	447	782	1,229	5,037	5,037	10,074
Airport North Precinct									
Total Trips	904	894	1,798	1,006	1,015	2,021	6,850	6,850	13,700
Internal Trips	108	108	216	125	125	250	830	830	1,660
External Trips	796	786	1,582	881	890	1,771	6,020	6,020	12,040
Undiverted Drop-in Trips	0	0	0	0	0	0	0	0	0
Public Transport Trips	0	0	0	0	0	0	0	0	0
New Trips	796	786	1,582	881	890	1,771	6,020	6,020	12,040
Aerospace Precinct									
Total Trips	203	23	226	34	191	225	1,125	1,125	2,250
Internal Trips	0	0	0	0	0	0	0	0	0
External Trips	203	23	226	34	191	225	1,125	1,125	2,250
Undiverted Drop-in Trips	0	0	0	0	0	0	0	0	0
Public Transport Trips	0	0	0	0	0	0	0	0	0
New Trips	203	23	226	34	191	225	1,125	1,125	2,250

5.1.4 Heavy vehicle proportions

A heavy vehicle proportion of 3% was applied to account for commercial vehicles. The 3% figure was derived from the traffic count data presented in Table 3-3, which showed heavy vehicle percentage during both AM and PM peak hours ranged from 2.9% to 3.1%. This data was obtained from a traffic survey conducted at the North Shore Connection Road / David Low Way / Airport Drive intersection on 20 February 2024 and is considered the most up-to-date and reliable data available for the location.

This dataset was also used in previous modelling exercises conducted with SCC and SCA for the site on 25 June 2024. The updated trip generation numbers incorporating the heavy vehicle proportions are presented as passenger car units (pcu) within Table 5-3 below.

Table 5-3: SCA PDA daily passenger car unit trips

Precinct	New daily trips (vehicles)	New daily trips (pcu)
Gateway	10,074	10,527
Airport North	12,040	12,580
Aerospace	2,250	2,352

5.2 Trip distribution

The distribution for the development trips was based on the future year traffic models provided by SCC. These models assign trips between traffic zones using origin-destination (OD) matrices that reflect observed travel patterns and demographic assumptions. The airport zoning system within the models have been further refined to better align with the proposed land use and site layout. This update primarily involved splitting the larger airport zones into smaller land parcels, thereby allowing for detailed trip distribution based on the various land uses within each precinct.

The trip generation rates calculated in the previous section were applied within the future year scenarios using OD data from existing zones outside of the PMP with comparable land uses. In addition, the demand daily profile was adopted from these "template" zones where suitable. This is discussed in further detail in the following sections.

The following sections also show the modelled trip distribution for each precinct, including daily trip volumes in passenger car units (pcu) prior to the removal of drop-in trips. Drop-in trips are taken out during post processing for SIDRA analysis as detailed in Table 6-3.

5.2.1 OD distribution

To ensure the trip distribution of traffic associated with the PDA was suitable, OD distribution patterns from existing "template" zones with comparable land uses near the airport were applied to the new modelled airport precinct zones. It should be noted that trips between these existing "template" zones and airport zones were excluded to avoid generating unrealistic internal movements within the precinct.

Table 5-4 indicates the existing model zones used to inform the distribution of the corresponding airport precinct zones.

Table 5-4: Existing zones trip distribution summary

Existing zone	Description	Airport precinct zone
2876	Existing medical centre	68043
2877	Existing shopping precinct	5804
2879	Existing recreation / community centre	5805
2881	Existing offices	5802, 6802, 5803, 6909, 6804
2887	Existing service station / carwash / restaurants	58042
2890	Existing retail and restaurants	2874, 6905, 6907, 6908, 6807
2891	Existing hotels and resorts	6805, 2865
2896	Existing childcare centre	68042
6803	Existing air industry	6903
6904	Existing industrial park	5806, 6903

Figure 5-1 shows the modelled airport precinct zones (in red), and nearby “template” zones with similar land uses (in blue).

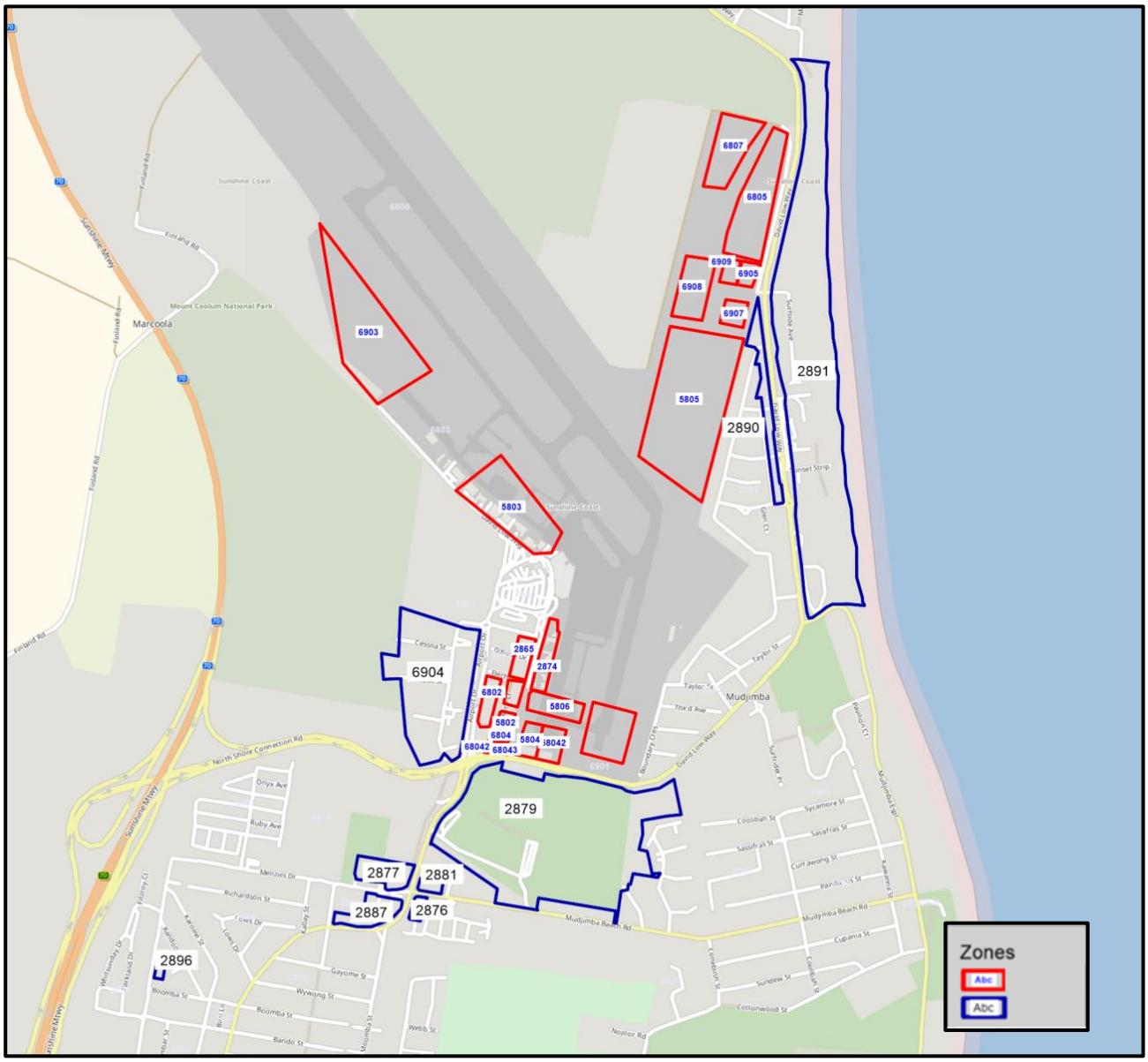


Figure 5-1: Airport precinct development zones (red) and existing “template” zones with comparable land uses (blue)

A distribution summary of each of the existing airport zones is shown below in Table 5-5.

Table 5-5: Existing zones distribution summary

Zone	Description	Approximate proportion of trips to/from North of the Airport (%)	Approximate proportion of trips to/from South of the Airport (%)
2876	Existing Medical Centre	40	60
2877	Existing Coles	25	75
2879	Existing Recreation / Community Centre	5	95
2881	Existing Office	30	70
2887	Existing Service Station and Restaurants	30	70
2890	Existing Retail and Restaurants	45	55
2891	Existing Hotels and Resorts	25	75
2896	Existing Child Care	15	85
6803	Existing Air Industry	20	80
6904	Existing Industrial Park	20	80

Based on this summary, the zone distribution for the new Airport North Precinct Zone 5805 (assumed to be indoor recreation) instead used Zone 6904 (light industry) as the template zone for OD distribution. This is because:

- The existing recreation / community centre zone (2879) indicated a north/south split of 5%/95%. Given the significant number of trips generated from this zone, this split was deemed unsuitable, especially given that it is likely there would be other land uses in this sub-precinct not associated with indoor recreation.
- Light industry was one of the possible land uses for Zone 5805 (indoor recreation was assumed due to having the highest trip-generation rate as per SCA's request). Given that it is likely that Zone 5805 will have light industry upon opening, this was considered an appropriate change.

5.2.2 Demand profile distribution

The daily traffic generation values associated with each of the new airport precincts, shown previously in Table 5-3, were distributed across the modelled periods on a zone-by-zone basis using existing daily demand profiles within the SCA model.

Traffic demand profiles were adopted and applied to the new airport precinct zones, based on existing zones with similar land use within the wider model (similarly to the OD distribution). For example, the Gateway Precinct includes a new shopping precinct with food and drink outlets. In this instance, the average weighted demand profile of all zones of similar land use within the wider SCA model were adopted and applied to the traffic associated with this new zone.

Table 5-6 shows the existing zones used to inform the demand profiles of the new airport precinct zones.

Table 5-6: Existing zones used to inform demand profile of airport precinct zones

Land use	Existing zones	Airport zones used to inform demand profile
Shopping precinct (supermarket/fast food)	2877, 2838, 2810, 2788	5804
Service station / carwash / restaurant	2887, 2792	58042
Childcare	2896, 2840	68042
Food and drink / retail	2890, 2796, 2795	2874, 6905, 6907, 6908, 6807
Indoor recreation	2879, 2809, 2783	5805
Aerospace	6803	6903
Office	2881, 6801, 6803, 6804, 6909	6804, 5802, 6802, 5803, 6909
Medical centre	2876	68043
Hotels / short-term accommodation	2891, 2815, 2793	2865, 6805
Industry	2807, 2811, 3609, 3610, 3611, 3616, 6904	5806

It should be noted that the demand profiles for the limited number of commercial office zones within the model were deemed inappropriate and would likely underestimate peak hour traffic generation. Consequently, the demand profile from the DTMR land use data for an office space in Queensland was applied to the new office zones within the PDA. The origin and destination traffic profiles used are shown below in Figure 5-2 and Figure 5-3 respectively.

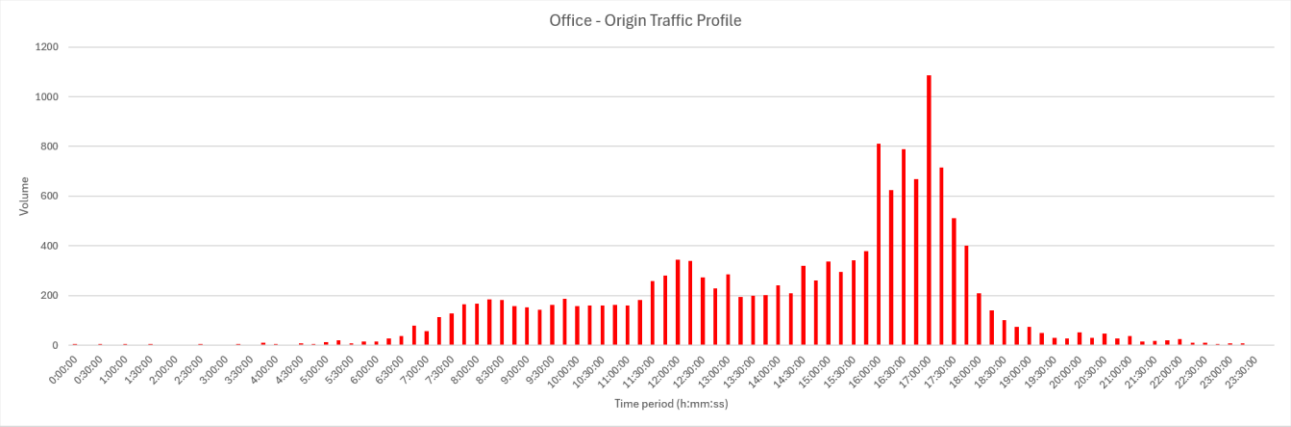


Figure 5-2: Office demand profile - origin (Source: TMR)

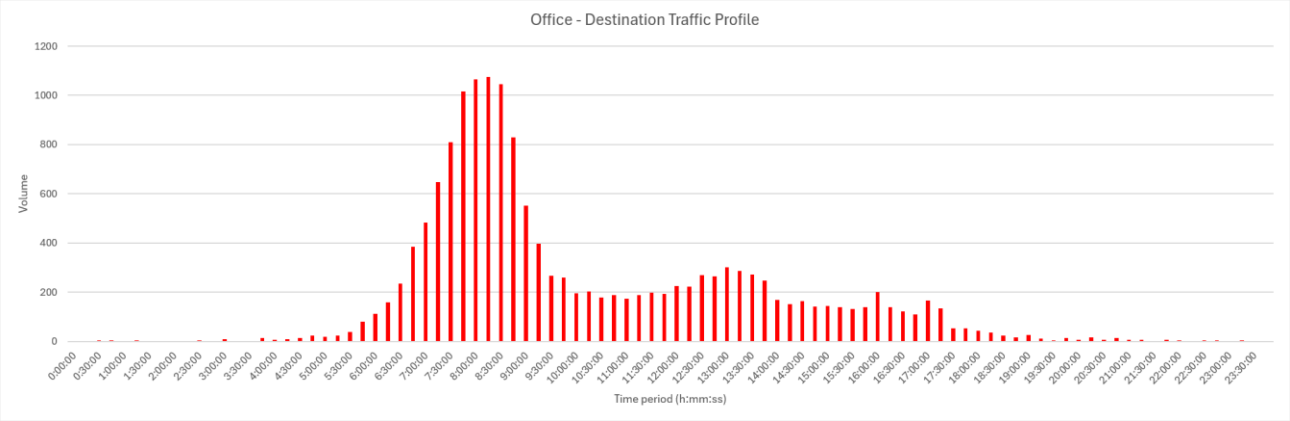


Figure 5-3: Office demand profile - destination (Source: TMR)

Figure 5-4 shows the combined trip profiles across all the airport precincts within the model. The graph generally aligns with the peaks identified in the observed traffic counts; however, it is noted that multiple PM peaks are observed, which would represent the staggered finishing times of various land uses. Overall, the profile broadly reflects the modelled flows and counts presented in Appendix A.

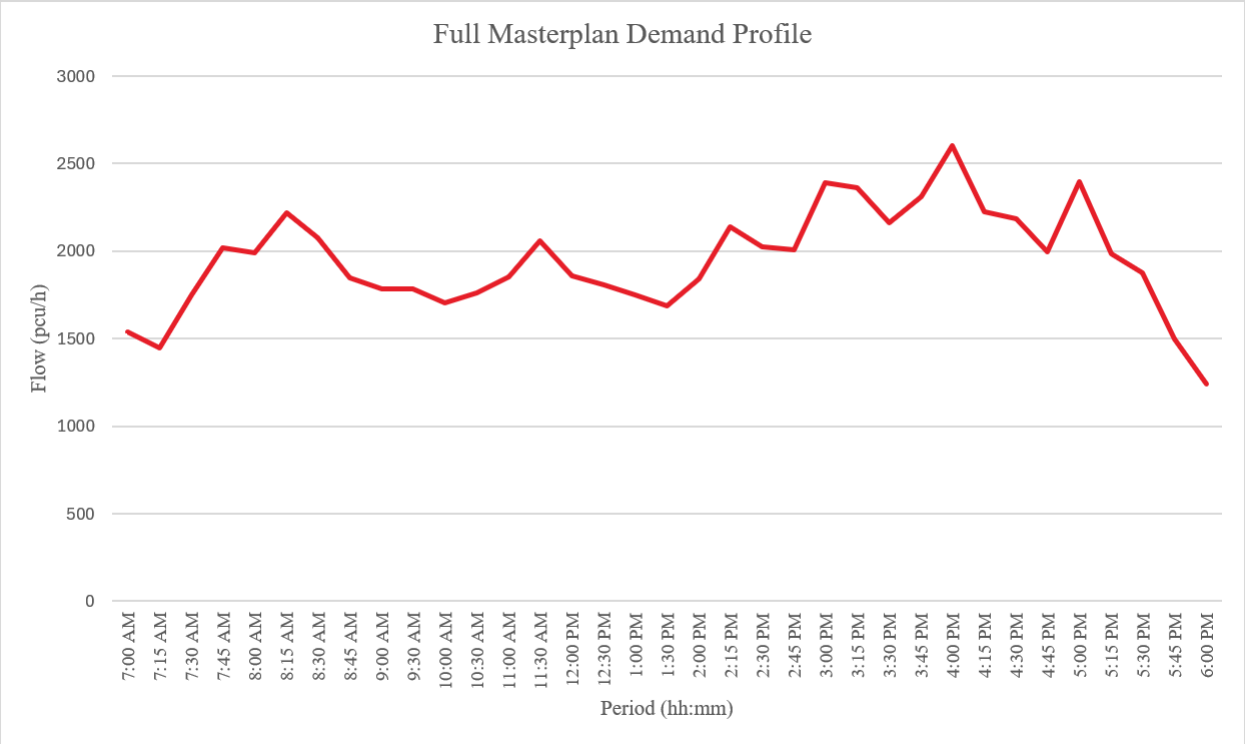


Figure 5-4: Full Masterplan precinct demand profile

Table 5-7 shows the modelled precinct volumes using the time-of-day distribution within the model for the identified network peak hours. These values differ from the peak hour traffic generation values shown previously in Table 5-2, as the additional development traffic was distributed across the model periods using the daily demand profile from existing zones within the SCA model, rather than a fixed peak hour rate.

Table 5-7: SCA PDA peak hour passenger car unit trips

Precinct	AM peak (pcu)	PM peak (pcu)
Gateway Precinct	945	980
Airport North Precinct	949	1,153
Aerospace Precinct	181	198

5.2.3 Gateway precinct trip distribution

Figure 5-5 shows the daily trip distribution for the Gateway precinct within the traffic model. The peak hour trip distribution is similar to the daily figures.

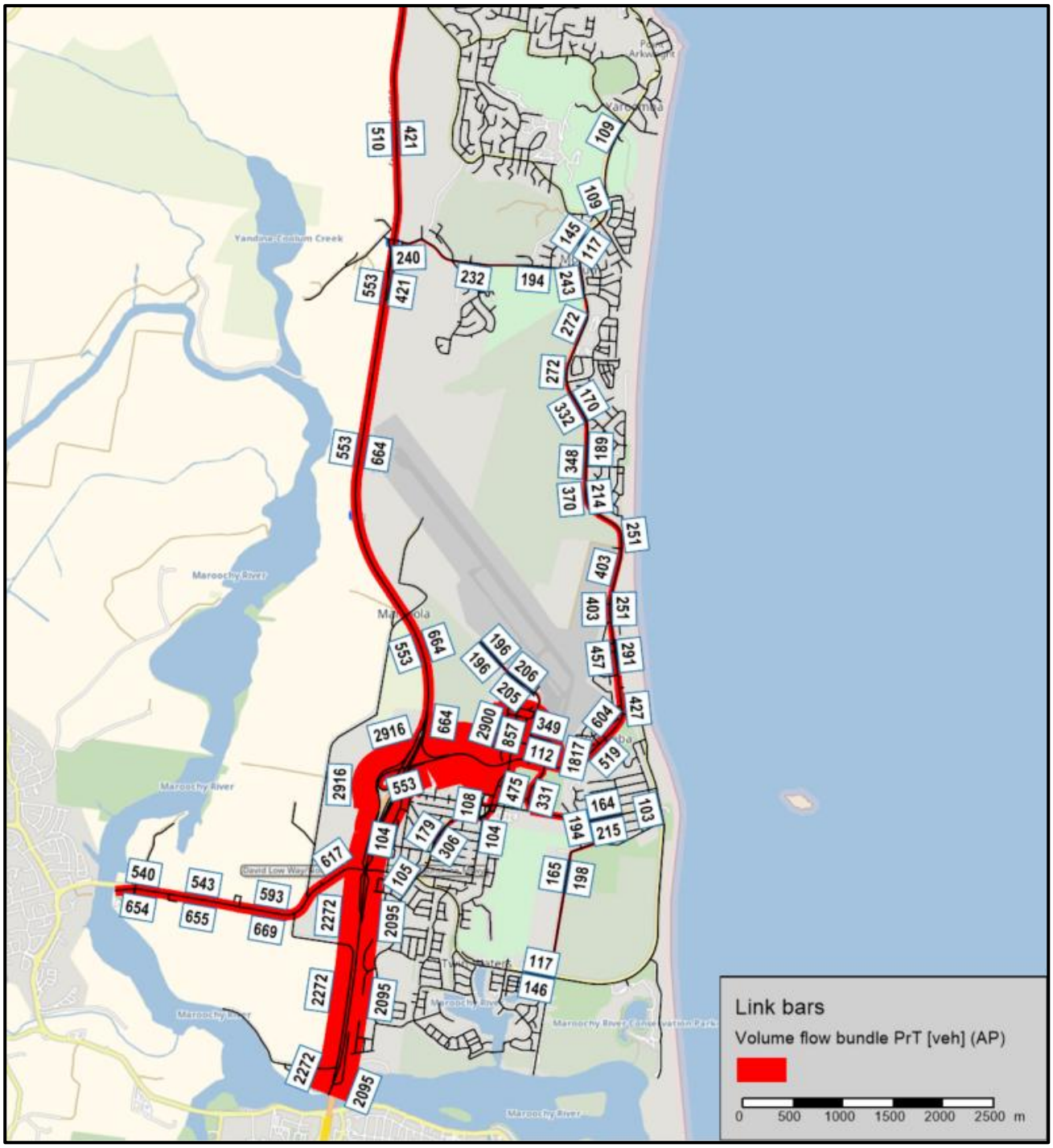


Figure 5-5: Gateway precinct daily modelled trip distribution

5.2.4 Aerospace precinct trip distribution

Figure 5-6 shows the daily trip distribution for the Aerospace precinct within the traffic model. The peak hour trip distribution is similar to the daily figures.

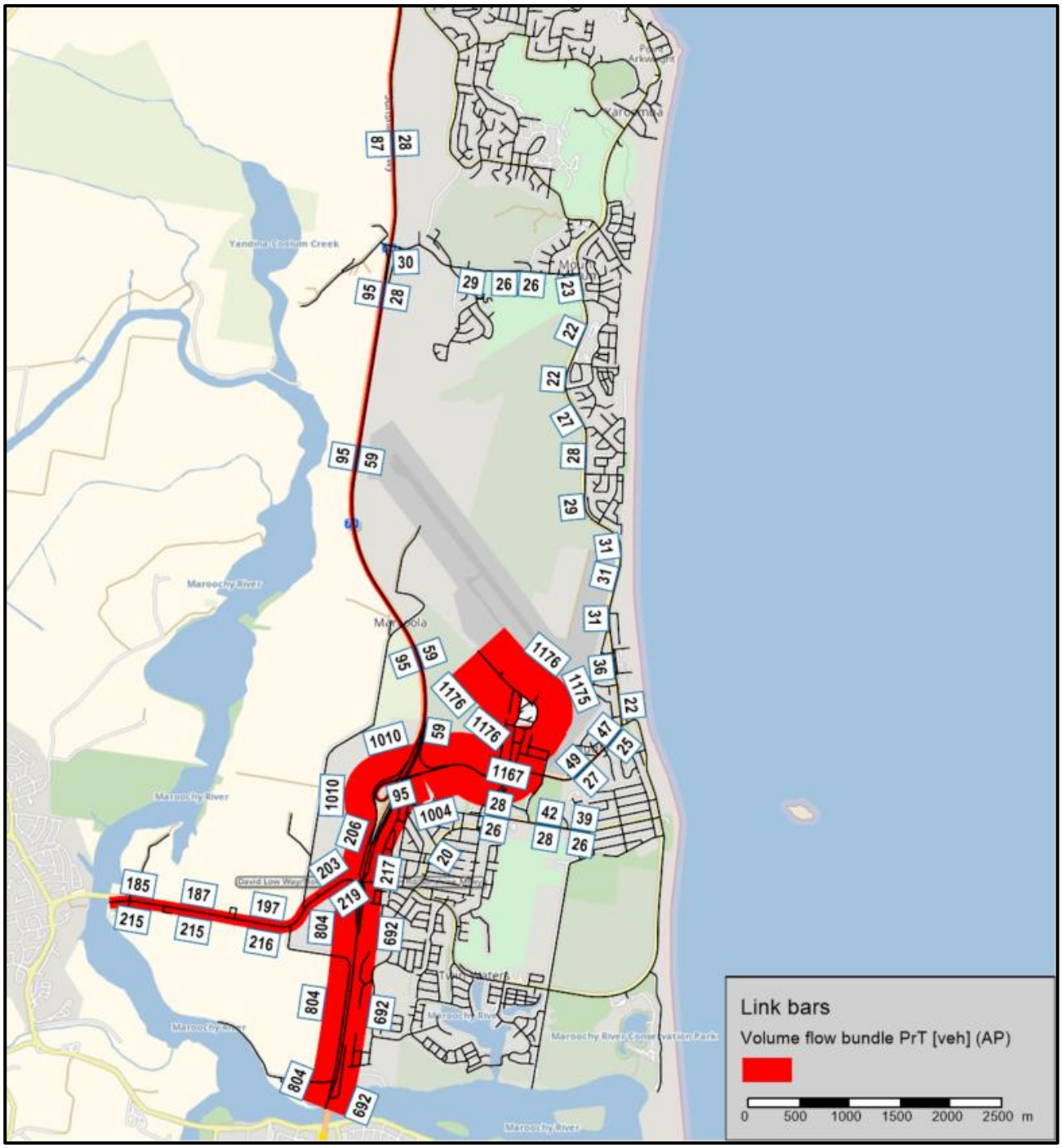


Figure 5-6: Aerospace precinct daily modelled trip distribution

5.2.5 Airport north precinct trip distribution

Figure 5-7 shows the daily trip distribution for the Airport North precinct within the traffic model. The peak hour trip distribution is similar to the daily figures.

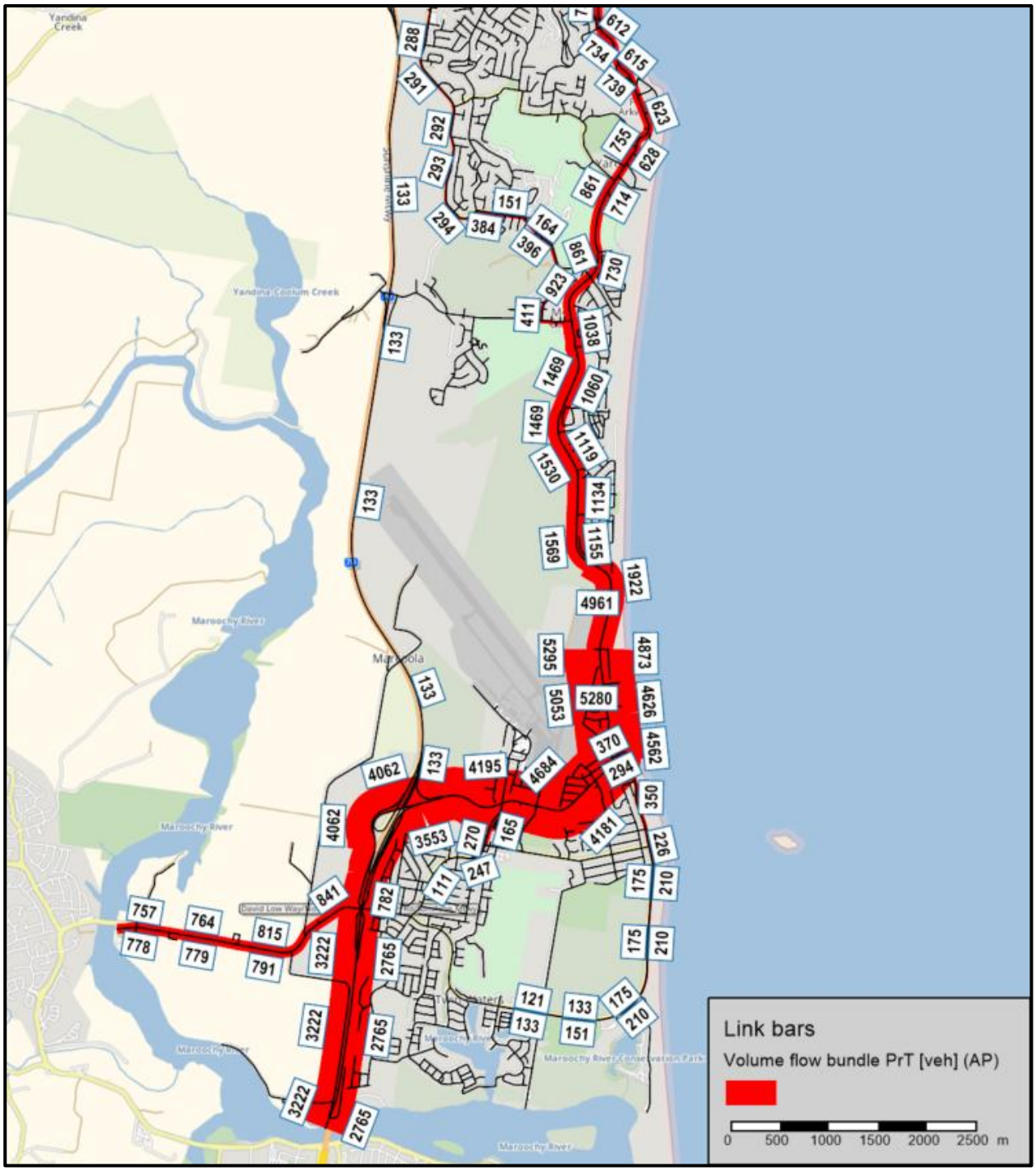


Figure 5-7: Airport North precinct daily modelled trip distribution

6. Impact Assessment

6.1 Pre and post development traffic volumes

In consultation with SCA and consistent with modelling work undertaken as part of the Development Scheme approval, the modelling activity has been undertaken on the scenarios outlined in Table 6-1.

Table 6-1: Modelling scenarios

Scenario	2034	2044
Do Nothing (DN)	Future 2034 'base case' demands with only committed or planned network changes as agreed with stakeholders.	Future 2044 'base case' demands with only committed or planned network changes as agreed with stakeholders.
Gateway and Aerospace Precincts (GAP)	Future 2034 network with precinct development demands and road network changes.	Future 2044 network with precinct development demands and road network changes.
Full Masterplan (MP) – including the Airport North Precinct	Future 2034 network with full masterplan demands and road network changes.	Future 2044 network with full masterplan demands and road network changes.

6.1.1 Future year traffic models

Future year traffic models for 2031 and 2041 were provided by SCC and used as the baseline for developing the modelled scenarios. The Visum models provided by SCC incorporate forecast traffic growth from Council's strategic demand forecasting model. All road upgrades included in these models were retained for the modelled scenarios, with the main changes including:

- Sunshine Motorway – David Low Way to Yandina Coolum Road
- Twin Waters West
- David Low Way to Mudjimba Beach Road Connection
- Mudjimba Esplanade Turning Lane.

In addition to the included road upgrades, the signalisation of David Low Way / Green Turtle Place was included in all scenarios.

Sunshine Motorway – David Low Way to Yandina Coolum Road

A number of upgrade projects have been included for the Sunshine Motorway between David Low Way and Yandina Coolum Road in 2031. These include:

- New south-facing motorway ramps at West Coolum Road
- New interchange at Yandina Coolum Road
- Motorway duplication.

An overview of the project is provided in Figure 6-1.

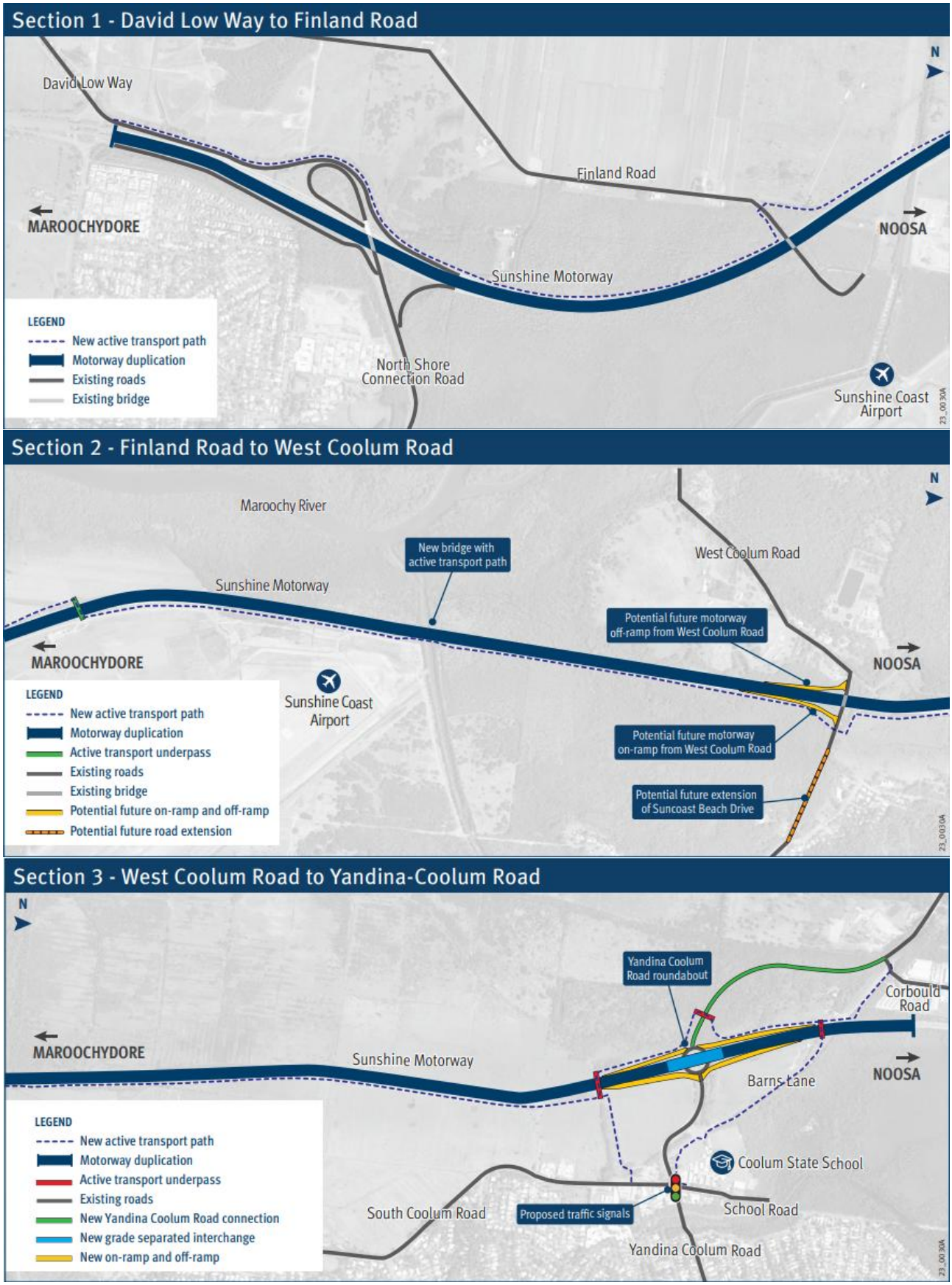


Figure 6-1: Sunshine Motorway upgrade project area (Source: TMR, 2024[6])

[6] https://www.tmr.qld.gov.au/projects/sunshine-motorway-mooloolaba-peregian-david-low-way-to-yandina-coolum-road

Twin Waters West

In 2023 approval was granted for the approximately 450 house Twin Waters West development. The road network and associated traffic demand of this development have been included in the future 2031 and 2041 SCC models. An overview of the proposed master plan is shown in Figure 6-2. The proposed access intersection at David Low Way / Ocean Drive is shown in Figure 6-3.



Figure 6-2: Twin Waters West proposed master plan (Source: Stockland, 2023)

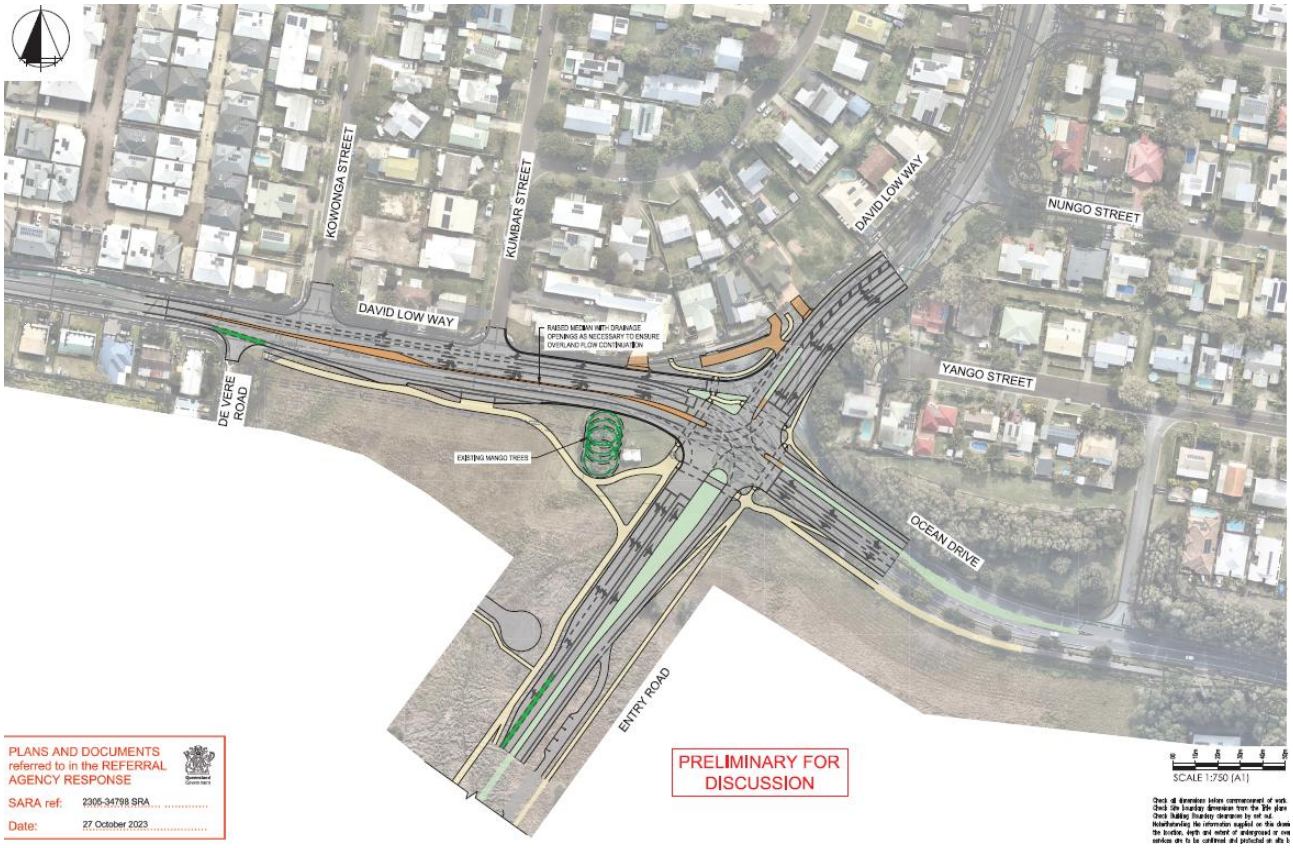


Figure 6-3: Twin Waters West proposed access intersection

David Low Way to Mudjimba Beach Road Connection

Provision has been made for a future connection from David Low Way to Mudjimba Beach Road, located as a fourth leg to the proposed David Low Way / Gateway Precinct Access signalised intersection. The timing of the provision of this connection is unknown but has been assumed to have been provided prior to the connection into the Gateway Precinct.

This connection was included in the models received from SCC and Arup were advised by SCA after discussions with SCC on 21 July 2025 to include the southern leg in the analysis.

Mudjimba Esplanade Turning Lane

Provision has been made for a right turn lane on David Low Way into Mudjimba Esplanade. TMR are in the planning process for this upgrade and timing of delivery is unknown but has been assumed to be provided prior to 2034 and has been included in the Do-Nothing scenarios.

6.1.2 Airport background growth

The growth in aviation passengers described in Section 4.2 would occur regardless of the development of the SCA PDA, and so aviation passenger growth has been included as background traffic growth for the purposes of this TIA. To forecast background traffic volumes in the 2034 (opening year) and 2044 (10-year Design Horizon) design years, a compounding growth rate of 4.3% per annum has been applied as highlighted in Table 4-5 as the growth between 2024 and 2031 and 2044.

Additionally, it has conservatively been assumed that the mode share of aviation passengers will remain the same as existing, though some passengers in future may change their travel mode to “The Wave’. Therefore, the 4.3% growth rate was used to determine the future year trips going to and from the airport. Within the traffic models, this was applied to adjust demands related to the terminal and airport parking zones such that the number of AM and PM peak hour trips along Airport Drive north of David Low Way within the 2034 and 2044 do nothing scenarios aligned with the trips calculated in Table 6-2.

Table 6-2: Airport background trips at Airport Drive north of David Low Way

Airport trips	2024 Existing	2034 Estimated	2044 Estimated	Annual growth rate
AM Airport In	406	619	942	4.3%
AM Airport Out	235	358	545	4.3%
PM Airport In	372	567	863	4.3%
PM Airport Out	436	664	1012	4.3%

6.1.3 External background traffic growth

The background traffic growth between non-airport zones was calculated for the 2034 and 2044 years using the provided traffic model demands. The 2034 background growth was calculated by interpolating between the 2031 and 2041 demand matrices. The 2044 background growth was calculated by extrapolating from the 2041 demands using the linear growth calculated in the earlier process. The linear background growth rate was calculated to be around 7.2% for the overall model subnetwork, which was around an additional 1,300 daily vehicle trips per year. Figure 6-4 shows the estimated increase in the background non-airport daily trips between the 2031 and 2041 demand matrices provided in the traffic models.

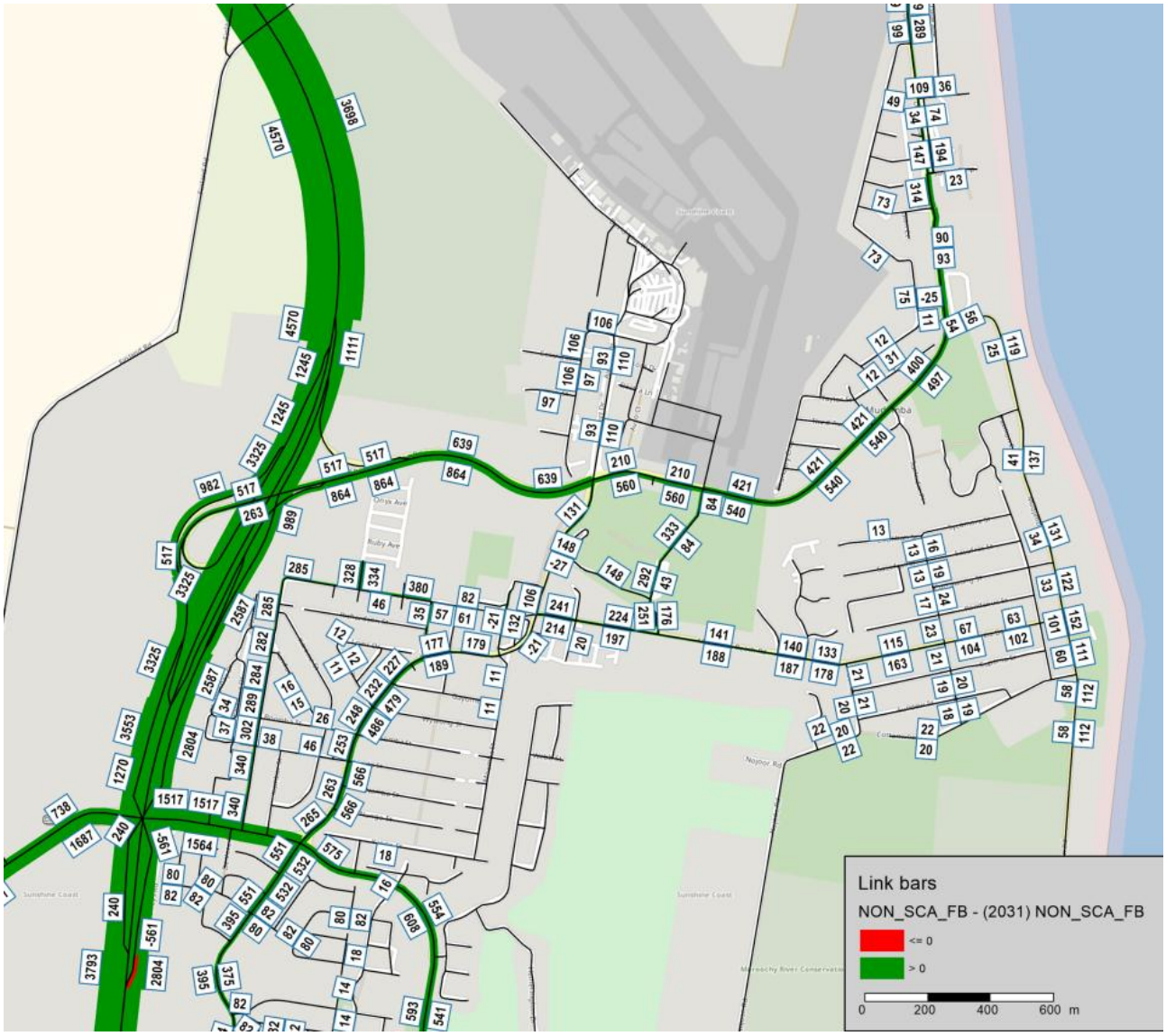


Figure 6-4: Estimated increase in non-airport daily background trips between 2031 and 2041

6.1.4 Future year modelling limitations

The following analysis is based on the future year traffic volumes and patterns estimated from the scenarios developed using the traffic models. While the models were developed using standard methods, several limitations have been identified due to data availability and project time constraints. Table 6-3 outlines the key limitations along with corresponding modelling approaches and assumptions used.

Table 6-3: Future year modelling limitations

Limitation	Modelling approach and assumptions
Undiverted trips are not redirected in model.	The models include the new trips generated by the proposed developments which use reduction factors for internal, public transport and undiverted trips. Due to the complexity involved, the diversion at the site accesses for the undiverted trips was not included within the VISUM modelling. As such, these trips are redirected in a post processing before SIDRA analysis.
Internal trips included within development zone trip distribution pattern.	Trips occurring within and between the proposed precincts were included in the initial demand matrices. These internal trips were subsequently zeroed in the model to avoid impacting the trip distribution pattern and focus on external network impacts.
Modelled period is a full day; however, airport background growth was only	The analysis is based on the AM and PM peaks and there was insufficient data available to estimate the airport background growth for a full daily profile required in the traffic model. As such, the non-peak periods in the model are treated as

Limitation	Modelling approach and assumptions
calculated based on the observed AM and PM peaks (see Section 6.1.2).	warmup and cooldown periods and are excluded from analysis. Whilst the analysis does not cover a full day, the critical time period is captured.

6.2 Access impact assessment and mitigation

As outlined in the GTIA, the desired outcomes regarding the access and frontage are for the SCA PDA to:

- Minimise impacts on the through carrying function of the frontage road
- Ensure any new access points do not worsen the safety or efficiency of the road network
- Ensure that the frontage works are constructed to ensure continuity of adjacent or planned transport infrastructure and to ensure existing infrastructure is not adversely impacted.

As mentioned in Section 4.1.2, the SCA PDA is to be accessed via:

- The existing North Shore Connection Road / David Low Way / Airport Drive signalised intersection
- A new signalised intersection on David Low Way, approximately 400m east of Airport Drive
- A new priority-controlled intersection on Airport Drive at Electra Lane
- The addition of a fourth leg to the David Low Way / Green Turtle Place signalised intersection
- A new priority-controlled LILO intersection on David Low Way, approximately 550m north of Green Turtle Place.

To assess the proposed development in accordance with TMR's desired outcomes and to demonstrate that the safety and efficiency of the surrounding road network is not worsened, traffic analysis has been carried out for the access and frontage intersections for the 2034 (opening year) and 2044 (10-year design horizon) design years using SIDRA 9.1 software.

6.2.1 North Shore Connection Road / David Low Way / Airport Drive

The North Shore Connection Road / David Low Way / Airport Drive signalised intersection was assessed as part of a SIDRA Network with the David Low Way / Gateway Precinct Access signalised intersection for the do nothing (DN) scenarios on the layout shown in Figure 6-5 and all post development scenarios with the layout shown in Figure 6-6. The intersection has been assessed on a 100 second cycle time with the phasing as shown in Figure 3-10.

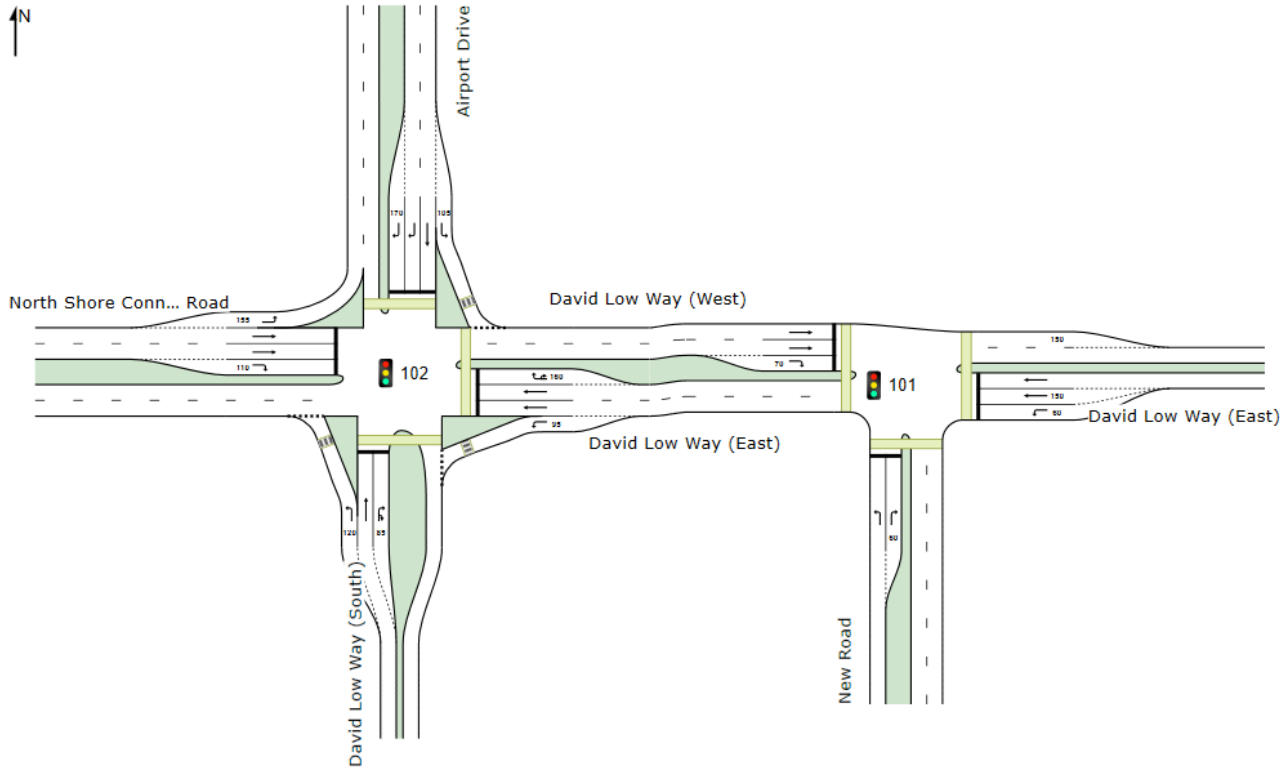


Figure 6-5: Airport Drive and Gateway Precinct Access pre SCA PDA SIDRA network layout

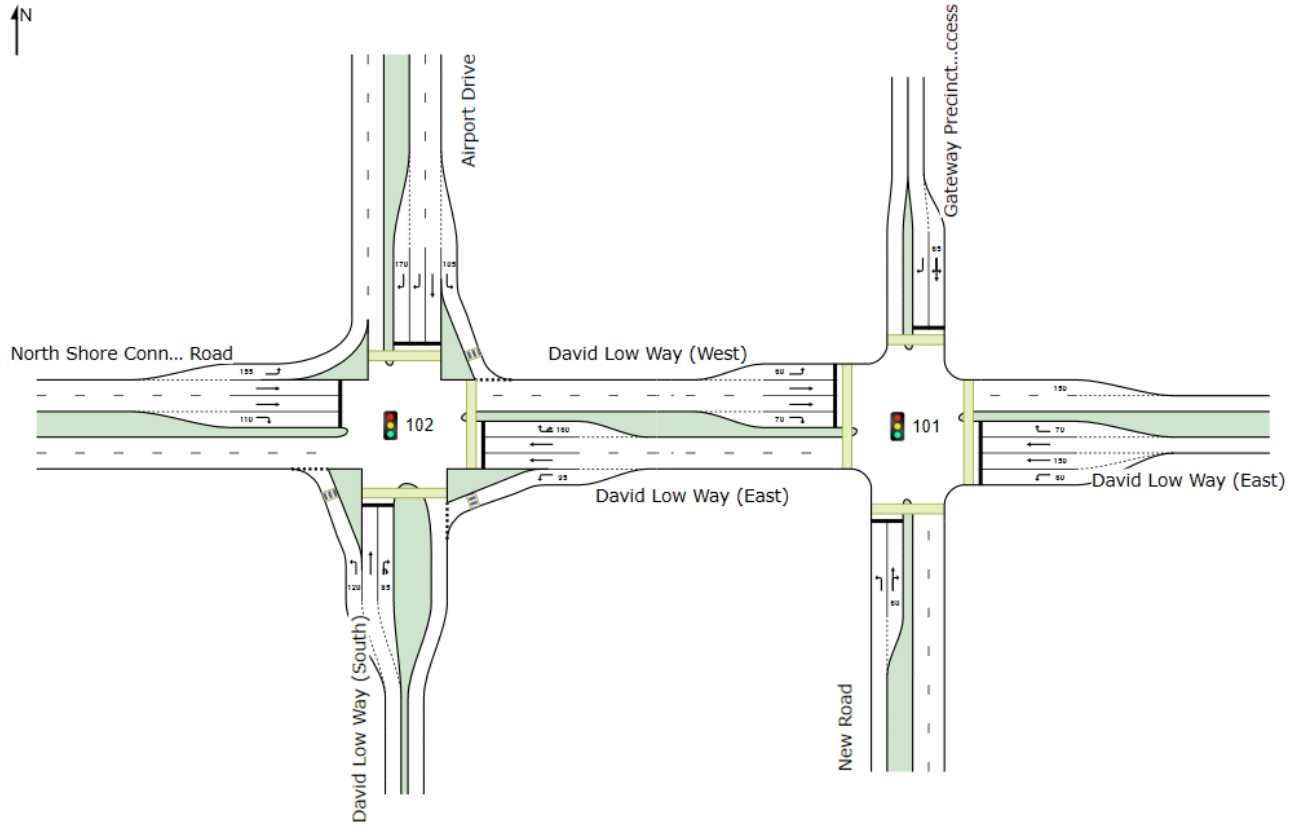


Figure 6-6: Airport Drive and Gateway Precinct Access post SCA PDA SIDRA network layout

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-4. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating within acceptable limits with low levels of delays (LOS C) and DOS less than 90%. All individual turn

delays do not exceed LOS E and all queues are able to be accommodated within the short turn lanes provided for all scenarios. There is also minimal increase in degree of saturation (DOS), average delay and 95th percentile queue between the GAP and MP scenarios.

Table 6-4: Intersection delay analysis summary for 2034 – North Shore Connection Road / David Low Way / Airport Drive intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	44.1	25.2	LOS C	92.5
AM Peak GAP	56.7	26.4	LOS C	102.4
AM Peak MP	66.0	28.4	LOS C	149.8
PM Peak DN	64.0	31.0	LOS C	87.5
PM Peak GAP	65.9	27.9	LOS C	119.5
PM Peak MP	81.8	33.5	LOS C	151.2

A summary of the intersection performance in 2044 for each of the assessed scenarios is presented in Table 6-5. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating within acceptable limits with low levels of delays (LOS C and LOS D) and DOS less than 90%, except for in the PM peak MP scenario where the DOS exceeds 90%. Individual turn delays exceed LOS E in the PM peak MP scenario and all queues are able to be accommodated within the short turn lanes provided for all scenarios except for the PM peak GAP scenario where the queue in the short right turn lane on Airport Drive exceeds the available length. The adjacent lane is also a right turn lane and operations of the intersection are not compromised by this queue. In the PM peak MP scenario, queues in the short right turn lane on Airport Drive and the short right turn lane on North Shore Connection Road exceed the available length.

Table 6-5: Intersection delay analysis summary for 2044 – North Shore Connection Road / David Low Way / Airport Drive intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	54.6	26.0	LOS C	102.3
AM Peak GAP	68.5	26.5	LOS C	113.1
AM Peak MP	76.8	29.9	LOS C	162.2
PM Peak DN	80.3	33.0	LOS C	133.0
PM Peak GAP	88.3	33.5	LOS C	200.9
PM Peak MP	99.7	47.4	LOS D	240.6

6.2.1.1 Mitigations

To improve intersection operations in the 2044 PM peak Full Masterplan scenario, the following upgrades are recommended:

- Conversion of the low angle left turn slip lane on North Shore Connection Road into a high angle left turn slip lane, allowing two full exit lanes on Airport Drive
- Addition of a new 60m long short right turn lane on David Low Way (East)
- Addition of a new 150m long short through lane on David Low Way (South)
- Increase length of short left turn lane on North Shore Connection Road to 185m

- Increase length of short right turn lane on Airport Drive to 235m
- Increase length of short right turn lane on North Shore Connection Road to 130m
- Increase cycle time to 120 seconds.

These works are able to be accommodated within the existing road reserve. The layout is shown in Figure 6-7. A summary of the intersection performance in 2044 for the Full Masterplan scenarios is presented in Table 6-6. Detailed assessment and SIDRA outputs are provided in Appendix G. The intersection is operating within acceptable limits with low levels of delays (LOS C and LOS D) and DOS less than 90%. All individual turn delays do not exceed LOS E and all queues are able to be accommodated within the short turn lanes provided for all scenarios.

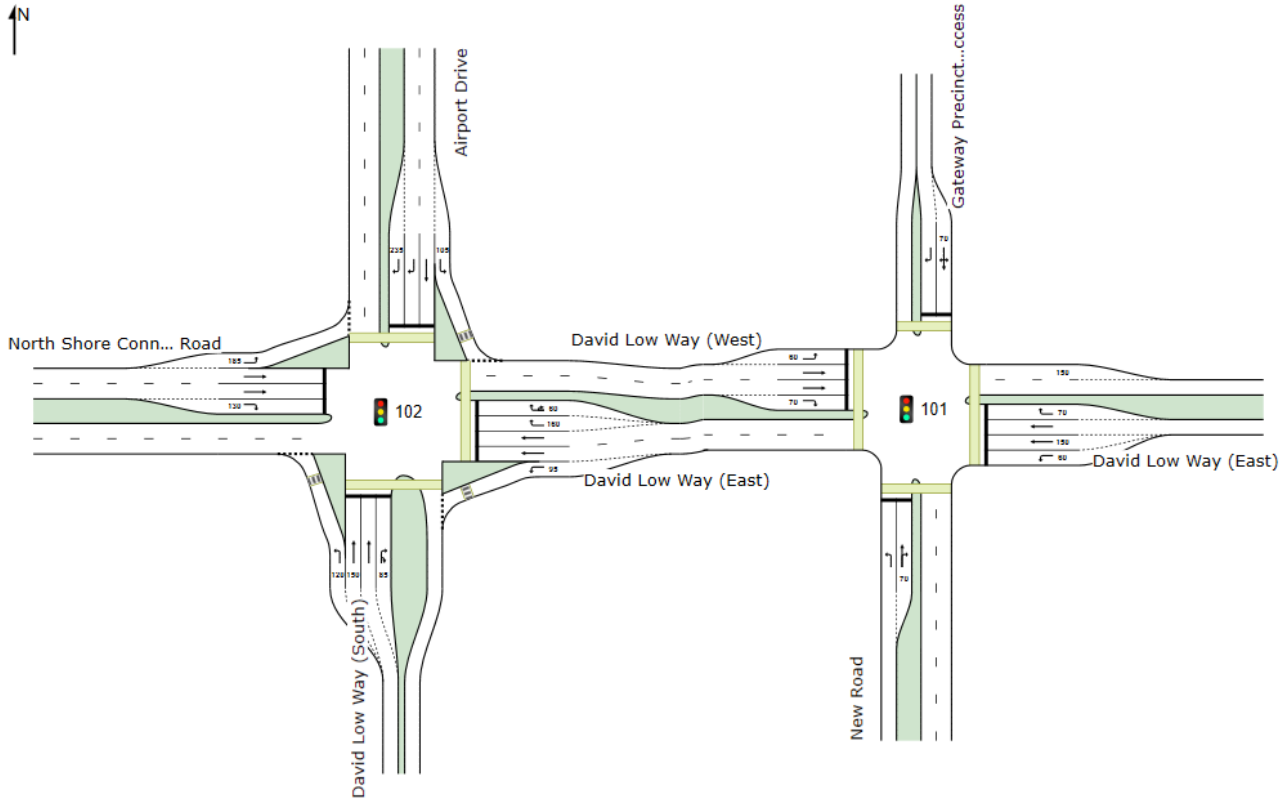


Figure 6-7: Airport Drive and Gateway Precinct Access upgraded network layout

Table 6-6: Intersection delay analysis summary for 2044 – North Shore Connection Road / David Low Way / Airport Drive upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak MP	81.4	33.5	LOS C	188.6
PM Peak MP	90.0	41.2	LOS D	231.5

6.2.2 David Low Way / Gateway Precinct Access

The David Low Way / Gateway Precinct Access signalised intersection has been assessed based on the layouts in Figure 6-5 and Figure 6-6, with the phasing shown in Figure 6-8 and Figure 6-9.

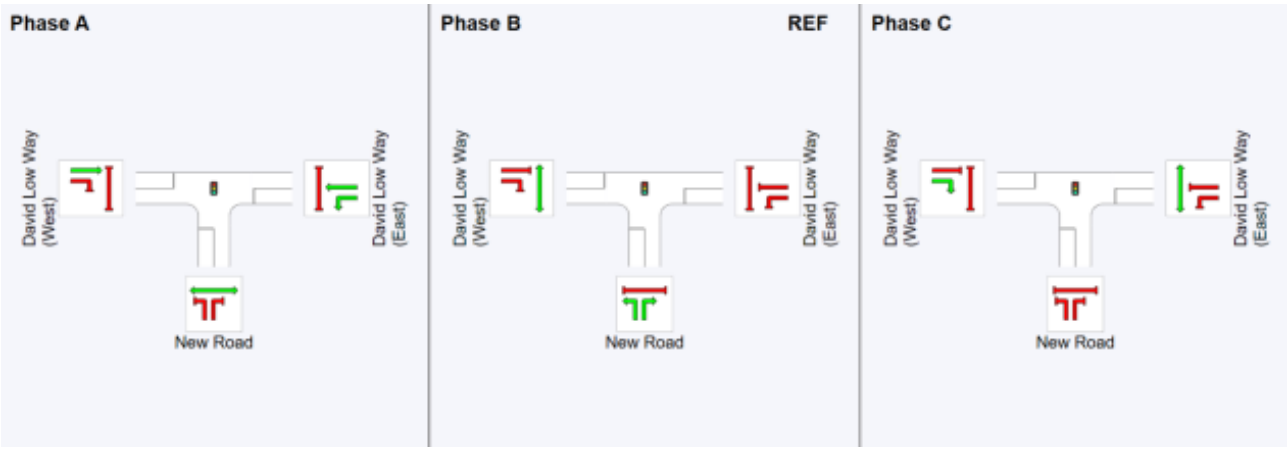


Figure 6-8: David Low Way / Gateway Precinct Access signalised intersection pre SCA PDA phasing

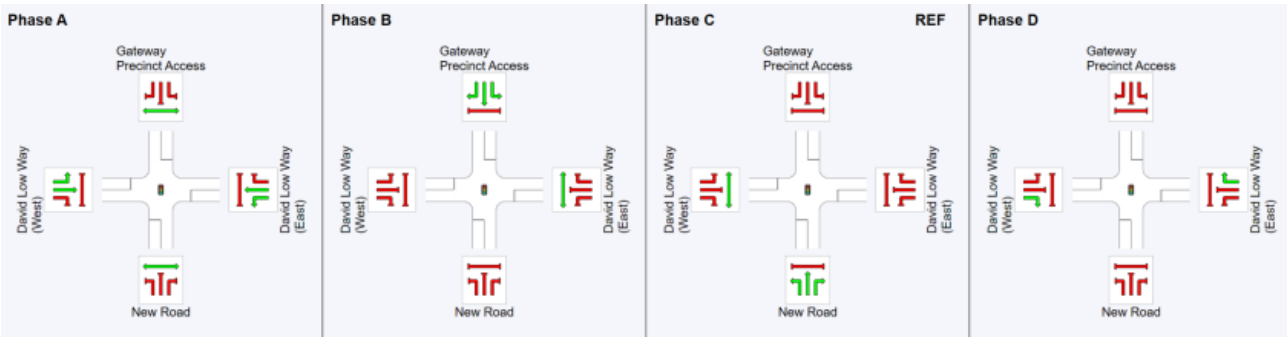


Figure 6-9: David Low Way / Gateway Precinct Access signalised intersection post SCA PDA phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-7. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating within acceptable limits with low levels of delays (LOS C and LOS D) and DOS less than 90% in all scenarios. In all scenarios, all individual turn delays do not exceed LOS E and all queues are able to be accommodated within the short turn lanes provided, except for in the AM peak Full Masterplan scenario where the queue extends outside of the short through lane on the eastern leg.

Table 6-7: Intersection delay analysis summary for 2034 – David Low Way / Gateway Precinct Access intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	41.6	21.0	LOS C	85.0
AM Peak GAP	59.1	33.0	LOS C	101.9
AM Peak MP	83.8	41.0	LOS D	183.6
PM Peak DN	43.8	23.2	LOS C	104.3
PM Peak GAP	68.3	38.2	LOS D	94.2
PM Peak MP	80.7	29.4	LOS C	136.1

A summary of the intersection performance in 2044 for each of the assessed scenarios is presented in Table 6-8. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating within acceptable limits with low levels of delays (LOS C and LOS D) and DOS less than 90%, except for in the PM peak MP scenario where the DOS exceeds 90%. In all scenarios, all individual turn delays do not exceed LOS E. All queues are able to be accommodated within the short turn lanes provided, except for in

the AM peak Full Masterplan scenario where the queue extends outside of the short through lane on the eastern leg.

Table 6-8: Intersection delay analysis summary for 2044 – David Low Way / Gateway Precinct Access intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	45.7	21.7	LOS C	95.7
AM Peak GAP	65.0	34.4	LOS C	117.4
AM Peak MP	88.9	44.3	LOS D	212.0
PM Peak DN	48.9	24.1	LOS C	115.9
PM Peak GAP	66.9	38.0	LOS D	112.7
PM Peak MP	97.8	40.2	LOS D	221.7

6.2.2.1 Mitigations

To improve intersection operations in the 2044 PM peak Full Masterplan scenario, the following upgrades are recommended:

- Increase length of short all movements lane on Gateway Precinct Access to 70m
- Increase length of short through / right turn lane on New Road to 70m
- Increase cycle time to 120 seconds.

These works are able to be accommodated within the existing road reserve. The layout is shown in Figure 6-7. A summary of the intersection performance in 2044 for the Full Masterplan scenarios is presented in Table 6-9. Detailed assessment and SIDRA outputs are provided in Appendix G. The intersection is operating within acceptable limits with low levels of delays (LOS C and LOS D) and DOS less than 90%. All individual turn delays do not exceed LOS E and all queues are able to be accommodated within the short turn lanes provided for all scenarios, except for in the AM peak Full Masterplan scenario where the queue extends outside of the short through lane on the eastern leg. The adjacent lane is also a through lane and operations of the intersection are unlikely to be compromised by this queue.

Table 6-9: Intersection delay analysis summary for 2044 – David Low Way / Gateway Precinct Access upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak MP	71.4	40.2	LOS D	190.1
PM Peak MP	78.7	40.2	LOS D	176.2

6.2.3 Airport Drive / Electra Lane

Noted by RPS and SLR, the Electra Lane and Airport Drive intersection provides an important alternative to the Airport Drive and Kittyhawk Close intersection by:

- Allowing reduced interaction between vehicles trying to access the terminal loop road and Wave station, and those accessing southern parts of the Gateway Precinct, reducing delays, conflicts, and queuing at peak times.
- Simplifying movement for pedestrians between the terminal and proposed car rental ready bays.
- Providing an early-stage access to Gateway south allowing the development of lots adjoining Airport Drive without triggering the David Low Way intersection and Friendship Avenue upgrades.
- Providing an additional stormwater conveyance to Airport Drive and a mid-block pedestrian connection.

Analysis of this intersection was undertaken by SLR as part of the Gateway Precinct TIA and is included in Appendix E.

6.2.4 David Low Way / Green Turtle Place / Airport North Access

As noted in Section 4.1.2, the David Low Way / Green Turtle Place intersection is assumed to be signalised prior to the development of the SCA PDA. Therefore, the Do-Nothing scenarios have been assessed based on the layout and phasing shown in Figure 6-10, with a 90 second cycle time.

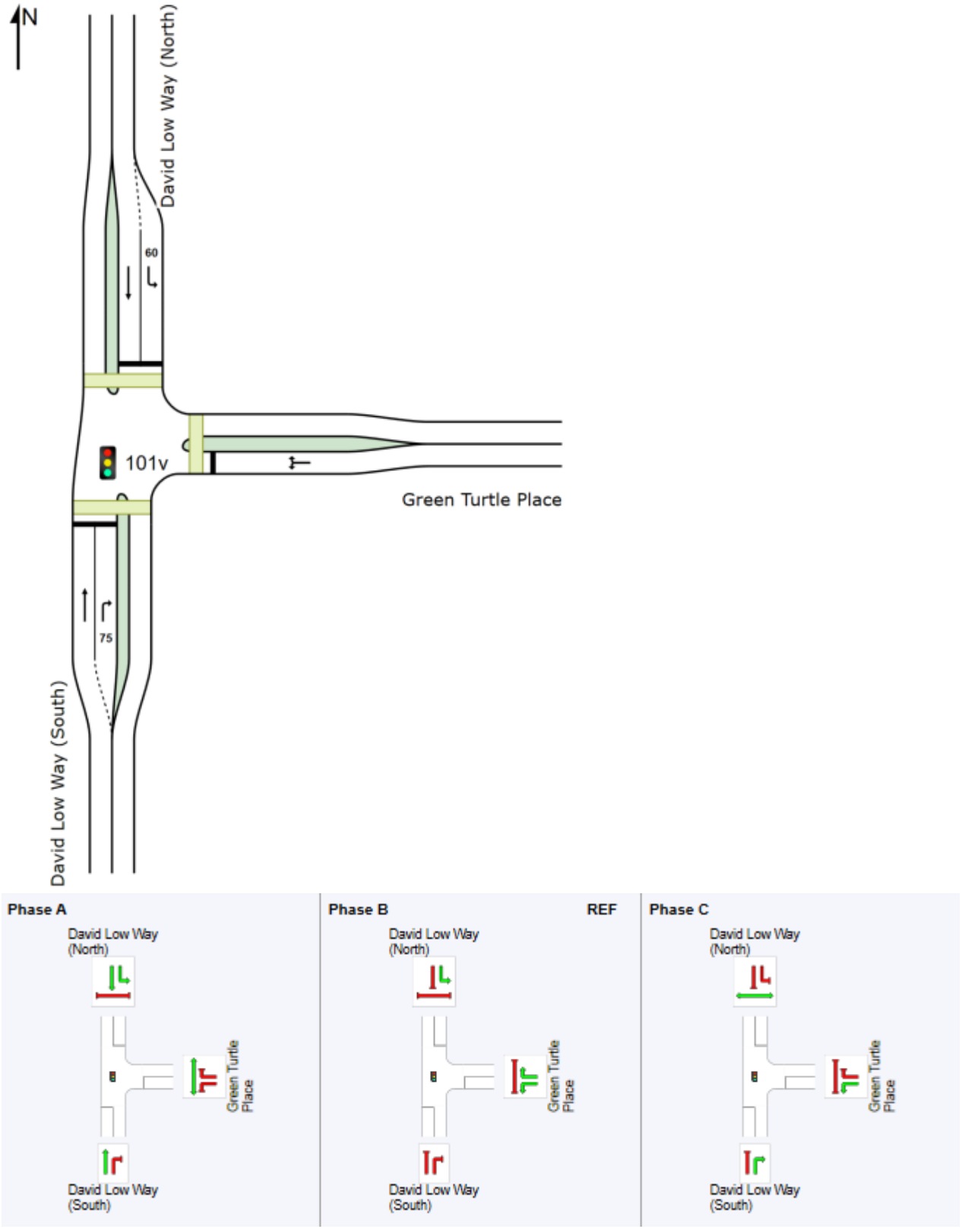


Figure 6-10: David Low Way / Green Turtle Place signalised intersection layout and phasing

The development of the SCA PDA proposes a fourth leg at this intersection to access the Airport North Precinct. Therefore, the MP scenarios have been assessed based on the layout and phasing shown in Figure 6-11, with a 80 second cycle time in the AM and 100 second cycle time in the PM.

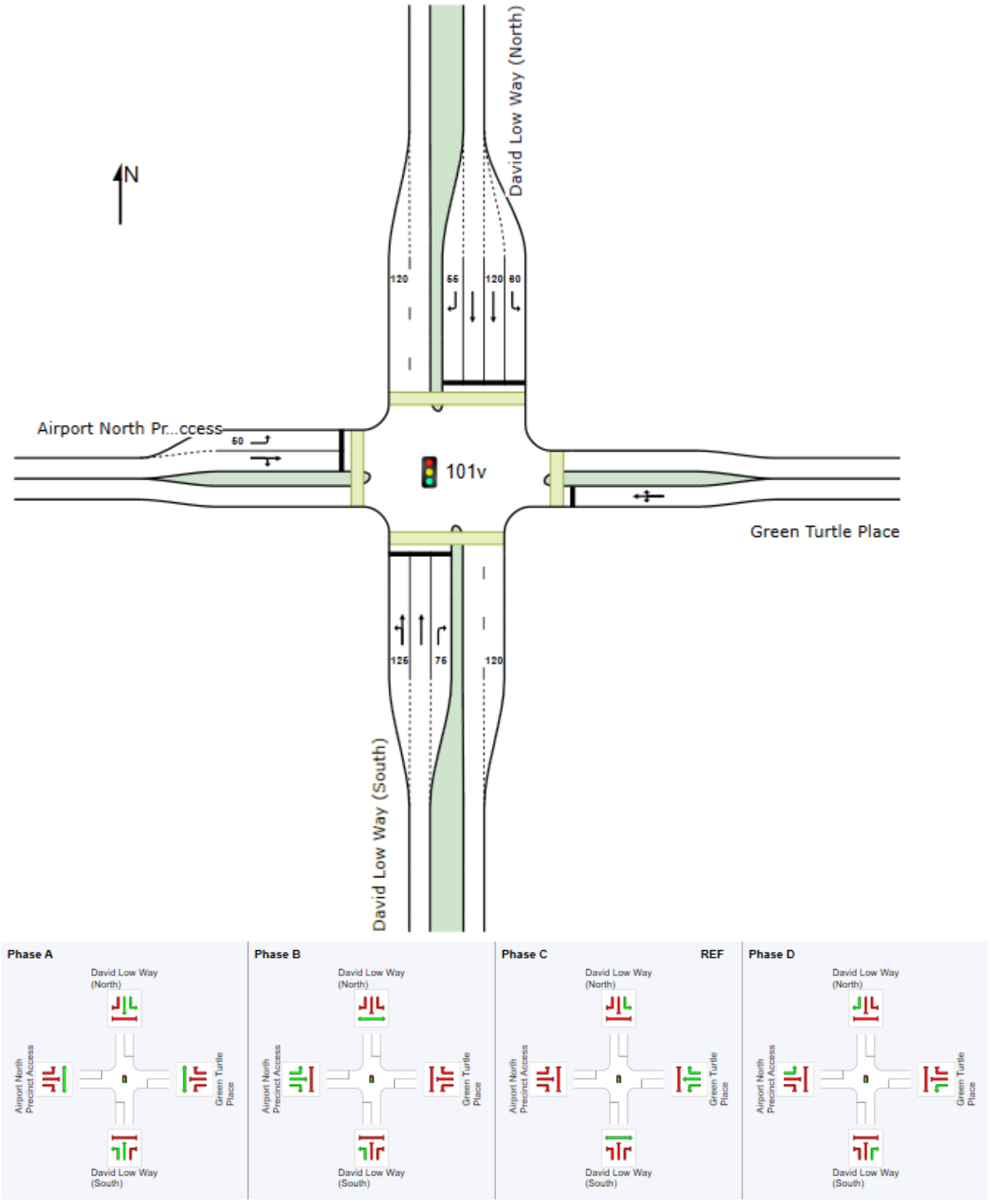


Figure 6-11: David Low Way / Green Turtle Place / Airport North Precinct Access signalised intersection layout and phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-10. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating within acceptable limits with low levels of delays (LOS B and LOS D) and DOS less than 90%, except for in the PM peak MP scenario where the DOS exceeds 90%. In all scenarios, all individual turn delays do not exceed LOS E except for the PM peak Full Masterplan scenario. All queues are able to be accommodated within the short turn lanes provided.

Table 6-10: Intersection delay analysis summary for 2034 – David Low Way / Green Turtle Place / Airport North Access intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	38.7	18.1	LOS B	72.3
AM Peak GAP	39.1	18.1	LOS B	73.0
AM Peak MP	80.3	36.3	LOS D	94.6
PM Peak DN	44.9	16.2	LOS B	88.4
PM Peak GAP	46.6	16.8	LOS B	92.8
PM Peak MP	92.3	48.9	LOS D	191.8

A summary of the intersection performance in 2044 for each of the assessed scenarios is presented in Table 6-11. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating within acceptable limits with low levels of delays (LOS B and LOS D) and DOS less than 90%, except for in the PM peak MP scenario where the DOS exceeds 90%. In all scenarios, all individual turn delays do not exceed LOS E except for the PM peak Full Masterplan scenario. All queues are able to be accommodated within the short turn lanes provided except for in the PM peak Full Masterplan scenario where the queue extends outside of the short left / through lane on the southern leg.

Table 6-11: Intersection delay analysis summary for 2044 – David Low Way / Green Turtle Place / Airport North Access intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	41.2	17.7	LOS B	78.4
AM Peak GAP	42.3	17.3	LOS B	80.3
AM Peak MP	83.2	36.3	LOS D	97.7
PM Peak DN	46.9	15.7	LOS B	93.8
PM Peak GAP	50.9	16.4	LOS B	103.9
PM Peak MP	95.2	52.7	LOS D	228.9

6.2.4.1 Mitigations

To improve intersection operations in the 2034 and 2044 PM peak Full Masterplan scenarios, the following upgrades are recommended:

- Adjustment of the lane allocation on the western leg to have a full-length right turn lane and short all-movements lane
- Increase the length of the short lane on the western leg to 50m.

These works are able to be accommodated within the existing road reserve. The layout is shown in Figure 6-12. A summary of the intersection performance in 2034 for the Full Masterplan scenarios is presented in

Table 6-12 and Table 6-13 for 2044. Detailed assessment and SIDRA outputs are provided in Appendix G. The intersection is operating within acceptable limits with low levels of delays (LOS C and LOS D) and DOS less than 90%. All individual turn delays do not exceed LOS E and all queues are able to be accommodated within the short turn lanes provided for all scenarios.

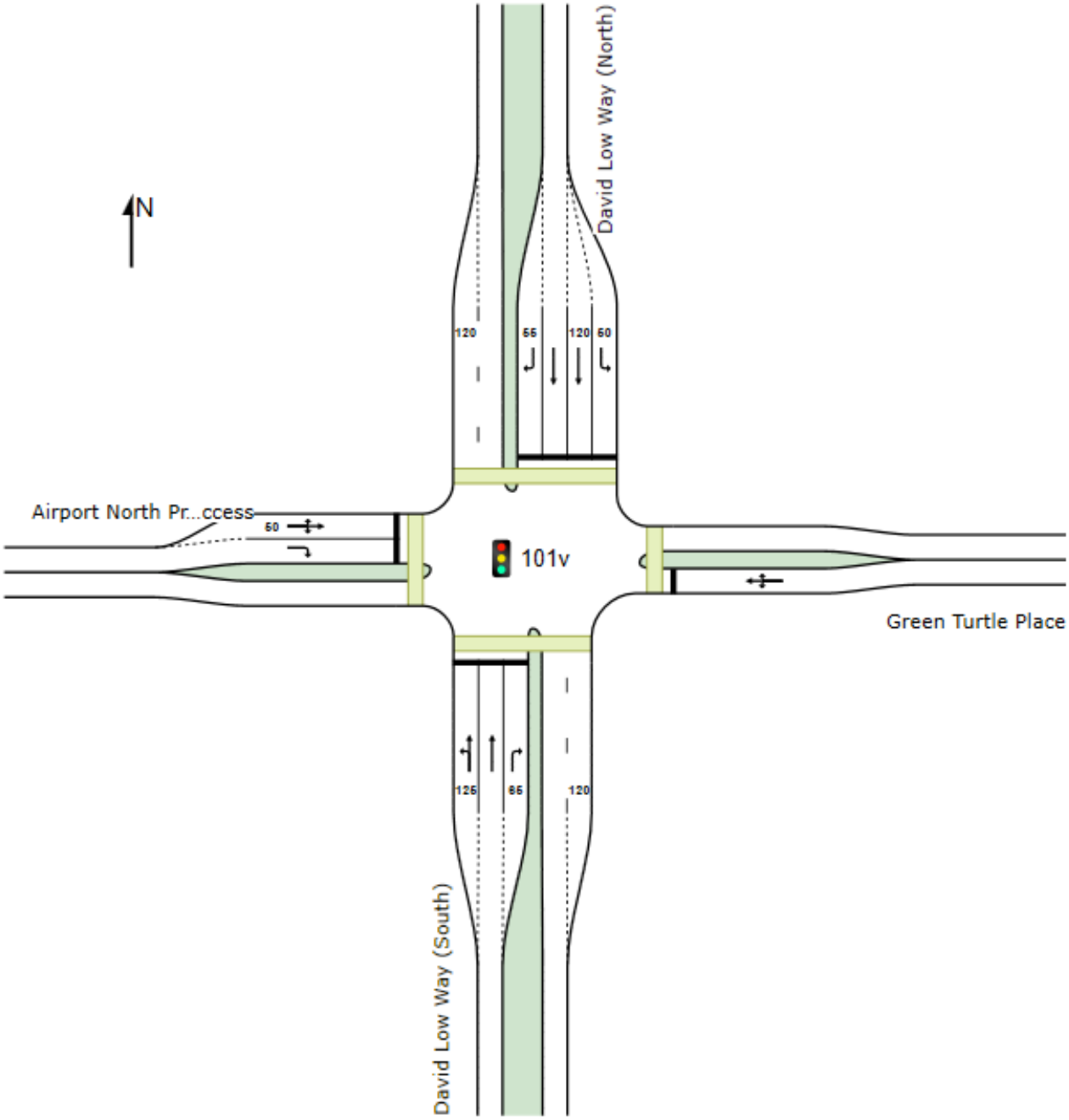


Figure 6-12: David Low Way / Green Turtle Place / Airport North Access upgraded intersection layout

Table 6-12: Intersection delay analysis summary for 2034 – David Low Way / Green Turtle Place / Airport North Access upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak MP	76.0	32.5	LOS C	83.4
PM Peak MP	80.1	37.5	LOS D	165.5

Table 6-13: Intersection delay analysis summary for 2044 – David Low Way / Green Turtle Place / Airport North Access upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak MP	78.8	33.0	LOS C	88.4
PM Peak MP	82.8	38.7	LOS D	180.5

6.2.5 David Low Way / Airport North LILO Access

The David Low Way / Airport North Precinct LILO Access priority-controlled intersection has been assessed based on the layout in Figure 6-13. In the Do Nothing and Gateway and Aerospace Precincts scenarios this intersection will not exist. Therefore, only the MP scenarios have been assessed.

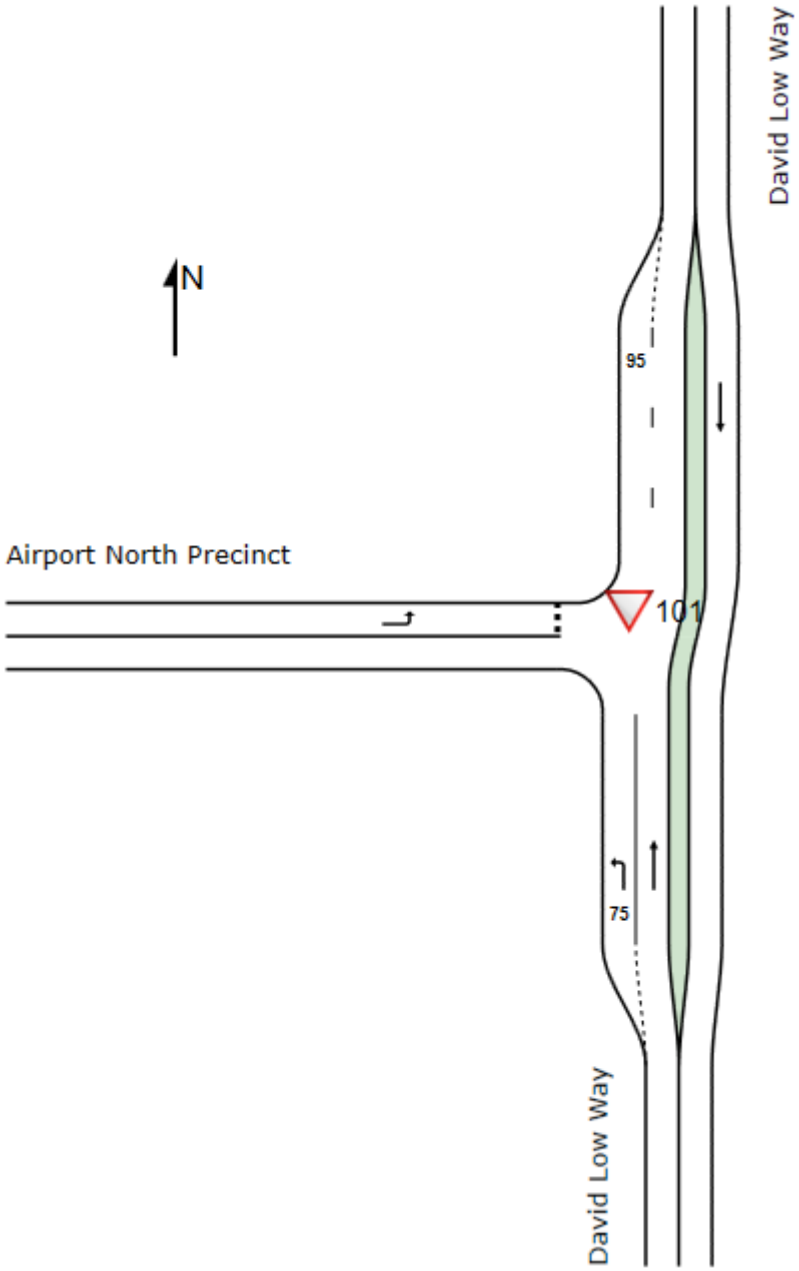


Figure 6-13: David Low Way / Airport North LILO Access priority-controlled intersection layout

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-14. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating

within acceptable limits with low levels of delays (LOS A) and DOS less than 80%. In all scenarios, all individual turn delays do not exceed LOS E and all queues are able to be accommodated within the short turn lanes provided.

Table 6-14: Intersection delay analysis summary for 2034 – David Low Way / Airport North LILO Access intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak MP	27.3	1.3	LOS A	3.0
PM Peak MP	27.6	1.2	LOS A	3.1

A summary of the intersection performance in 2044 for each of the assessed scenarios is presented in Table 6-15. Detailed assessment and SIDRA outputs are provided in Appendix D. The intersection is operating within acceptable limits with low levels of delays (LOS A) and DOS less than 80%. In all scenarios, all individual turn delays do not exceed LOS E and all queues are able to be accommodated within the short turn lanes provided.

Table 6-15: Intersection delay analysis summary for 2044 – David Low Way / Airport North LILO Access intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak MP	28.4	1.2	LOS A	3.0
PM Peak MP	29.4	1.1	LOS A	3.3

6.3 Intersection delay impact assessment and mitigation

6.3.1 Intersection operations

As outlined in the GTIA, the desired outcome regarding intersection delay is to ensure the sum of intersection delays on base traffic in the study area does not significantly worsen (i.e. does not increase average delay by more than 5% in aggregate) because of the development in the proposed opening year.

Network delay impacts calculations are to be carried out where the development traffic exceeds 5% of the base traffic for any movement in the design peak periods in the year of opening (TMR's GTIA, Table 6.4), and where at least one approach of the intersection forms part of the State-Controlled Road network (TMR's GTIA, Section 6.4.1). As such, based on the results of the 2034 VISUM modelling exercise, the impact assessment area has been determined as shown in Figure 6-14. Network delay impacts have been calculated only on the intersections where at least one leg of the intersection is a state-controlled road, including the site access intersections assessed in Section 6.2.

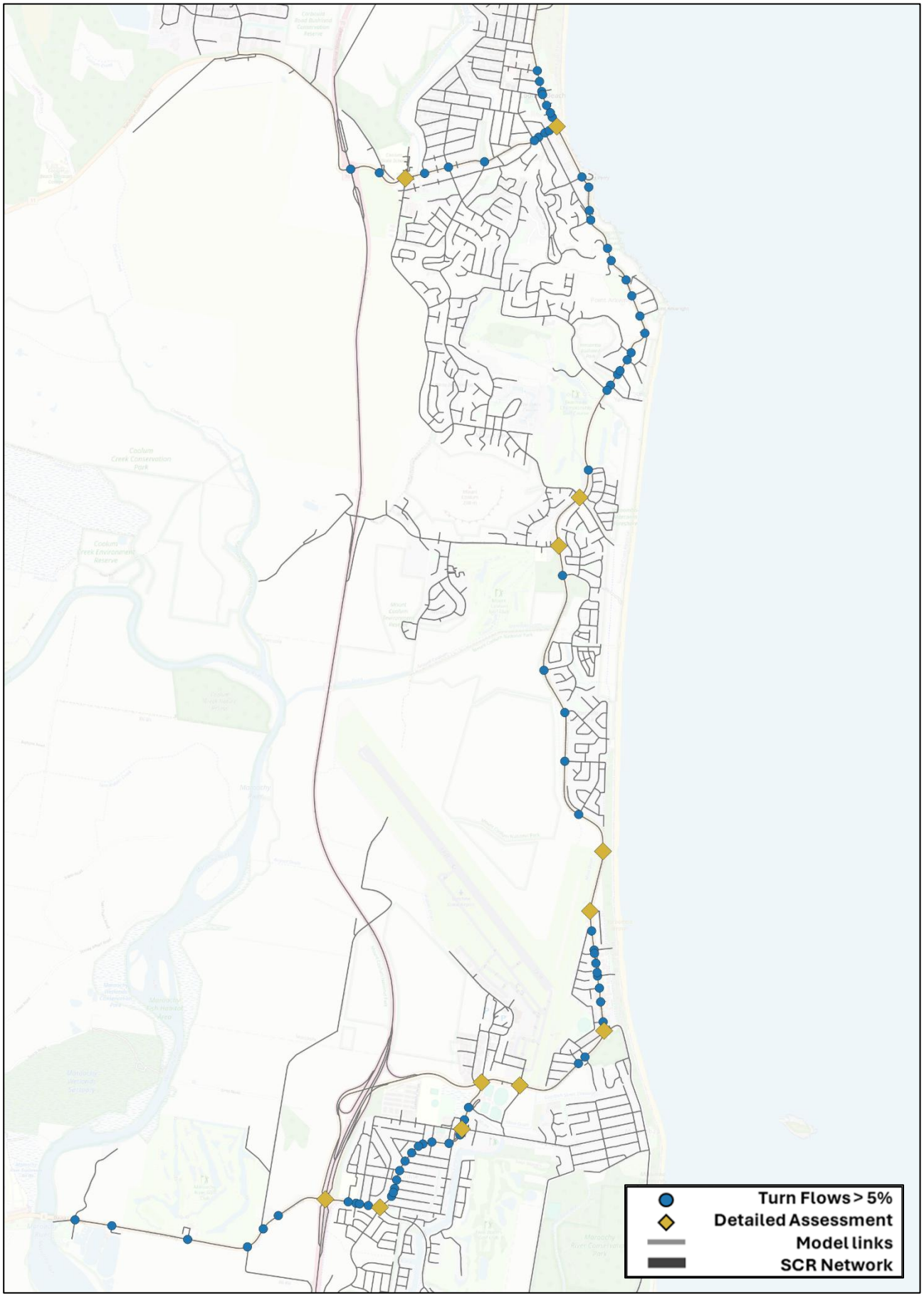


Figure 6-14 Impact assessment area

Within the model area, there are a significant number of minor intersections with small amounts of turning volumes where a single vehicle increase would trigger the 5% threshold. As such, a high-level filtering exercise has been undertaken which is described as follows:

- Exclude if the Do-Nothing Case has less than 100 vehicles, and the difference between the Masterplan is less than 10 vehicles
- Exclude if the intersection is not on the state-controlled road network

This is considered reasonable as the GTIA *Frequently Asked Questions* states that:

> *"TMR expects industry to adopt a pragmatic approach to applying the GTIA and does not expect mitigation of minor traffic impacts, unless the increase will result in an unacceptable safety risk."*

This results in a total of 72 intersections, including the four site access intersections, in either the AM or PM peak period which exceeds the threshold identified above. Given the large impact assessment area, the delays associated with each of the intersections for inclusion in the network delay impact assessment have been extracted from the VISUM model. This approach is considered appropriate as the GTIA FAQ's note that for larger developments in complex traffic networks, microsimulation, strategic and mesoscopic models may be used.

However, a series of intersections were identified for detailed assessment using SIDRA 9.1. These intersections were chosen as they are either the signalised intersections along David Low Way or were considered key links in close proximity to the airport. These intersections are:

- David Low Way / Sunshine Motorway Ramps roundabout
- David Low Way / Ocean Drive / Twin Waters West Access signalised intersection
- David Low Way / Suncoast Beach Drive signalised intersection
- David Low Way / Mudjimba Esplanade priority-controlled intersection
- David Low Way / Yandina Coolum Road signalised intersection
- David Low Way / Mudjimba Beach Road signalised intersection
- Yandina Coolum Road / South Coolum Road / School Road signalised intersection
- David Low Way / Tanah Street West / Tanah Street East signalised intersection.

The large impact assessment area is considered to be due to the magnitude of the development and includes intersections both to the north and south of the SCA. Refer to Section 5.2 for further information on trip distribution.

6.3.1.1 David Low Way / Sunshine Motorway Ramps

The David Low Way / Sunshine Motorway Ramps roundabout has been assessed based on the layout shown in Figure 6-15.

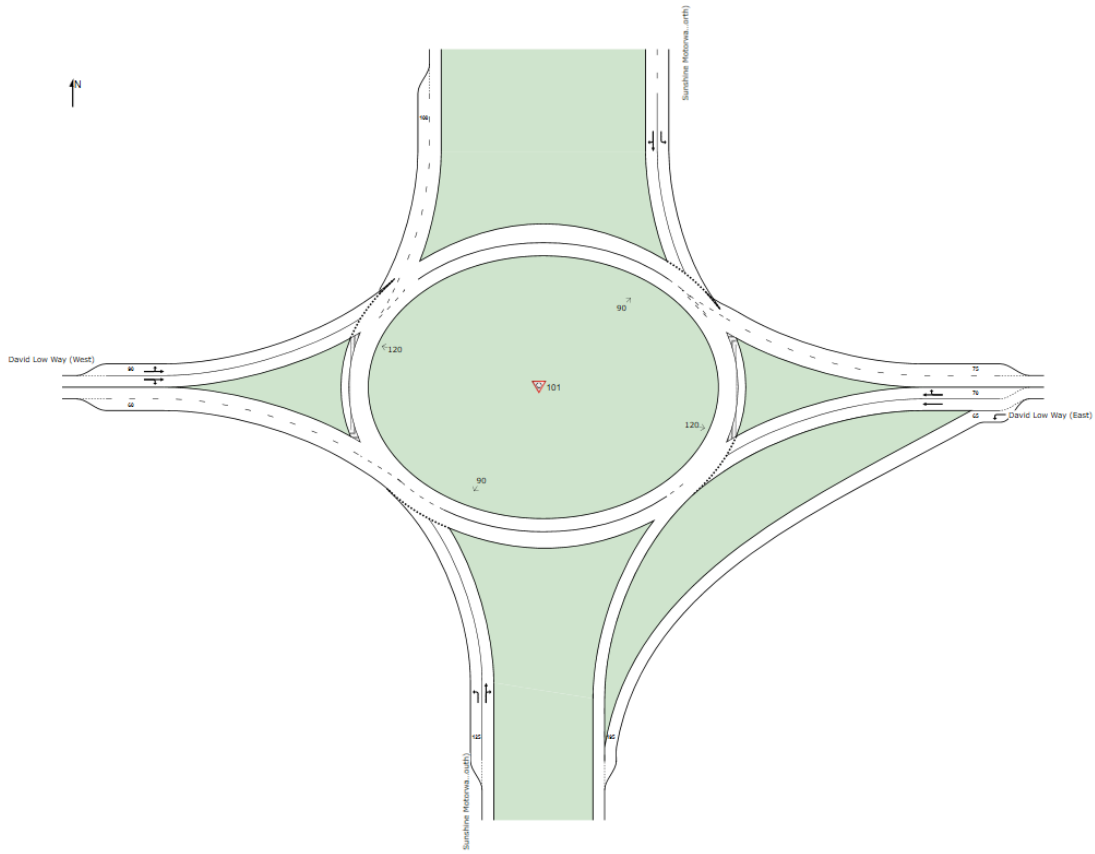


Figure 6-15: David Low Way / Sunshine Motorway Ramps roundabout layout

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-16. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-16: Intersection delay analysis summary for 2034 – David Low Way / Sunshine Motorway Ramps intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	79.9	12.2	LOS B	97.8
AM Peak GAP	79.8	13.0	LOS B	98.0
AM Peak MP	81.5	14.8	LOS B	107.1
PM Peak DN	86.1	21.3	LOS C	127.1
PM Peak GAP	104.0	31.8	LOS C	309.5
PM Peak MP	102.5	28.9	LOS C	309.5

6.3.1.2 *David Low Way / Ocean Drive / Twin Waters West Access*

The David Low Way / Ocean Drive / Twin Waters West Access signalised intersection has been assessed based on the layout and phasing shown in Figure 6-16.

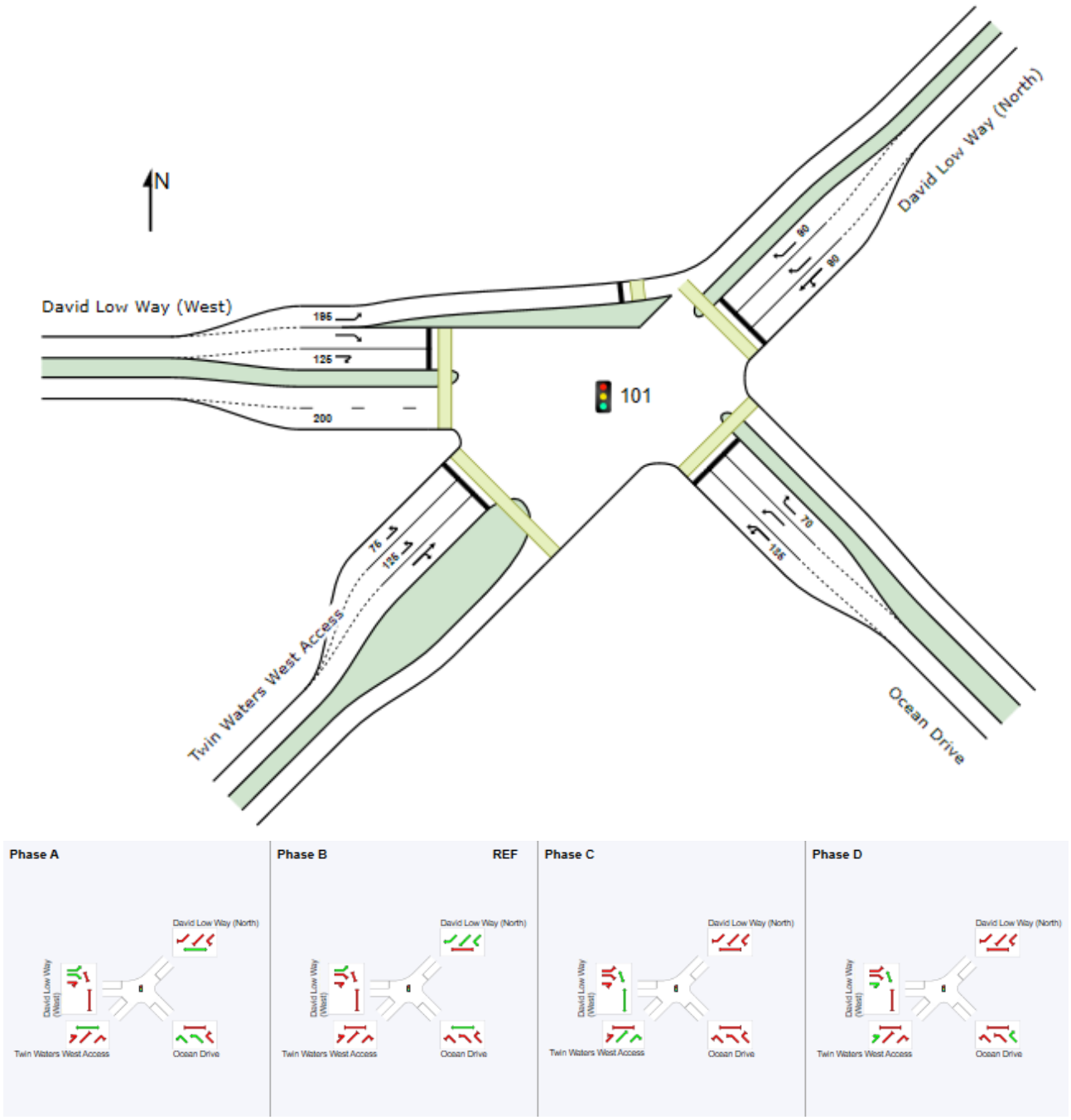


Figure 6-16: David Low Way / Ocean Drive / Twin Waters West Access signalised intersection layout and phasing

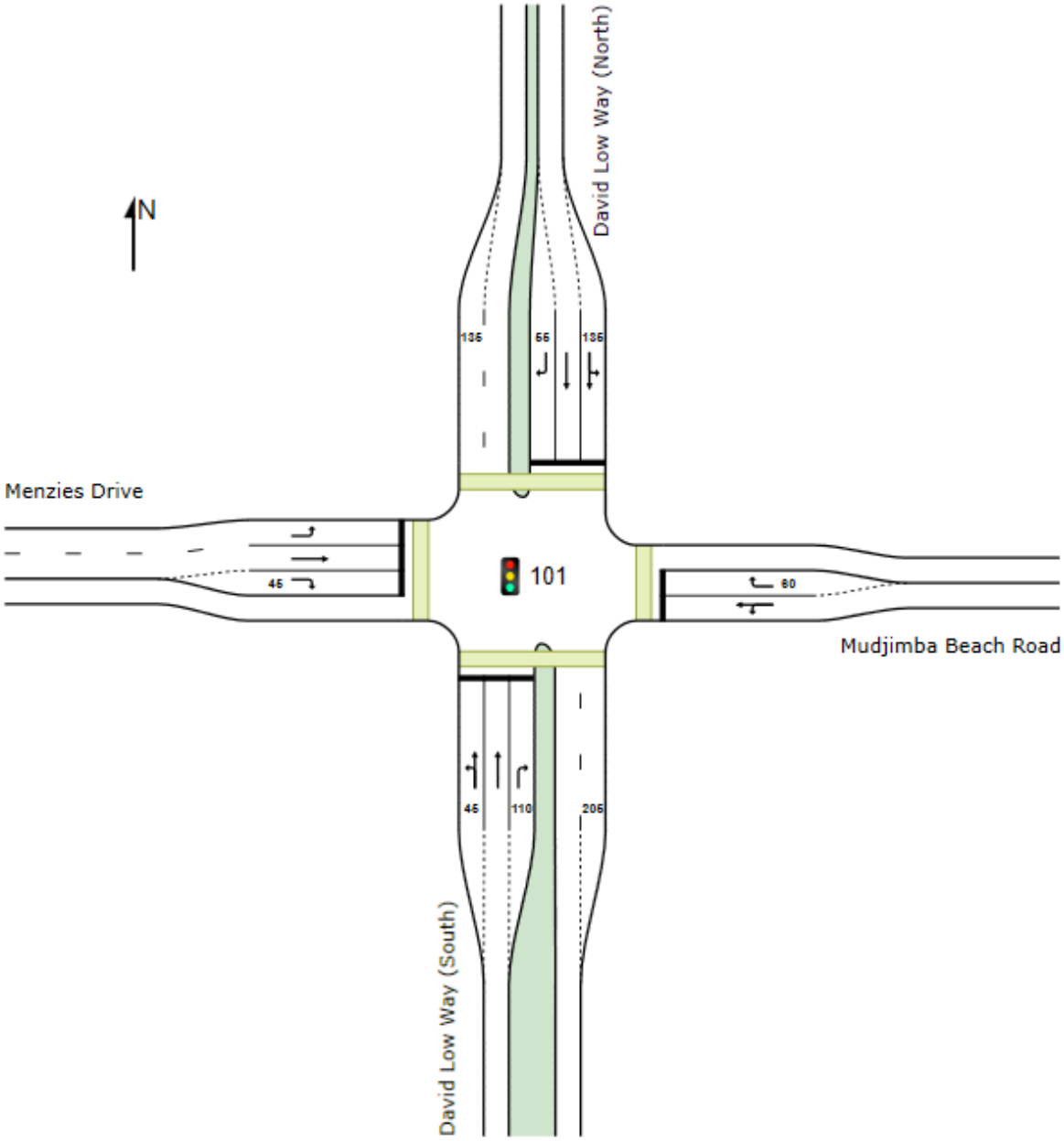
A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-17. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-17: Intersection delay analysis summary for 2034 – David Low Way / Ocean Drive / Twin Waters West Access intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	65.3	40.0	LOS D	151.3
AM Peak GAP	65.6	40.2	LOS D	152.3
AM Peak MP	69.2	41.4	LOS D	154.4
PM Peak DN	61.9	36.1	LOS D	150.4
PM Peak GAP	65.7	36.1	LOS D	156.3
PM Peak MP	60.9	36.2	LOS D	145.0

6.3.1.3 David Low Way / Mudjimba Beach Road / Menzies Drive

The David Low Way / Mudjimba Beach Road / Menzies Drive signalised intersection has been assessed based on the layout and phasing shown in Figure 6-17.



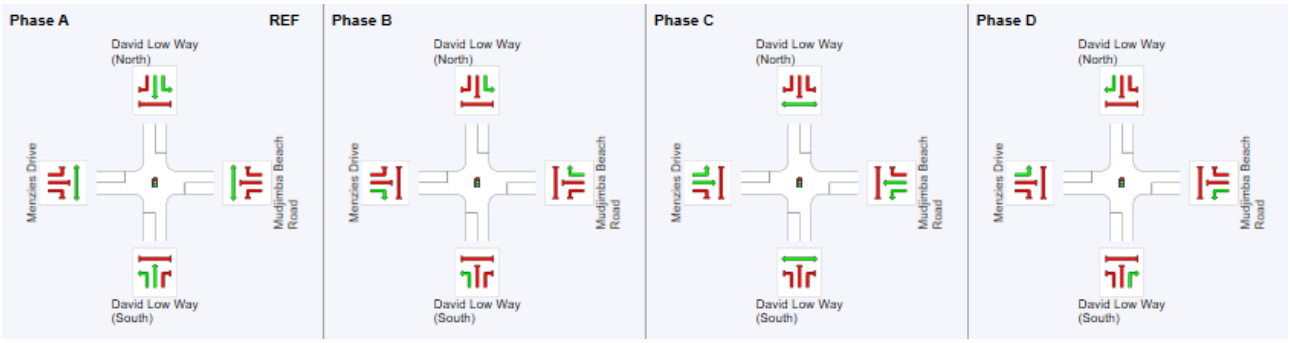


Figure 6-17: David Low Way / Mudjimba Beach Road / Menzies Drive signalised intersection layout and phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-18. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-18: Intersection delay analysis summary for 2034 – David Low Way / Mudjimba Beach Road / Menzies Drive intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	52.8	41.4	LOS D	68.6
AM Peak GAP	53.1	39.9	LOS D	69.4
AM Peak MP	52.5	38.2	LOS D	81.9
PM Peak DN	54.6	39.0	LOS D	69.5
PM Peak GAP	48.6	38.4	LOS D	71.6
PM Peak MP	55.6	39.8	LOS D	82.0

6.3.1.4 David Low Way / Mudjimba Esplanade

The David Low Way / Mudjimba Esplanade priority-controlled intersection has been assessed based on the layout shown in Figure 6-18.

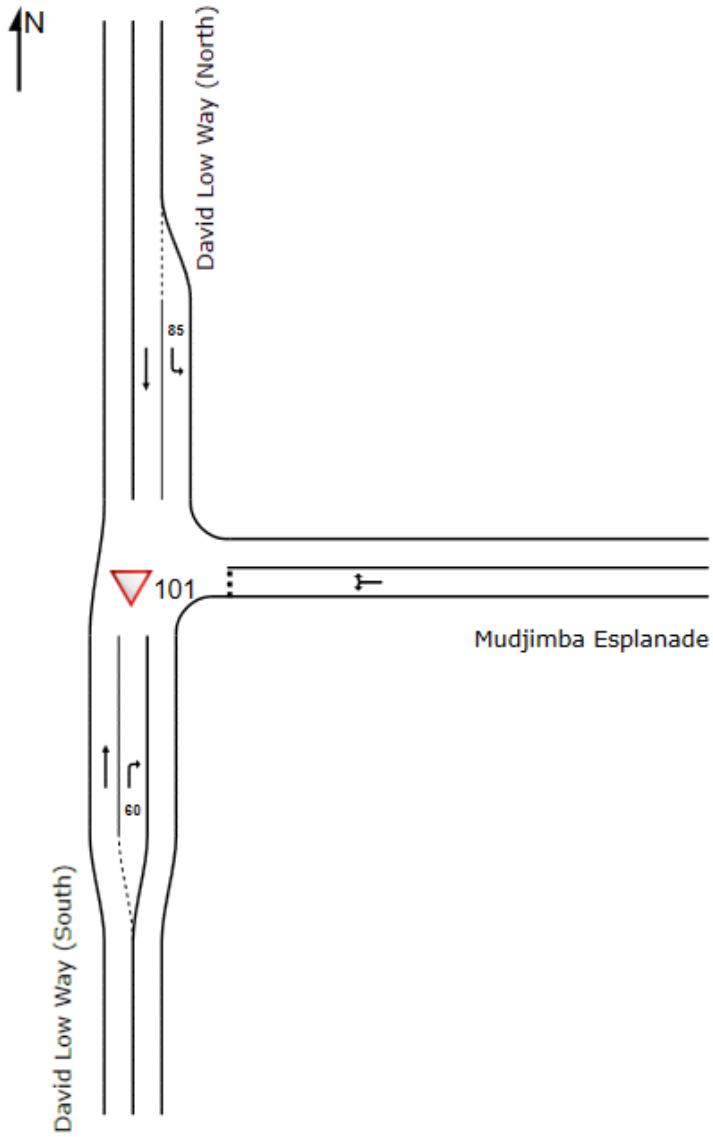


Figure 6-18: David Low Way / Mudjimba Esplanade priority-controlled intersection layout

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-19. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-19: Intersection delay analysis summary for 2034 – David Low Way / Mudjimba Esplanade intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	27.3	2.3	LOS A	7.7
AM Peak GAP	31.1	2.5	LOS A	9.1
AM Peak MP	159.9	41.6	LOS E	221.2
PM Peak DN	42.8	3.0	LOS A	13.0
PM Peak GAP	50.0	3.4	LOS A	16.2
PM Peak MP	400.7	177.5	LOS F	451.9

6.3.1.5 *David Low Way / Suncoast Beach Drive*

The David Low Way / Suncoast Beach Drive signalised intersection has been assessed based on the layout and phasing shown in Figure 6-19.

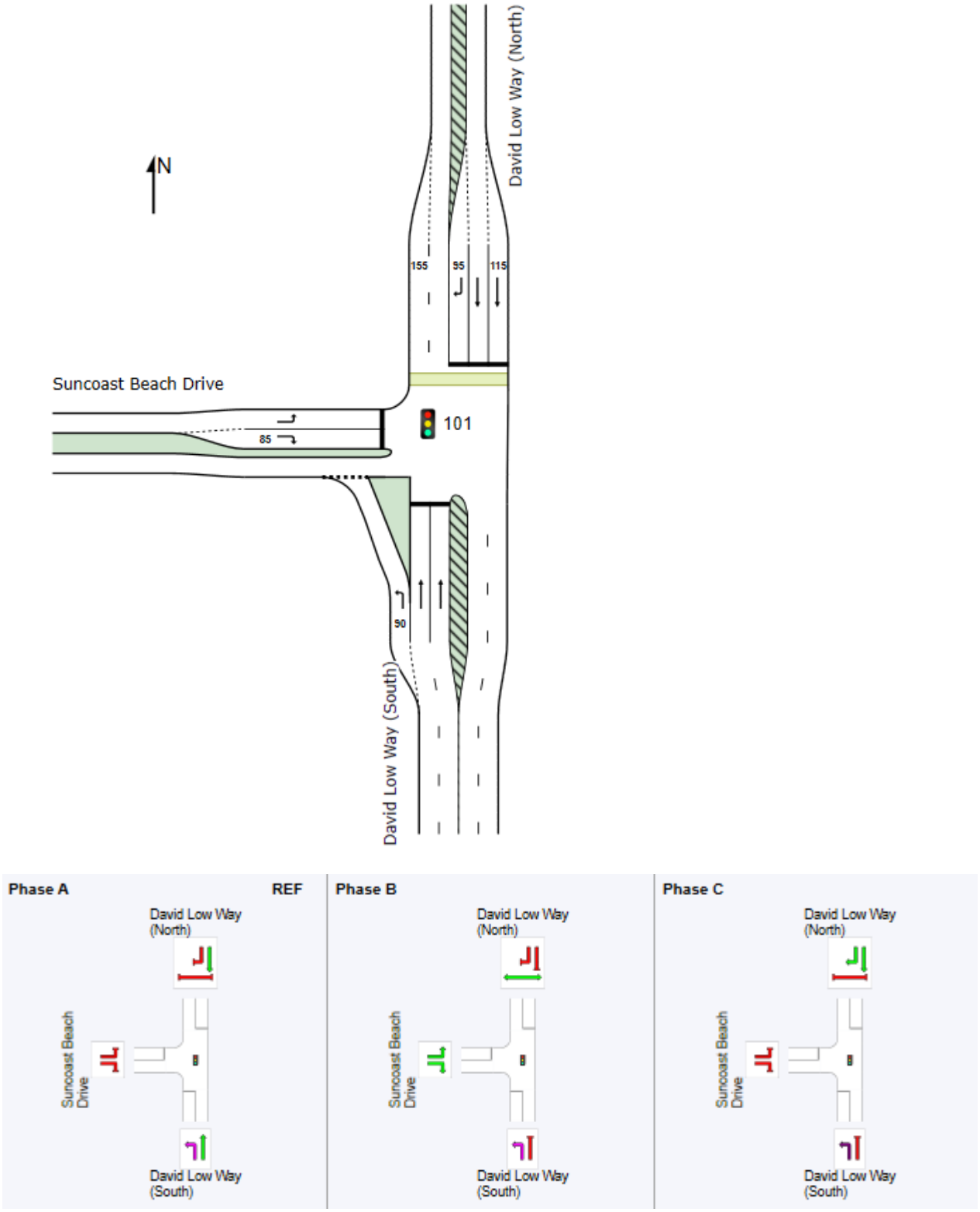


Figure 6-19: David Low Way / Suncoast Beach Drive signalised intersection layout and phasing

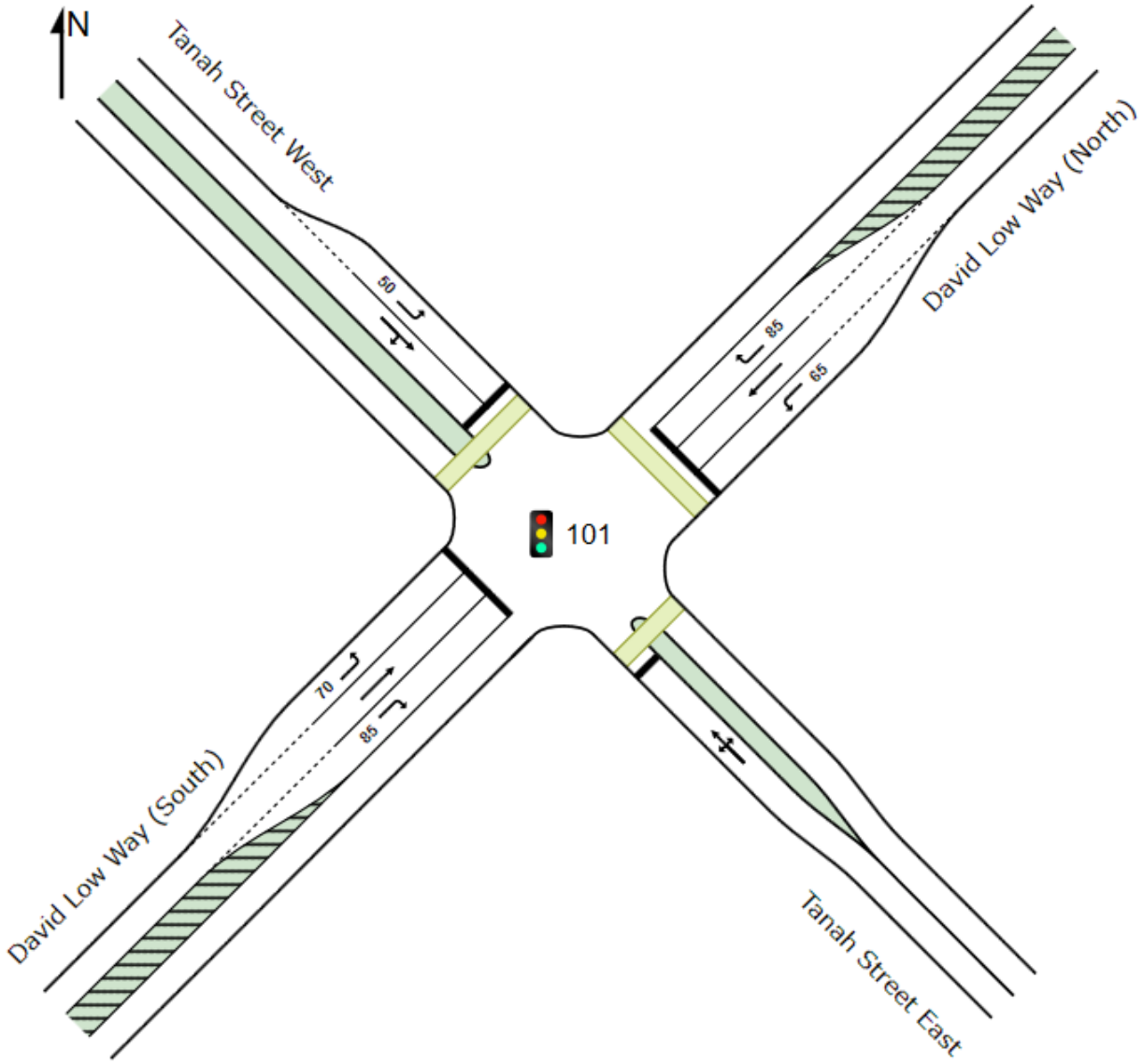
A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-20. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-20: Intersection delay analysis summary for 2034 – David Low Way / Suncoast Beach Drive intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	51.9	22.7	LOS C	72.7
AM Peak GAP	53.1	22.7	LOS C	73.3
AM Peak MP	58.8	22.7	LOS C	84.8
PM Peak DN	45.7	22.0	LOS C	54.6
PM Peak GAP	46.8	21.9	LOS C	55.6
PM Peak MP	48.3	21.2	LOS C	55.8

6.3.1.6 David Low Way / Tanah Street West / Tanah Street East

The David Low Way / Tanah Street West / Tanah Street East signalised intersection has been assessed based on the layout and phasing shown in Figure 6-20.



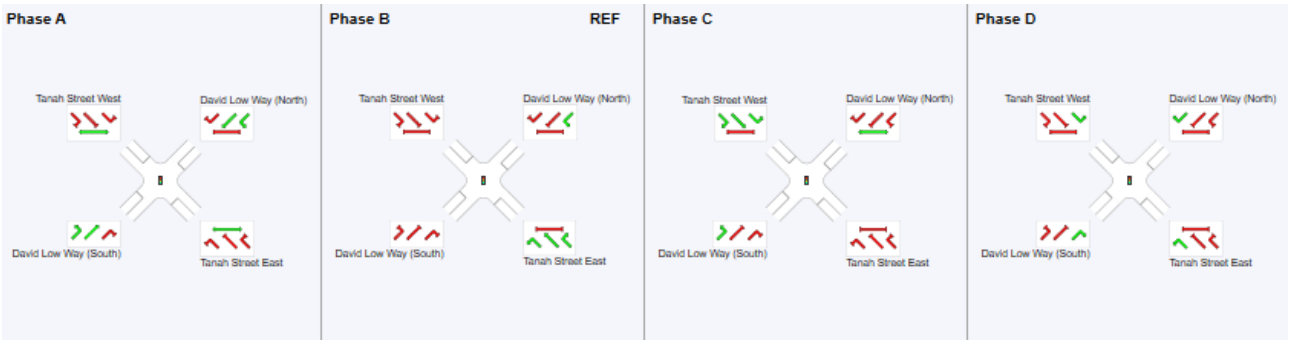


Figure 6-20: David Low Way / Tanah Street West / Tanah Street East signalised intersection layout and phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-21. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-21: Intersection delay analysis summary for 2034 – David Low Way / Tanah Street West / Tanah Street East intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	63.3	25.9	LOS C	130.7
AM Peak GAP	64.3	26.2	LOS C	133.6
AM Peak MP	72.9	28.7	LOS C	159.8
PM Peak DN	68.7	28.2	LOS C	141.5
PM Peak GAP	70.4	29.0	LOS C	147.3
PM Peak MP	75.8	31.7	LOS C	171.7

6.3.1.7 David Low Way / Yandina Coolum Road

The David Low Way / Yandina Coolum Road signalised intersection has been assessed based on the layout and phasing shown in Figure 6-21.

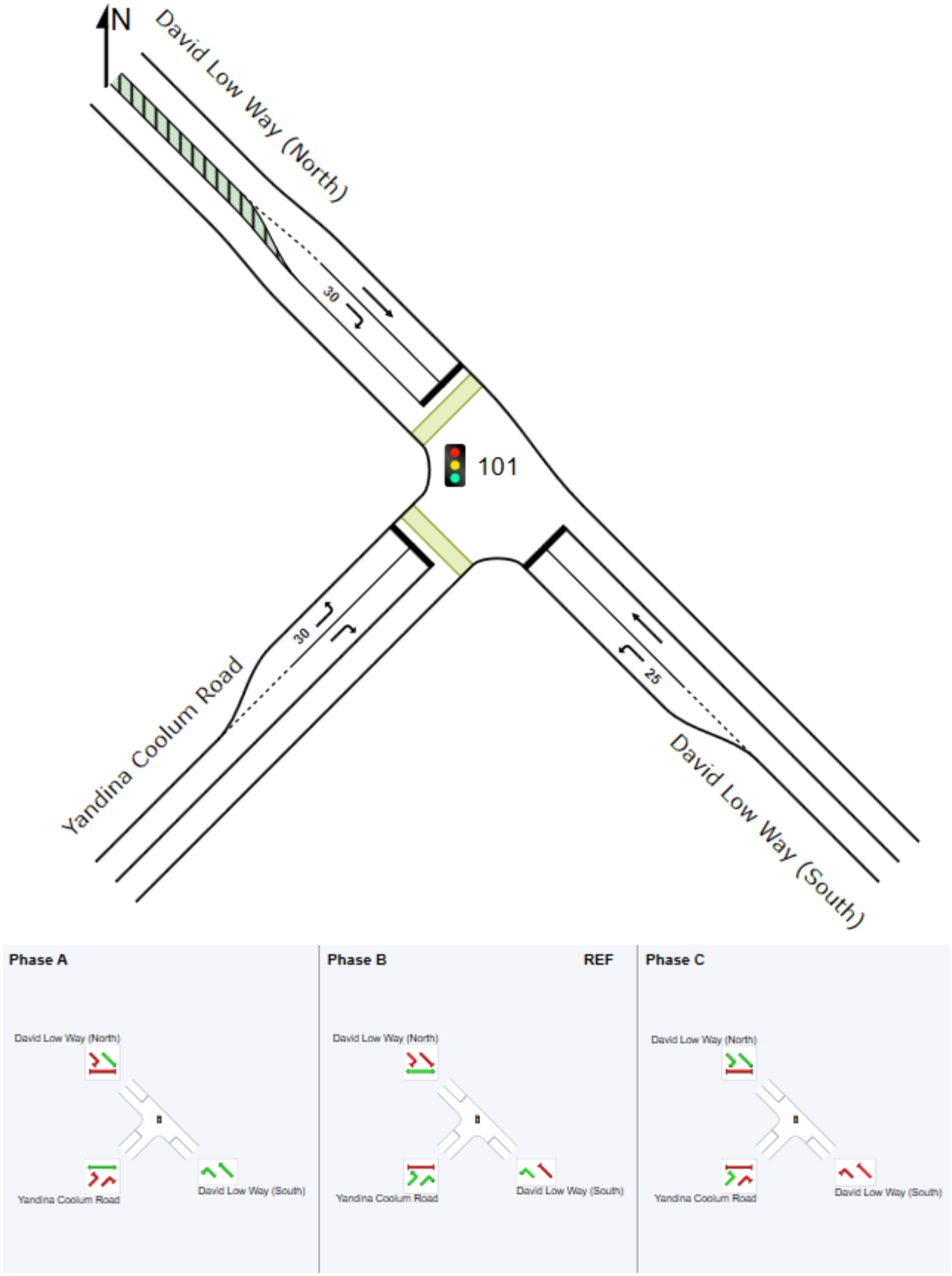


Figure 6-21: David Low Way / Yandina Coolum Road signalised intersection layout and phasing

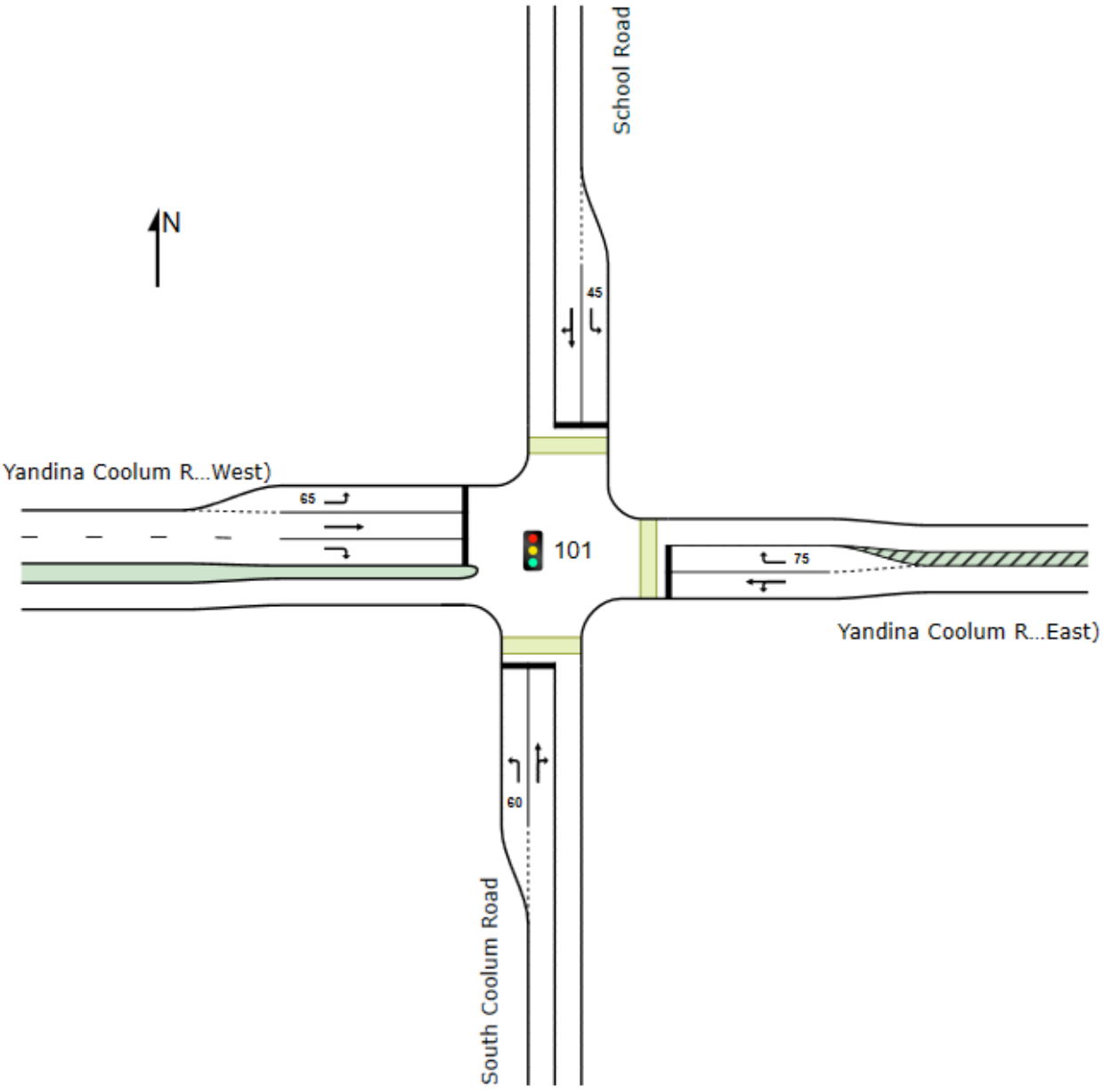
A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-22. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-22: Intersection delay analysis summary for 2034 – David Low Way / Yandina Coolum Road intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	54.1	20.8	LOS C	119.0
AM Peak GAP	56.1	20.6	LOS C	122.4
AM Peak MP	60.1	20.9	LOS C	136.7
PM Peak DN	45.1	17.5	LOS B	91.0
PM Peak GAP	43.8	17.0	LOS B	87.8
PM Peak MP	47.1	18.9	LOS B	98.2

6.3.1.8 Yandina Coolum Road / South Coolum Road / School Road

The Yandina Coolum Road / South Coolum Road / School Road signalised intersection has been assessed based on the layout and phasing shown in Figure 6-22. Due to the high volume of pedestrians expected within the area, the pedestrian crossing actuation setting in SIDRA was set to 100% for this intersection.



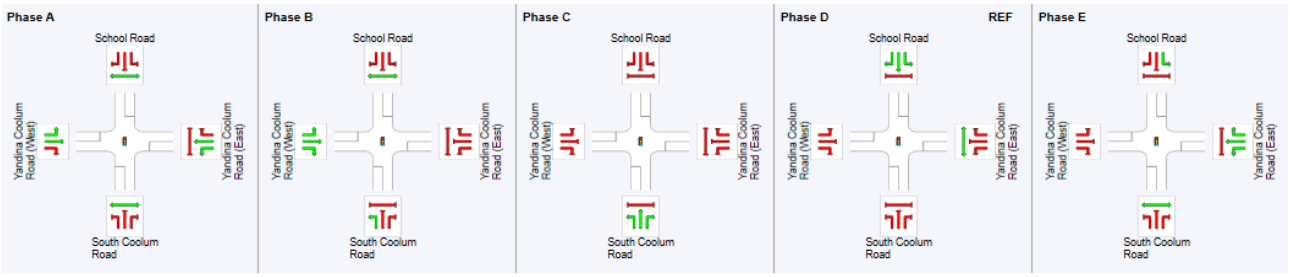


Figure 6-22: Yandina Coolum Road / South Coolum Road / School Road signalised intersection layout and phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-23. Detailed assessment and SIDRA outputs are provided in Appendix D.

Table 6-23: Intersection delay analysis summary for 2034 –Yandina Coolum Road / South Coolum Road / School Road intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	108.4	104.2	LOS F	515.8
AM Peak GAP	109.3	115.5	LOS F	521.5
AM Peak MP	109.7	113.6	LOS F	505.5
PM Peak DN	106.5	85.6	LOS F	440.4
PM Peak GAP	106.7	84.1	LOS F	447.6
PM Peak MP	107.8	89.8	LOS F	434.7

6.3.1.9 VISUM intersection assessment

A summary of the average intersection delay and LOS in 2034 for each of the assessed scenarios for each of the 60 VISUM assessed intersections in the impact assessment area is provided in Table 6-24.

All of these intersections are operating with a LOS of no worse than LOS C with the majority of intersections operating at LOS A with minimal delay.

Table 6-24: VISUM assessed intersection delay analysis summary for 2034

Intersection and Scenario		DN Avg. Delay (sec)	LOS	GAP Avg. Delay (sec)	LOS	MP Avg. Delay (sec)	LOS
David Low Way / Maroochy River Golf Club Access	AM Peak	2.7	A	2.4	A	7.4	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Godfreys Road	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Finland Road	AM Peak	< 1	A	< 1	A	1.1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Vantage Pacific Paradise	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / De Vere Road	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Kowonga Street	AM Peak	< 1	A	8.1	A	< 1	A
	PM Peak	< 1	A	5.5	A	< 1	A
David Low Way / Kumbar Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	1.8	A	< 1	A

Intersection and Scenario		DN Avg. Delay (sec)	LOS	GAP Avg. Delay (sec)	LOS	MP Avg. Delay (sec)	LOS
David Low Way / Nungo Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Bando Street	AM Peak	2.3	A	1.7	A	1.9	A
	PM Peak	1.4	A	1.5	A	1.9	A
David Low Way / Boomba Street	AM Peak	< 1	A	1.5	A	1.1	A
	PM Peak	1.1	A	2.2	A	1.8	A
David Low Way / Wywong Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Gayome Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Kallay St	AM Peak	1.3	A	1.6	A	1.4	A
	PM Peak	1.4	A	1.3	A	1.3	A
David Low Way / Lerner Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Timari Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	1.0	A	1.6	A	1.3	A
David Low Way / Multisports Complex	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Fourth Avenue	AM Peak	< 1	A	< 1	A	2.0	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Surfrider Pl	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Desley St	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Rex Terrace	AM Peak	1.1	A	1.1	A	2.1	A
	PM Peak	1.4	A	1.4	A	3.3	A
David Low Way / Sunset Strip	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Ped Crossing North of Sunset Strip	AM Peak	1.3	A	1.8	A	2.2	A
	PM Peak	1.3	A	1.4	A	2.2	A
David Low Way / Wayne Avenue	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	1.0	A
David Low Way / Warana Way	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Keith Royal Drive	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Petrie Avenue	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Tamarindus Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Seaside Boulevard (Mt Coolum Shores Drive)	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Boardwalk Blvd	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	1.0	A
David Low Way / Yaroomba Dr	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A

Intersection and Scenario		DN Avg. Delay (sec)	LOS	GAP Avg. Delay (sec)	LOS	MP Avg. Delay (sec)	LOS
David Low Way / Warran Rd	AM Peak	1.3	A	1.1	A	1.3	A
	PM Peak	< 1	A	< 1	A	1.2	A
David Low Way / Warragah Pde	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Boward Close	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Goongilla St	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Yerranya Row	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Neurum Rd	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Bertya Place	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Birtwill Street	AM Peak	2.7	A	1.9	A	3.1	A
	PM Peak	1.4	A	1.4	A	1.5	A
David Low Way / William Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Elizabeth Street	AM Peak	2.5	A	2.4	A	2.7	A
	PM Peak	1.5	A	1.7	A	1.6	A
David Low Way / Park Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Ped Crossing north of Beach Road	AM Peak	3.7	A	3.9	A	4.1	A
	PM Peak	3.5	A	3.2	A	3.9	A
Sunshine Motorway / Yandina-Coolum Road	AM Peak	5.8	A	6.0	A	6.5	A
	PM Peak	7.8	A	8.2	A	8.1	A
Yandina Coolum Road / Barns Lane	AM Peak	6.8	A	7.0	A	7.6	A
	PM Peak	7.4	A	6.6	A	6.8	A
Yandina Coolum Road / Park Crescent	AM Peak	2.0	A	1.9	A	1.3	A
	PM Peak	2.7	A	2.6	A	2.8	A
Yandina Coolum Road / Central Avenue	AM Peak	29.6	C	28.2	C	26.2	C
	PM Peak	27.9	C	28.2	C	28.1	C
Yandina Coolum Road / Centenary Heights Road	AM Peak	3.5	A	4.0	A	4.8	A
	PM Peak	2.0	A	1.8	A	1.9	A
Yandina Coolum Road / Perry Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
Yandina Coolum Road / Pacific Terrace	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Scrub Road	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Bay Terrace	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Richmond Close	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Dewar Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A

Intersection and Scenario		DN Avg. Delay (sec)	LOS	GAP Avg. Delay (sec)	LOS	MP Avg. Delay (sec)	LOS
David Low Way / Andrew Street	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
Runway Drive / Airport Drive	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Cook Road	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Bli Bli Watrsports Access	AM Peak	< 1	A	< 1	A	1.9	A
	PM Peak	< 1	A	< 1	A	< 1	A
David Low Way / Lorraine Avenue	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A
Sunshine Motorway / Suncoast Beach Drive (West)	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	1.3	A	1.1	A	1.1	A
Sunshine Motorway / Suncoast Beach Drive (East)	AM Peak	< 1	A	< 1	A	< 1	A
	PM Peak	< 1	A	< 1	A	< 1	A

6.3.2 Model cordon volume comparisons

At TMR's request, an assessment of whether GTIA impact triggers (>5% increase relative to base traffic) are being exceeded at the subarea model cordon boundaries at the road mid-block level was undertaken. This analysis compares the AM and PM peak period link flows between the 2034 Do-Nothing and 2034 Full Masterplan scenarios, identifying any locations where the GTIA impact trigger is exceeded.

Figure 6-23 and Figure 6-24 show the comparison between the 2034 Do-Nothing and 2034 Full Masterplan AM and PM peak periods respectively.

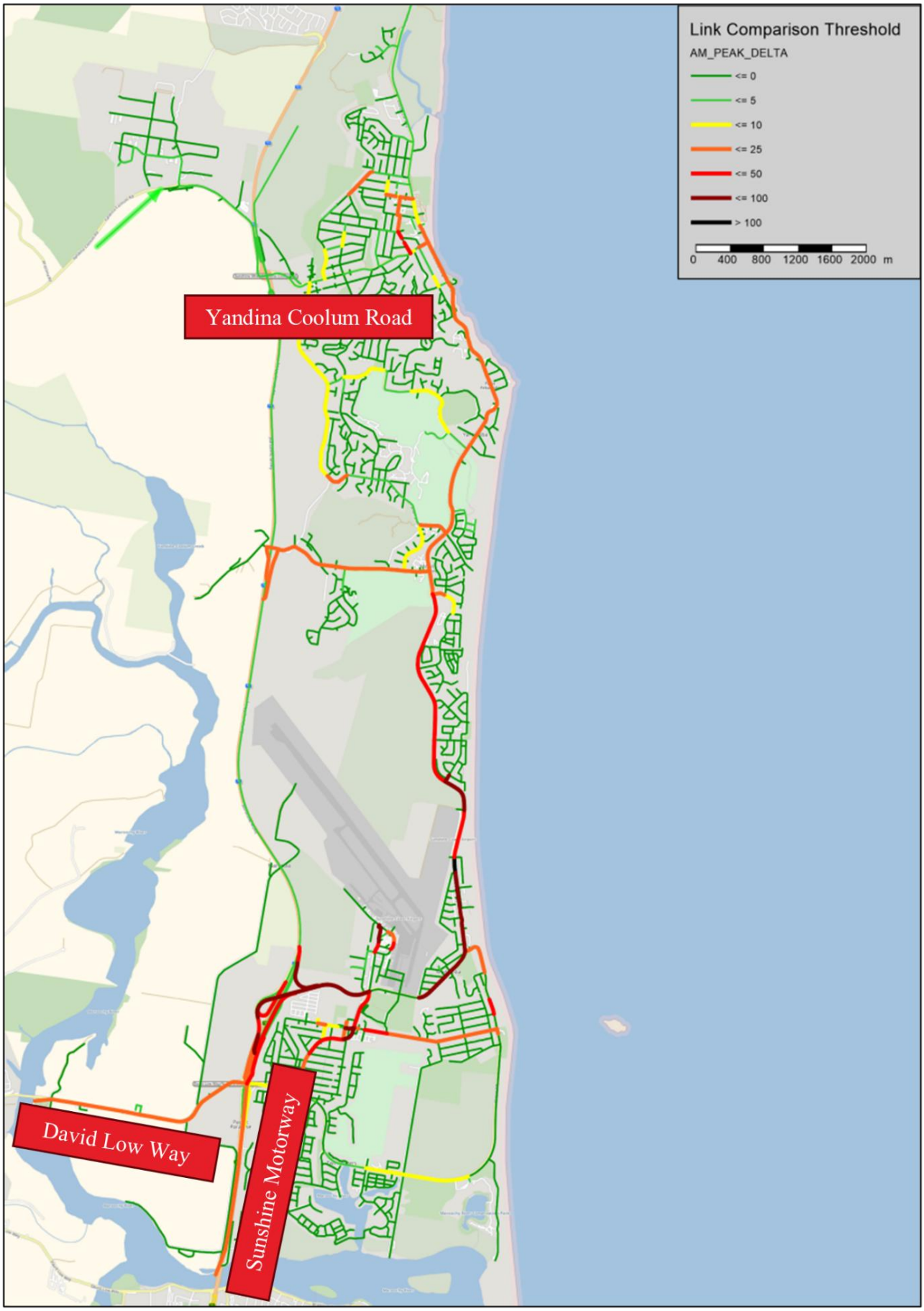


Figure 6-23: AM peak hour link flow analysis comparison between 2034 DN and 2034 Full Masterplan

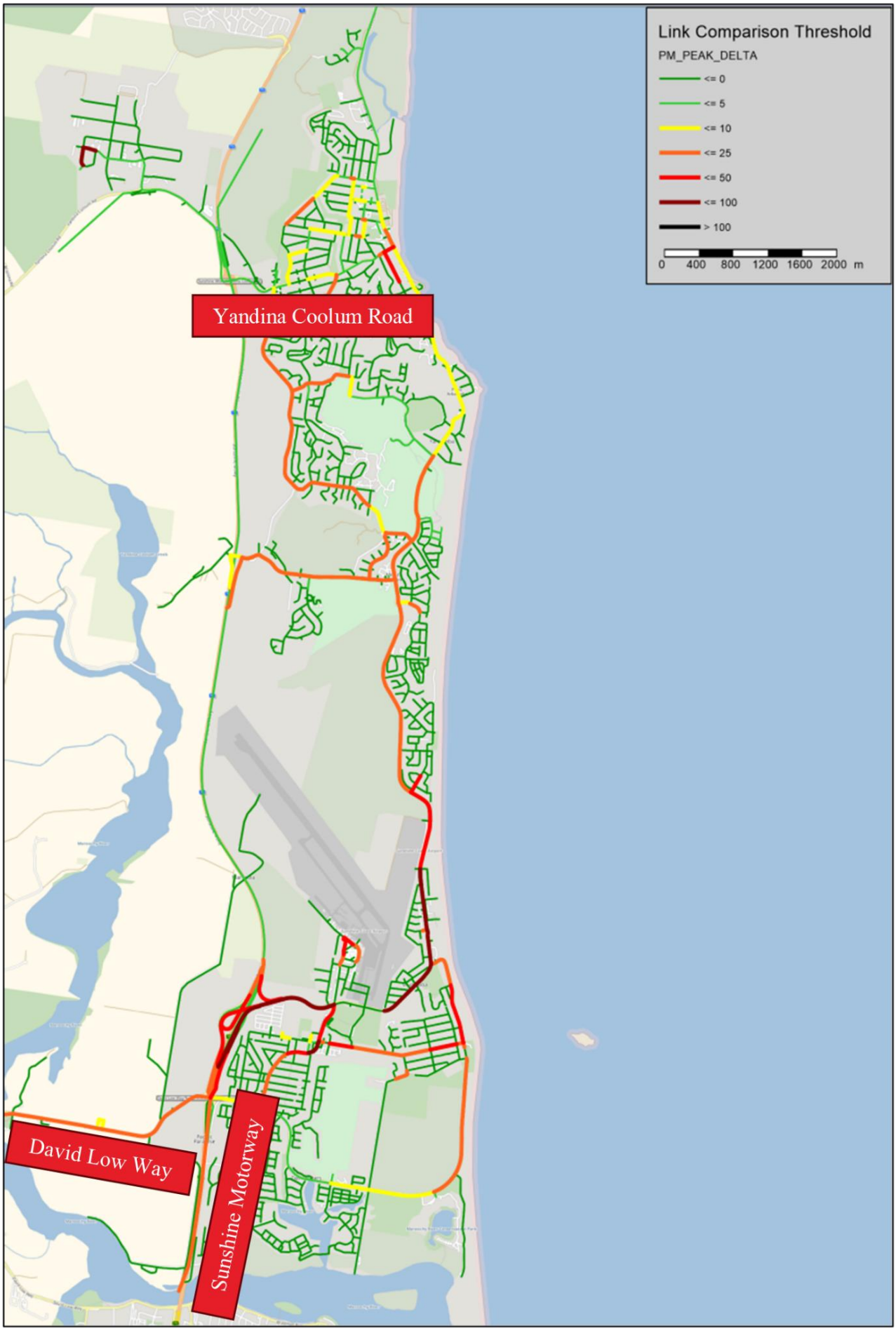


Figure 6-24: PM peak hour link flow analysis comparison between 2034 DN and 2034 Full Masterplan

The figures above indicate two model boundary locations where the development traffic results in an increase in traffic relative to the base by more than 5%. They are:

- Sunshine Motorway south
- David Low Way west.

Table 6-25 and Table 6-26 indicate the 2034 Do Nothing and 2034 Full Masterplan volumes at these locations where the threshold is exceeded for the AM and PM peak periods respectively.

Table 6-25: Volume at locations where GTIA threshold is exceeded – AM peak

Location	2034 DN	2034 MP	Difference
Sunshine Motorway south – northbound	2,859	3,371	512 (18%)
Sunshine Motorway south – southbound	4,396	4,768	372 (8%)
David Low Way west – eastbound	826	927	101 (12%)
David Low Way west – westbound	739	839	100 (14%)

Table 6-26: Volume at locations where GTIA threshold is exceeded – PM peak

Location	2034 DN	2034 MP	Difference
Sunshine Motorway south – southbound	3,421	3,904	484 (14%)
David Low Way west – eastbound	823	949	126 (15%)
David Low Way west – westbound	738	865	127 (17%)

The analysis indicates that the 5% threshold is exceeded at both the Sunshine Motorway south and David Low Way west links at the model boundary, with the largest increase being 18% along the Sunshine Motorway northbound in the AM peak.

However, it should be noted that the impact assessment undertaken is highly conservative in several respects:

- The highest applicable trip generation rates have been used for each land use for the Airport North sub-precincts where land use has not yet been finalised.
- The model used for this assessment is a subnetwork of SCC's wider regional SBA VISUM model. A large proportion of the trips generated by the new development would likely stem from the redistribution of trips already occurring within the wider regional network, as opposed to wholly new demand (i.e. new demand from outside the network).

  As the subnetwork cannot capture this redistribution of traffic, development traffic has been treated as additive (with the exception of undiverted drop in trips and internal which have been reduced via reduction factors mentioned previously in Section 5.1.2), which is likely to overstate the increase in traffic at these model boundary locations.

6.3.3 Network delay impacts

As noted, network delay impacts calculations are to be carried out where the development traffic exceeds 5% of the base traffic for any movement in the design peak periods in the year of opening for intersections where at least one approach of the intersection forms part of the State-Controlled Road. The increase in intersection delay associated with the impact assessment area of the SCA PDA was calculated using the following formula (see TMR's GTIA Section 11.3.1):

$$ID = \sum_{i=1}^{n} WD - \sum_{i=1}^{n} BC$$

Where:	ID	is aggregate intersection-delay impact vehicle-minutes
	WD	is with development intersection vehicle-minutes for design peak periods. This is calculated by multiplying the with development average delay by movement to the base case volume on each movement, thus not counting the impact as delays to development traffic, only to pre-existing traffic that is affected by these additional delays.
	BC	is base case intersection vehicle-minutes for design peak periods
	n	is the number of intersections in the impact assessment area
	i	is each intersection within the impact assessment area

This calculation is a multi-step calculation that requires the use of SIDRA 9.1 models and spreadsheets to complete a series of consecutive calculations. The key SIDRA results tables and spreadsheet used to complete this calculation are provided in Appendix F.

The GTIA FAQ's states that:

> *"If the access upgrade is required for safety reasons and it provides additional safety benefits to the intersection, then the upgrade's effect should not be considered in the summation of intersection delay impacts. If the access upgrade is primarily provided for access to the development, without any appreciable benefits to the broader community, then the upgrade's effect should be included in the summation of intersection delay impacts."*

The provision of the four site access intersections is primarily for access to the development and so have been included in the assessment of no net worsening.

6.3.3.1 Gateway and Aerospace Precincts

Network Delay

The key results of the calculation for the Gateway and Aerospace Precincts are:

- Sum of WD (GAP) = 1,696,518 vehicle-seconds (28,275 vehicle-minutes)
- Sum of BC (DN) = 1,595,808 vehicle-seconds (26,597 vehicle-minutes)
- ID = 100,710 vehicle-seconds (1,678 vehicle-minutes)
- Percentage increase in delay = **6.31%.**

The results demonstrate that the Gateway and Aerospace Precincts increases the intersection delay by more than 5%. As such, the delay impacts of the surrounding road network at the opening year are required to be mitigated.

As mentioned in Section 6.3.1, the process above included a combination of undertaking SIDRA analyses on key intersections within the model study area and using VISUM for the remainder of the intersections. To ensure this method is conservative, the process above has also been undertaken using VISUM analysis for all intersections.

The key results of the calculation for the Gateway and Aerospace Precincts using the VISUM delay outputs for all intersections are:

- Sum of WD (GAP) = 991,830 vehicle-seconds (16,531 vehicle-minutes)
- Sum of BC (DN) = 965,696 vehicle-seconds (16,094 vehicle-minutes)

- ID = 26,134 vehicle-seconds (436 vehicle-minutes)
- Percentage increase in delay = **2.71%.**

Given that the percentage increase in delay is notably lower (and less than 5%) when calculating the delay based on the VISUM intersection outputs only, it indicates that the process using a combination of SIDRA (for key intersections) and VISUM for intersection delay is the more conservative approach. As such, mitigation measures and the impact of the mitigation measures on the network delay has been conducted using the combined SIDRA and VISUM intersection modelling.

6.3.3.2 Full Masterplan

Network Delay

The key results of the calculation for the Full Masterplan are:

- Sum of WD (MP) = 2,176,569 vehicle-seconds (36,276 vehicle-minutes)
- Sum of BC (GAP) = 1,696,518 vehicle-seconds (28,275 vehicle-minutes)
- ID = 480,051 vehicle-seconds (8,001 vehicle-minutes)
- Percentage increase in delay = **28.30%**

The Gateway and Aerospace Precincts (GAP) scenario has been used as the BC scenario in this case as the Gateway and Aerospace Precincts are assumed to be complete prior to the start of the Airport North Precinct. The results demonstrate that the addition of the Full Masterplan increases the intersection delay by more than 5% when compared to the GAP as the base. As such, the delay impacts of the surrounding road network at the opening year are required to be mitigated.

Similarly to the GAP scenario, the delay outputs using only the VISUM intersection delay were calculated and are as follows:

- Sum of WD (MP) = 1,091,638 vehicle-seconds (18,194 vehicle-minutes)
- Sum of BC (GAP) = 991,830 vehicle-seconds (16,531 vehicle-minutes)
- ID = 99,808 vehicle-seconds 1,663 vehicle-minutes)
- Percentage increase in delay = **10.06%**

In this instance, the percentage increase in delay is considerably lower (but still exceeds 5%) when calculating the intersection delay based on the VISUM intersection outputs only. Again, this indicates that the process of using the combination of SIDRA (for key intersections) and VISUM is more conservative. As such, mitigation measures and the impact of the mitigation measures on the network delay has been conducted using the combined SIDRA and VISUM intersection modelling.

6.3.4 Mitigations

The analysis of the 72 intersections revealed that approximately 87% of the total network delay impacts originated from the twelve critical locations. This includes the four site access intersections (Section 6.2), and the eight key intersections (Section 6.3.1). Due to the significant impact that these intersections have on the overall network performance, a focused detailed assessment on potential mitigation measures was undertaken within SIDRA 9.1 at these key intersection locations.

For this assessment, it was assumed that the mitigation measures would not significantly affect the overall performance of the network. As such, the network delay impacts calculated from the remaining 60 intersections were assumed to remain unchanged from the original assessment.

6.3.4.1 Gateway and Aerospace Precincts

To mitigate the impacts of the Gateway and Aerospace Precincts, the following upgrades to the road network are required:

- Signalisation of the David Low Way / Mudjimba Esplanade intersection

David Low Way / Mudjimba Esplanade

The David Low Way / Mudjimba Esplanade signalised intersection has been assessed based on the layout and phasing shown in Figure 6-25.

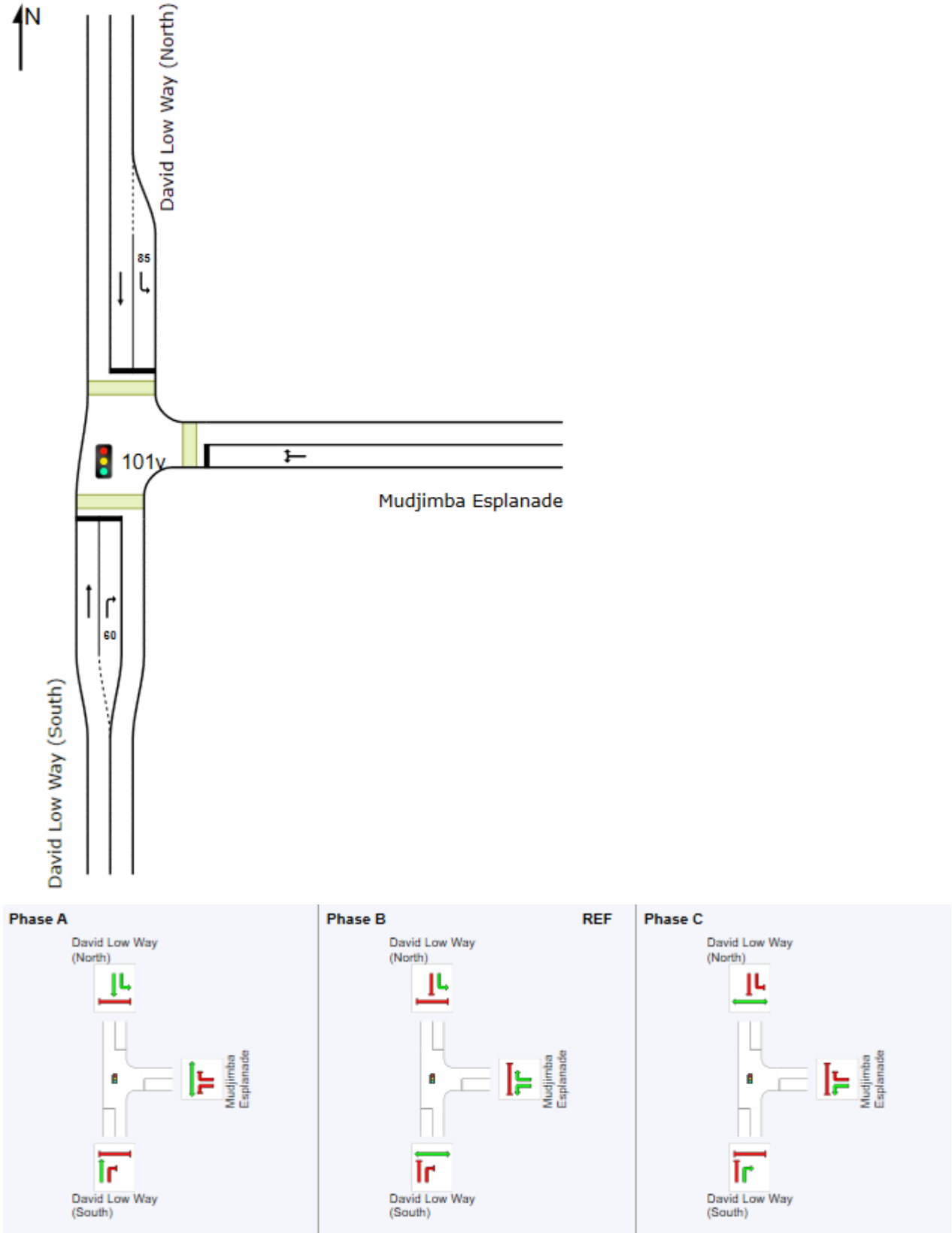


Figure 6-25: David Low Way / Mudjimba Esplanade signalised intersection layout and phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios is presented in Table 6-27. Detailed assessment and SIDRA outputs are provided in Appendix G.

Table 6-27: Intersection delay analysis summary for 2034 – David Low Way / Mudjimba Esplanade upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak DN	49.9	16.8	LOS B	89.1
AM Peak GAP	52.6	17.1	LOS B	95.5
AM Peak MP	69.5	20.3	LOS C	232.0
PM Peak DN	55.1	17.5	LOS B	116.4
PM Peak GAP	55.8	17.9	LOS B	118.6
PM Peak MP	77.9	23.6	LOS C	300.1

Network Delay

The delays to right turning vehicles out of the David Low Way / Mudjimba Esplanade intersection are in excess of 400 seconds in the PM peak Full Masterplan scenario. In this case, it can be expected that drivers would undertake risky and unsafe manoeuvres to turn out of Mudjimba Esplanade. Therefore, the signalisation of this intersection can be considered to be a safety upgrade. In accordance with TMR's GTIA, additional delays to base traffic created from safety-related upgrades (i.e. increased delays to through traffic on David Low Way due to the requirement to stop at the signals) do not need to be accounted for in the no net worsening assessment (i.e. the safety related upgrade can be considered as the base case condition). Therefore, the with mitigations assessment of no net worsening considers the David Low Way / Mudjimba Esplanade intersection as a signalised intersection in all scenarios.

The key results of the calculation for the Gateway and Aerospace Precincts with mitigation measures are:

- Sum of WD (GAP) = 1,729,477 vehicle-seconds (28,825 vehicle-minutes)
- Sum of BC (DN) = 1,628,585 vehicle-seconds (27,143 vehicle-minutes)
- ID = 100,892 vehicle-seconds (1682 vehicle-minutes)
- Percentage increase in delay = **6.20%**

The results demonstrate that the Gateway and Aerospace Precincts with the proposed mitigation measures increases the intersection delay by more than 5%. Therefore, additional mitigation measures are required to be provided. A mitigation measure optioneering task has been conducted, with the results included in Section 6.3.4.3.

6.3.4.2 Full Masterplan

To mitigate the impacts of the Full Masterplan above the mitigation measures identified for the Gateway and Aerospace Precincts, the following upgrades to the road network are required:

- Upgrades to the David Low Way / Green Turtle Place / Airport North Precinct Access signalised intersection as detailed in Section 6.2.4.1

Network Delay

The key results of the calculation for the Full Masterplan are:

- Sum of WD (MP) = 1,842,192 vehicle-seconds (30,703 vehicle-minutes)
- Sum of BC (GAP) = 1,729,477 vehicle-seconds (28,825 vehicle-minutes)
- ID = 112,715 vehicle-seconds (1,878 vehicle-minutes)

- Percentage increase in delay = **6.52%**

The results demonstrate that the Full Masterplan with the proposed mitigation measures increases the intersection delay by more than 5%. Therefore, additional mitigation measures are required to be provided. A mitigation measure optioneering task has been conducted, with the results included in Section 6.3.4.3.

6.3.4.3 Additional mitigation measures optioneering

The mitigation measures outlined in Sections 6.3.4.1 and 6.3.4.2 are insufficient to limit the increase in intersection delay to below 5%. As such, additional mitigation measures are required to be provided. The results of the intersection analyses conducted in Section 6.3.1 indicate that the majority of intersections within the impact assessment area are expected to operate within acceptable limits, with the exception of the David Low Way / Sunshine Motorway Ramps roundabout and the Yandina Coolum Road / South Coolum Road / School Road signalised intersection. Due to this, mitigation measure optioneering has been limited to these two locations.

Yandina Coolum Road / South Coolum Road / School Road

Two potential mitigation measures at the Yandina Coolum Road / South Coolum Road / School Road signalised intersection have been investigated. The results of the intersection analysis above indicate there are high delays to turning vehicles and so the measures investigated are:

1. Conversion of the left turn lane on the southern leg into a left turn slip lane with two-phase signalisation for pedestrians
2. Addition of a short second right turn lane on the western leg and corresponding short second exit lane on the southern leg

It is noted that Yandina Coolum Road / South Coolum Road / School Road intersection has recently been upgraded and the upgrade did not include left turn slip lanes. The results of the intersection analysis in this TIA indicate that at this intersection there are very high delays to left turning vehicles hence, the proposal to provide a left turn slip lane at this intersection as mitigation works.

The slip lane is proposed to be provided with two-phase signalisation to provide a protected crossing for pedestrians. This treatment is in line with the requirements of TMR's Road Safety Policy and Road Safety Policy Fact Sheets which highlight that where slip lanes are determined to be required, pedestrian crossing types are to be provided as per the hierarchy in the Queensland Guide to Traffic Management (QGTM) and that raised crossings and two-aspect signalised crossings, as proposed, may be provided without the need for a design exception or planning report.

The Yandina Coolum Road / South Coolum Road / School Road signalised intersection has been assessed based on the layout and phasing shown in Figure 6-26 for the left turn slip lane upgrade option and Figure 6-27 for the new short lanes upgrade option.

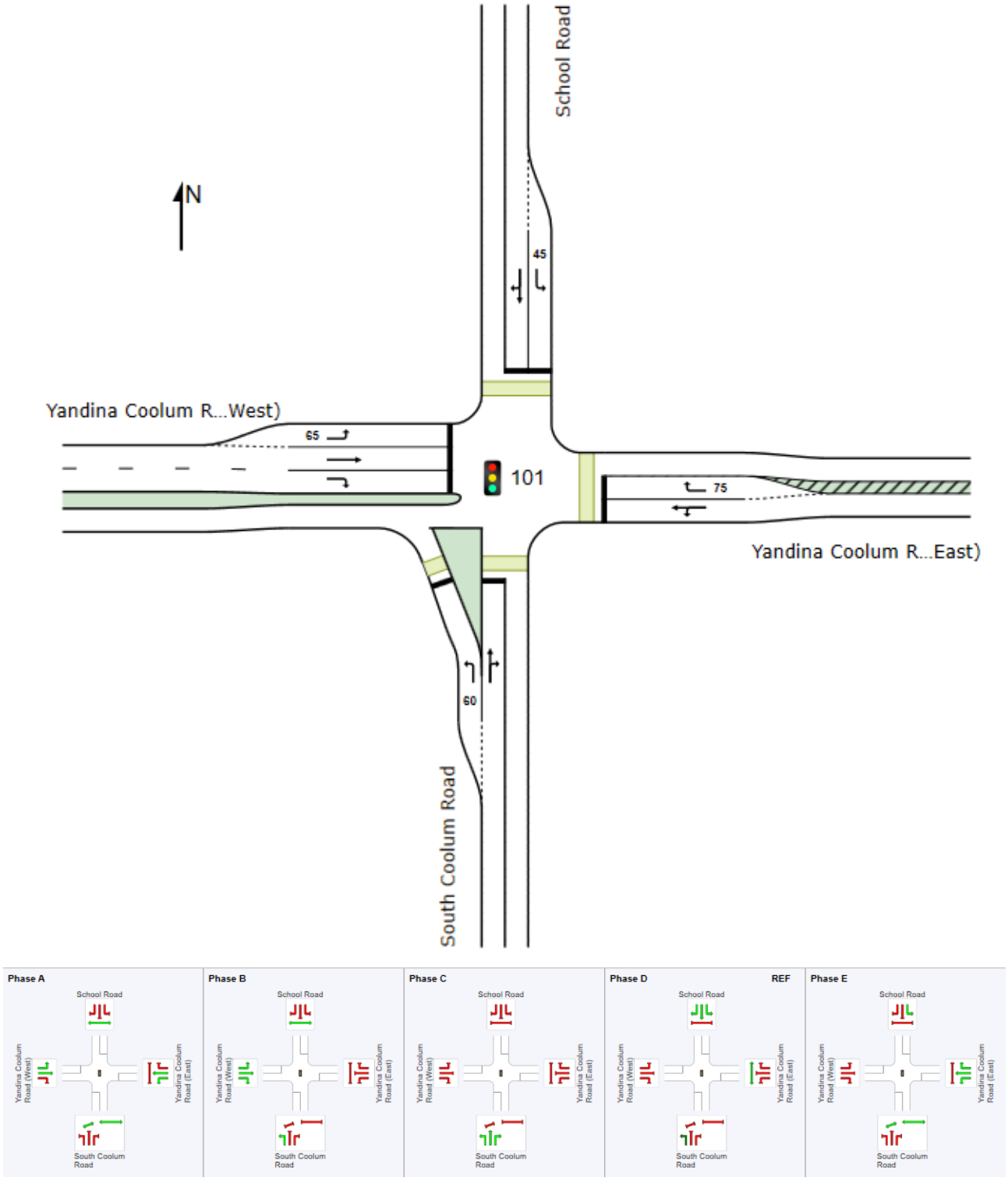
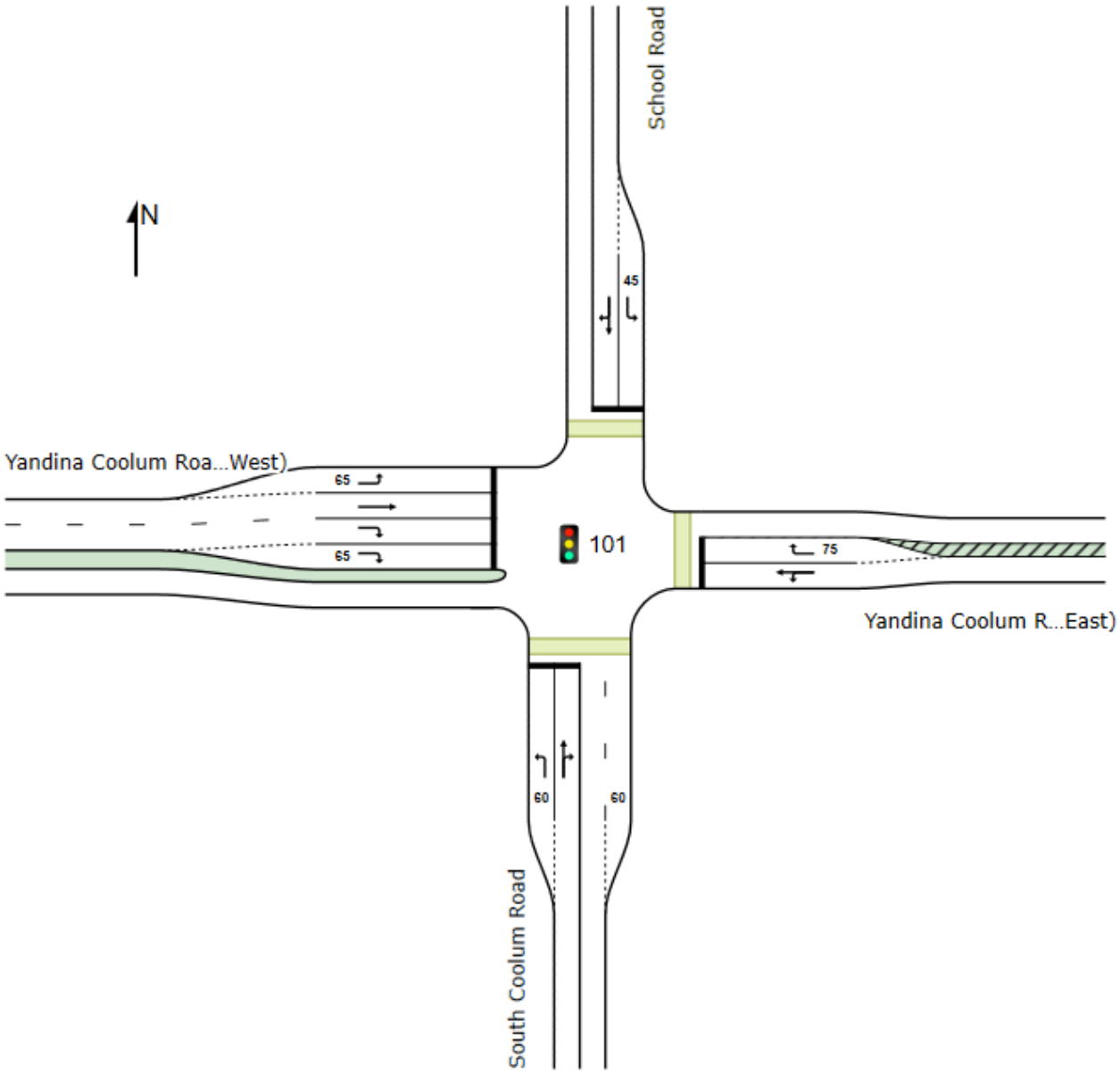


Figure 6-26: Yandina Coolum Road / South Coolum Road / School Road option 1 upgraded intersection layout and phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios for the option 1 upgrade is presented in Table 6-28. Detailed assessment and SIDRA outputs are provided in Appendix G.

Table 6-28: Intersection delay analysis summary for 2034 – Yandina Coolum Road / South Coolum Road / School Road option 1 upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak GAP	109.3	95.7	LOS F	521.5
AM Peak MP	109.7	95.3	LOS F	505.5
PM Peak GAP	106.7	79.8	LOS E	447.6
PM Peak MP	109.4	85.7	LOS F	461.6



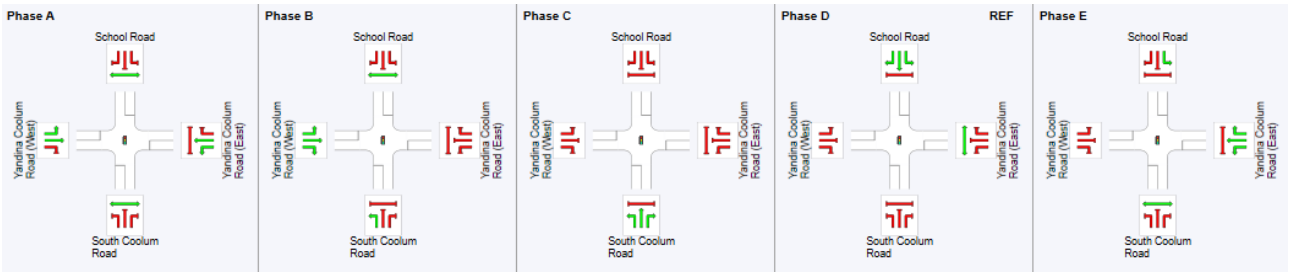


Figure 6-27: Yandina Coolum Road / South Coolum Road / School Road option 2 upgraded intersection layout and phasing

A summary of the intersection performance in 2034 for each of the assessed scenarios for the option 2 upgrade is presented in Table 6-29. Detailed assessment and SIDRA outputs are provided in Appendix G.

Table 6-29: Intersection delay analysis summary for 2034 – Yandina Coolum Road / South Coolum Road / School Road option 2 upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak GAP	107.2	100.9	LOS F	499.7
AM Peak MP	106.1	96.8	LOS F	484.4
PM Peak GAP	97.5	62.5	LOS E	283.4
PM Peak MP	98.5	65.8	LOS E	317.0

David Low Way / Sunshine Motorway Ramps

Two potential mitigation measures at the David Low Way / Sunshine Motorway Ramps roundabout have been investigated. The results of the intersection analysis above indicate there are high delays to vehicles on the northern approach and so the measures investigated are:

1. Addition of roundabout metering signals
2. Provision of a second circulating lane on the eastern side of the roundabout and reallocation of lane movements on the northern approach.

The David Low Way / Sunshine Motorway Ramps roundabout has been assessed based on the layout shown in Figure 6-28 for the roundabout metering upgrade option and Figure 6-29 for the lane reallocation upgrade option.

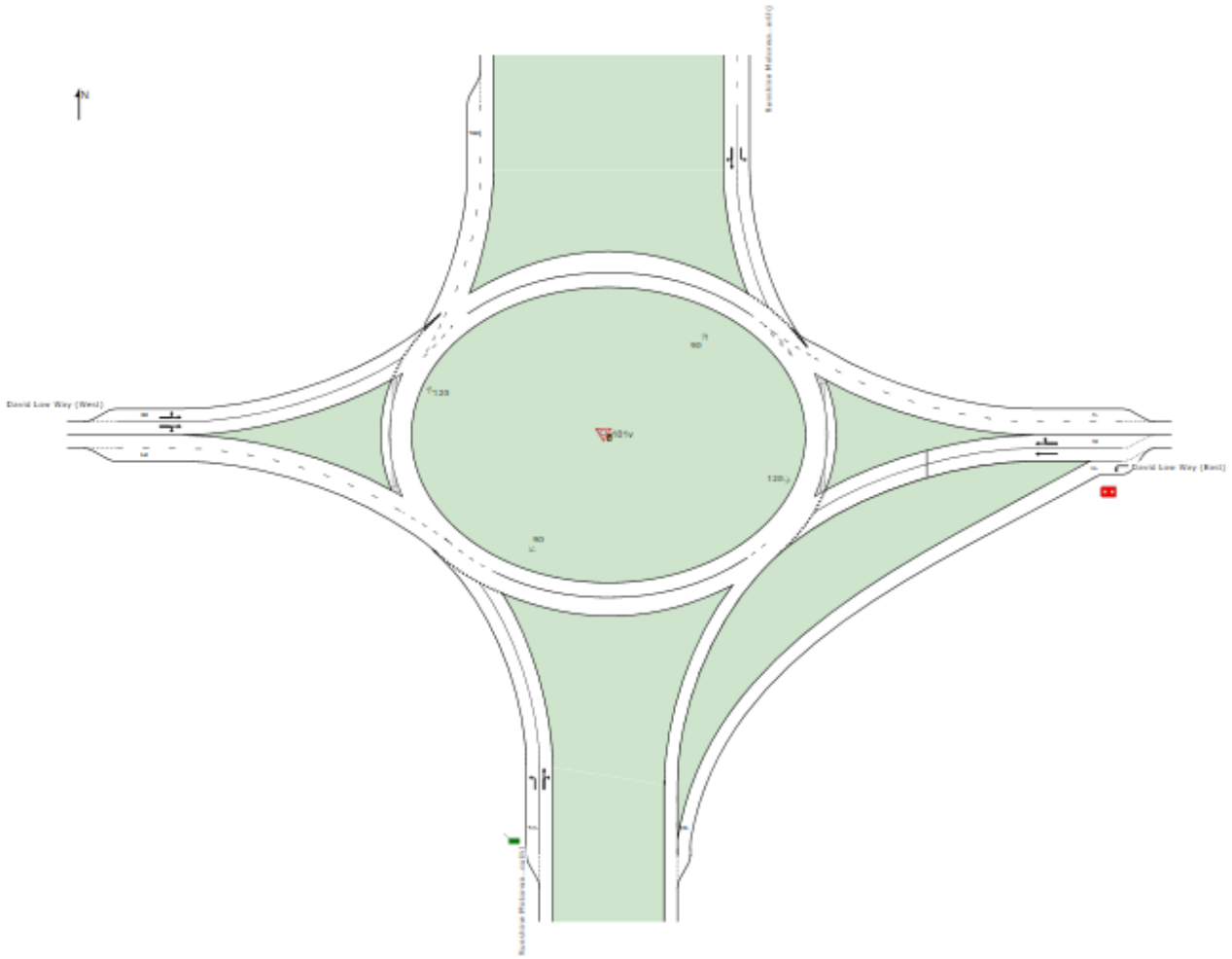


Figure 6-28: David Low Way / Sunshine Motorway Ramps option 1 upgraded intersection layout

A summary of the intersection performance in 2034 for each of the assessed scenarios for the option 1 upgrade is presented in Table 6-30. Detailed assessment and SIDRA outputs are provided in Appendix G.

Table 6-30: Intersection delay analysis summary for 2034 – David Low Way / Sunshine Motorway Ramps option 1 upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak GAP	76.2	9.9	LOS A	38.0
AM Peak MP	76.4	10.2	LOS B	38.0
PM Peak GAP	83.6	11.3	LOS B	59.5
PM Peak MP	82.6	10.9	LOS B	55.0

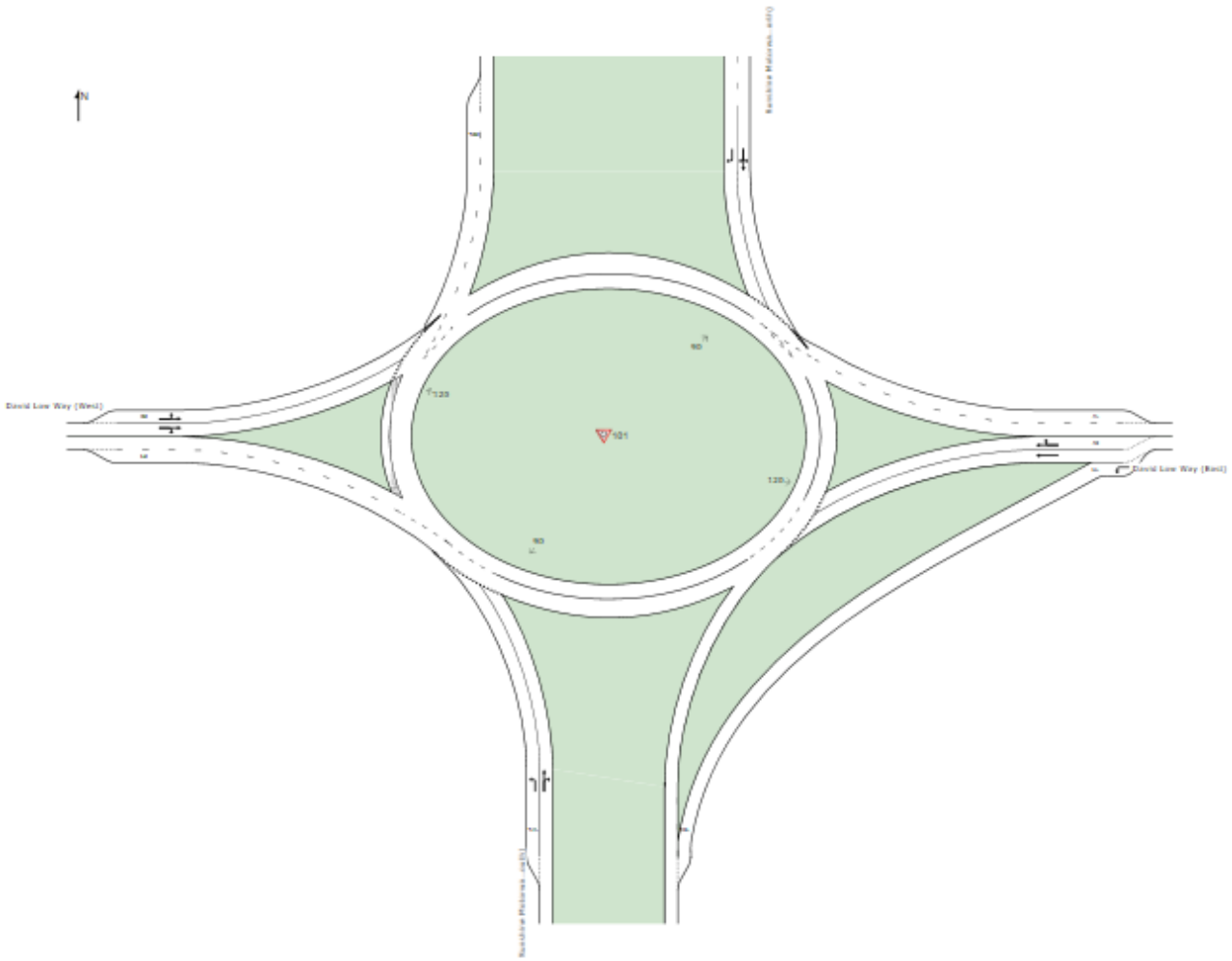


Figure 6-29: David Low Way / Sunshine Motorway Ramps option 2 upgraded intersection layout

A summary of the intersection performance in 2034 for each of the assessed scenarios for the option 2 upgrade is presented in Table 6-31. Detailed assessment and SIDRA outputs are provided in Appendix G.

Table 6-31: Intersection delay analysis summary for 2034 – David Low Way / Sunshine Motorway Ramps option 2 upgraded intersection

Scenario	DOS (%)	Avg. Delay (sec)	LOS	Max 95th percentile queue (m)
AM Peak GAP	78.4	12.3	LOS B	93.0
AM Peak MP	79.7	13.6	LOS B	100.5
PM Peak GAP	78.0	20.0	LOS B	100.4
PM Peak MP	72.4	16.7	LOS B	87.6

Network Delay

The impact on net intersection delay for the above mitigation measure options has been assessed as a number of scenarios with all possible combinations of upgrades reviewed. Table 6-32 provides an overview of each scenario and the results of the net intersection delay assessment for each scenario. It should be noted that the results are inclusive of the upgrades proposed in Section 6.3.4.1 and Section 6.3.4.2.

Table 6-32: Net intersection delay results for additional mitigation measure optioneering

Scenario	Upgrades provided at GAP	Upgrades provided at MP	GAP increase in delay	MP increase in delay
1	Yandina Coolum Road Option 1	Sunshine Motorway Ramps Option 1	2.20%	3.01%
2	Sunshine Motorway Ramps Option 1	Yandina Coolum Road Option 1	1.36%	3.86%
3	Yandina Coolum Road Option 2	Sunshine Motorway Ramps Option 1	-0.14%	2.03%
4	Sunshine Motorway Ramps Option 1	Yandina Coolum Road Option 2	1.36%	0.52%
5	Yandina Coolum Road Option 1	Sunshine Motorway Ramps Option 2	2.20%	4.64%
6	Sunshine Motorway Ramps Option 2	Yandina Coolum Road Option 1	3.64%	3.19%
7	Yandina Coolum Road Option 2	Sunshine Motorway Ramps Option 2	-0.14%	3.70%
8	Sunshine Motorway Ramps Option 2	Yandina Coolum Road Option 2	3.64%	-0.08%

The results demonstrate that both the Gateway and Aerospace Precincts and Full Masterplan with any combination of the proposed mitigation measures limits the delay increase to less than 5%. Under some combinations of upgrades, the net intersection delay is improved from the base case scenario (i.e. there is less delay across the impact assessment area than prior to the Airport development).

6.4 Road safety impact assessment and mitigation

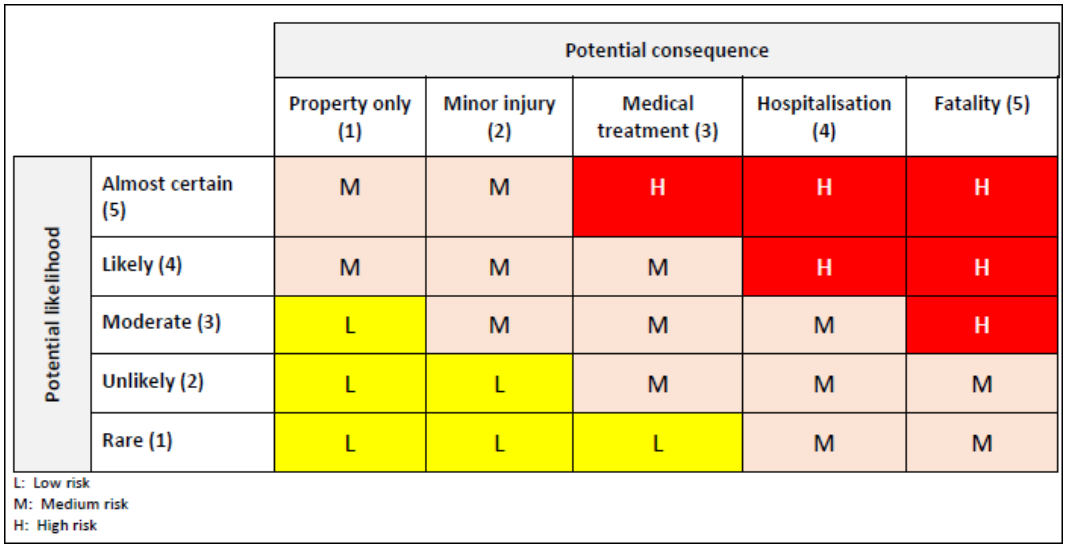
A road safety risk assessment is necessary to determine if there is likely to be any significant change to the level of road safety risk on the surrounding road network due to the development. As outlined in the GTIA, the desired outcome is for road safety at any location on the network to not be significantly worsened as a result of the proposed development. Significantly worsened is defined within TMR's GTIA as a change to the level of safety risk (e.g. Low to Moderate, Moderate to High etc).

To achieve the desired outcomes for safety, the road risk assessment process carried out includes:

- Identifying the current safety risks relevant to the development impact assessment area
- Identifying the likely new risks or modified risks resulting from the proposed development and the relevant road environment, including the safety risk rating
- Recommending management and mitigation works to ensure the existing safety risk rating for the road is not worsened because of the development and that any unacceptable safety risk is addressed.

The safety risks for all road users (including pedestrians and cyclists) have been identified and scored in accordance with TMR's GTIA risk scoring matrix, as shown in Figure 6-30 and has been assessed for the predevelopment, post development and post development with mitigation measures (if required) scenarios.

The road safety risk assessment is presented in Table 6-33.



Potential likelihood	Potential consequence				
	Property only (1)	Minor injury (2)	Medical treatment (3)	Hospitalisation (4)	Fatality (5)
Almost certain (5)	M	M	H	H	H
Likely (4)	M	M	M	H	H
Moderate (3)	L	M	M	M	H
Unlikely (2)	L	L	M	M	M
Rare (1)	L	L	L	M	M

L: Low risk
M: Medium risk
H: High risk

Figure 6-30: GTIA safety risk score matrix (see Figure 9.3.2(a) in GTIA)

Table 6-33: Safety risk assessment summary

Risk Item	Pre Development			Post Development			Mitigation Measures	Post with Mitigation		
	L	C	Risk	L	C	Risk		L	C	Risk
David Low Way / North Shore Connection Road / Airport Drive Intersection										
The development may cause an increase in traffic volume travelling through the intersection. This increases the likelihood of crashes occurring.	2	3	M	3	3	M	No Action			
The additional traffic volume from the development may cause the turn lanes to overflow into the other lanes which increases the risk of rear end crashes. The short right turn lane on David Low Way is unable to accommodate the current traffic conditions so is expected to be too short to accommodate any development traffic which increases the risk of rear end crashes occurring.	3	3	M	4	3	M	No Action			
David Low Way / Gateway Precinct Access Intersection										
The added intersection introduces additional crash types such as angle collisions and head on collisions in addition to the already existing risk of rear end crashes.	1	4	M	4	4	H	The inclusion of a signalised intersection will reduce the likelihood of crashes occurring. The signal phasing proposed separates the traffic movements and reduces the potential for collisions between vehicles on opposing / adjacent legs.	3	4	M

Risk Item	Pre Development			Post Development			Mitigation Measures	Post with Mitigation		
	L	C	Risk	L	C	Risk		L	C	Risk
Pedestrians using the bus stops are likely to not use the signalised pedestrian crossing at the David Low Way / North Shore Connection Road / Airport Drive Intersection and are more likely to cross the road near the bus stops (where there is no pedestrian crossing). This creates a risk of vehicle collisions with pedestrians at high speed.	3	5	H	4	5	H	The signalised intersection is located closer to the bus stop than the David Low Way / North Shore Connection Road / Airport Drive Intersection and provides signalised crossings on all legs. Pedestrians are likely to use this intersection to cross the road to access the bus stops. This reduces the risk of vehicles colliding with pedestrians.	2	5	M
The southern cycle lane in the existing conditions is narrow which may cause a vehicle to collide with a cyclist.	3	4	M	3	4	M	The signalised intersection provides a wider cycle lane for the length of the intersection and beyond the bus bay. This will reduce the likelihood of a vehicle collision with a cyclist.	2	4	M
David Low Way / Green Turtle Place / Airport North Access Intersection										
The addition of the site access leg to the signalised intersection introduces additional crash types such as angle collisions and head on collisions.	3	4	M	4	4	H	The signal phasing proposed separates the traffic movements and reduces the potential for collisions between vehicles on opposing / adjacent legs.	3	4	M
David Low Way / Mudjimba Esplanade										
There are no kerb ramps or crossing provisions as well as missing footpaths at the intersection. There is a risk of collisions between pedestrians and vehicles should pedestrians try to cross the road at the intersection.	3	4	M	4	4	H	The signalised intersection proposes signalised pedestrian crossings on all legs which will enable safe crossing of David Low Way and Mudjimba Esplanade for pedestrians.	2	4	M
There is a history of head-on and angle crashes at the intersection as highlighted in Section 3.6.1.	5	4	H	5	4	H	Signalisation of the intersection reduces the likelihood of head-on and angle crashes as the phasing does not permit filtered right turns or for vehicles from Mudjimba Esplanade to move at the same time as vehicles on David Low Way.	3	4	M
Yandina Coolum Road / South Coolum Road / School Road										

Risk Item	Pre Development			Post Development			Mitigation Measures	Post with Mitigation		
	L	C	Risk	L	C	Risk		L	C	Risk
Option 1 upgrade: The addition of a left turn slip lane on the southern leg of this intersection increases the risk of collisions between vehicles and pedestrians crossing the slip lane. The intersection is adjacent to a school and a number of other attractors and so pedestrians can be expected in this area.	2	4	M	4	4	H	The left turn slip lane is proposed to be two-phase signalised for pedestrians as outlined in TMR's Road Safety Policy. This will reduce the potential for collisions between vehicles and pedestrians on the slip lane.	3	4	M
Option 2 upgrade: The addition of a second right turn lane on the western leg of this intersection increases the risk of side swipe collisions between turning vehicles in each lane.	1	3	L	2	3	M	Turn guide lines can be provided to direct drivers to stay in the correct lane.	1	3	L
David Low Way / Sunshine Motorway Ramps										
Option 1 upgrade: The addition of roundabout metering increases the risk of rear end collisions on approach to the roundabout.	2	4	M	3	4	M	No action	3	4	M
Option 2 upgrade: The reallocation of lane movements on the northern leg and opening up of a second circulating lane on the eastern leg of this intersection increases the risk of side swipe collisions between vehicles in each lane.	2	3	M	3	3	M	No action	3	3	M

TMR's GTIA also states that for any works identified as being required for a development, either through the risk assessment or delay assessment, a road safety audit (RSA) or road safety assessment is required to be undertaken to ensure the design of the works does not introduce unacceptable safety risks.

The level of assessment required is determined based on the AADT and speed of the surrounding road environment as well as the type of development. Based on the AADT and speed of David Low Way identified in Section 3.2.3 and the SCA PDA being determined to be a Major Development, an RSA is required to be undertaken. The RSA is required to be undertaken independently of the design team and will be completed once mitigation measures are approved as part of the design process.

7. Summary

This report has assessed the transport impacts associated with the development of the Sunshine Coast Airport Priority Development Area (SCA PDA), which comprises the Gateway, Aerospace, and Airport North Precincts. These precincts are intended to be delivered in stages, aligned with airport growth and regional economic development objectives. Access to the SCA PDA is proposed via:

- The existing North Shore Connection Road / David Low Way / Airport Drive signalised intersection
- A new signalised intersection on David Low Way, approximately 400m east of Airport Drive
- Modification of the Airport Drive / Electra Lane priority-controlled intersection
- The addition of a fourth leg to the David Low Way / Green Turtle Place signalised intersection
- A new priority-controlled LILO intersection on David Low Way, approximately 550m north of Green Turtle Place.

Traffic modelling forecasts indicate that the Gateway and Aerospace Precincts will generate approximately 1,375 new trips during the AM peak and 1,450 new trips during the PM peak period. The Full Masterplan scenario (including Airport North Precinct) is expected to generate up to approximately 2,950 AM peak hour trips and 3,225 PM peak hour trips.

The overall impacts on the surrounding transport network are assessed to be moderate for both the Gateway and Aerospace Precincts and the broader Full Masterplan. However, a number of targeted mitigation measures are required to maintain acceptable network performance and road safety outcomes

7.1 Summary of impacts and mitigation measures required

7.1.1 Gateway and Aerospace Precincts

The assessment of network performance and access conditions identified modest increases in traffic volumes, with impacts dispersed across the local road network. Overall network delays are expected to increase by 6.31% as a result of the Gateway and Aerospace Precincts while all access intersections will operate within acceptable limits.

The following mitigation measures are recommended to address the traffic and safety impacts of the Gateway and Aerospace Precincts:

Traffic Network Mitigations:

- Signalisation of the David Low Way / Mudjimba Esplanade intersection
- Upgrades at the Yandina Coolum Road / South Coolum Road / School Road or David Low Way / Sunshine Motorway Ramps intersections as detailed in the mitigation measures optioneering assessment

Road Safety Mitigations:

A road safety impact assessment has been carried out to identify the existing safety risks in the study area and any new or modified risks that result from the Gateway and Aerospace Precincts. This assessment has identified the need to implement the following mitigation measures:

- Signalisation of the David Low Way / Mudjimba Esplanade intersection to reduce the likelihood of head-on and angle crashes between vehicles, as there is a history of crashes at this intersection.
- Provision of signalised crossings on all legs of the David Low Way / Mudjimba Esplanade upgraded intersection to provide safe crossing opportunities for pedestrians across David Low Way and Mudjimba Esplanade.

Subject to implementation of the above measures, the impacts of the Gateway and Aerospace Precincts are considered manageable. It is recommended that the Gateway Precinct Master Plan be supported from a transport planning and engineering perspective.

7.1.2 Full Masterplan

The Full Masterplan scenario, incorporating all three precincts, results in an increase in overall network delay of approximately 28.30% (relative to the Gateway and Aerospace scenario). Traffic impacts are distributed across the network, and all major access intersections are forecast to operate within acceptable performance thresholds.

Traffic Network Mitigations:

- Increasing the length of the short lane to 50m and adjustment of the lane allocation on the western leg to have a full-length right turn lane and short all-movements lane at the David Low Way / Green Turtle Place / Airport North Access intersection
- Upgrades at the Yandina Coolum Road / South Coolum Road / School Road or David Low Way / Sunshine Motorway Ramps intersections as detailed in the mitigation measures optioneering assessment

Road Safety Mitigations:

A road safety impact assessment has been carried out to identify the existing safety risks in the study area and any new or modified risks that result from the Full Masterplan. This assessment has identified the need for no additional road safety measures as part of the Full Masterplan development.

Accordingly, the Full Masterplan is also supported from a traffic and transport perspective, subject to the delivery of the recommended mitigation measures.

7.2 Certification of TIA Report

As a professional engineer registered by the Board of Professional Engineers of Queensland pursuant to the Professional Engineers Act 2002 as competent in my areas of nominated expertise, I understand and recognise:

- the significant role of engineering as a profession, and that
- the community has a legitimate expectation that my certification affixed to this engineering work can be trusted, and that
- I am responsible for ensuring its preparation has satisfied all necessary standards, conduct and contemporary practice.

As the responsible RPEQ, I certify:

- I am satisfied that all submitted components comprising this traffic impact assessment, listed in the following table, have been completed in accordance with the Guide to Traffic Impact Assessment published by the Queensland Department of Transport and Main Roads and using sound engineering principles, and
- where specialised areas of work have not been under my direct supervision, I have reviewed the outcomes of the work and consider the work and its outcomes as suitable for the purposes of this traffic impact assessment, and that
- the outcomes of this traffic impact assessment are a true reflection of results of assessment, and that
- I believe the strategies recommended for mitigating impacts by this traffic impact assessment, embrace contemporary practice initiatives and will deliver the desired outcomes.

Name	John Bennett	**RPEQ Number**	18467
RPEQ Competencies	Civil		

Name	John Bennett	**RPEQ Number**	18467
Signature		**Date**	01/10/2026
Postal Address	Arup, Level 26, 123 Albert Street, Brisbane Qld 4000		
Email	john.bennett@arup.com		

Traffic impact assessment items checklist		Report section
1. Introduction		
Background	✓	2.1
Scope and study area	✓	2.3
Pre-lodgement meeting notes	N/A	
2. Existing Conditions		
Land use and zoning	✓	3.1
Adjacent land uses / approvals	✓	3.1
Surrounding road network details	✓	3.2
Traffic volumes	✓	3.4
Intersection and network performance	✓	3.5
Road safety issues	✓	3.6
Site access	✓	
Public transport (if applicable)	✓	0
Active transport (if applicable)	✓	3.8
Parking (if applicable)	✓	3.3.2.1
Pavement (if applicable)	N/A	
Transport infrastructure (if applicable)	N/A	
3. Proposed Development Details		
Development site plan	✓	4.1
Operational details (including year of opening of each stage and any relevant catchment/market analysis)	✓	4.1.1
Proposed access and parking	✓	4.1.2
4. Development Traffic		
Traffic generation (by development stage if relevant and considering light and heavy vehicle trips)	✓	5.1
Trip distribution	✓	5.1.4

Traffic impact assessment items checklist		Report section
Development traffic volumes on the network	✓	5.1.4
5. Impact Assessment and Mitigation		
Pavement (if applicable)	N/A	
With and without development traffic volumes	✓	6.1
Construction traffic impact assessment and mitigation (if applicable)	N/A	
Road safety impact assessment and mitigation	✓	6.4
Access and frontage impact assessment and mitigation	✓	6.2
Intersection delay impact assessment and mitigation	✓	6.2.4.1
Road link capacity assessment and mitigation	N/A	
Pavement impact assessment and mitigation	N/A	
Transport infrastructure impact assessment and mitigation	N/A	
Other impacts assessment relevant to the specific development type / location (if applicable)	N/A	
6. Conclusions and Recommendations		
Summary of impacts and mitigation measures proposed	✓	7.1
Certification statement and authorisation	✓	7.2

Appendix A

SCC Model Calibration Technical Note

Airport SBA Visum Model 2024 Calibration

Technical Note May 2025

Background

Sunshine Coast Council (SCC) has developed a detailed regional Visum assignment model to support the management of its roads and to plan for future road upgrades across the region. The model uses Simulation Based Assignment (SBA), a simplified microsimulation that simulates individual vehicles using a car following model taking account of key driver behaviours and associated network attributes. Input demands to the model are derived from the Sunshine Coast Integrated Multi-Modal Model (SCIMMM).

A subnetwork has been cut from the regional model that covers Coolum, Marcoola, Mudjimba and Twin Waters. This subnetwork model supports detailed planning in the Airport precinct and the wider study area. Detailed demand calibration has been undertaken to ensure the model accurately represents existing flows across the network.

The Airport SBA model:

- utilises single class total pcu demand matrices generated by SCIMMM
- comprises 154 zones, which align directly with the SCIMMM zoning system
- comprises detailed intersection geometry and signal timings to accurately reflect network capacity, delay and route choice
- assigns 24hrs of traffic to the network dynamically using SBA (with 15min profiling of demands within the critical peak periods), as shown in Table 1.

Time of Day	Time Period	Demands
0000-0700	Model warm up	
0700-0900	AM peak	8x15min matrices
0900-1100	mid-morning peak	4x30min matrices
1100-1400	lunch peak	6x30min matrices
1400-1600	school PM peak	8x15min matrices
1600-1800	PM peak	8x15min matrices
1800-2100	late night shopping peak	6x30min matrices
2100-2400	Model cool down	

TABLE 1 - MODELLED TIME PERIODS

The Mesoscopic and Hybrid Modelling Guidelines Version No. 1.0 (Main Roads Western Australia 2021) has been adopted as the basis for demand calibration targets. The criteria assessed included:

- link and turn GEH statistic
- scatter plots with slope and R-squared (R^2)
- Root Mean Squared Error (RMSE).

Count Data

Demands in the Airport SBA model have been calibrated using 2024 link and turn counts. The matrices generated from the subnetwork cut from the regional Visum model are used as seed matrices that are adjusted using Visum's in-built Dynamic Origin-Destination Matrix Estimation (DODME) process to match observed traffic counts. Calibrated 15min demand matrices resulting from the estimation process provide a more precise representation of counts and vehicle movements, which is critical for supporting management of the traffic network and for detailed

project planning. The study area comprises 114 link counts and 273 turn counts, as shown in Figure 1.

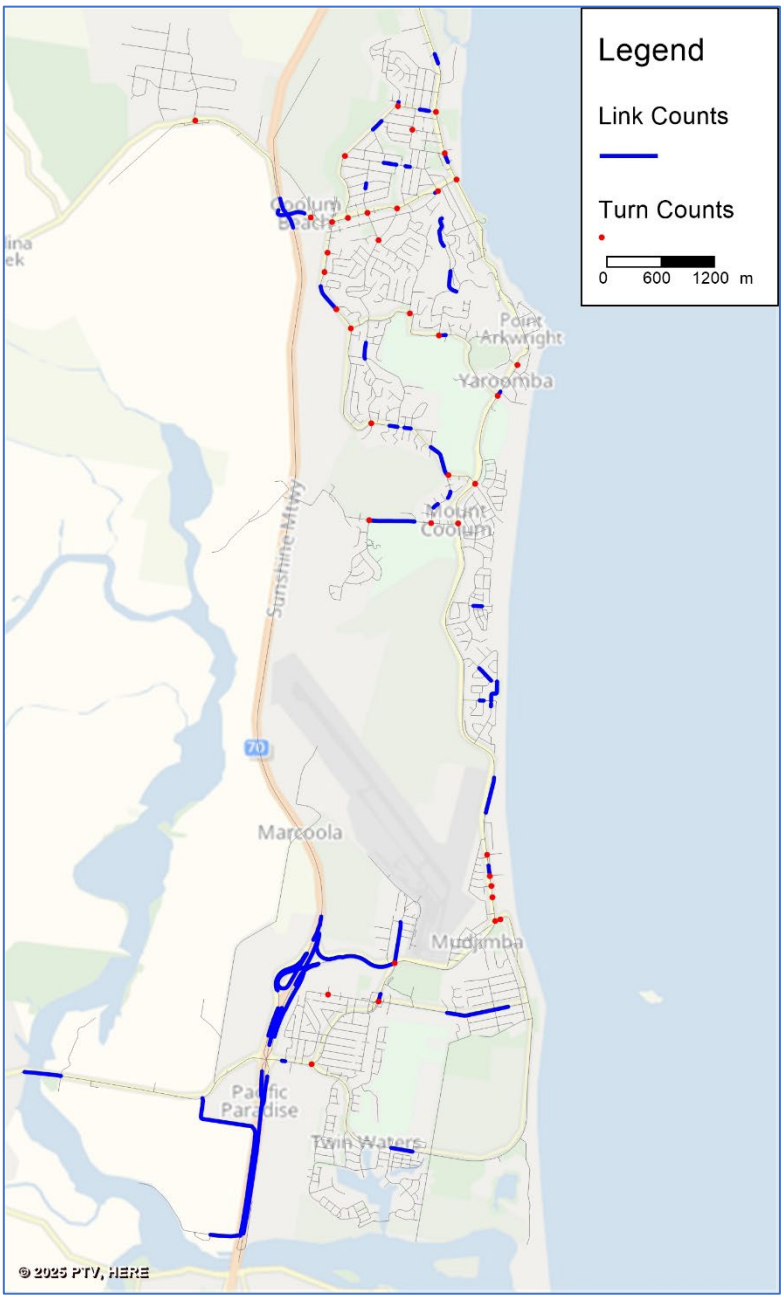


FIGURE 1 - COUNT LOCATIONS

Calibration Results

The targets for each criteria and the calibration results for the peak analysis periods (0700-2100) for link and turn counts respectively are shown in Table 2 and Table 3. Results that meet the calibration target criteria are coloured green. Any targets not met would be coloured red. In this model, all targets are met.

Figure 2 and Figure 3 show the temporal profile of the sum of all counts and sum of all modelled flows at the count locations by 15mins for links and turns respectively. Overall, the model is very well calibrated throughout the 7am to 9pm modelled period.

No.Counts	114	Link Counts					
		am	mm	Ip	spm	pm	Ins
	Targets	0700-0900	0900-1100	1100-1400	1400-1600	1600-1800	1800-2100
%GEH<5	>85%	95.6%	99.1%	99.1%	98.2%	97.4%	99.1%
%GEH<10	>95%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
RMSE	<15	6.9	6.0	5.4	6.9	9.8	7.4
R^2	>0.95	0.998	0.999	0.999	0.998	0.996	0.998
Slope	0.9-1.1	0.999	0.992	0.998	1.002	0.996	1.008

TABLE 2 - LINK STATISTICS

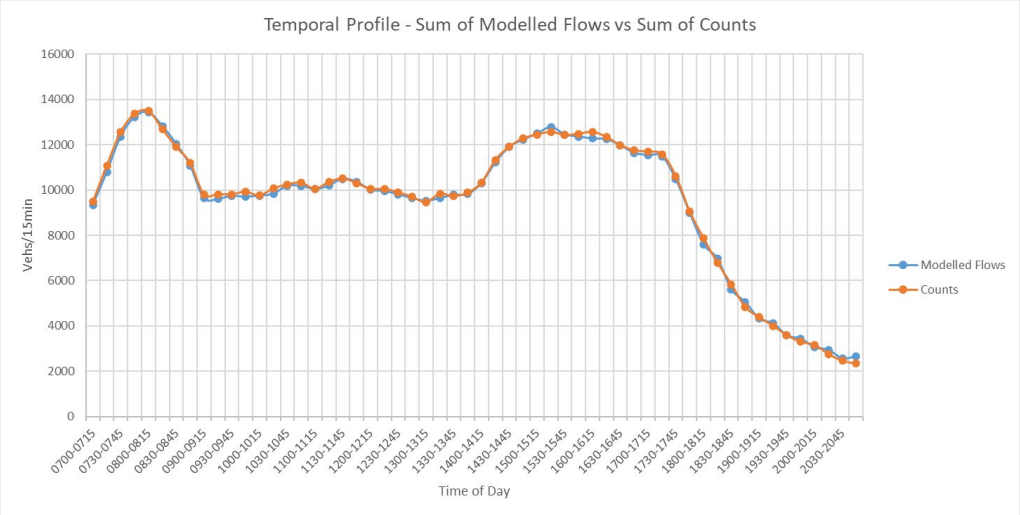


FIGURE 2 - TEMPORAL PROFILE - LINKS

No.Counts	273	Turn Counts					
		am	mm	Ip	spm	pm	Ins
	Targets	0700-0900	0900-1100	1100-1400	1400-1600	1600-1800	1800-2100
%GEH<5	>85%	98.5%	99.3%	99.6%	98.5%	97.4%	99.6%
%GEH<10	>95%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
RMSE	<15	10.8	9.9	9.5	11.5	14.5	14.6
R^2	>0.95	0.996	0.997	0.997	0.995	0.993	0.993
Slope	0.9-1.1	0.998	0.985	0.983	0.981	0.984	0.999

TABLE 3 - TURN STATISTICS

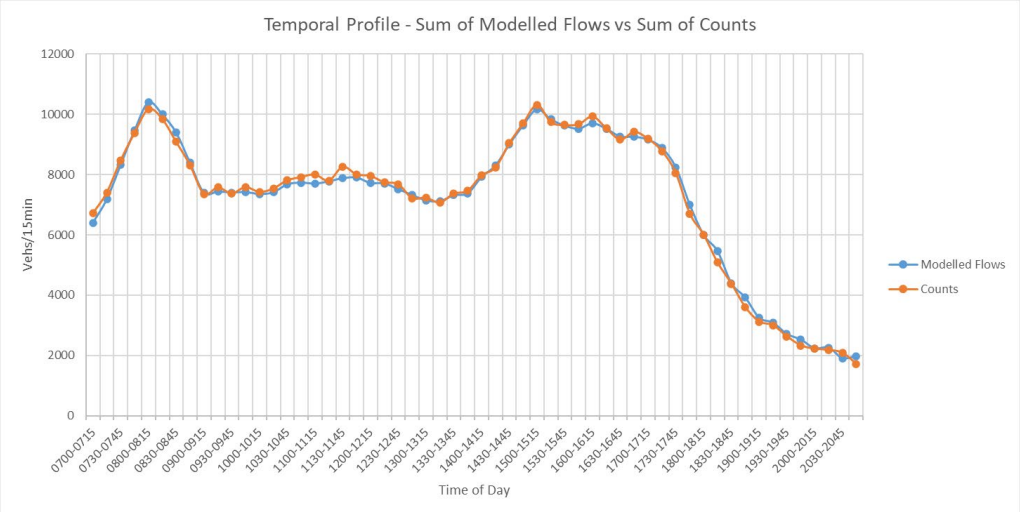


FIGURE 3 - TEMPORAL PROFILE - TURNS

Summary and Key Findings

The demand calibration results demonstrate the following:

- The ~100 link counts provide a very good spread on the major arterial network including the Sunshine Motorway and the David Low Way
- Counts on or adjacent to the major external zones of the model significantly improve model calibration.
- The lower order movement network is also well represented with link counts supplementing the large spread of intersection counts.
- Link counts are typically surveyed over a longer period than intersection turn counts and can be given a greater level of confidence.
- The model achieves >95% GEH<5 and 100% GEH<10 for all time periods which is an excellent level of calibration considering the wide spread of counts used.
- The statistics for turn counts also demonstrate results that are well above the minimum targets adopted (>97% GEH<5 and 100% GEH<10 for all time periods).
- R^2, RMSE and slope statistics are all well above the minimum desired targets.
- Also, the 15min profile of calibrated demand provides a very close representation of observed counts across the study area.

Overall, the calibration results for the Airport SBA model demonstrate that the 2024 base year model represents count observations very closely and is suitable to be used as the basis model for future year models.

Appendix B

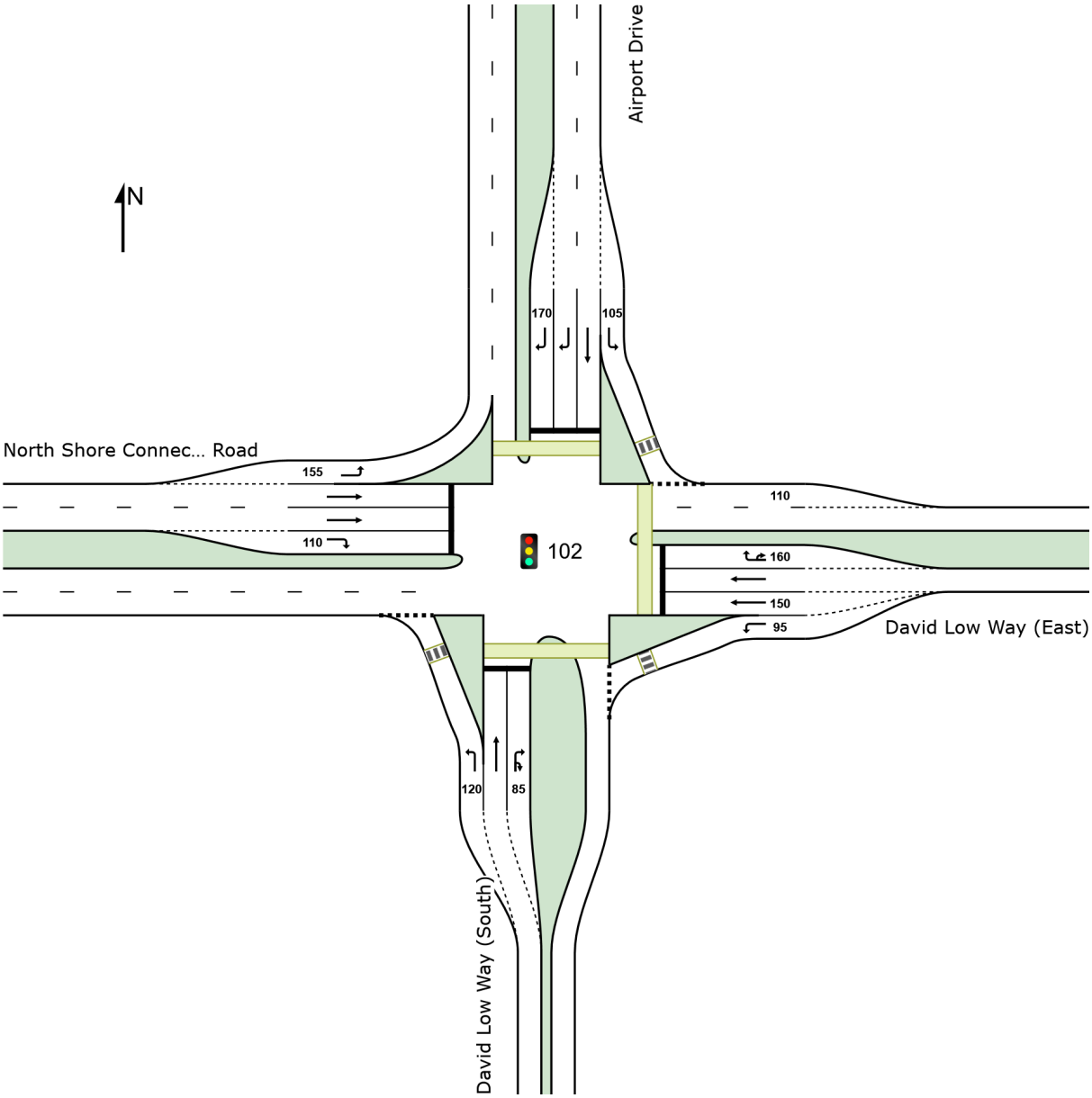
Existing intersection operations

SITE LAYOUT

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2024 AM Peak Existing Conditions)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2024 AM Peak Existing Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2024 AM Peak Existing Conditions)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2024 AM Peak Existing Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	20	2.9	20	2.9	0.026	11.0	LOS B	0.3	2.1	0.41	0.63	0.41	49.2
2	T1	All MCs	35	2.9	35	2.9	0.148	39.2	LOS D	1.4	10.1	0.93	0.68	0.93	36.6
3	R2	All MCs	149	2.9	149	2.9	* 0.678	49.4	LOS D	6.8	48.6	1.00	0.85	1.09	32.6
3u	U	All MCs	1	2.9	1	2.9	0.678	50.9	LOS D	6.8	48.6	1.00	0.85	1.09	32.4
Approach			205	2.9	205	2.9	0.678	43.9	LOS D	6.8	48.6	0.93	0.80	1.00	34.4
East: David Low Way (East)															
4	L2	All MCs	183	2.9	183	2.9	0.122	6.4	LOS A	0.9	6.5	0.20	0.60	0.20	52.4
5	T1	All MCs	1087	2.9	1087	2.9	* 0.673	22.6	LOS C	19.3	138.5	0.87	0.77	0.87	43.9
6	R2	All MCs	52	2.9	52	2.9	* 0.437	52.5	LOS D	2.4	17.2	1.00	0.74	1.00	31.7
6u	U	All MCs	1	2.9	1	2.9	0.437	53.8	LOS D	2.4	17.2	1.00	0.74	1.00	31.4
Approach			1323	2.9	1323	2.9	0.673	21.6	LOS C	19.3	138.5	0.78	0.74	0.78	44.2
North: Airport Drive															
7	L2	All MCs	48	2.9	48	2.9	0.053	10.2	LOS B	0.6	4.2	0.36	0.63	0.36	50.3
8	T1	All MCs	49	2.9	49	2.9	0.211	39.7	LOS D	2.0	14.5	0.94	0.70	0.94	36.5
9	R2	All MCs	128	2.9	128	2.9	* 0.289	45.9	LOS D	2.7	19.2	0.95	0.75	0.95	33.6
Approach			226	2.9	226	2.9	0.289	36.9	LOS D	2.7	19.2	0.82	0.71	0.82	36.9
West: North Shore Connection Road															
10	L2	All MCs	275	2.9	275	2.9	0.151	5.7	LOS A	0.0	0.0	0.00	0.53	0.00	53.3
11	T1	All MCs	319	2.9	319	2.9	0.239	17.9	LOS B	5.4	39.0	0.67	0.55	0.67	46.6
12	R2	All MCs	24	2.9	24	2.9	0.200	51.3	LOS D	1.1	7.7	0.98	0.71	0.98	32.1
Approach			618	2.9	618	2.9	0.239	13.8	LOS B	5.4	39.0	0.38	0.55	0.38	48.5
All Vehicles			2373	2.9	2373	2.9	0.678	22.9	LOS C	19.3	138.5	0.69	0.69	0.70	43.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: David Low Way (South)												
P1	Full	9	9	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
East: David Low Way (East)												
P2	Full	15	16	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
North: Airport Drive												
P3	Full	1	1	39.2	LOS D	0.0	0.0	0.93	0.93	193.0	200.0	1.04
All Pedestrians		25	26	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2024 PM Peak Existing Conditions)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2024 PM Peak Existing Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	27	3.1	27	3.1	0.023	7.6	LOS A	0.2	1.6	0.27	0.60	0.27	51.5
2	T1	All MCs	25	3.1	25	3.1	0.063	30.7	LOS C	0.9	6.4	0.83	0.60	0.83	40.0
3	R2	All MCs	277	3.1	277	3.1	* 0.725	43.7	LOS D	12.1	86.6	0.99	0.87	1.06	34.3
3u	U	All MCs	1	3.1	1	3.1	0.725	45.2	LOS D	12.1	86.6	0.99	0.87	1.06	34.1
Approach			331	3.1	331	3.1	0.725	39.8	LOS D	12.1	86.6	0.92	0.83	0.98	35.7
East: David Low Way (East)															
4	L2	All MCs	234	3.1	234	3.1	0.181	8.1	LOS A	2.4	17.2	0.33	0.65	0.33	51.1
5	T1	All MCs	314	3.1	314	3.1	0.295	27.8	LOS C	5.5	39.3	0.83	0.68	0.83	41.3
6	R2	All MCs	16	3.1	16	3.1	0.065	42.2	LOS D	0.7	4.7	0.89	0.69	0.89	34.8
6u	U	All MCs	1	3.1	1	3.1	0.065	43.5	LOS D	0.7	4.7	0.89	0.69	0.89	34.5
Approach			564	3.1	564	3.1	0.295	20.1	LOS C	5.5	39.3	0.62	0.66	0.62	44.6
North: Airport Drive															
7	L2	All MCs	24	3.1	24	3.1	0.034	18.2	LOS B	0.5	3.5	0.55	0.65	0.55	46.1
8	T1	All MCs	78	3.1	78	3.1	0.408	43.0	LOS D	3.4	24.3	0.98	0.75	0.98	35.3
9	R2	All MCs	254	3.1	254	3.1	* 0.698	51.7	LOS D	5.9	42.1	1.00	0.86	1.13	31.9
Approach			356	3.1	356	3.1	0.698	47.5	LOS D	5.9	42.1	0.96	0.82	1.06	33.3
West: North Shore Connection Road															
10	L2	All MCs	198	3.1	198	3.1	0.109	5.7	LOS A	0.0	0.0	0.00	0.53	0.00	53.3
11	T1	All MCs	658	3.1	658	3.1	* 0.751	33.2	LOS C	16.8	121.0	0.94	0.83	0.98	39.3
12	R2	All MCs	191	3.1	191	3.1	* 0.726	48.7	LOS D	8.6	61.9	1.00	0.88	1.12	32.8
Approach			1046	3.1	1046	3.1	0.751	30.8	LOS C	16.8	121.0	0.77	0.78	0.82	39.9
All Vehicles			2297	3.1	2297	3.1	0.751	32.0	LOS C	16.8	121.0	0.79	0.77	0.83	39.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: David Low Way (South)												
P1	Full	4	4	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
East: David Low Way (East)												
P2	Full	5	5	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
North: Airport Drive												
P3	Full	2	2	39.2	LOS D	0.0	0.0	0.93	0.93	193.0	200.0	1.04
All Pedestrians		11	12	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04

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

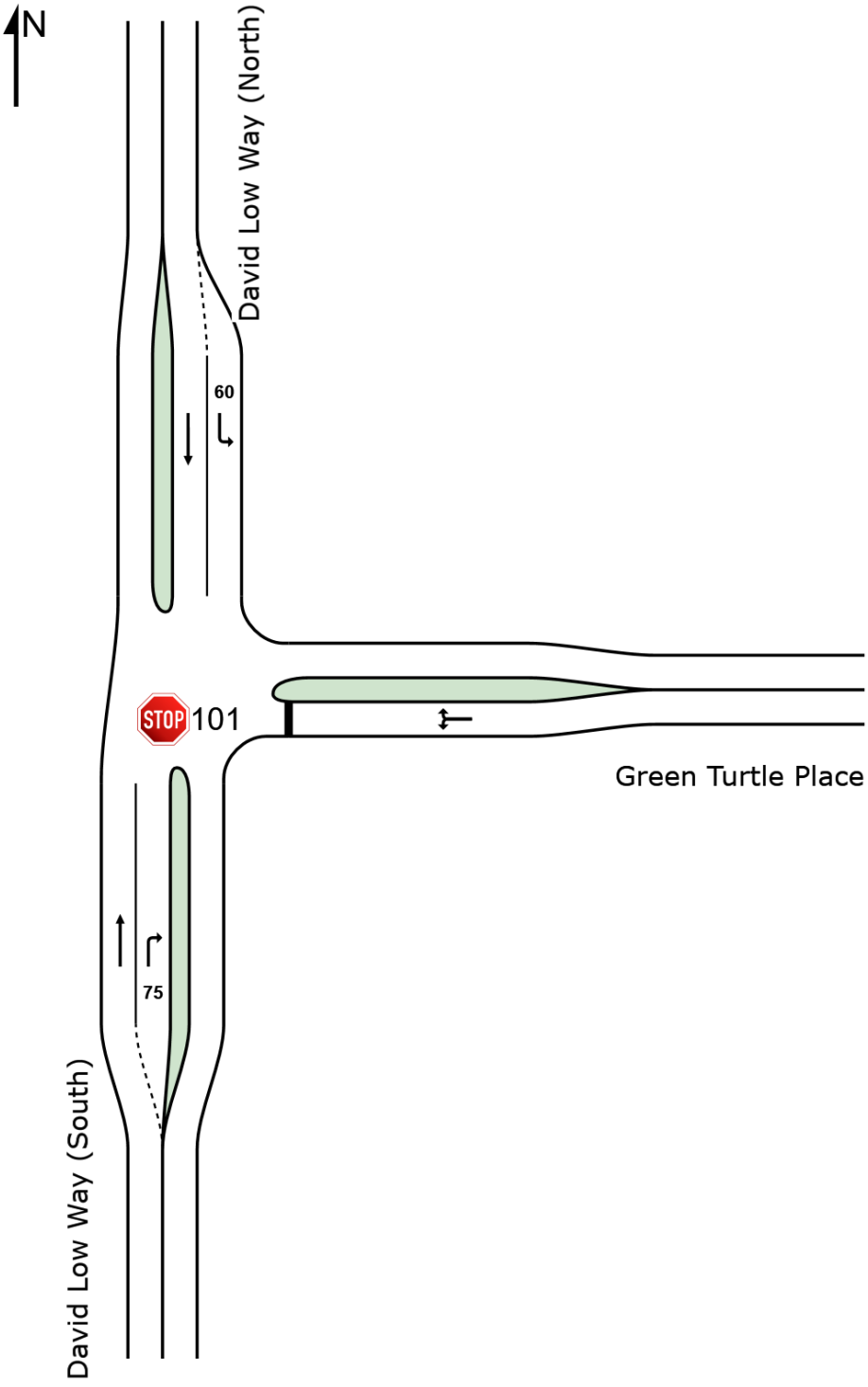
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SITE LAYOUT

Site: 101 [David Low Way / Green Turtle Place (Site Folder: 2024 AM Peak Existing Conditions)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2024 AM Peak Existing Conditions
Site Category: (None)
Stop (Two-Way)

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



MOVEMENT SUMMARY

Site: 101 [David Low Way / Green Turtle Place (Site Folder: 2024 AM Peak Existing Conditions)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2024 AM Peak Existing Conditions
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	544	2.9	544	2.9	0.284	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	1	2.9	1	2.9	0.002	12.0	LOS B	0.0	0.1	0.69	0.69	0.69	48.2
Approach			545	2.9	545	2.9	0.284	0.1	NA	0.0	0.1	0.00	0.00	0.00	59.8
East: Green Turtle Place															
4	L2	All MCs	12	2.9	12	2.9	0.165	18.4	LOS C	0.5	3.2	0.89	1.01	0.91	36.4
6	R2	All MCs	7	2.9	7	2.9	0.165	70.8	LOS F	0.5	3.2	0.89	1.01	0.91	36.4
Approach			19	2.9	19	2.9	0.165	38.8	LOS E	0.5	3.2	0.89	1.01	0.91	36.4
North: David Low Way (North)															
7	L2	All MCs	3	2.9	3	2.9	0.002	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	840	2.9	840	2.9	0.439	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			843	2.9	843	2.9	0.439	0.2	NA	0.0	0.0	0.00	0.00	0.00	59.7
All Vehicles			1407	2.9	1407	2.9	0.439	0.7	NA	0.5	3.2	0.01	0.02	0.01	59.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Green Turtle Place (Site Folder: 2024 PM Peak Existing Conditions)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2024 PM Peak Existing Conditions
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	584	3.1	584	3.1	0.306	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	12	3.1	12	3.1	0.013	7.6	LOS A	0.0	0.3	0.45	0.62	0.45	51.2
Approach			596	3.1	596	3.1	0.306	0.2	NA	0.0	0.3	0.01	0.01	0.01	59.6
East: Green Turtle Place															
4	L2	All MCs	3	3.1	3	3.1	0.011	10.6	LOS B	0.0	0.2	0.60	0.85	0.60	47.2
6	R2	All MCs	1	3.1	1	3.1	0.011	28.7	LOS D	0.0	0.2	0.60	0.85	0.60	47.2
Approach			4	3.1	4	3.1	0.011	15.2	LOS C	0.0	0.2	0.60	0.85	0.60	47.2
North: David Low Way (North)															
7	L2	All MCs	7	3.1	7	3.1	0.004	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	417	3.1	417	3.1	0.218	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			424	3.1	424	3.1	0.218	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles			1024	3.1	1024	3.1	0.306	0.3	NA	0.0	0.3	0.01	0.01	0.01	59.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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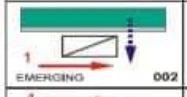
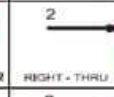
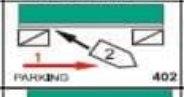
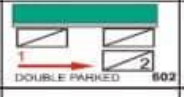
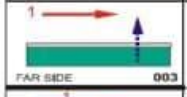
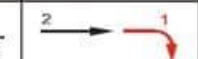
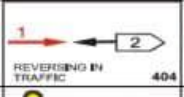
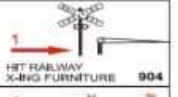
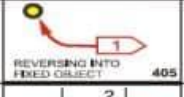
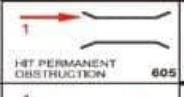
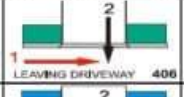
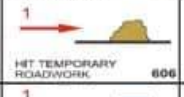
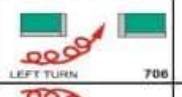
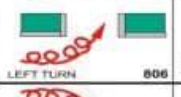
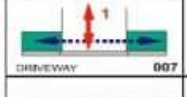
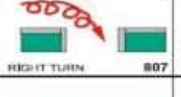
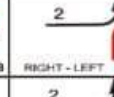
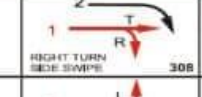
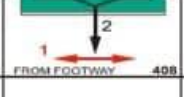
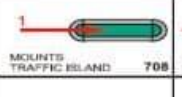
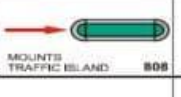
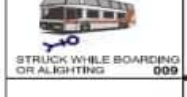
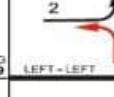
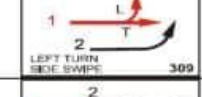
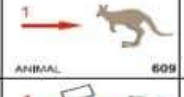
Appendix C

DCA code description / diagram

Crash DCA Code	Drum code description/diagram
107	**107 THRU LEFT** One vehicle is making or intending a left turn, the other is straight through. The vehicle on the right is straight through (1).
201	**201 HEAD-ON** Vehicles from opposing directions collide. Includes sideswipes. If a vehicle crosses a median or other separator and hits vehicle travelling in opposite direction still code as this cell. One or both of the vehicles in impact might be out of control.
202	**202 THRU-RIGHT** One vehicle proceeding straight through, the other turning right from the opposing direction. The vehicle turning right may have pulled out from special purpose lanes (including bike lanes) or shoulder (from a stationary or parked position).
301	**301 REAR END** Front vehicle — straight ahead.
302	**302 LEFT REAR** Front vehicle — left turning or intending to turn.
303	**303 RIGHT REAR** Front vehicle — right turning or intending to turn.
306	**306 LANE CHANGE RIGHT** Vehicle diverges to the right and hits or is hit by the vehicle in the next lane in the side, rear or front.
400	**400 OTHER** Other crashes involving a manoeuvring or parking vehicle not covered below or covered in 01 or 02.
408	**408 [BLANK]** This DRUM code is not used.
607	**607 HIT TEMPORARY OBJECT** Vehicle hits object temporarily in the traffic lane, special purpose lanes (including bike lanes), or shoulder (e.g., rocks, crates, fallen trees, etc.). The object may be stationary or moving. Includes hitting a pothole. Object hit is recorded.
701	**701 OFF TO LEFT** Vehicle loses control and runs off the traffic lanes, special purpose lanes (including bike lanes) or shoulder to the left. Note similar cell for curves in column 80.
703	**703 LEFT OFF INTO OBJECT** Vehicle hits object after leaving the traffic lanes, special purpose lanes (including bike lanes) or shoulder. Object hit is recorded.
803	**803 OFF RIGHT BEND INTO OBJECT** As for 801, but vehicle hits object after leaving the traffic lanes, special purpose lanes (including bike lanes) or shoulder. Object hit is recorded.
804	**804 OFF LEFT BEND INTO OBJECT** Vehicle hits object after leaving the traffic lanes, special purpose lanes (including bike lanes) or shoulder. Object hit is recorded.

Queensland DCA Codes

NOTE:- 1 = Key vehicle direction. ie; The direction in which the key vehicle was travelling as it approached the crash location.

	00	10	20	30	40	50	60	70	80	90
	PEDESTRIAN on foot or in toy/pram	**INTERSECTION** vehicles from adjacent approaches	**VEHICLES** from opposing directions	**VEHICLES** from one direction	**MANOEUVRING**	**OVERTAKING**	**ON PATH**	**OFF PATH ON STRAIGHT**	**OFF PATH ON CURVE**	**PASSENGERS & MISCELLANEOUS**
	OTHER 000	OTHER 100	OTHER 200	OTHER 300	OTHER 400	OTHER 500	OTHER 600	OTHER 700	OTHER 800	OTHER 900
1	 NEAR SIDE 001	 THRU - THRU 101	 HEAD - ON 201	 REAR END 301	 LEAVING PARKING 401	 HEAD - ON 501	 PARKED 601	 OFF CARRIAGEWAY TO LEFT 701	 OFF CARRIAGEWAY RIGHT BEND 801	 FELL IN/ FROM VEHICLE 901
2	 EMERGING 002	 RIGHT - THRU 102	 THRU - RIGHT 202	 LEFT REAR 302	 PARKING 402	 OUT OF CONTROL 502	 DOUBLE PARKED 602	 OFF CARRIAGEWAY TO RIGHT 702	 OFF CARRIAGEWAY LEFT BEND 802	
3	 FAR SIDE 003	 LEFT - THRU 103	 RIGHT - LEFT 203	 RIGHT REAR 303	 PARKING VEHICLES ONLY 403	 PULLING OUT 503		 LEFT OFF CARRIAGEWAY INTO OBJECT 703	 OFF RIGHT BEND INTO OBJECT 803	 HIT TRAIN 903
4	 PLAYING, WORKING, LYING, STANDING ON CARRIAGEWAY 004	 THRU - RIGHT 104	 RIGHT 204	 U TURN 304	 REVERSING IN TRAFFIC 404	 CUTTING IN 504	 CAR DOOR 604	 RIGHT OFF CARRIAGEWAY INTO OBJECT 704	 OFF LEFT BEND INTO OBJECT 804	 HIT RAILWAY X-ING FURNITURE 904
5	 WALKING WITH TRAFFIC 005	 RIGHT - RIGHT 105	 THRU - LEFT 205	 LANE SIDE SWIPE 305	 REVERSING INTO FIXED OBJECT 405	 PULLING OUT REAR END 505	 HIT PERMANENT OBSTRUCTION 605	 OUT OF CONTROL ON CARRIAGEWAY 705	 OUT OF CONTROL ON CARRIAGEWAY 805	 HIT ANIMAL OFF CARRIAGEWAY 905
6	 FACING TRAFFIC 006	 LEFT - RIGHT 106	 LEFT - LEFT 206	 LANE CHANGE RIGHT 306	 LEAVING DRIVEWAY 406	 OVERTAKING RIGHT TURN 506	 HIT TEMPORARY ROADWORK 606	 LEFT TURN 706	 LEFT TURN 806	 PARKED VEHICLE RAN AWAY 906
7	 DRIVEWAY 007	 THRU - LEFT 107	 U TURN 207	 LANE CHANGE LEFT 307	 FROM LOADING BAY 407		 HIT TEMPORARY OBJECT ON CARRIAGEWAY 607	 RIGHT TURN 707	 RIGHT TURN 807	 VEHICLE MOVEMENTS NOT KNOWN 907
8	 ON FOOTWAY 008	 RIGHT - LEFT 108		 RIGHT TURN SIDE SWIPE 308	 FROM FOOTWAY 408		 ACCIDENT OR BROKEN DOWN 608	 MOUNTS TRAFFIC ISLAND 708	 MOUNTS TRAFFIC ISLAND 808	
9	 STRUCK WHILE BOARDING OR ALIGHTING 009	 LEFT - LEFT 109		 LEFT TURN SIDE SWIPE 309			 ANIMAL 609			
0				 PULLING OUT 310			 LOAD HITS VEHICLE 610			

Appendix D

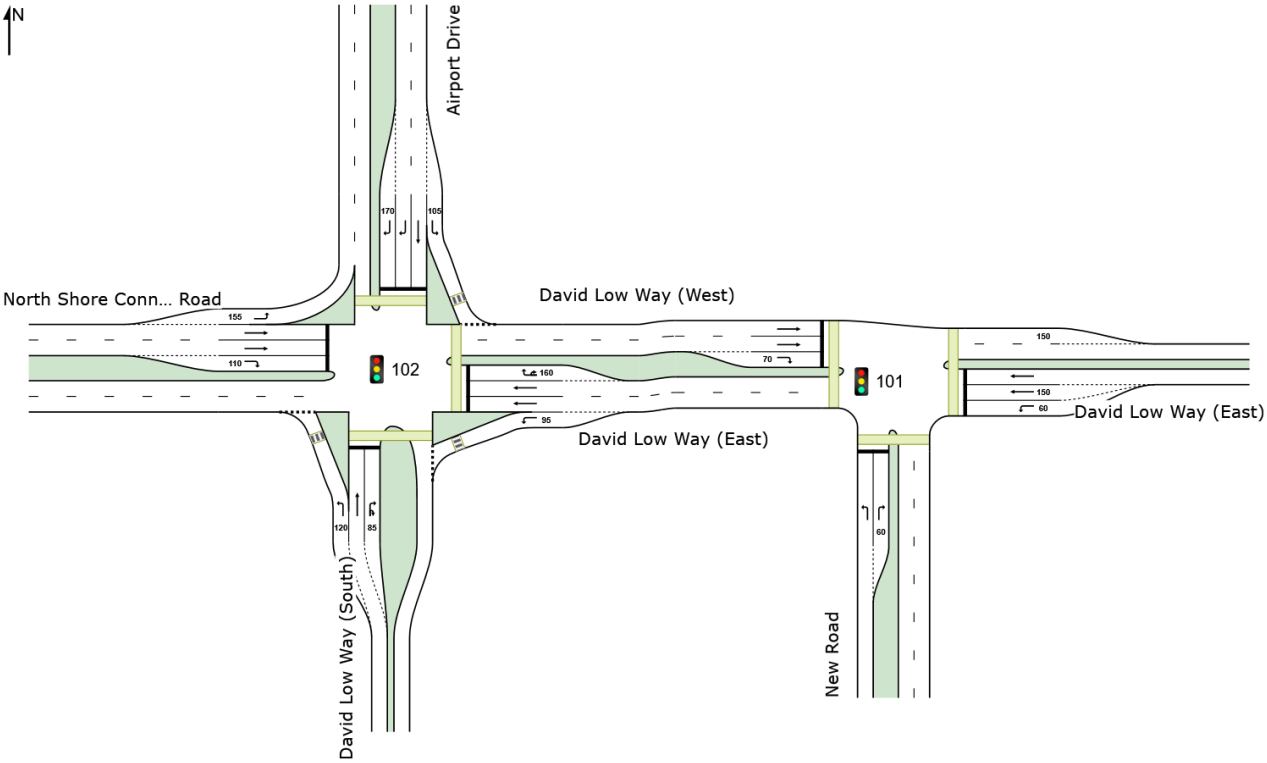
Detailed SIDRA outputs

NETWORK LAYOUT

Network: N101 [2034 AM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive & David Low Way / New Road
2034 AM Peak Pre Development Conditions
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
102	NA	North Shore Connection Road / David Low Way / Airport Drive
101	NA	David Low Way / Gateway Access

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 AM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	217	2.9	217	2.9	0.229	10.3	LOS B	3.3	23.7	0.40	0.67	0.40	49.7
2	T1	All MCs	93	2.9	93	2.9	* 0.403	45.4	LOS D	4.3	31.1	0.97	0.75	0.97	34.5
3	R2	All MCs	63	2.9	63	2.9	0.296	50.5	LOS D	3.0	21.3	0.95	0.75	0.95	23.1
3u	U	All MCs	1	2.9	1	2.9	0.296	51.9	LOS D	3.0	21.3	0.95	0.75	0.95	32.1
Approach			374	2.9	374	2.9	0.403	25.9	LOS C	4.3	31.1	0.64	0.71	0.64	40.4
East: David Low Way (East)															
4	L2	All MCs	117	2.9	117	2.9	0.082	6.0	LOS A	0.3	1.9	0.07	0.57	0.07	52.1
5	T1	All MCs	603	2.9	603	2.9	* 0.438	32.2	LOS C	12.9	92.5	0.93	0.76	0.93	38.0
6	R2	All MCs	33	2.9	33	2.9	0.170	42.1	LOS D	1.3	9.3	0.79	0.69	0.79	33.3
6u	U	All MCs	1	2.9	1	2.9	0.170	43.4	LOS D	1.3	9.3	0.79	0.69	0.79	22.6
Approach			754	2.9	754	2.9	0.438	28.6	LOS C	12.9	92.5	0.79	0.73	0.79	39.4
North: Airport Drive															
7	L2	All MCs	33	2.9	33	2.9	0.032	8.5	LOS A	0.4	2.5	0.30	0.61	0.30	47.2
8	T1	All MCs	81	2.9	81	2.9	0.249	39.5	LOS D	3.5	25.1	0.91	0.71	0.91	36.6
9	R2	All MCs	273	2.9	273	2.9	* 0.441	46.8	LOS D	6.1	44.0	0.94	0.79	0.94	33.3
Approach			386	2.9	386	2.9	0.441	42.0	LOS D	6.1	44.0	0.88	0.76	0.88	34.5
West: North Shore Connection Road															
10	L2	All MCs	574	2.9	574	2.9	0.315	5.7	LOS A	0.0	0.0	0.00	0.53	0.00	53.2
11	T1	All MCs	381	2.9	381	2.9	0.277	24.4	LOS C	6.6	47.2	0.75	0.63	0.75	33.8
12	R2	All MCs	82	2.9	82	2.9	* 0.410	52.3	LOS D	3.9	28.0	0.97	0.77	0.97	31.8
Approach			1037	2.9	1037	2.9	0.410	16.3	LOS B	6.6	47.2	0.35	0.58	0.35	44.5
All Vehicles			2551	2.9	2551	2.9	0.441	25.2	LOS C	12.9	92.5	0.60	0.67	0.60	40.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 AM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	19	2.9	19	2.9	0.027	25.4	LOS C	0.6	4.0	0.64	0.67	0.64	32.9
3	R2	All MCs	1	2.9	1	2.9	0.003	41.4	LOS D	0.0	0.3	0.84	0.59	0.84	35.0
Approach			20	2.9	20	2.9	0.027	26.3	LOS C	0.6	4.0	0.65	0.67	0.65	33.1
East: David Low Way (East)															
4	L2	All MCs	4	2.9	4	2.9	0.003	11.2	LOS B	0.1	0.5	0.34	0.61	0.34	48.8
5	T1	All MCs	733	2.9	733	2.9	* 0.416	19.3	LOS B	11.9	85.0	0.71	0.62	0.71	37.1
Approach			737	2.9	737	2.9	0.416	19.2	LOS B	11.9	85.0	0.71	0.62	0.71	37.2
West: David Low Way (West)															
11	T1	All MCs	432	2.9	432	2.9	0.269	23.6	LOS C	8.2	59.2	0.82	0.61	0.82	42.1
12	R2	All MCs	43	2.9	43	2.9	* 0.132	23.5	LOS C	0.9	6.6	0.45	0.65	0.45	40.7
Approach			475	2.9	475	2.9	0.269	23.6	LOS C	8.2	59.2	0.79	0.61	0.79	42.0
All Vehicles			1232	2.9	1232	2.9	0.416	21.0	LOS C	11.9	85.0	0.74	0.62	0.74	39.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
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Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											
P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		158	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 AM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	224	2.9	224	2.9	0.261	13.0	LOS B	4.4	31.4	0.50	0.70	0.50	47.9
2	T1	All MCs	141	2.9	141	2.9	* 0.567	45.6	LOS D	6.7	48.1	0.99	0.79	0.99	34.4
3	R2	All MCs	72	2.9	72	2.9	0.309	49.5	LOS D	3.3	23.8	0.95	0.76	0.95	23.4
3u	U	All MCs	1	2.9	1	2.9	0.309	51.0	LOS D	3.3	23.8	0.95	0.76	0.95	32.3
Approach			438	2.9	438	2.9	0.567	29.6	LOS C	6.7	48.1	0.73	0.74	0.73	38.8
East: David Low Way (East)															
4	L2	All MCs	125	2.9	125	2.9	0.091	5.9	LOS A	0.2	1.2	0.04	0.56	0.04	52.2
5	T1	All MCs	587	2.9	587	2.9	* 0.548	41.9	LOS D	14.3	102.4	0.99	0.84	0.99	34.2
6	R2	All MCs	46	2.9	46	2.9	0.262	53.2	LOS D	2.3	16.2	0.97	0.74	0.97	30.0
6u	U	All MCs	1	2.9	1	2.9	0.262	54.5	LOS D	2.3	16.2	0.97	0.74	0.97	19.4
Approach			760	2.9	760	2.9	0.548	36.6	LOS D	14.3	102.4	0.83	0.79	0.83	35.9
North: Airport Drive															
7	L2	All MCs	40	2.9	40	2.9	0.038	8.5	LOS A	0.4	3.1	0.30	0.61	0.30	47.2
8	T1	All MCs	105	2.9	105	2.9	0.220	32.2	LOS C	4.1	29.4	0.83	0.66	0.83	39.4
9	R2	All MCs	505	2.9	505	2.9	* 0.555	41.3	LOS D	10.9	78.2	0.92	0.82	0.92	35.1
Approach			651	2.9	651	2.9	0.555	37.8	LOS D	10.9	78.2	0.87	0.78	0.87	36.0
West: North Shore Connection Road															
10	L2	All MCs	1018	2.9	1018	2.9	0.559	5.9	LOS A	0.0	0.0	0.00	0.52	0.00	53.0
11	T1	All MCs	351	2.9	351	2.9	0.327	30.9	LOS C	6.8	48.9	0.84	0.69	0.84	30.3
12	R2	All MCs	99	2.9	99	2.9	* 0.544	54.2	LOS D	4.8	34.7	1.00	0.78	1.00	31.3
Approach			1467	2.9	1467	2.9	0.559	15.1	LOS B	6.8	48.9	0.27	0.58	0.27	45.9
All Vehicles			3316	2.9	3316	2.9	0.567	26.4	LOS C	14.3	102.4	0.58	0.69	0.58	40.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 AM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	11	2.9	11	2.9	0.019	31.7	LOS C	0.4	2.6	0.73	0.66	0.73	29.6
2	T1	All MCs	56	2.9	56	2.9	*0.175	37.0	LOS D	2.6	18.8	0.88	0.68	0.88	37.2
3	R2	All MCs	7	2.9	7	2.9	0.175	42.6	LOS D	2.6	18.8	0.88	0.68	0.88	36.4
Approach			74	2.9	74	2.9	0.175	36.8	LOS D	2.6	18.8	0.85	0.68	0.85	36.4
East: David Low Way (East)															
4	L2	All MCs	8	2.9	8	2.9	0.010	13.6	LOS B	0.1	0.9	0.56	0.64	0.56	47.3
5	T1	All MCs	679	2.9	679	2.9	*0.591	32.3	LOS C	14.2	101.9	0.91	0.78	0.91	29.4
6	R2	All MCs	83	2.9	83	2.9	*0.571	56.6	LOS E	4.2	30.0	1.00	0.79	1.03	30.5
Approach			771	2.9	771	2.9	0.591	34.7	LOS C	14.2	101.9	0.91	0.78	0.92	29.9
North: Gateway Precinct Access															
7	L2	All MCs	48	2.9	48	2.9	0.192	20.0	LOS B	1.8	12.8	0.86	0.72	0.86	42.2
8	T1	All MCs	23	2.9	23	2.9	*0.192	30.6	LOS C	1.8	12.8	0.86	0.72	0.86	43.6
9	R2	All MCs	64	2.9	64	2.9	0.186	42.8	LOS D	2.7	19.2	0.88	0.74	0.88	25.4
Approach			136	2.9	136	2.9	0.192	32.6	LOS C	2.7	19.2	0.87	0.73	0.87	35.1
West: David Low Way (West)															
10	L2	All MCs	38	2.9	38	2.9	0.040	26.1	LOS C	1.5	10.4	0.84	0.58	0.84	39.3
11	T1	All MCs	392	2.9	392	2.9	0.374	29.6	LOS C	7.5	54.0	0.83	0.69	0.83	39.1
12	R2	All MCs	27	2.9	27	2.9	0.188	35.9	LOS D	0.9	6.3	0.65	0.66	0.65	35.3
Approach			457	2.9	457	2.9	0.374	29.7	LOS C	7.5	54.0	0.82	0.68	0.82	38.9
All Vehicles			1437	2.9	1437	2.9	0.591	33.0	LOS C	14.2	101.9	0.88	0.74	0.88	34.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access											
P3	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 AM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	142	2.9	142	2.9	0.193	16.1	LOS B	3.2	23.1	0.56	0.70	0.56	46.1
2	T1	All MCs	126	2.9	126	2.9	*0.660	49.8	LOS D	6.3	45.4	1.00	0.83	1.08	33.2
3	R2	All MCs	78	2.9	78	2.9	0.436	53.5	LOS D	3.8	27.3	0.98	0.77	0.98	22.3
3u	U	All MCs	1	2.9	1	2.9	0.436	55.0	LOS D	3.8	27.3	0.98	0.77	0.98	31.3
Approach			347	2.9	347	2.9	0.660	36.9	LOS D	6.3	45.4	0.81	0.77	0.84	35.5
East: David Low Way (East)															
4	L2	All MCs	161	2.9	161	2.9	0.116	5.8	LOS A	0.2	1.6	0.02	0.55	0.02	52.3
5	T1	All MCs	861	2.9	861	2.9	*0.643	42.5	LOS D	20.9	149.8	1.00	0.84	1.00	34.0
6	R2	All MCs	48	2.9	48	2.9	0.304	50.3	LOS D	2.2	16.1	0.92	0.73	0.92	30.8
6u	U	All MCs	1	2.9	1	2.9	0.304	51.6	LOS D	2.2	16.1	0.92	0.73	0.92	20.2
Approach			1072	2.9	1072	2.9	0.643	37.4	LOS D	20.9	149.8	0.85	0.79	0.85	35.7
North: Airport Drive															
7	L2	All MCs	35	2.9	35	2.9	0.038	10.5	LOS B	0.5	3.6	0.38	0.63	0.38	44.9
8	T1	All MCs	107	2.9	107	2.9	0.255	35.1	LOS D	4.4	31.4	0.87	0.69	0.87	38.2
9	R2	All MCs	516	2.9	516	2.9	*0.644	44.6	LOS D	11.7	83.7	0.96	0.83	0.96	34.0
Approach			658	2.9	658	2.9	0.644	41.2	LOS D	11.7	83.7	0.92	0.80	0.92	34.9
West: North Shore Connection Road															
10	L2	All MCs	1026	2.9	1026	2.9	0.564	5.9	LOS A	0.0	0.0	0.00	0.52	0.00	53.0
11	T1	All MCs	637	2.9	637	2.9	0.475	27.3	LOS C	12.1	87.0	0.83	0.71	0.83	32.1
12	R2	All MCs	98	2.9	98	2.9	*0.598	55.8	LOS E	4.9	35.1	1.00	0.80	1.04	30.9
Approach			1761	2.9	1761	2.9	0.598	16.4	LOS B	12.1	87.0	0.36	0.61	0.36	44.4
All Vehicles			3838	2.9	3838	2.9	0.660	28.4	LOS C	20.9	149.8	0.63	0.71	0.64	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Eff. Stop	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		[Ped ped	Dist] m		Rate	sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 AM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	11	2.9	11	2.9	0.021	33.3	LOS C	0.4	2.6	0.75	0.67	0.75	28.9
2	T1	All MCs	66	2.9	66	2.9	*0.258	37.7	LOS D	3.9	28.1	0.89	0.72	0.89	36.6
3	R2	All MCs	26	2.9	26	2.9	0.258	43.4	LOS D	3.9	28.1	0.89	0.72	0.89	35.8
Approach			103	2.9	103	2.9	0.258	38.7	LOS D	3.9	28.1	0.88	0.71	0.88	35.9
East: David Low Way (East)															
4	L2	All MCs	5	2.9	5	2.9	0.006	24.6	LOS C	0.1	0.6	0.54	0.62	0.54	47.6
5	T1	All MCs	1006	2.9	1006	2.9	*0.838	49.3	LOS D	25.6	183.6	1.00	0.97	1.12	26.3
6	R2	All MCs	82	2.9	82	2.9	*0.752	68.7	LOS E	4.4	31.5	1.00	0.87	1.24	29.3
Approach			1094	2.9	1094	2.9	0.838	50.6	LOS D	25.6	183.6	0.99	0.96	1.13	23.8
North: Gateway Precinct Access															
7	L2	All MCs	64	2.9	64	2.9	0.220	21.8	LOS C	2.0	14.7	0.86	0.73	0.86	42.1
8	T1	All MCs	19	2.9	19	2.9	*0.220	31.5	LOS C	2.0	14.7	0.86	0.73	0.86	43.5
9	R2	All MCs	52	2.9	52	2.9	0.149	42.4	LOS D	2.1	15.2	0.87	0.73	0.87	25.5
Approach			135	2.9	135	2.9	0.220	31.1	LOS C	2.1	15.2	0.86	0.73	0.86	36.5
West: David Low Way (West)															
10	L2	All MCs	39	2.9	39	2.9	0.040	24.1	LOS C	1.4	10.1	0.79	0.59	0.79	40.3
11	T1	All MCs	680	2.9	680	2.9	0.608	28.3	LOS C	15.0	107.6	0.84	0.73	0.84	39.8
12	R2	All MCs	27	2.9	27	2.9	0.251	49.9	LOS D	1.2	8.7	0.88	0.70	0.88	30.7
Approach			746	2.9	746	2.9	0.608	28.9	LOS C	15.0	107.6	0.84	0.72	0.84	39.4
All Vehicles			2078	2.9	2078	2.9	0.838	41.0	LOS D	25.6	183.6	0.92	0.85	1.00	30.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: New Road										
P1 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)										
P2 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access										
P3 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)										
P4 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 PM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	187	3.1	187	3.1	0.174	9.7	LOS A	2.6	18.7	0.37	0.66	0.37	50.1
2	T1	All MCs	81	3.1	81	3.1	0.249	39.5	LOS D	3.5	25.1	0.91	0.71	0.91	36.5
3	R2	All MCs	189	3.1	189	3.1	* 0.618	48.4	LOS D	8.9	63.9	0.98	0.82	0.98	23.7
3u	U	All MCs	1	3.1	1	3.1	0.618	49.8	LOS D	8.9	63.9	0.98	0.82	0.98	32.7
Approach			459	3.1	459	3.1	0.618	31.0	LOS C	8.9	63.9	0.72	0.73	0.72	36.3
East: David Low Way (East)															
4	L2	All MCs	141	3.1	141	3.1	0.112	6.7	LOS A	0.7	4.7	0.13	0.58	0.13	51.5
5	T1	All MCs	276	3.1	276	3.1	0.314	36.4	LOS D	5.9	42.2	0.90	0.73	0.90	36.2
6	R2	All MCs	41	3.1	41	3.1	0.167	43.7	LOS D	1.7	12.3	0.85	0.72	0.85	32.8
6u	U	All MCs	1	3.1	1	3.1	0.167	45.0	LOS D	1.7	12.3	0.85	0.72	0.85	22.1
Approach			459	3.1	459	3.1	0.314	28.0	LOS C	5.9	42.2	0.66	0.68	0.66	39.4
North: Airport Drive															
7	L2	All MCs	48	3.1	48	3.1	0.054	12.3	LOS B	0.8	6.0	0.43	0.65	0.43	43.1
8	T1	All MCs	155	3.1	155	3.1	0.368	36.1	LOS D	6.5	46.7	0.89	0.73	0.89	37.8
9	R2	All MCs	512	3.1	512	3.1	* 0.640	44.5	LOS D	11.6	83.1	0.96	0.83	0.96	34.0
Approach			715	3.1	715	3.1	0.640	40.5	LOS D	11.6	83.1	0.91	0.79	0.91	35.1
West: North Shore Connection Road															
10	L2	All MCs	487	3.1	487	3.1	0.268	5.7	LOS A	0.0	0.0	0.00	0.53	0.00	53.2
11	T1	All MCs	546	3.1	546	3.1	* 0.621	37.8	LOS D	12.2	87.5	0.95	0.80	0.95	27.3
12	R2	All MCs	160	3.1	160	3.1	* 0.629	51.3	LOS D	7.7	55.3	0.99	0.82	1.02	32.1
Approach			1194	3.1	1194	3.1	0.629	26.5	LOS C	12.2	87.5	0.57	0.69	0.57	38.0
All Vehicles			2826	3.1	2826	3.1	0.640	31.0	LOS C	12.2	87.5	0.70	0.72	0.70	37.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	4	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	5	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
North: Airport Drive										
P3 Full	2	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	12	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 PM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	19	3.1	19	3.1	0.027	25.5	LOS C	0.6	4.0	0.64	0.67	0.64	32.9
3	R2	All MCs	5	3.1	5	3.1	0.016	41.8	LOS D	0.2	1.5	0.84	0.65	0.84	34.8
Approach			24	3.1	24	3.1	0.027	29.0	LOS C	0.6	4.0	0.68	0.67	0.68	33.6
East: David Low Way (East)															
4	L2	All MCs	7	3.1	7	3.1	0.006	11.3	LOS B	0.1	0.8	0.34	0.62	0.34	48.8
5	T1	All MCs	435	3.1	435	3.1	0.247	17.5	LOS B	6.4	46.0	0.65	0.55	0.65	38.4
Approach			442	3.1	442	3.1	0.247	17.4	LOS B	6.4	46.0	0.64	0.55	0.64	38.6
West: David Low Way (West)															
11	T1	All MCs	703	3.1	703	3.1	* 0.438	26.2	LOS C	14.5	104.3	0.87	0.66	0.87	40.9
12	R2	All MCs	81	3.1	81	3.1	* 0.248	26.7	LOS C	2.1	15.3	0.55	0.68	0.55	39.2
Approach			784	3.1	784	3.1	0.438	26.3	LOS C	14.5	104.3	0.84	0.66	0.84	40.7
All Vehicles			1251	3.1	1251	3.1	0.438	23.2	LOS C	14.5	104.3	0.77	0.62	0.77	40.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											
P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		158	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 PM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	135	3.1	135	3.1	0.151	12.0	LOS B	2.3	16.7	0.44	0.67	0.44	48.6
2	T1	All MCs	107	3.1	107	3.1	* 0.624	50.3	LOS D	5.4	38.7	1.00	0.81	1.06	33.0
3	R2	All MCs	82	3.1	82	3.1	0.511	55.0	LOS E	4.1	29.4	1.00	0.77	1.00	21.9
3u	U	All MCs	1	3.1	1	3.1	0.511	56.5	LOS E	4.1	29.4	1.00	0.77	1.00	30.9
Approach			325	3.1	325	3.1	0.624	35.6	LOS D	5.4	38.7	0.77	0.74	0.79	35.7
East: David Low Way (East)															
4	L2	All MCs	176	3.1	176	3.1	0.142	6.0	LOS A	0.3	2.0	0.04	0.56	0.04	52.1
5	T1	All MCs	353	3.1	353	3.1	0.461	33.4	LOS C	7.8	56.2	0.85	0.69	0.85	37.4
6	R2	All MCs	49	3.1	49	3.1	0.200	41.8	LOS D	2.0	14.2	0.81	0.72	0.81	33.4
6u	U	All MCs	1	3.1	1	3.1	0.200	43.1	LOS D	2.0	14.2	0.81	0.72	0.81	22.7
Approach			579	3.1	579	3.1	0.461	25.8	LOS C	7.8	56.2	0.60	0.66	0.60	40.5
North: Airport Drive															
7	L2	All MCs	61	3.1	61	3.1	0.059	10.3	LOS B	0.9	6.3	0.37	0.64	0.37	45.2
8	T1	All MCs	196	3.1	196	3.1	0.310	26.9	LOS C	7.1	51.2	0.79	0.66	0.79	41.7
9	R2	All MCs	791	3.1	791	3.1	* 0.659	36.7	LOS D	16.6	119.5	0.91	0.84	0.91	36.7
Approach			1047	3.1	1047	3.1	0.659	33.4	LOS C	16.6	119.5	0.86	0.79	0.86	37.8
West: North Shore Connection Road															
10	L2	All MCs	767	3.1	767	3.1	0.422	5.8	LOS A	0.0	0.0	0.00	0.53	0.00	53.1
11	T1	All MCs	494	3.1	494	3.1	* 0.646	40.5	LOS D	11.3	81.3	0.97	0.81	0.98	26.3
12	R2	All MCs	159	3.1	159	3.1	* 0.625	51.2	LOS D	7.6	54.8	0.99	0.82	1.01	32.1
Approach			1420	3.1	1420	3.1	0.646	22.9	LOS C	11.3	81.3	0.45	0.66	0.45	40.7
All Vehicles			3372	3.1	3372	3.1	0.659	27.9	LOS C	16.6	119.5	0.63	0.71	0.64	39.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 PM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	12	3.1	12	3.1	0.017	26.0	LOS C	0.3	2.5	0.65	0.66	0.65	32.6
2	T1	All MCs	41	3.1	41	3.1	*0.366	38.7	LOS D	5.6	40.0	0.92	0.77	0.92	35.5
3	R2	All MCs	87	3.1	87	3.1	0.366	44.4	LOS D	5.6	40.0	0.92	0.77	0.92	34.7
Approach			140	3.1	140	3.1	0.366	41.2	LOS D	5.6	40.0	0.89	0.76	0.89	34.8
East: David Low Way (East)															
4	L2	All MCs	16	3.1	16	3.1	0.023	16.1	LOS B	0.2	1.7	0.65	0.66	0.65	45.8
5	T1	All MCs	397	3.1	397	3.1	0.472	37.1	LOS D	8.6	61.5	0.92	0.76	0.92	27.4
6	R2	All MCs	73	3.1	73	3.1	0.250	46.1	LOS D	3.2	22.8	0.91	0.76	0.91	33.4
Approach			485	3.1	485	3.1	0.472	37.8	LOS D	8.6	61.5	0.91	0.76	0.91	29.3
North: Gateway Precinct Access															
7	L2	All MCs	105	3.1	105	3.1	*0.431	19.1	LOS B	4.3	30.7	0.92	0.77	0.92	41.3
8	T1	All MCs	37	3.1	37	3.1	*0.431	35.5	LOS D	4.3	30.7	0.92	0.77	0.92	42.6
9	R2	All MCs	168	3.1	168	3.1	0.431	44.5	LOS D	6.6	47.1	0.93	0.79	0.93	25.4
Approach			311	3.1	311	3.1	0.431	34.8	LOS C	6.6	47.1	0.92	0.78	0.92	33.6
West: David Low Way (West)															
10	L2	All MCs	44	3.1	44	3.1	0.055	33.3	LOS C	1.9	14.0	0.96	0.60	0.96	36.2
11	T1	All MCs	524	3.1	524	3.1	*0.683	42.8	LOS D	13.1	94.2	0.98	0.84	0.99	33.9
12	R2	All MCs	71	3.1	71	3.1	0.243	19.1	LOS B	1.2	8.8	0.36	0.64	0.36	43.0
Approach			639	3.1	639	3.1	0.683	39.5	LOS D	13.1	94.2	0.91	0.80	0.92	34.9
All Vehicles			1575	3.1	1575	3.1	0.683	38.2	LOS D	13.1	94.2	0.91	0.78	0.91	33.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access											
P3	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 PM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	218	3.1	218	3.1	0.284	17.7	LOS B	5.4	39.0	0.61	0.73	0.61	45.2
2	T1	All MCs	108	3.1	108	3.1	* 0.810	56.3	LOS E	5.8	42.0	1.00	0.92	1.30	31.3
3	R2	All MCs	91	3.1	91	3.1	0.723	59.9	LOS E	4.8	34.6	1.00	0.86	1.18	20.7
3u	U	All MCs	1	3.1	1	3.1	0.723	61.4	LOS E	4.8	34.6	1.00	0.86	1.18	29.7
Approach			418	3.1	418	3.1	0.810	37.0	LOS D	5.8	42.0	0.80	0.81	0.92	35.4
East: David Low Way (East)															
4	L2	All MCs	202	3.1	202	3.1	0.163	6.1	LOS A	0.4	2.7	0.05	0.56	0.05	52.1
5	T1	All MCs	616	3.1	616	3.1	0.597	39.6	LOS D	14.8	106.1	0.97	0.83	0.97	35.0
6	R2	All MCs	48	3.1	48	3.1	0.211	50.5	LOS D	2.3	16.5	0.96	0.74	0.96	30.7
6u	U	All MCs	1	3.1	1	3.1	0.211	51.8	LOS D	2.3	16.5	0.96	0.74	0.96	20.1
Approach			867	3.1	867	3.1	0.597	32.4	LOS C	14.8	106.1	0.75	0.76	0.75	37.6
North: Airport Drive															
7	L2	All MCs	57	3.1	57	3.1	0.064	13.6	LOS B	1.1	7.7	0.47	0.66	0.47	41.8
8	T1	All MCs	184	3.1	184	3.1	0.332	30.1	LOS C	7.1	51.0	0.83	0.69	0.83	40.3
9	R2	All MCs	844	3.1	844	3.1	* 0.801	45.1	LOS D	20.6	147.8	0.99	0.91	1.09	33.9
Approach			1085	3.1	1085	3.1	0.801	40.9	LOS D	20.6	147.8	0.93	0.86	1.01	35.0
West: North Shore Connection Road															
10	L2	All MCs	731	3.1	731	3.1	0.402	5.8	LOS A	0.0	0.0	0.00	0.53	0.00	53.2
11	T1	All MCs	844	3.1	844	3.1	* 0.818	41.7	LOS D	21.0	151.2	1.00	0.95	1.12	25.8
12	R2	All MCs	193	3.1	193	3.1	* 0.816	57.6	LOS E	10.2	73.1	1.00	0.95	1.23	30.4
Approach			1767	3.1	1767	3.1	0.818	28.6	LOS C	21.0	151.2	0.59	0.78	0.67	36.9
All Vehicles			4138	3.1	4138	3.1	0.818	33.5	LOS C	21.0	151.2	0.73	0.80	0.80	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Eff. Stop	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		[Ped ped	Dist] m		Rate	sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2034 PM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	16	3.1	16	3.1	0.031	33.5	LOS C	0.6	4.0	0.75	0.68	0.75	28.8
2	T1	All MCs	43	3.1	43	3.1	*0.412	39.1	LOS D	6.3	45.4	0.93	0.78	0.93	35.3
3	R2	All MCs	101	3.1	101	3.1	0.412	44.8	LOS D	6.3	45.4	0.93	0.78	0.93	34.5
Approach			160	3.1	160	3.1	0.412	42.1	LOS D	6.3	45.4	0.91	0.77	0.91	34.4
East: David Low Way (East)															
4	L2	All MCs	12	3.1	12	3.1	0.013	13.5	LOS B	0.2	1.3	0.54	0.64	0.54	47.6
5	T1	All MCs	725	3.1	725	3.1	0.593	31.1	LOS C	14.9	107.3	0.90	0.77	0.90	30.1
6	R2	All MCs	75	3.1	75	3.1	0.686	60.4	LOS E	3.9	28.3	1.00	0.83	1.16	29.5
Approach			812	3.1	812	3.1	0.686	33.5	LOS C	14.9	107.3	0.90	0.78	0.91	30.2
North: Gateway Precinct Access															
7	L2	All MCs	106	3.1	106	3.1	*0.415	23.5	LOS C	4.0	28.8	0.91	0.77	0.91	41.5
8	T1	All MCs	46	3.1	46	3.1	*0.415	32.2	LOS C	4.0	28.8	0.91	0.77	0.91	42.9
9	R2	All MCs	126	3.1	126	3.1	0.366	44.4	LOS D	5.5	39.4	0.92	0.78	0.92	24.9
Approach			279	3.1	279	3.1	0.415	34.4	LOS C	5.5	39.4	0.91	0.77	0.91	34.8
West: David Low Way (West)															
10	L2	All MCs	43	3.1	43	3.1	0.044	19.1	LOS B	1.1	8.2	0.58	0.69	0.58	42.9
11	T1	All MCs	899	3.1	899	3.1	*0.807	21.1	LOS C	18.9	136.1	0.78	0.70	0.80	44.3
12	R2	All MCs	49	3.1	49	3.1	0.454	54.2	LOS D	2.4	17.1	0.95	0.73	0.95	29.8
Approach			992	3.1	992	3.1	0.807	22.7	LOS C	18.9	136.1	0.78	0.70	0.80	42.9
All Vehicles			2242	3.1	2242	3.1	0.807	29.4	LOS C	18.9	136.1	0.85	0.74	0.86	36.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: New Road										
P1 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)										
P2 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access										
P3 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)										
P4 Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

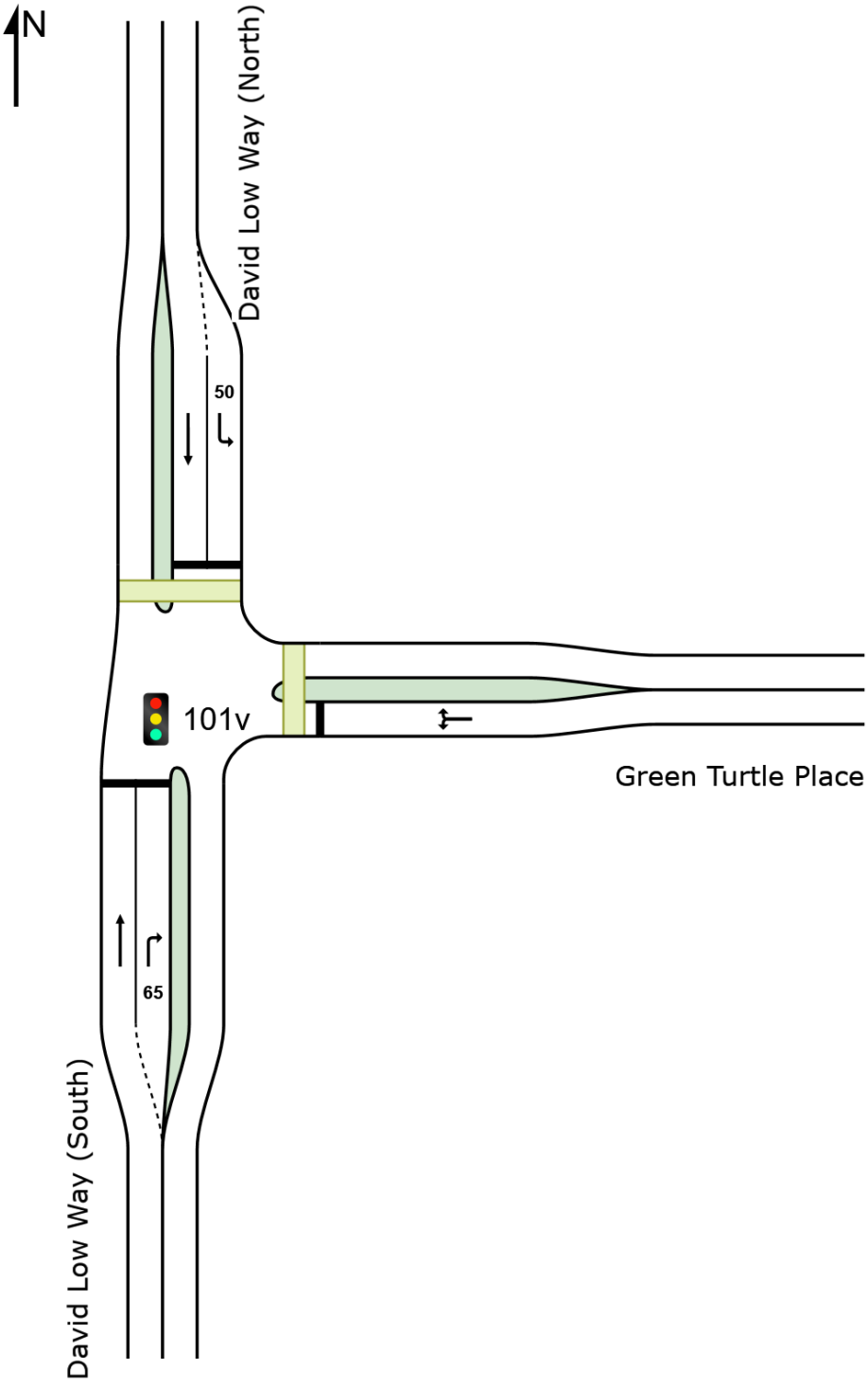
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SITE LAYOUT

Site: 101v [David Low Way / Green Turtle Place (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	265	2.9	265	2.9	0.271	13.3	LOS B	6.6	47.0	0.60	0.52	0.60	49.2
3	R2	All MCs	25	2.9	25	2.9	* 0.096	42.3	LOS D	1.0	7.1	0.90	0.71	0.90	34.4
Approach			291	2.9	291	2.9	0.271	15.8	LOS B	6.6	47.0	0.63	0.53	0.63	47.4
East: Green Turtle Place															
4	L2	All MCs	33	2.9	33	2.9	0.363	30.5	LOS C	4.1	29.8	0.94	0.77	0.94	34.1
6	R2	All MCs	69	2.9	69	2.9	* 0.363	49.5	LOS D	4.1	29.8	0.94	0.77	0.94	34.1
Approach			102	2.9	102	2.9	0.363	43.4	LOS D	4.1	29.8	0.94	0.77	0.94	34.1
North: David Low Way (North)															
7	L2	All MCs	59	2.9	59	2.9	0.046	10.0	LOS A	0.8	5.6	0.33	0.64	0.33	49.6
8	T1	All MCs	379	2.9	379	2.9	* 0.387	14.3	LOS B	10.1	72.3	0.65	0.57	0.65	48.5
Approach			438	2.9	438	2.9	0.387	13.7	LOS B	10.1	72.3	0.61	0.58	0.61	48.7
All Vehicles			831	2.9	831	2.9	0.387	18.1	LOS B	10.1	72.3	0.66	0.59	0.66	45.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	274	2.9	274	2.9	0.280	13.4	LOS B	6.8	48.7	0.61	0.52	0.61	49.2
3	R2	All MCs	25	2.9	25	2.9	* 0.096	42.3	LOS D	1.0	7.1	0.90	0.71	0.90	34.4
Approach			299	2.9	299	2.9	0.280	15.8	LOS B	6.8	48.7	0.63	0.53	0.63	47.4
East: Green Turtle Place															
4	L2	All MCs	33	2.9	33	2.9	0.363	30.5	LOS C	4.1	29.8	0.94	0.77	0.94	34.1
6	R2	All MCs	69	2.9	69	2.9	* 0.363	49.5	LOS D	4.1	29.8	0.94	0.77	0.94	34.1
Approach			102	2.9	102	2.9	0.363	43.4	LOS D	4.1	29.8	0.94	0.77	0.94	34.1
North: David Low Way (North)															
7	L2	All MCs	59	2.9	59	2.9	0.046	10.0	LOS A	0.8	5.6	0.33	0.64	0.33	49.6
8	T1	All MCs	382	2.9	382	2.9	* 0.391	14.4	LOS B	10.2	73.0	0.65	0.57	0.65	48.5
Approach			441	2.9	441	2.9	0.391	13.8	LOS B	10.2	73.0	0.61	0.58	0.61	48.7
All Vehicles			842	2.9	842	2.9	0.391	18.1	LOS B	10.2	73.0	0.66	0.59	0.66	45.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	486	3.1	486	3.1	*0.449	12.1	LOS B	12.3	88.4	0.62	0.55	0.62	50.0
3	R2	All MCs	57	3.1	57	3.1	*0.217	43.3	LOS D	2.3	16.3	0.92	0.75	0.92	34.1
Approach			543	3.1	543	3.1	0.449	15.4	LOS B	12.3	88.4	0.66	0.57	0.66	47.7
East: Green Turtle Place															
4	L2	All MCs	45	3.1	45	3.1	0.405	36.8	LOS D	3.6	25.8	0.97	0.77	0.97	33.1
6	R2	All MCs	39	3.1	39	3.1	*0.405	58.4	LOS E	3.6	25.8	0.97	0.77	0.97	33.1
Approach			84	3.1	84	3.1	0.405	46.8	LOS D	3.6	25.8	0.97	0.77	0.97	33.1
North: David Low Way (North)															
7	L2	All MCs	45	3.1	45	3.1	0.036	9.9	LOS A	0.6	4.3	0.32	0.64	0.32	49.6
8	T1	All MCs	378	3.1	378	3.1	0.349	11.2	LOS B	8.9	63.8	0.58	0.50	0.58	50.6
Approach			423	3.1	423	3.1	0.349	11.1	LOS B	8.9	63.8	0.55	0.52	0.55	50.5
All Vehicles			1051	3.1	1051	3.1	0.449	16.2	LOS B	12.3	88.4	0.64	0.57	0.64	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	485	3.1	485	3.1	*0.466	13.4	LOS B	12.9	92.8	0.66	0.58	0.66	49.2
3	R2	All MCs	25	3.1	25	3.1	*0.096	42.4	LOS D	1.0	7.1	0.90	0.71	0.90	34.4
Approach			511	3.1	511	3.1	0.466	14.8	LOS B	12.9	92.8	0.67	0.59	0.67	48.1
East: Green Turtle Place															
4	L2	All MCs	33	3.1	33	3.1	0.463	33.4	LOS C	4.4	31.4	0.97	0.78	0.97	33.0
6	R2	All MCs	69	3.1	69	3.1	*0.463	53.4	LOS D	4.4	31.4	0.97	0.78	0.97	33.0
Approach			102	3.1	102	3.1	0.463	47.0	LOS D	4.4	31.4	0.97	0.78	0.97	33.0
North: David Low Way (North)															
7	L2	All MCs	59	3.1	59	3.1	0.046	10.0	LOS A	0.8	5.6	0.33	0.64	0.33	49.6
8	T1	All MCs	397	3.1	397	3.1	0.381	12.6	LOS B	9.9	71.4	0.62	0.54	0.62	49.7
Approach			456	3.1	456	3.1	0.381	12.2	LOS B	9.9	71.4	0.58	0.55	0.58	49.7
All Vehicles			1068	3.1	1068	3.1	0.466	16.8	LOS B	12.9	92.8	0.66	0.59	0.66	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

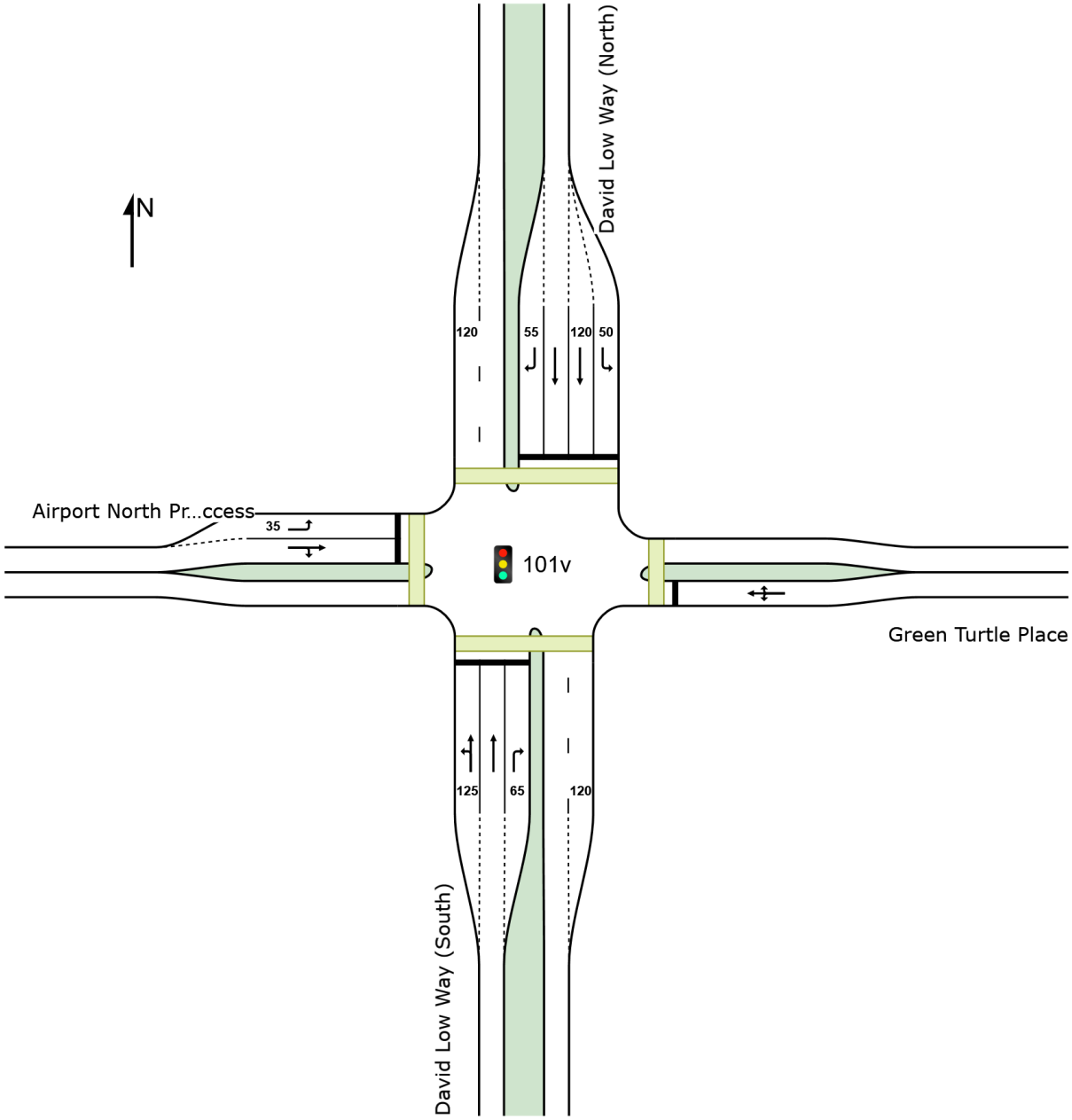
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SITE LAYOUT

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2034 AM Peak MP)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	317	2.9	317	2.9	0.523	24.8	LOS C	10.5	75.3	0.83	0.81	0.83	40.6
2	T1	All MCs	313	2.9	313	2.9	* 0.803	39.1	LOS D	12.0	86.0	0.99	0.94	1.16	37.1
3	R2	All MCs	25	2.9	25	2.9	0.185	45.5	LOS D	1.0	7.1	0.97	0.71	0.97	33.5
Approach			655	2.9	655	2.9	0.803	32.5	LOS C	12.0	86.0	0.91	0.87	0.99	38.6
East: Green Turtle Place															
4	L2	All MCs	33	2.9	33	2.9	0.278	29.9	LOS C	3.5	24.8	0.88	0.76	0.88	37.2
5	T1	All MCs	1	2.9	1	2.9	* 0.278	32.1	LOS C	3.5	24.8	0.88	0.76	0.88	38.3
6	R2	All MCs	69	2.9	69	2.9	0.278	37.7	LOS D	3.5	24.8	0.88	0.76	0.88	37.4
Approach			103	2.9	103	2.9	0.278	35.2	LOS D	3.5	24.8	0.88	0.76	0.88	37.3
North: David Low Way (North)															
7	L2	All MCs	59	2.9	59	2.9	0.089	15.3	LOS B	0.9	6.8	0.69	0.70	0.69	46.3
8	T1	All MCs	448	2.9	448	2.9	0.757	35.5	LOS D	10.9	78.2	0.98	0.85	1.06	38.1
9	R2	All MCs	75	2.9	75	2.9	* 0.548	47.4	LOS D	3.1	22.0	1.00	0.78	1.04	33.0
Approach			582	2.9	582	2.9	0.757	35.0	LOS C	10.9	78.2	0.95	0.83	1.02	38.1
West: Airport North Precinct Access															
10	L2	All MCs	75	2.9	75	2.9	0.143	25.9	LOS C	1.2	8.3	0.78	0.72	0.78	45.0
11	T1	All MCs	1	2.9	1	2.9	* 0.795	43.3	LOS D	13.2	94.6	1.00	0.92	1.17	35.8
12	R2	All MCs	322	2.9	322	2.9	0.795	48.9	LOS D	13.2	94.6	1.00	0.92	1.17	35.0
Approach			398	2.9	398	2.9	0.795	44.6	LOS D	13.2	94.6	0.96	0.88	1.09	33.9
All Vehicles			1738	2.9	1738	2.9	0.803	36.3	LOS D	13.2	94.6	0.93	0.85	1.02	37.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												

P1	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
East: Green Turtle Place												
P2	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: Airport North Precinct Access												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	211	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	440	3.1	440	3.1	0.586	25.6	LOS C	17.1	122.9	0.80	0.82	0.80	40.2
2	T1	All MCs	503	3.1	503	3.1	* 0.900	59.7	LOS E	26.7	191.8	0.99	1.07	1.23	33.3
3	R2	All MCs	25	3.1	25	3.1	0.232	66.8	LOS E	1.3	9.0	0.98	0.71	0.98	30.3
Approach			968	3.1	968	3.1	0.900	44.4	LOS D	26.7	191.8	0.90	0.95	1.03	34.3
East: Green Turtle Place															
4	L2	All MCs	33	3.1	33	3.1	0.338	41.5	LOS D	4.5	32.6	0.92	0.77	0.92	33.4
5	T1	All MCs	1	3.1	1	3.1	* 0.338	43.1	LOS D	4.5	32.6	0.92	0.77	0.92	34.3
6	R2	All MCs	69	3.1	69	3.1	0.338	48.8	LOS D	4.5	32.6	0.92	0.77	0.92	33.5
Approach			103	3.1	103	3.1	0.338	46.4	LOS D	4.5	32.6	0.92	0.77	0.92	33.5
North: David Low Way (North)															
7	L2	All MCs	59	3.1	59	3.1	0.077	15.8	LOS B	1.1	8.1	0.63	0.70	0.63	46.0
8	T1	All MCs	429	3.1	429	3.1	0.486	32.5	LOS C	10.7	76.6	0.86	0.72	0.86	39.4
9	R2	All MCs	98	3.1	98	3.1	* 0.898	68.2	LOS E	5.6	40.4	1.00	1.00	1.53	27.8
Approach			586	3.1	586	3.1	0.898	36.8	LOS D	10.7	76.6	0.86	0.77	0.95	37.3
West: Airport North Precinct Access															
10	L2	All MCs	91	3.1	91	3.1	0.178	40.9	LOS D	2.0	14.5	0.79	0.74	0.79	43.0
11	T1	All MCs	1	3.1	1	3.1	* 0.923	76.5	LOS E	22.4	161.1	1.00	1.06	1.38	29.4
12	R2	All MCs	372	3.1	372	3.1	0.923	82.1	LOS F	22.4	161.1	1.00	1.06	1.38	28.8
Approach			463	3.1	463	3.1	0.923	74.1	LOS E	22.4	161.1	0.96	1.00	1.26	26.7
All Vehicles			2121	3.1	2121	3.1	0.923	48.9	LOS D	26.7	191.8	0.91	0.90	1.05	32.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												

P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: Green Turtle Place												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Airport North Precinct Access												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		50	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

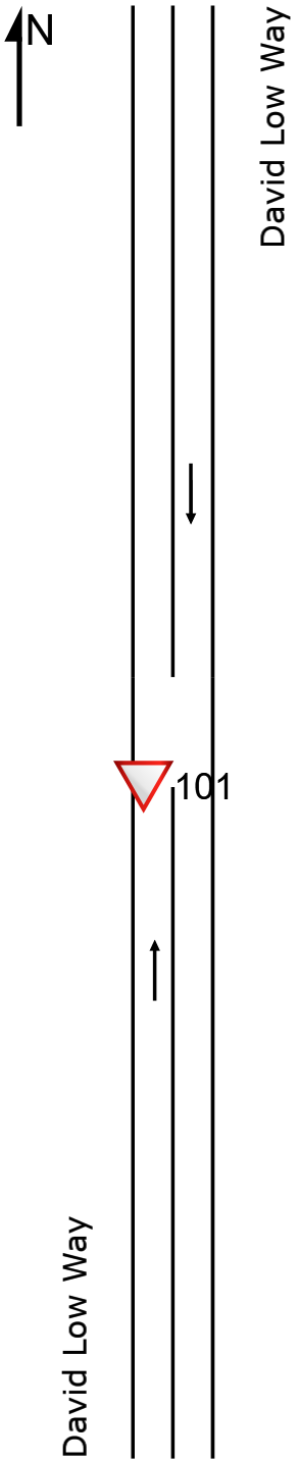
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SITE LAYOUT

Site: 101 [David Low Way / Airport North (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 AM Peak Pre Development Conditions
Site Category: (None)
Give-Way (Two-Way)

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



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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA \SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
2	T1	All MCs	274	2.9	274	2.9	0.143	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			274	2.9	274	2.9	0.143	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: David Low Way															
8	T1	All MCs	382	2.9	382	2.9	0.200	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			382	2.9	382	2.9	0.200	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			656	2.9	656	2.9	0.200	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 AM Peak Pre Development Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
2	T1	All MCs	265	2.9	265	2.9	0.139	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			265	2.9	265	2.9	0.139	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: David Low Way															
8	T1	All MCs	378	2.9	378	2.9	0.197	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			378	2.9	378	2.9	0.197	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			643	2.9	643	2.9	0.197	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 PM Peak Pre Development Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
2	T1	All MCs	491	3.1	491	3.1	0.214	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			491	3.1	491	3.1	0.214	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: David Low Way															
8	T1	All MCs	379	3.1	379	3.1	0.198	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			379	3.1	379	3.1	0.198	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			869	3.1	869	3.1	0.214	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
2	T1	All MCs	488	3.1	488	3.1	0.256	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			488	3.1	488	3.1	0.256	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: David Low Way															
8	T1	All MCs	398	3.1	398	3.1	0.208	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			398	3.1	398	3.1	0.208	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			886	3.1	886	3.1	0.256	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

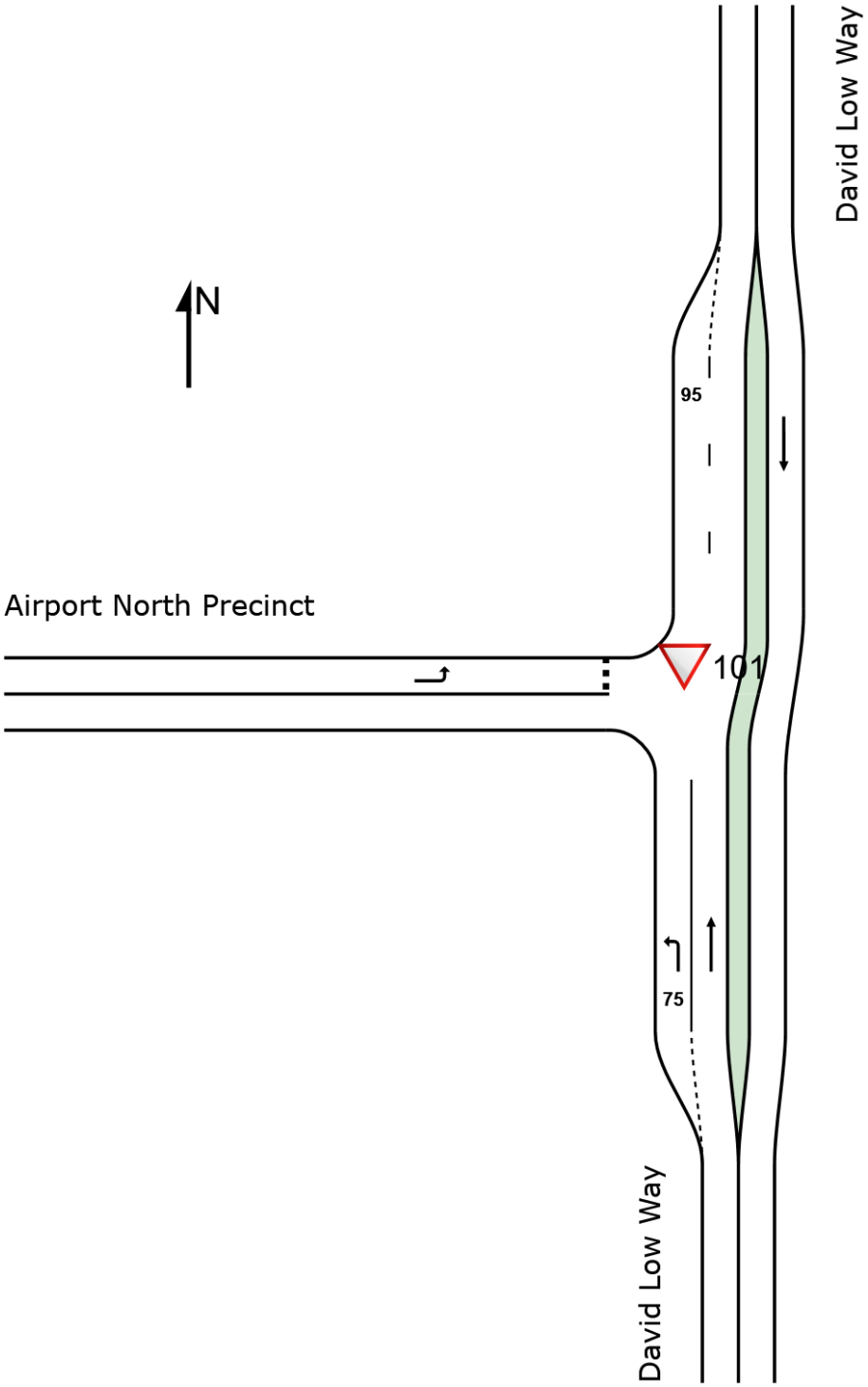
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SITE LAYOUT

Site: 101 [David Low Way / Airport North (Site Folder: 2034 AM Peak MP)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA\SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
1	L2	All MCs	77	2.9	77	2.9	0.042	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	309	2.9	309	2.9	0.162	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			386	2.9	386	2.9	0.162	1.1	NA	0.0	0.0	0.00	0.11	0.00	58.3
North: David Low Way															
8	T1	All MCs	523	2.9	523	2.9	0.273	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			523	2.9	523	2.9	0.273	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Airport North Precinct															
10	L2	All MCs	124	2.9	124	2.9	0.103	6.7	LOS A	0.4	3.0	0.38	0.62	0.38	51.6
Approach			124	2.9	124	2.9	0.103	6.7	LOS A	0.4	3.0	0.38	0.62	0.38	51.6
All Vehicles			1034	2.9	1034	2.9	0.273	1.3	NA	0.4	3.0	0.05	0.12	0.05	58.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
1	L2	All MCs	92	3.1	92	3.1	0.050	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	505	3.1	505	3.1	0.264	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			597	3.1	597	3.1	0.264	0.9	NA	0.0	0.0	0.00	0.09	0.00	58.6
North: David Low Way															
8	T1	All MCs	527	3.1	527	3.1	0.276	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			527	3.1	527	3.1	0.276	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Airport North Precinct															
10	L2	All MCs	108	3.1	108	3.1	0.114	7.8	LOS A	0.4	3.1	0.50	0.72	0.50	51.1
Approach			108	3.1	108	3.1	0.114	7.8	LOS A	0.4	3.1	0.50	0.72	0.50	51.1
All Vehicles			1233	3.1	1233	3.1	0.276	1.2	NA	0.4	3.1	0.04	0.11	0.04	58.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

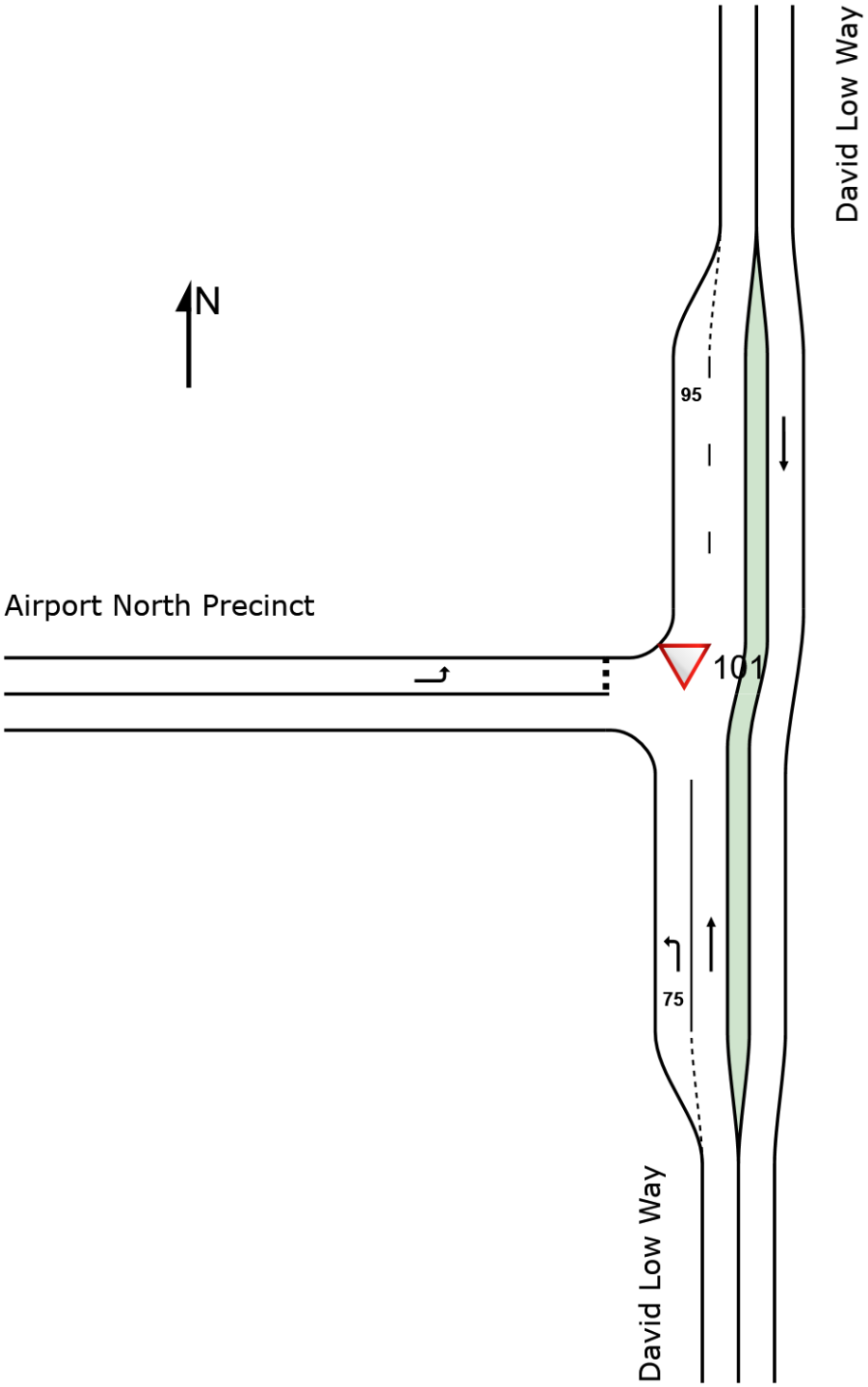
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SITE LAYOUT

Site: 101 [David Low Way / Airport North (Site Folder: 2044 AM Peak MP)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA\SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
1	L2	All MCs	74	2.9	74	2.9	0.040	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	334	2.9	334	2.9	0.174	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			407	2.9	407	2.9	0.174	1.0	NA	0.0	0.0	0.00	0.10	0.00	58.5
North: David Low Way															
8	T1	All MCs	543	2.9	543	2.9	0.284	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			543	2.9	543	2.9	0.284	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Airport North Precinct															
10	L2	All MCs	123	2.9	123	2.9	0.105	6.8	LOS A	0.4	3.0	0.40	0.63	0.40	51.6
Approach			123	2.9	123	2.9	0.105	6.8	LOS A	0.4	3.0	0.40	0.63	0.40	51.6
All Vehicles			1074	2.9	1074	2.9	0.284	1.2	NA	0.4	3.0	0.05	0.11	0.05	58.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
1	L2	All MCs	82	3.1	82	3.1	0.045	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	554	3.1	554	3.1	0.290	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			636	3.1	636	3.1	0.290	0.8	NA	0.0	0.0	0.00	0.07	0.00	58.8
North: David Low Way															
8	T1	All MCs	562	3.1	562	3.1	0.294	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			562	3.1	562	3.1	0.294	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Airport North Precinct															
10	L2	All MCs	108	3.1	108	3.1	0.121	8.2	LOS A	0.5	3.3	0.52	0.74	0.52	50.9
Approach			108	3.1	108	3.1	0.121	8.2	LOS A	0.5	3.3	0.52	0.74	0.52	50.9
All Vehicles			1306	3.1	1306	3.1	0.294	1.1	NA	0.5	3.3	0.04	0.10	0.04	58.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

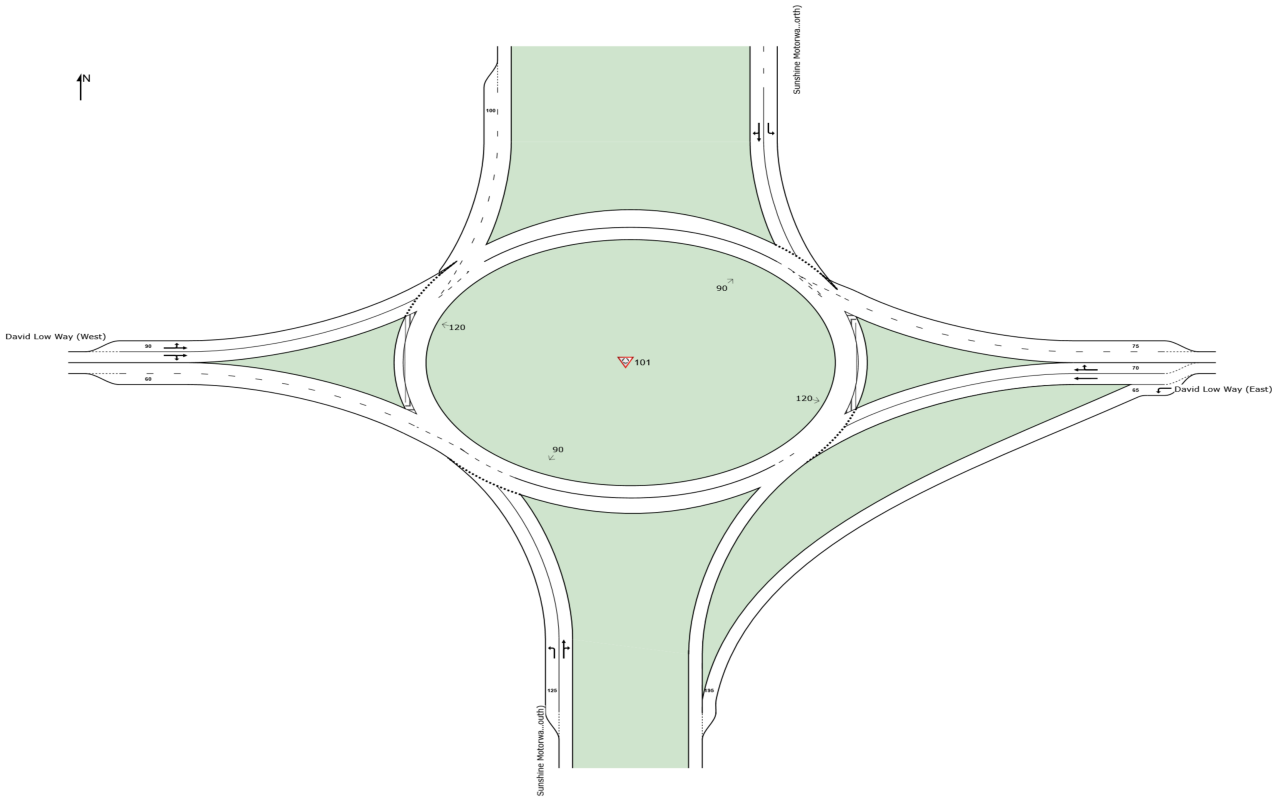
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SITE LAYOUT

Site: 101 [David Low Way / Sunshine Motorway Ramps (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Pre Development Conditions
Site Category: (None)
Roundabout

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



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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Pre Development Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	135	2.9	135	2.9	0.140	4.5	LOS A	0.7	4.7	0.57	0.48	0.57	55.2
2	T1	All MCs	1	2.9	1	2.9	0.492	5.4	LOS A	3.4	24.4	0.68	0.73	0.72	50.2
3	R2	All MCs	647	2.9	647	2.9	0.492	11.5	LOS B	3.4	24.4	0.68	0.73	0.72	49.9
Approach			783	2.9	783	2.9	0.492	10.3	LOS B	3.4	24.4	0.66	0.69	0.69	50.6
East: David Low Way (East)															
4	L2	All MCs	797	2.9	797	2.9	0.423	3.9	LOS A	0.0	0.0	0.00	0.22	0.00	57.8
5	T1	All MCs	207	2.9	207	2.9	0.195	5.0	LOS A	1.6	11.7	0.70	0.51	0.70	52.7
6	R2	All MCs	228	2.9	228	2.9	0.195	11.2	LOS B	1.6	11.7	0.72	0.58	0.72	50.8
Approach			1233	2.9	1233	2.9	0.423	5.4	LOS A	1.6	11.7	0.25	0.33	0.25	55.3
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	91	2.9	91	2.9	0.200	16.4	LOS B	1.5	11.1	0.99	0.80	0.99	49.0
8	T1	All MCs	1	2.9	1	2.9	0.400	13.4	LOS B	3.8	27.5	1.00	0.83	1.00	46.6
9	R2	All MCs	241	2.9	241	2.9	0.400	20.5	LOS C	3.8	27.5	1.00	0.83	1.00	46.3
Approach			333	2.9	333	2.9	0.400	19.4	LOS B	3.8	27.5	1.00	0.82	1.00	46.9
West: David Low Way (West)															
10	L2	All MCs	794	2.9	794	2.9	0.641	10.7	LOS B	9.5	68.0	1.00	0.90	1.27	51.8
11	T1	All MCs	242	2.9	242	2.9	0.799	21.9	LOS C	13.6	97.8	1.00	1.23	1.86	43.5
12	R2	All MCs	365	2.9	365	2.9	0.799	28.9	LOS C	13.6	97.8	1.00	1.23	1.86	43.3
Approach			1401	2.9	1401	2.9	0.799	17.4	LOS B	13.6	97.8	1.00	1.05	1.52	47.5
All Vehicles			3749	2.9	3749	2.9	0.799	12.2	LOS B	13.6	97.8	0.68	0.72	0.89	50.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	135	2.9	135	2.9	0.142	4.7	LOS A	0.7	4.9	0.58	0.50	0.58	55.1
2	T1	All MCs	1	2.9	1	2.9	0.505	5.7	LOS A	3.6	26.1	0.71	0.75	0.76	50.2
3	R2	All MCs	653	2.9	653	2.9	0.505	11.8	LOS B	3.6	26.1	0.71	0.75	0.76	49.8
Approach			788	2.9	788	2.9	0.505	10.6	LOS B	3.6	26.1	0.69	0.70	0.73	50.5
East: David Low Way (East)															
4	L2	All MCs	789	2.9	789	2.9	0.419	3.9	LOS A	0.0	0.0	0.00	0.22	0.00	57.8
5	T1	All MCs	205	2.9	205	2.9	0.197	5.3	LOS A	1.7	12.0	0.73	0.54	0.73	52.5
6	R2	All MCs	220	2.9	220	2.9	0.197	11.4	LOS B	1.7	12.0	0.75	0.59	0.75	50.7
Approach			1215	2.9	1215	2.9	0.419	5.5	LOS A	1.7	12.0	0.26	0.34	0.26	55.3
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	83	2.9	83	2.9	0.175	16.3	LOS B	1.4	10.1	1.00	0.80	1.00	49.2
8	T1	All MCs	1	2.9	1	2.9	0.490	17.4	LOS B	5.4	38.9	1.00	0.94	1.21	44.7
9	R2	All MCs	291	2.9	291	2.9	0.490	24.6	LOS C	5.4	38.9	1.00	0.94	1.21	44.4
Approach			375	2.9	375	2.9	0.490	22.7	LOS C	5.4	38.9	1.00	0.91	1.16	45.2
West: David Low Way (West)															
10	L2	All MCs	849	2.9	849	2.9	0.690	12.3	LOS B	11.4	81.9	1.00	0.98	1.38	50.7
11	T1	All MCs	246	2.9	246	2.9	0.798	21.6	LOS C	13.7	98.0	1.00	1.23	1.84	43.7
12	R2	All MCs	365	2.9	365	2.9	0.798	28.7	LOS C	13.7	98.0	1.00	1.23	1.84	43.4
Approach			1461	2.9	1461	2.9	0.798	18.0	LOS B	13.7	98.0	1.00	1.08	1.57	47.3
All Vehicles			3839	2.9	3839	2.9	0.798	13.0	LOS B	13.7	98.0	0.70	0.75	0.94	50.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	135	2.9	135	2.9	0.146	5.1	LOS A	0.7	5.2	0.62	0.53	0.62	54.9
2	T1	All MCs	1	2.9	1	2.9	0.528	6.6	LOS A	4.1	29.2	0.75	0.78	0.84	50.0
3	R2	All MCs	655	2.9	655	2.9	0.528	12.4	LOS B	4.1	29.2	0.75	0.78	0.84	49.6
Approach			791	2.9	791	2.9	0.528	11.1	LOS B	4.1	29.2	0.73	0.74	0.80	50.3
East: David Low Way (East)															
4	L2	All MCs	888	2.9	888	2.9	0.471	4.3	LOS A	0.0	0.0	0.00	0.22	0.00	57.7
5	T1	All MCs	211	2.9	211	2.9	0.213	5.9	LOS A	1.9	13.4	0.76	0.57	0.76	52.4
6	R2	All MCs	234	2.9	234	2.9	0.213	11.8	LOS B	1.9	13.4	0.79	0.61	0.79	50.5
Approach			1333	2.9	1333	2.9	0.471	5.9	LOS A	1.9	13.4	0.26	0.34	0.26	55.3
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	96	2.9	96	2.9	0.201	16.6	LOS B	1.6	11.7	1.00	0.80	1.00	49.0
8	T1	All MCs	1	2.9	1	2.9	0.592	23.6	LOS C	7.8	56.1	1.00	1.08	1.48	42.0
9	R2	All MCs	348	2.9	348	2.9	0.592	30.8	LOS C	7.8	56.1	1.00	1.08	1.48	41.7
Approach			445	2.9	445	2.9	0.592	27.7	LOS C	7.8	56.1	1.00	1.02	1.38	43.0
West: David Low Way (West)															
10	L2	All MCs	908	2.9	908	2.9	0.758	15.9	LOS B	14.9	107.1	1.00	1.12	1.58	48.6
11	T1	All MCs	249	2.9	249	2.9	0.815	23.6	LOS C	14.7	105.5	1.00	1.28	1.93	42.8
12	R2	All MCs	365	2.9	365	2.9	0.815	30.6	LOS C	14.7	105.5	1.00	1.28	1.93	42.5
Approach			1523	2.9	1523	2.9	0.815	20.7	LOS C	14.9	107.1	1.00	1.18	1.72	45.8
All Vehicles			4092	2.9	4092	2.9	0.815	14.8	LOS B	14.9	107.1	0.71	0.81	1.03	49.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 PM Peak Pre Development Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	200	3.1	200	3.1	0.220	5.5	LOS A	1.2	8.4	0.64	0.53	0.64	54.8
2	T1	All MCs	1	3.1	1	3.1	0.767	8.1	LOS A	9.5	68.0	0.89	0.95	1.22	49.5
3	R2	All MCs	946	3.1	946	3.1	0.767	15.0	LOS B	9.5	68.0	0.89	0.95	1.22	49.1
Approach			1147	3.1	1147	3.1	0.767	13.3	LOS B	9.5	68.0	0.85	0.88	1.12	49.9
East: David Low Way (East)															
4	L2	All MCs	607	3.1	607	3.1	0.323	2.6	LOS A	0.0	0.0	0.00	0.22	0.00	57.9
5	T1	All MCs	221	3.1	221	3.1	0.145	5.0	LOS A	1.2	8.6	0.71	0.50	0.71	52.8
6	R2	All MCs	93	3.1	93	3.1	0.145	11.2	LOS B	1.2	8.6	0.72	0.52	0.72	51.9
Approach			921	3.1	921	3.1	0.323	4.0	LOS A	1.2	8.6	0.24	0.32	0.24	55.8
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	140	3.1	140	3.1	0.380	23.7	LOS C	3.2	22.9	1.00	0.89	1.05	46.6
8	T1	All MCs	1	3.1	1	3.1	0.839	61.3	LOS E	17.7	127.1	1.00	1.59	2.54	30.8
9	R2	All MCs	400	3.1	400	3.1	0.839	68.4	LOS E	17.7	127.1	1.00	1.59	2.54	30.7
Approach			541	3.1	541	3.1	0.839	56.8	LOS E	17.7	127.1	1.00	1.41	2.15	33.3
West: David Low Way (West)															
10	L2	All MCs	543	3.1	543	3.1	0.625	13.5	LOS B	9.7	69.4	1.00	1.00	1.30	49.4
11	T1	All MCs	219	3.1	219	3.1	0.861	40.5	LOS D	16.0	114.7	1.00	1.43	2.21	36.6
12	R2	All MCs	222	3.1	222	3.1	0.861	47.8	LOS D	16.0	114.7	1.00	1.44	2.22	36.3
Approach			984	3.1	984	3.1	0.861	27.3	LOS C	16.0	114.7	1.00	1.20	1.71	42.3
All Vehicles			3594	3.1	3594	3.1	0.861	21.3	LOS C	17.7	127.1	0.76	0.90	1.21	45.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	192	3.1	192	3.1	0.219	6.0	LOS A	1.2	8.6	0.68	0.56	0.68	54.7
2	T1	All MCs	1	3.1	1	3.1	0.781	9.1	LOS A	10.0	72.1	0.93	0.99	1.32	49.0
3	R2	All MCs	917	3.1	917	3.1	0.781	16.0	LOS B	10.0	72.1	0.93	0.99	1.32	48.6
Approach			1109	3.1	1109	3.1	0.781	14.2	LOS B	10.0	72.1	0.88	0.92	1.21	49.5
East: David Low Way (East)															
4	L2	All MCs	676	3.1	676	3.1	0.359	2.6	LOS A	0.0	0.0	0.00	0.22	0.00	57.8
5	T1	All MCs	239	3.1	239	3.1	0.164	5.4	LOS A	1.4	10.2	0.76	0.52	0.76	52.6
6	R2	All MCs	99	3.1	99	3.1	0.164	11.4	LOS B	1.4	10.2	0.77	0.53	0.77	51.7
Approach			1014	3.1	1014	3.1	0.359	4.2	LOS A	1.4	10.2	0.25	0.32	0.25	55.8
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	142	3.1	142	3.1	0.402	25.7	LOS C	3.6	26.0	1.00	0.92	1.08	45.2
8	T1	All MCs	1	3.1	1	3.1	1.040	145.4	LOS F	43.1	309.5	1.00	2.50	4.62	19.3
9	R2	All MCs	461	3.1	461	3.1	1.040	152.5	LOS F	43.1	309.5	1.00	2.50	4.62	19.2
Approach			604	3.1	604	3.1	1.040	122.7	LOS F	43.1	309.5	1.00	2.12	3.79	21.9
West: David Low Way (West)															
10	L2	All MCs	591	3.1	591	3.1	0.666	14.8	LOS B	11.0	79.2	1.00	1.05	1.38	48.6
11	T1	All MCs	219	3.1	219	3.1	0.834	34.5	LOS C	14.4	103.8	1.00	1.36	2.03	38.6
12	R2	All MCs	222	3.1	222	3.1	0.834	41.6	LOS D	14.4	103.8	1.00	1.36	2.03	38.4
Approach			1032	3.1	1032	3.1	0.834	24.7	LOS C	14.4	103.8	1.00	1.18	1.66	43.4
All Vehicles			3759	3.1	3759	3.1	1.040	31.8	LOS C	43.1	309.5	0.76	1.02	1.49	40.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	172	3.1	172	3.1	0.208	6.7	LOS A	1.2	8.5	0.72	0.60	0.72	54.5
2	T1	All MCs	1	3.1	1	3.1	0.766	9.8	LOS A	9.7	69.9	0.96	1.01	1.38	48.6
3	R2	All MCs	836	3.1	836	3.1	0.766	16.7	LOS B	9.7	69.9	0.96	1.01	1.38	48.3
Approach			1008	3.1	1008	3.1	0.766	15.0	LOS B	9.7	69.9	0.92	0.94	1.26	49.1
East: David Low Way (East)															
4	L2	All MCs	623	3.1	623	3.1	0.331	2.6	LOS A	0.0	0.0	0.00	0.22	0.00	57.9
5	T1	All MCs	245	3.1	245	3.1	0.184	6.1	LOS A	1.7	12.3	0.83	0.57	0.83	52.2
6	R2	All MCs	104	3.1	104	3.1	0.184	11.9	LOS B	1.7	12.3	0.85	0.57	0.85	51.3
Approach			973	3.1	973	3.1	0.331	4.5	LOS A	1.7	12.3	0.30	0.34	0.30	55.5
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	146	3.1	146	3.1	0.347	19.2	LOS B	3.0	21.3	1.00	0.85	1.00	48.4
8	T1	All MCs	1	3.1	1	3.1	1.025	119.3	LOS F	43.1	309.5	1.00	2.47	4.55	21.8
9	R2	All MCs	534	3.1	534	3.1	1.025	126.5	LOS F	43.1	309.5	1.00	2.47	4.55	21.8
Approach			681	3.1	681	3.1	1.025	103.4	LOS F	43.1	309.5	1.00	2.12	3.79	24.3
West: David Low Way (West)															
10	L2	All MCs	687	3.1	687	3.1	0.703	14.1	LOS B	12.2	87.7	1.00	1.06	1.42	49.1
11	T1	All MCs	223	3.1	223	3.1	0.725	19.5	LOS B	10.1	72.7	1.00	1.12	1.55	44.8
12	R2	All MCs	222	3.1	222	3.1	0.725	26.6	LOS C	10.1	72.7	1.00	1.12	1.55	44.6
Approach			1133	3.1	1133	3.1	0.725	17.6	LOS B	12.2	87.7	1.00	1.08	1.47	47.1
All Vehicles			3795	3.1	3795	3.1	1.025	28.9	LOS C	43.1	309.5	0.80	1.04	1.53	41.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

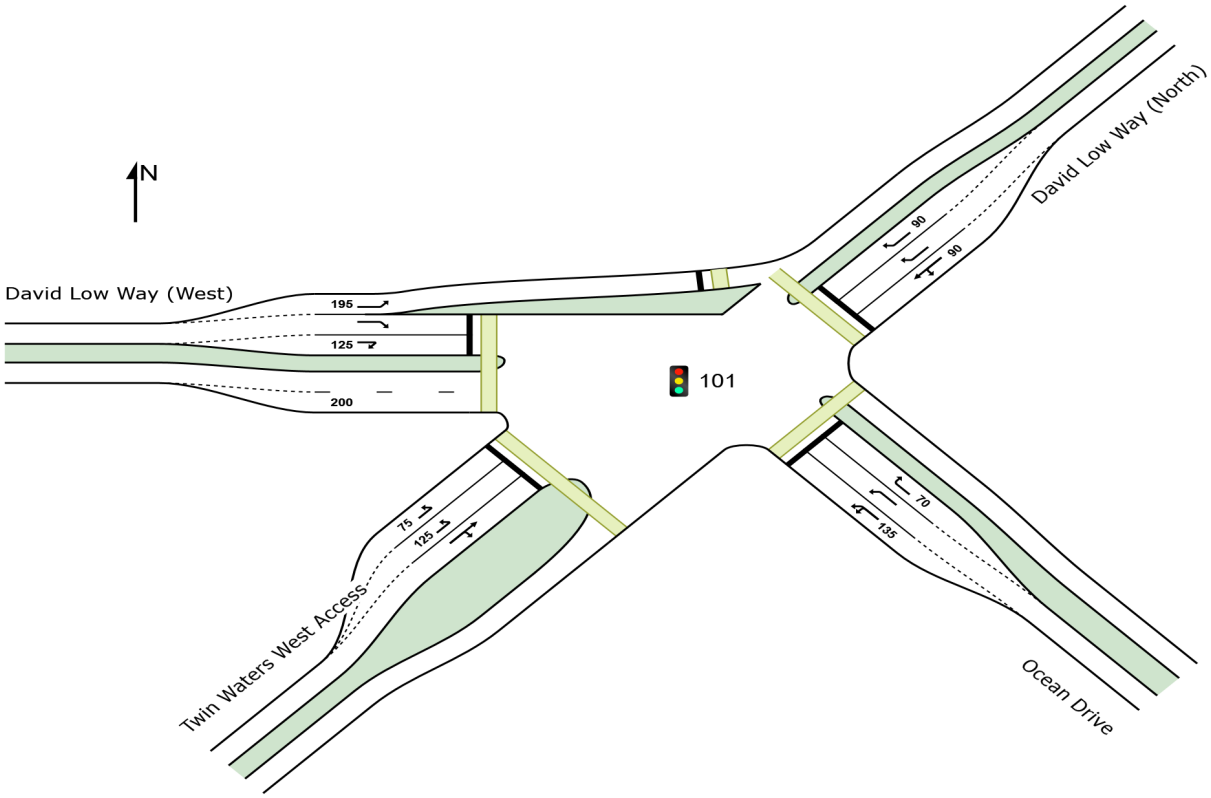
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SITE LAYOUT

Site: 101 [David Low Way / Ocean Drive / Twin Waters West Access (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Ocean Drive / Twin Waters West Access
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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MOVEMENT SUMMARY

Site: 101 [David Low Way / Ocean Drive / Twin Waters West Access (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Ocean Drive / Twin Waters West Access
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Ocean Drive															
21	L2	All MCs	2	2.9	2	2.9	0.427	37.5	LOS D	12.5	89.4	0.81	0.77	0.81	36.9
21a	L1	All MCs	558	2.9	558	2.9	0.427	37.4	LOS D	12.5	89.4	0.81	0.77	0.81	37.4
23	R2	All MCs	12	2.9	12	2.9	0.127	67.7	LOS E	0.7	4.9	0.98	0.68	0.98	27.9
Approach			572	2.9	572	2.9	0.427	38.0	LOS D	12.5	89.4	0.82	0.77	0.82	37.2
NorthEast: David Low Way (North)															
24	L2	All MCs	27	2.9	27	2.9	0.092	43.4	LOS D	1.9	13.3	0.81	0.69	0.81	34.8
25	T1	All MCs	14	2.9	14	2.9	0.092	37.8	LOS D	1.9	13.3	0.81	0.69	0.81	35.7
26a	R1	All MCs	575	2.9	575	2.9	* 0.635	49.7	LOS D	15.2	109.0	0.95	0.83	0.95	33.3
Approach			616	2.9	616	2.9	0.635	49.2	LOS D	15.2	109.0	0.94	0.82	0.94	33.4
West: David Low Way (West)															
10a	L1	All MCs	469	2.9	469	2.9	0.390	15.4	LOS B	12.9	92.4	0.51	0.73	0.51	46.3
12a	R1	All MCs	428	2.9	428	2.9	* 0.653	39.5	LOS D	21.1	151.3	0.90	0.83	0.90	36.0
12b	R3	All MCs	49	2.9	49	2.9	* 0.620	72.8	LOS E	3.1	22.4	1.00	0.80	1.11	27.1
Approach			947	2.9	947	2.9	0.653	29.3	LOS C	21.1	151.3	0.72	0.78	0.72	39.6
SouthWest: Twin Waters West Access															
30b	L3	All MCs	97	2.9	97	2.9	0.607	74.0	LOS E	3.0	21.9	1.00	0.79	1.09	27.0
31	T1	All MCs	155	2.9	155	2.9	* 0.631	52.0	LOS D	10.6	76.1	0.99	0.81	0.99	32.2
32	R2	All MCs	35	2.9	35	2.9	0.631	57.6	LOS E	10.6	76.1	0.99	0.81	0.99	31.5
Approach			286	2.9	286	2.9	0.631	60.1	LOS E	10.6	76.1	0.99	0.80	1.02	30.1
All Vehicles			2421	2.9	2421	2.9	0.653	40.0	LOS D	21.1	151.3	0.83	0.79	0.84	36.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Drive												
P5	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

NorthEast: David Low Way (North)												
P6	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P4B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
SouthWest: Twin Waters West Access												
P8	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		250	263	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Ocean Drive / Twin Waters West Access (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Ocean Drive / Twin Waters West Access
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Ocean Drive															
21	L2	All MCs	2	2.9	2	2.9	0.425	37.5	LOS D	12.4	89.0	0.81	0.77	0.81	36.9
21a	L1	All MCs	556	2.9	556	2.9	0.425	37.3	LOS D	12.4	89.0	0.81	0.77	0.81	37.4
23	R2	All MCs	7	2.9	7	2.9	0.081	67.2	LOS E	0.4	3.1	0.98	0.66	0.98	28.0
Approach			565	2.9	565	2.9	0.425	37.7	LOS D	12.4	89.0	0.82	0.77	0.82	37.3
NorthEast: David Low Way (North)															
24	L2	All MCs	23	2.9	23	2.9	0.090	44.2	LOS D	1.8	12.8	0.82	0.68	0.82	34.6
25	T1	All MCs	16	2.9	16	2.9	0.090	38.6	LOS D	1.8	12.8	0.82	0.68	0.82	35.6
26a	R1	All MCs	565	2.9	565	2.9	* 0.646	50.5	LOS D	15.1	108.2	0.96	0.83	0.96	33.1
Approach			604	2.9	604	2.9	0.646	50.0	LOS D	15.1	108.2	0.95	0.82	0.95	33.2
West: David Low Way (West)															
10a	L1	All MCs	474	2.9	474	2.9	0.399	16.0	LOS B	13.3	95.7	0.53	0.73	0.53	46.0
12a	R1	All MCs	431	2.9	431	2.9	* 0.656	39.5	LOS D	21.2	152.3	0.90	0.83	0.90	36.0
12b	R3	All MCs	48	2.9	48	2.9	* 0.607	72.7	LOS E	3.0	21.9	1.00	0.79	1.09	27.1
Approach			953	2.9	953	2.9	0.656	29.5	LOS C	21.2	152.3	0.72	0.78	0.73	39.5
SouthWest: Twin Waters West Access															
30b	L3	All MCs	94	2.9	94	2.9	0.587	73.7	LOS E	2.9	21.1	1.00	0.78	1.08	27.0
31	T1	All MCs	168	2.9	168	2.9	* 0.643	51.3	LOS D	11.3	81.3	0.99	0.82	0.99	32.4
32	R2	All MCs	35	2.9	35	2.9	0.643	56.9	LOS E	11.3	81.3	0.99	0.82	0.99	31.7
Approach			297	2.9	297	2.9	0.643	59.0	LOS E	11.3	81.3	0.99	0.81	1.02	30.4
All Vehicles			2419	2.9	2419	2.9	0.656	40.2	LOS D	21.2	152.3	0.83	0.79	0.84	36.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Drive												
P5	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

NorthEast: David Low Way (North)												
P6	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P4B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
SouthWest: Twin Waters West Access												
P8	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		250	263	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Ocean Drive / Twin Waters West Access (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Ocean Drive / Twin Waters West Access
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Ocean Drive															
21	L2	All MCs	2	2.9	2	2.9	0.438	39.1	LOS D	12.5	89.4	0.83	0.78	0.83	36.3
21a	L1	All MCs	545	2.9	545	2.9	0.438	39.4	LOS D	12.5	89.4	0.83	0.78	0.83	36.8
23	R2	All MCs	19	2.9	19	2.9	0.179	66.6	LOS E	1.1	8.0	0.98	0.70	0.98	28.2
Approach			566	2.9	566	2.9	0.438	40.3	LOS D	12.5	89.4	0.84	0.78	0.84	36.5
NorthEast: David Low Way (North)															
24	L2	All MCs	35	2.9	35	2.9	0.108	41.9	LOS D	2.3	16.4	0.80	0.69	0.80	35.2
25	T1	All MCs	17	2.9	17	2.9	0.108	36.3	LOS D	2.3	16.4	0.80	0.69	0.80	36.2
26a	R1	All MCs	669	2.9	669	2.9	* 0.692	49.4	LOS D	17.8	127.8	0.96	0.84	0.96	33.5
Approach			721	2.9	721	2.9	0.692	48.7	LOS D	17.8	127.8	0.95	0.83	0.95	33.7
West: David Low Way (West)															
10a	L1	All MCs	488	2.9	488	2.9	0.406	15.6	LOS B	13.6	97.5	0.52	0.73	0.52	46.2
12a	R1	All MCs	426	2.9	426	2.9	* 0.683	41.3	LOS D	21.5	154.4	0.92	0.84	0.92	35.3
12b	R3	All MCs	55	2.9	55	2.9	0.588	71.1	LOS E	3.4	24.3	1.00	0.79	1.06	27.4
Approach			969	2.9	969	2.9	0.683	30.0	LOS C	21.5	154.4	0.73	0.78	0.73	39.3
SouthWest: Twin Waters West Access															
30b	L3	All MCs	117	2.9	117	2.9	* 0.628	73.3	LOS E	3.6	26.1	1.00	0.80	1.10	27.2
31	T1	All MCs	162	2.9	162	2.9	* 0.688	54.1	LOS D	11.3	80.9	1.00	0.85	1.04	31.6
32	R2	All MCs	34	2.9	34	2.9	0.688	59.7	LOS E	11.3	80.9	1.00	0.85	1.04	31.0
Approach			313	2.9	313	2.9	0.688	61.9	LOS E	11.3	80.9	1.00	0.83	1.06	29.7
All Vehicles			2569	2.9	2569	2.9	0.692	41.4	LOS D	21.5	154.4	0.85	0.80	0.86	35.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Drive												
P5	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

NorthEast: David Low Way (North)												
P6	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P4B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
SouthWest: Twin Waters West Access												
P8	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		250	263	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Ocean Drive / Twin Waters West Access (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Ocean Drive / Twin Waters West Access
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Ocean Drive															
21	L2	All MCs	2	3.1	2	3.1	0.280	32.8	LOS C	8.0	57.8	0.73	0.73	0.73	38.7
21a	L1	All MCs	400	3.1	400	3.1	0.280	32.0	LOS C	8.1	57.9	0.73	0.73	0.73	39.3
23	R2	All MCs	17	3.1	17	3.1	0.111	62.2	LOS E	0.9	6.8	0.96	0.70	0.96	29.2
Approach			419	3.1	419	3.1	0.280	33.2	LOS C	8.1	57.9	0.74	0.72	0.74	38.7
NorthEast: David Low Way (North)															
24	L2	All MCs	51	3.1	51	3.1	0.202	48.9	LOS D	3.7	26.4	0.87	0.73	0.87	33.0
25	T1	All MCs	24	3.1	24	3.1	0.202	43.3	LOS D	3.7	26.4	0.87	0.73	0.87	33.9
26a	R1	All MCs	461	3.1	461	3.1	* 0.616	52.5	LOS D	12.5	89.8	0.97	0.82	0.97	32.3
Approach			536	3.1	536	3.1	0.616	51.7	LOS D	12.5	89.8	0.95	0.81	0.95	32.4
West: David Low Way (West)															
10a	L1	All MCs	637	3.1	637	3.1	0.537	17.5	LOS B	20.4	146.3	0.60	0.77	0.60	45.1
12a	R1	All MCs	444	3.1	444	3.1	* 0.619	36.2	LOS D	20.9	150.4	0.87	0.82	0.87	37.2
12b	R3	All MCs	80	3.1	80	3.1	* 0.603	67.6	LOS E	4.8	34.6	1.00	0.80	1.05	28.2
Approach			1161	3.1	1161	3.1	0.619	28.1	LOS C	20.9	150.4	0.73	0.79	0.73	40.1
SouthWest: Twin Waters West Access															
30b	L3	All MCs	52	3.1	52	3.1	0.194	64.9	LOS E	1.5	10.6	0.96	0.72	0.96	28.7
31	T1	All MCs	33	3.1	33	3.1	* 0.154	50.3	LOS D	2.0	14.7	0.92	0.69	0.92	32.7
32	R2	All MCs	6	3.1	6	3.1	0.154	56.0	LOS E	2.0	14.7	0.92	0.69	0.92	32.0
Approach			91	3.1	91	3.1	0.194	59.0	LOS E	2.0	14.7	0.95	0.71	0.95	30.2
All Vehicles			2206	3.1	2206	3.1	0.619	36.1	LOS D	20.9	150.4	0.80	0.78	0.80	37.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Drive												
P5	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

NorthEast: David Low Way (North)												
P6	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P4B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
SouthWest: Twin Waters West Access												
P8	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		250	263	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Ocean Drive / Twin Waters West Access (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Ocean Drive / Twin Waters West Access
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Ocean Drive															
21	L2	All MCs	1	3.1	1	3.1	0.285	33.6	LOS C	8.1	58.3	0.74	0.73	0.74	38.4
21a	L1	All MCs	399	3.1	399	3.1	0.285	32.9	LOS C	8.1	58.3	0.74	0.73	0.74	39.0
23	R2	All MCs	23	3.1	23	3.1	0.218	66.9	LOS E	1.4	9.8	0.99	0.71	0.99	28.1
Approach			423	3.1	423	3.1	0.285	34.7	LOS C	8.1	58.3	0.76	0.73	0.76	38.2
NorthEast: David Low Way (North)															
24	L2	All MCs	44	3.1	44	3.1	0.175	45.2	LOS D	3.5	25.5	0.84	0.71	0.84	34.3
25	T1	All MCs	32	3.1	32	3.1	0.175	39.6	LOS D	3.5	25.5	0.84	0.71	0.84	35.3
26a	R1	All MCs	555	3.1	555	3.1	* 0.635	49.9	LOS D	14.8	106.0	0.96	0.83	0.96	33.1
Approach			631	3.1	631	3.1	0.635	49.0	LOS D	14.8	106.0	0.94	0.81	0.94	33.3
West: David Low Way (West)															
10a	L1	All MCs	628	3.1	628	3.1	0.510	15.7	LOS B	18.6	133.4	0.56	0.75	0.56	46.1
12a	R1	All MCs	453	3.1	453	3.1	* 0.645	37.3	LOS D	21.8	156.3	0.88	0.83	0.88	36.7
12b	R3	All MCs	61	3.1	61	3.1	* 0.657	71.9	LOS E	3.8	27.5	1.00	0.82	1.12	27.3
Approach			1142	3.1	1142	3.1	0.657	27.3	LOS C	21.8	156.3	0.71	0.78	0.72	40.5
SouthWest: Twin Waters West Access															
30b	L3	All MCs	52	3.1	52	3.1	0.278	69.6	LOS E	1.5	11.1	0.99	0.72	0.99	27.7
31	T1	All MCs	38	3.1	38	3.1	* 0.179	50.5	LOS D	2.4	17.2	0.92	0.70	0.92	32.6
32	R2	All MCs	7	3.1	7	3.1	0.179	56.2	LOS E	2.4	17.2	0.92	0.70	0.92	31.9
Approach			97	3.1	97	3.1	0.278	61.1	LOS E	2.4	17.2	0.96	0.71	0.96	29.8
All Vehicles			2293	3.1	2293	3.1	0.657	36.1	LOS D	21.8	156.3	0.79	0.78	0.80	37.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Drive												
P5	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

NorthEast: David Low Way (North)												
P6	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P4B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
SouthWest: Twin Waters West Access												
P8	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		250	263	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Ocean Drive / Twin Waters West Access (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Ocean Drive / Twin Waters West Access
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Ocean Drive															
21	L2	All MCs	2	3.1	2	3.1	0.289	33.6	LOS C	8.2	59.2	0.74	0.73	0.74	38.4
21a	L1	All MCs	403	3.1	403	3.1	0.289	32.8	LOS C	8.2	59.2	0.74	0.73	0.74	39.0
23	R2	All MCs	26	3.1	26	3.1	0.217	65.6	LOS E	1.5	11.0	0.98	0.71	0.98	28.4
Approach			432	3.1	432	3.1	0.289	34.8	LOS C	8.2	59.2	0.76	0.73	0.76	38.1
NorthEast: David Low Way (North)															
24	L2	All MCs	58	3.1	58	3.1	0.200	46.3	LOS D	4.0	28.5	0.85	0.73	0.85	33.8
25	T1	All MCs	25	3.1	25	3.1	0.200	40.7	LOS D	4.0	28.5	0.85	0.73	0.85	34.7
26a	R1	All MCs	513	3.1	513	3.1	* 0.609	50.2	LOS D	13.6	97.9	0.95	0.82	0.95	33.0
Approach			596	3.1	596	3.1	0.609	49.4	LOS D	13.6	97.9	0.94	0.81	0.94	33.1
West: David Low Way (West)															
10a	L1	All MCs	588	3.1	588	3.1	0.484	15.9	LOS B	17.3	124.0	0.55	0.75	0.55	46.0
12a	R1	All MCs	427	3.1	427	3.1	* 0.609	36.7	LOS D	20.2	145.0	0.87	0.82	0.87	37.0
12b	R3	All MCs	60	3.1	60	3.1	* 0.565	69.5	LOS E	3.7	26.3	1.00	0.78	1.04	27.8
Approach			1076	3.1	1076	3.1	0.609	27.2	LOS C	20.2	145.0	0.70	0.78	0.70	40.5
SouthWest: Twin Waters West Access															
30b	L3	All MCs	52	3.1	52	3.1	0.243	67.9	LOS E	1.5	10.9	0.98	0.72	0.98	28.1
31	T1	All MCs	42	3.1	42	3.1	* 0.196	50.7	LOS D	2.6	18.9	0.93	0.71	0.93	32.6
32	R2	All MCs	7	3.1	7	3.1	0.196	56.3	LOS E	2.6	18.9	0.93	0.71	0.93	31.9
Approach			101	3.1	101	3.1	0.243	59.9	LOS E	2.6	18.9	0.95	0.71	0.95	30.1
All Vehicles			2204	3.1	2204	3.1	0.609	36.2	LOS D	20.2	145.0	0.79	0.77	0.79	37.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Ocean Drive												
P5	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

NorthEast: David Low Way (North)												
P6	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P4B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
SouthWest: Twin Waters West Access												
P8	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		250	263	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

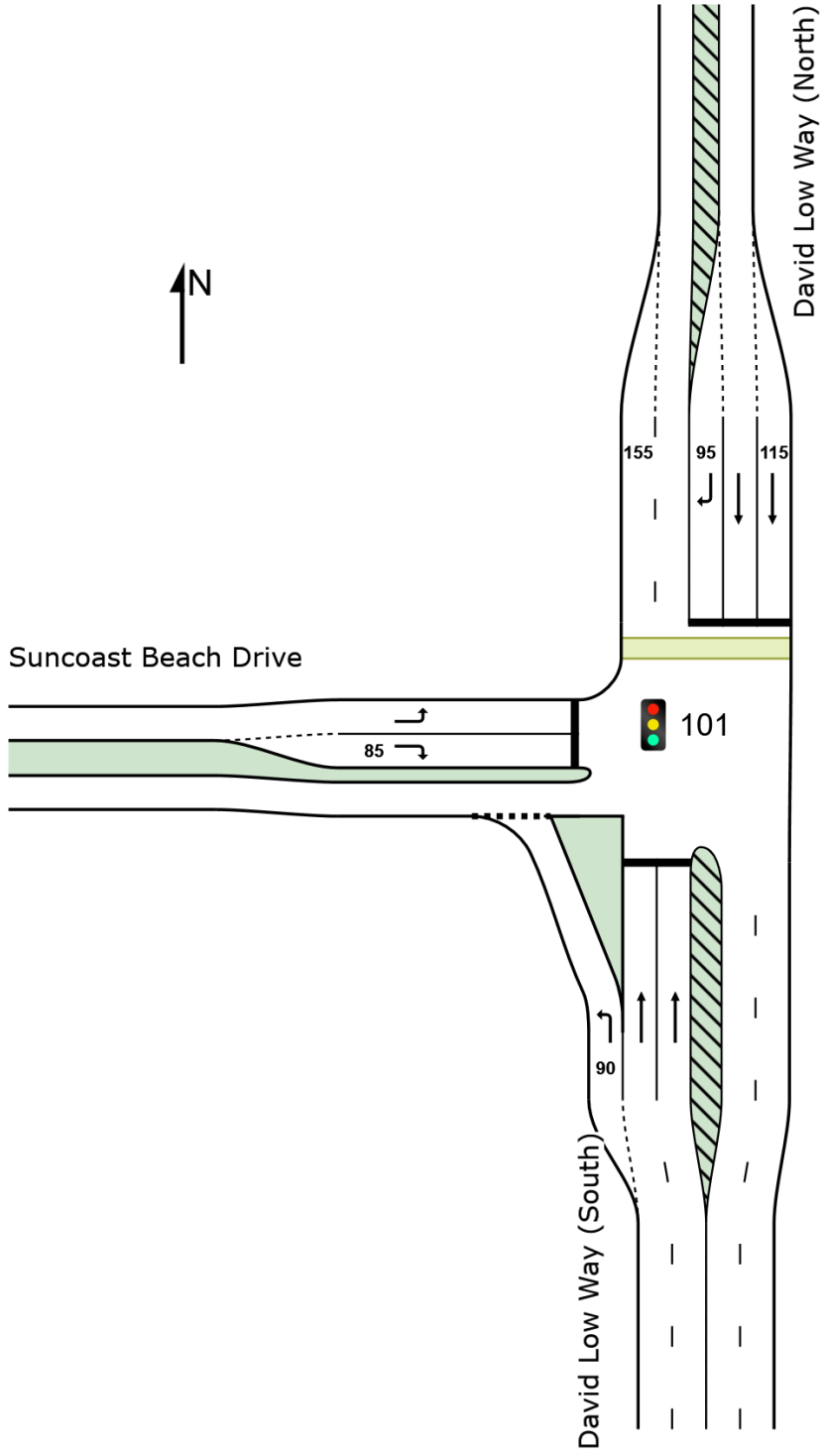
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SITE LAYOUT

Site: 101 [David Low Way / Suncoast Beach Drive (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Suncoast Beach Drive
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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MOVEMENT SUMMARY

Site: 101 [David Low Way / Suncoast Beach Drive (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Suncoast Beach Drive
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	219	2.9	219	2.9	0.180	8.3	LOS A	2.3	16.2	0.36	0.65	0.36	51.0
2	T1	All MCs	314	2.9	314	2.9	* 0.511	33.2	LOS C	6.3	45.0	0.95	0.76	0.95	38.9
Approach			533	2.9	533	2.9	0.511	23.0	LOS C	6.3	45.0	0.70	0.72	0.70	43.1
North: David Low Way (North)															
8	T1	All MCs	359	2.9	359	2.9	0.160	8.0	LOS A	3.1	22.6	0.48	0.40	0.48	53.0
9	R2	All MCs	319	2.9	319	2.9	* 0.519	28.8	LOS C	10.1	72.7	0.85	0.81	0.85	39.6
Approach			678	2.9	678	2.9	0.519	17.8	LOS B	10.1	72.7	0.66	0.60	0.66	45.7
West: Suncoast Beach Drive															
10	L2	All MCs	219	2.9	219	2.9	* 0.507	35.2	LOS D	7.6	54.5	0.92	0.81	0.92	37.1
12	R2	All MCs	60	2.9	60	2.9	0.126	30.1	LOS C	1.8	12.9	0.80	0.73	0.80	39.1
Approach			279	2.9	279	2.9	0.507	34.1	LOS C	7.6	54.5	0.89	0.79	0.89	37.5
All Vehicles			1489	2.9	1489	2.9	0.519	22.7	LOS C	10.1	72.7	0.72	0.68	0.72	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Suncoast Beach Drive (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Suncoast Beach Drive
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	244	2.9	244	2.9	0.200	8.4	LOS A	2.6	18.5	0.36	0.65	0.36	51.0
2	T1	All MCs	312	2.9	312	2.9	* 0.508	33.2	LOS C	6.2	44.7	0.95	0.76	0.95	38.9
Approach			556	2.9	556	2.9	0.508	22.3	LOS C	6.2	44.7	0.69	0.72	0.69	43.4
North: David Low Way (North)															
8	T1	All MCs	356	2.9	356	2.9	0.158	8.0	LOS A	3.1	22.4	0.48	0.40	0.48	53.0
9	R2	All MCs	321	2.9	321	2.9	* 0.523	28.8	LOS C	10.2	73.3	0.86	0.81	0.86	39.5
Approach			677	2.9	677	2.9	0.523	17.9	LOS B	10.2	73.3	0.66	0.60	0.66	45.6
West: Suncoast Beach Drive															
10	L2	All MCs	229	2.9	229	2.9	* 0.531	35.4	LOS D	8.0	57.6	0.92	0.81	0.92	37.1
12	R2	All MCs	69	2.9	69	2.9	0.145	30.2	LOS C	2.1	15.1	0.80	0.73	0.80	39.1
Approach			299	2.9	299	2.9	0.531	34.2	LOS C	8.0	57.6	0.90	0.79	0.90	37.5
All Vehicles			1532	2.9	1532	2.9	0.531	22.7	LOS C	10.2	73.3	0.72	0.68	0.72	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Suncoast Beach Drive (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Suncoast Beach Drive
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	266	2.9	266	2.9	0.224	9.1	LOS A	3.2	23.0	0.40	0.67	0.40	50.5
2	T1	All MCs	389	2.9	389	2.9	* 0.556	31.9	LOS C	7.7	55.3	0.94	0.77	0.94	39.5
Approach			656	2.9	656	2.9	0.556	22.6	LOS C	7.7	55.3	0.72	0.73	0.72	43.3
North: David Low Way (North)															
8	T1	All MCs	422	2.9	422	2.9	0.180	7.2	LOS A	3.5	25.4	0.46	0.39	0.46	53.7
9	R2	All MCs	361	2.9	361	2.9	* 0.588	29.5	LOS C	11.8	84.8	0.88	0.83	0.88	39.3
Approach			783	2.9	783	2.9	0.588	17.5	LOS B	11.8	84.8	0.66	0.59	0.66	45.9
West: Suncoast Beach Drive															
10	L2	All MCs	219	2.9	219	2.9	* 0.566	37.4	LOS D	7.9	56.6	0.95	0.81	0.95	36.3
12	R2	All MCs	88	2.9	88	2.9	0.205	32.4	LOS C	2.8	20.2	0.84	0.75	0.84	38.2
Approach			307	2.9	307	2.9	0.566	35.9	LOS D	7.9	56.6	0.92	0.80	0.92	36.9
All Vehicles			1746	2.9	1746	2.9	0.588	22.7	LOS C	11.8	84.8	0.73	0.68	0.73	43.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Suncoast Beach Drive (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Suncoast Beach Drive
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	158	3.1	158	3.1	0.117	7.2	LOS A	1.2	8.4	0.28	0.62	0.28	51.8
2	T1	All MCs	336	3.1	336	3.1	* 0.451	30.3	LOS C	6.4	46.0	0.91	0.74	0.91	40.2
Approach			494	3.1	494	3.1	0.451	22.9	LOS C	6.4	46.0	0.71	0.70	0.71	43.3
North: David Low Way (North)															
8	T1	All MCs	498	3.1	498	3.1	0.242	10.5	LOS B	5.1	36.9	0.57	0.48	0.57	51.2
9	R2	All MCs	207	3.1	207	3.1	* 0.457	33.6	LOS C	7.0	50.4	0.90	0.80	0.90	37.6
Approach			705	3.1	705	3.1	0.457	17.3	LOS B	7.0	50.4	0.66	0.57	0.66	46.3
West: Suncoast Beach Drive															
10	L2	All MCs	234	3.1	234	3.1	* 0.447	31.5	LOS C	7.6	54.6	0.87	0.80	0.87	38.6
12	R2	All MCs	116	3.1	116	3.1	0.204	27.5	LOS C	3.3	24.1	0.77	0.75	0.77	40.2
Approach			349	3.1	349	3.1	0.447	30.2	LOS C	7.6	54.6	0.84	0.78	0.84	39.1
All Vehicles			1548	3.1	1548	3.1	0.457	22.0	LOS C	7.6	54.6	0.72	0.66	0.72	43.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Suncoast Beach Drive (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Suncoast Beach Drive
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	147	3.1	147	3.1	0.111	7.4	LOS A	1.2	8.4	0.29	0.62	0.29	51.6
2	T1	All MCs	337	3.1	337	3.1	* 0.453	30.3	LOS C	6.4	46.2	0.91	0.74	0.91	40.2
Approach			484	3.1	484	3.1	0.453	23.3	LOS C	6.4	46.2	0.72	0.71	0.72	43.1
North: David Low Way (North)															
8	T1	All MCs	519	3.1	519	3.1	0.247	10.0	LOS B	5.2	37.6	0.55	0.47	0.55	51.5
9	R2	All MCs	219	3.1	219	3.1	* 0.459	32.8	LOS C	7.3	52.6	0.89	0.80	0.89	37.9
Approach			738	3.1	738	3.1	0.459	16.8	LOS B	7.3	52.6	0.65	0.57	0.65	46.6
West: Suncoast Beach Drive															
10	L2	All MCs	234	3.1	234	3.1	* 0.468	32.5	LOS C	7.7	55.6	0.88	0.80	0.88	38.2
12	R2	All MCs	111	3.1	111	3.1	0.203	28.3	LOS C	3.2	23.3	0.78	0.75	0.78	39.9
Approach			344	3.1	344	3.1	0.468	31.1	LOS C	7.7	55.6	0.85	0.79	0.85	38.7
All Vehicles			1566	3.1	1566	3.1	0.468	21.9	LOS C	7.7	55.6	0.72	0.66	0.72	43.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

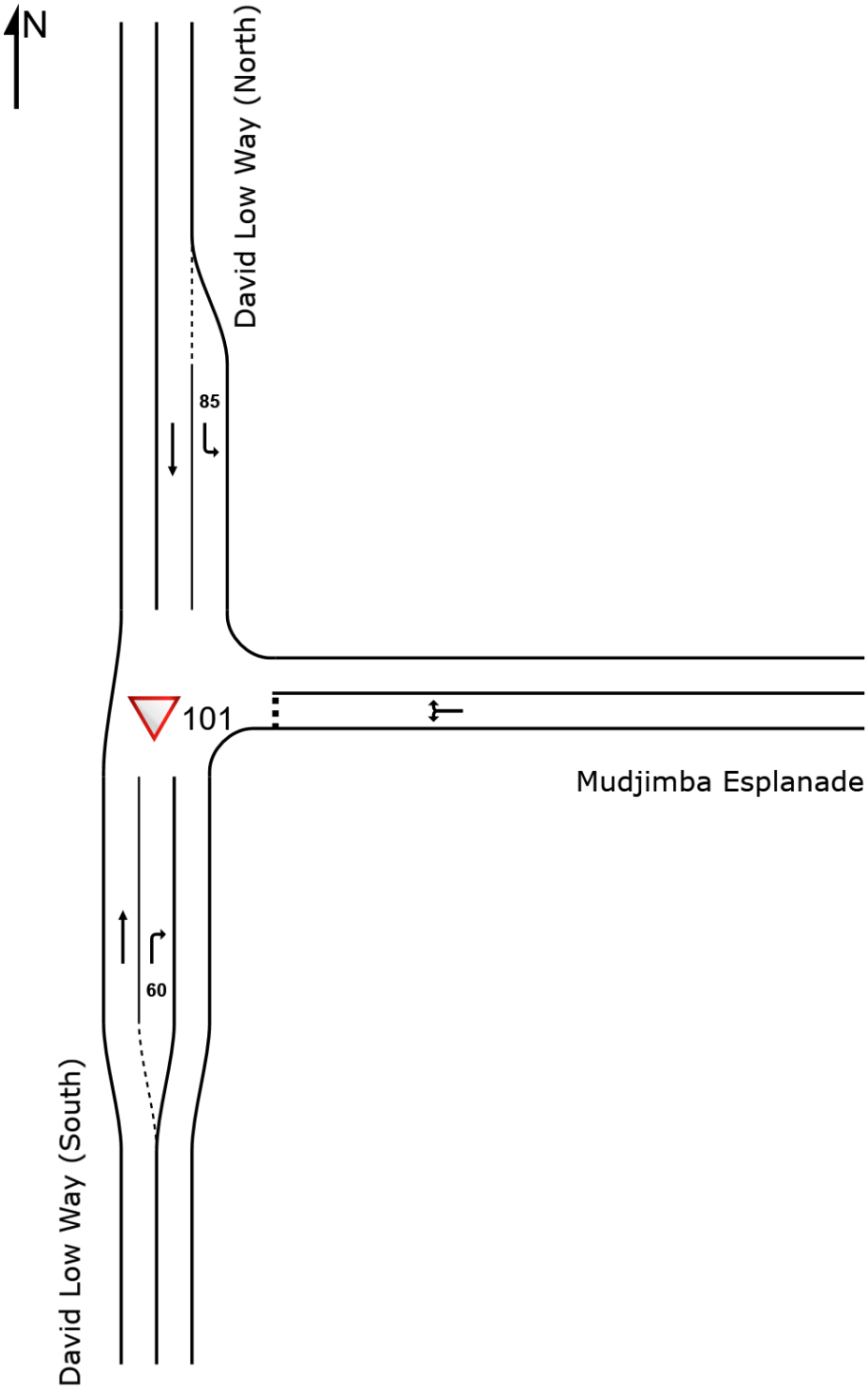
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SITE LAYOUT

Site: 101 [David Low Way / Mudjimba Esplanade (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Pre Development Conditions
Site Category: (None)
Give-Way (Two-Way)

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



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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA \SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Esplanade (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Pre Development Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	328	2.9	328	2.9	0.172	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	31	2.9	31	2.9	0.041	8.6	LOS A	0.2	1.1	0.53	0.72	0.53	50.3
Approach			359	2.9	359	2.9	0.172	0.8	NA	0.2	1.1	0.04	0.06	0.04	59.0
East: Mudjimba Esplanade															
4	L2	All MCs	46	2.9	46	2.9	0.273	9.1	LOS A	1.1	7.7	0.70	0.91	0.81	46.4
6	R2	All MCs	59	2.9	59	2.9	0.273	19.6	LOS C	1.1	7.7	0.70	0.91	0.81	46.3
Approach			105	2.9	105	2.9	0.273	15.0	LOS B	1.1	7.7	0.70	0.91	0.81	46.4
North: David Low Way (North)															
7	L2	All MCs	91	2.9	91	2.9	0.050	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	478	2.9	478	2.9	0.250	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			568	2.9	568	2.9	0.250	0.9	NA	0.0	0.0	0.00	0.09	0.00	58.6
All Vehicles			1033	2.9	1033	2.9	0.273	2.3	NA	1.1	7.7	0.09	0.16	0.10	57.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Esplanade (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	335	2.9	335	2.9	0.175	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	31	2.9	31	2.9	0.043	8.8	LOS A	0.2	1.1	0.54	0.73	0.54	50.1
Approach			365	2.9	365	2.9	0.175	0.8	NA	0.2	1.1	0.04	0.06	0.04	59.0
East: Mudjimba Esplanade															
4	L2	All MCs	54	2.9	54	2.9	0.311	9.7	LOS A	1.3	9.1	0.72	0.93	0.88	45.9
6	R2	All MCs	62	2.9	62	2.9	0.311	21.3	LOS C	1.3	9.1	0.72	0.93	0.88	45.8
Approach			116	2.9	116	2.9	0.311	15.9	LOS C	1.3	9.1	0.72	0.93	0.88	45.9
North: David Low Way (North)															
7	L2	All MCs	88	2.9	88	2.9	0.049	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	503	2.9	503	2.9	0.263	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			592	2.9	592	2.9	0.263	0.9	NA	0.0	0.0	0.00	0.09	0.00	58.7
All Vehicles			1073	2.9	1073	2.9	0.311	2.5	NA	1.3	9.1	0.09	0.17	0.11	57.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Esplanade (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	662	2.9	662	2.9	0.346	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	29	2.9	29	2.9	0.080	14.3	LOS B	0.3	1.9	0.75	0.90	0.75	46.6
Approach			692	2.9	692	2.9	0.346	0.7	NA	0.3	1.9	0.03	0.04	0.03	59.1
East: Mudjimba Esplanade															
4	L2	All MCs	47	2.9	47	2.9	1.599	570.2	LOS F	30.8	221.2	1.00	2.95	8.95	5.4
6	R2	All MCs	72	2.9	72	2.9	1.599	639.2	LOS F	30.8	221.2	1.00	2.95	8.95	5.4
Approach			119	2.9	119	2.9	1.599	611.7	LOS F	30.8	221.2	1.00	2.95	8.95	5.4
North: David Low Way (North)															
7	L2	All MCs	117	2.9	117	2.9	0.064	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	854	2.9	854	2.9	0.446	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			971	2.9	971	2.9	0.446	0.8	NA	0.0	0.0	0.00	0.07	0.00	58.7
All Vehicles			1781	2.9	1781	2.9	1.599	41.6	NA	30.8	221.2	0.08	0.25	0.61	35.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Esplanade (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 PM Peak Pre Development Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	580	3.1	580	3.1	0.303	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	49	3.1	49	3.1	0.061	8.1	LOS A	0.2	1.6	0.50	0.71	0.50	50.6
Approach			629	3.1	629	3.1	0.303	0.7	NA	0.2	1.6	0.04	0.06	0.04	59.0
East: Mudjimba Esplanade															
4	L2	All MCs	41	3.1	41	3.1	0.428	10.9	LOS B	1.8	13.0	0.80	1.02	1.13	41.9
6	R2	All MCs	71	3.1	71	3.1	0.428	30.8	LOS D	1.8	13.0	0.80	1.02	1.13	41.9
Approach			112	3.1	112	3.1	0.428	23.4	LOS C	1.8	13.0	0.80	1.02	1.13	41.9
North: David Low Way (North)															
7	L2	All MCs	112	3.1	112	3.1	0.061	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	387	3.1	387	3.1	0.203	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			499	3.1	499	3.1	0.203	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.1
All Vehicles			1240	3.1	1240	3.1	0.428	3.0	NA	1.8	13.0	0.09	0.17	0.12	56.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Esplanade (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	587	3.1	587	3.1	0.307	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	48	3.1	48	3.1	0.062	8.3	LOS A	0.2	1.7	0.52	0.72	0.52	50.4
Approach			636	3.1	636	3.1	0.307	0.7	NA	0.2	1.7	0.04	0.06	0.04	59.0
East: Mudjimba Esplanade															
4	L2	All MCs	54	3.1	54	3.1	0.500	12.3	LOS B	2.2	16.2	0.83	1.06	1.26	41.1
6	R2	All MCs	75	3.1	75	3.1	0.500	34.5	LOS D	2.2	16.2	0.83	1.06	1.26	41.0
Approach			128	3.1	128	3.1	0.500	25.2	LOS D	2.2	16.2	0.83	1.06	1.26	41.0
North: David Low Way (North)															
7	L2	All MCs	112	3.1	112	3.1	0.061	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	419	3.1	419	3.1	0.219	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			531	3.1	531	3.1	0.219	1.2	NA	0.0	0.0	0.00	0.12	0.00	58.2
All Vehicles			1295	3.1	1295	3.1	0.500	3.4	NA	2.2	16.2	0.10	0.18	0.14	56.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Esplanade (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	983	3.1	983	3.1	0.514	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
3	R2	All MCs	36	3.1	36	3.1	0.085	13.0	LOS B	0.3	2.1	0.71	0.89	0.71	47.4
Approach			1019	3.1	1019	3.1	0.514	0.7	NA	0.3	2.1	0.03	0.03	0.03	59.0
East: Mudjimba Esplanade															
4	L2	All MCs	38	3.1	38	3.1	4.007	2723.5	LOS F	62.9	451.9	1.00	2.76	8.40	1.3
6	R2	All MCs	92	3.1	92	3.1	4.007	2846.4	LOS F	62.9	451.9	1.00	2.76	8.40	1.3
Approach			129	3.1	129	3.1	4.007	2810.4	LOS F	62.9	451.9	1.00	2.76	8.40	1.3
North: David Low Way (North)															
7	L2	All MCs	149	3.1	149	3.1	0.082	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	761	3.1	761	3.1	0.398	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			911	3.1	911	3.1	0.398	1.0	NA	0.0	0.0	0.00	0.09	0.00	58.5
All Vehicles			2059	3.1	2059	3.1	4.007	177.5	NA	62.9	451.9	0.08	0.23	0.54	15.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Suncoast Beach Drive (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Suncoast Beach Drive
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	208	3.1	208	3.1	0.158	7.5	LOS A	1.7	12.5	0.30	0.63	0.30	51.6
2	T1	All MCs	373	3.1	373	3.1	* 0.473	29.6	LOS C	7.1	50.7	0.91	0.74	0.91	40.5
Approach			581	3.1	581	3.1	0.473	21.7	LOS C	7.1	50.7	0.69	0.70	0.69	43.9
North: David Low Way (North)															
8	T1	All MCs	592	3.1	592	3.1	0.275	9.7	LOS A	5.9	42.6	0.55	0.47	0.55	51.8
9	R2	All MCs	228	3.1	228	3.1	* 0.479	33.0	LOS C	7.7	55.2	0.89	0.81	0.89	37.9
Approach			820	3.1	820	3.1	0.479	16.2	LOS B	7.7	55.2	0.65	0.57	0.65	47.0
West: Suncoast Beach Drive															
10	L2	All MCs	231	3.1	231	3.1	* 0.483	33.5	LOS C	7.8	55.8	0.89	0.81	0.89	37.8
12	R2	All MCs	126	3.1	126	3.1	0.242	29.4	LOS C	3.8	27.5	0.81	0.76	0.81	39.4
Approach			357	3.1	357	3.1	0.483	32.0	LOS C	7.8	55.8	0.86	0.79	0.86	38.4
All Vehicles			1758	3.1	1758	3.1	0.483	21.2	LOS C	7.8	55.8	0.71	0.66	0.71	43.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

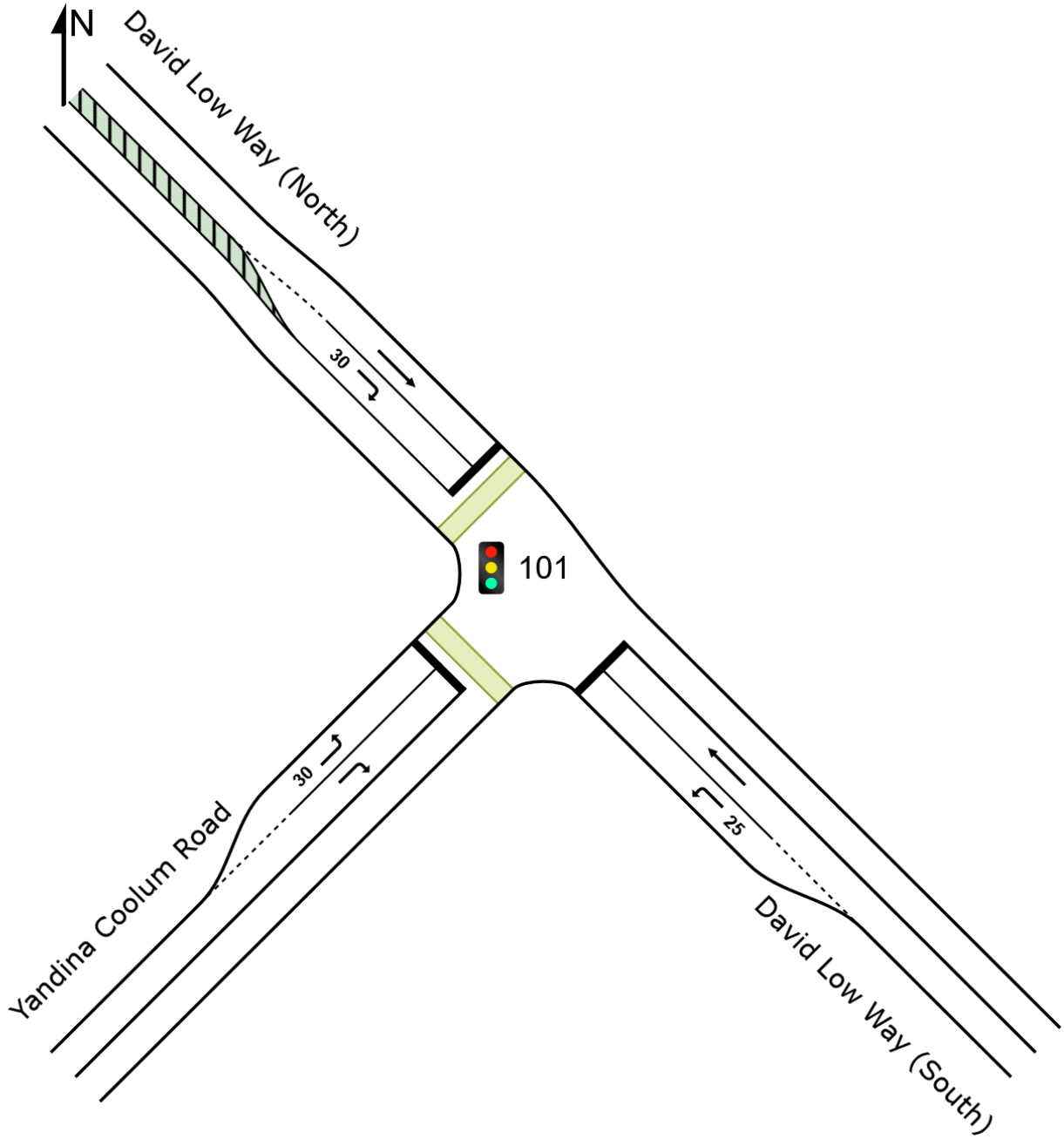
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SITE LAYOUT

Site: 101 [David Low Way / Yandina Coolum Road (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Yandina Coolum Road
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: 101 [David Low Way / Yandina Coolum Road (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Yandina Coolum Road
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: David Low Way (South)															
21	L2	All MCs	61	2.9	61	2.9	0.045	16.4	LOS B	0.7	5.4	0.27	0.63	0.27	50.3
22	T1	All MCs	581	2.9	581	2.9	* 0.541	20.0	LOS B	16.6	119.0	0.64	0.57	0.64	49.7
Approach			642	2.9	642	2.9	0.541	19.6	LOS B	16.6	119.0	0.60	0.58	0.60	45.2
NorthWest: David Low Way (North)															
28	T1	All MCs	411	2.9	411	2.9	0.282	3.9	LOS A	6.0	43.0	0.33	0.29	0.33	56.4
29	R2	All MCs	96	2.9	96	2.9	* 0.526	54.0	LOS D	4.7	33.5	0.99	0.78	0.99	31.0
Approach			506	2.9	506	2.9	0.526	13.3	LOS B	6.0	43.0	0.45	0.38	0.45	48.8
SouthWest: Yandina Coolum Road															
30	L2	All MCs	143	2.9	143	2.9	0.315	38.8	LOS D	5.7	41.2	0.86	0.78	0.86	35.7
32	R2	All MCs	65	2.9	65	2.9	* 0.299	50.4	LOS D	3.0	21.6	0.95	0.76	0.95	32.0
Approach			208	2.9	208	2.9	0.315	42.4	LOS D	5.7	41.2	0.89	0.77	0.89	34.4
All Vehicles			1357	2.9	1357	2.9	0.541	20.8	LOS C	16.6	119.0	0.59	0.54	0.59	44.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: David Low Way (North)												
P7	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
SouthWest: Yandina Coolum Road												
P8	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Yandina Coolum Road (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Yandina Coolum Road
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: David Low Way (South)															
21	L2	All MCs	84	2.9	84	2.9	0.062	16.6	LOS B	1.0	7.5	0.28	0.64	0.28	50.3
22	T1	All MCs	587	2.9	587	2.9	* 0.561	20.4	LOS C	17.1	122.4	0.65	0.58	0.65	49.6
Approach			672	2.9	672	2.9	0.561	19.9	LOS B	17.1	122.4	0.60	0.59	0.60	45.0
NorthWest: David Low Way (North)															
28	T1	All MCs	413	2.9	413	2.9	0.284	3.9	LOS A	6.0	43.3	0.33	0.29	0.33	56.4
29	R2	All MCs	98	2.9	98	2.9	* 0.538	54.0	LOS D	4.8	34.3	0.99	0.78	0.99	31.0
Approach			511	2.9	511	2.9	0.538	13.5	LOS B	6.0	43.3	0.46	0.38	0.46	48.7
SouthWest: Yandina Coolum Road															
30	L2	All MCs	119	2.9	119	2.9	0.261	38.2	LOS D	4.7	33.7	0.84	0.77	0.84	35.9
32	R2	All MCs	65	2.9	65	2.9	* 0.299	50.4	LOS D	3.0	21.6	0.95	0.76	0.95	32.0
Approach			184	2.9	184	2.9	0.299	42.5	LOS D	4.7	33.7	0.88	0.76	0.88	34.4
All Vehicles			1366	2.9	1366	2.9	0.561	20.6	LOS C	17.1	122.4	0.59	0.54	0.59	44.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: David Low Way (North)												
P7	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
SouthWest: Yandina Coolum Road												
P8	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Yandina Coolum Road (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Yandina Coolum Road
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: David Low Way (South)															
21	L2	All MCs	82	2.9	82	2.9	0.060	17.4	LOS B	1.0	7.3	0.28	0.64	0.28	50.3
22	T1	All MCs	632	2.9	632	2.9	* 0.601	21.7	LOS C	19.0	136.7	0.68	0.61	0.68	49.2
Approach			714	2.9	714	2.9	0.601	21.2	LOS C	19.0	136.7	0.63	0.61	0.63	44.3
NorthWest: David Low Way (North)															
28	T1	All MCs	459	2.9	459	2.9	0.316	4.0	LOS A	6.9	49.7	0.34	0.30	0.34	56.3
29	R2	All MCs	104	2.9	104	2.9	* 0.573	54.3	LOS D	5.1	36.8	1.00	0.79	1.01	30.9
Approach			563	2.9	563	2.9	0.573	13.3	LOS B	6.9	49.7	0.46	0.39	0.46	48.9
SouthWest: Yandina Coolum Road															
30	L2	All MCs	123	2.9	123	2.9	0.271	38.3	LOS D	4.9	35.0	0.85	0.77	0.85	35.8
32	R2	All MCs	67	2.9	67	2.9	* 0.309	50.4	LOS D	3.1	22.4	0.95	0.76	0.95	32.0
Approach			191	2.9	191	2.9	0.309	42.6	LOS D	4.9	35.0	0.88	0.77	0.88	34.4
All Vehicles			1467	2.9	1467	2.9	0.601	20.9	LOS C	19.0	136.7	0.60	0.55	0.60	44.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: David Low Way (North)												
P7	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
SouthWest: Yandina Coolum Road												
P8	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Yandina Coolum Road (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Yandina Coolum Road
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: David Low Way (South)															
21	L2	All MCs	69	3.1	69	3.1	0.052	15.6	LOS B	0.9	6.7	0.30	0.64	0.30	49.9
22	T1	All MCs	462	3.1	462	3.1	* 0.451	18.8	LOS B	12.7	91.0	0.61	0.54	0.61	49.6
Approach			532	3.1	532	3.1	0.451	18.4	LOS B	12.7	91.0	0.57	0.55	0.57	45.9
NorthWest: David Low Way (North)															
28	T1	All MCs	556	3.1	556	3.1	0.395	5.2	LOS A	9.1	65.5	0.37	0.33	0.37	56.0
29	R2	All MCs	92	3.1	92	3.1	* 0.420	52.1	LOS D	4.3	31.0	0.97	0.77	0.97	31.7
Approach			647	3.1	647	3.1	0.420	11.8	LOS B	9.1	65.5	0.45	0.40	0.45	50.0
SouthWest: Yandina Coolum Road															
30	L2	All MCs	65	3.1	65	3.1	0.133	35.4	LOS D	2.4	17.3	0.79	0.73	0.79	36.9
32	R2	All MCs	64	3.1	64	3.1	* 0.294	50.3	LOS D	3.0	21.3	0.95	0.75	0.95	32.0
Approach			129	3.1	129	3.1	0.294	42.8	LOS D	3.0	21.3	0.87	0.74	0.87	34.3
All Vehicles			1308	3.1	1308	3.1	0.451	17.5	LOS B	12.7	91.0	0.54	0.49	0.54	46.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: David Low Way (North)												
P7	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
SouthWest: Yandina Coolum Road												
P8	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Yandina Coolum Road (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Yandina Coolum Road
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: David Low Way (South)															
21	L2	All MCs	66	3.1	66	3.1	0.049	14.9	LOS B	0.8	6.1	0.28	0.64	0.28	50.1
22	T1	All MCs	459	3.1	459	3.1	* 0.438	17.6	LOS B	12.2	87.8	0.59	0.53	0.59	50.1
Approach			525	3.1	525	3.1	0.438	17.3	LOS B	12.2	87.8	0.55	0.54	0.55	46.5
NorthWest: David Low Way (North)															
28	T1	All MCs	563	3.1	563	3.1	0.400	5.3	LOS A	9.3	66.8	0.37	0.34	0.37	56.0
29	R2	All MCs	85	3.1	85	3.1	* 0.427	53.2	LOS D	4.1	29.2	0.98	0.77	0.98	31.4
Approach			648	3.1	648	3.1	0.427	11.6	LOS B	9.3	66.8	0.45	0.39	0.45	50.1
SouthWest: Yandina Coolum Road															
30	L2	All MCs	66	3.1	66	3.1	0.140	36.2	LOS D	2.5	17.9	0.80	0.74	0.80	36.6
32	R2	All MCs	64	3.1	64	3.1	* 0.294	50.3	LOS D	3.0	21.3	0.95	0.75	0.95	32.0
Approach			131	3.1	131	3.1	0.294	43.2	LOS D	3.0	21.3	0.88	0.75	0.88	34.2
All Vehicles			1304	3.1	1304	3.1	0.438	17.0	LOS B	12.2	87.8	0.54	0.49	0.54	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: David Low Way (North)												
P7	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
SouthWest: Yandina Coolum Road												
P8	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

MOVEMENT SUMMARY

Site: 101 [David Low Way / Yandina Coolum Road (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Yandina Coolum Road
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: David Low Way (South)															
21	L2	All MCs	54	3.1	54	3.1	0.041	16.7	LOS B	0.7	5.3	0.30	0.64	0.30	49.7
22	T1	All MCs	482	3.1	482	3.1	* 0.471	20.4	LOS C	13.7	98.2	0.63	0.56	0.63	49.1
Approach			536	3.1	536	3.1	0.471	20.0	LOS C	13.7	98.2	0.60	0.57	0.60	45.0
NorthWest: David Low Way (North)															
28	T1	All MCs	606	3.1	606	3.1	0.438	5.8	LOS A	10.4	75.1	0.39	0.35	0.39	55.8
29	R2	All MCs	106	3.1	106	3.1	* 0.450	51.7	LOS D	5.0	35.8	0.97	0.78	0.97	31.9
Approach			713	3.1	713	3.1	0.450	12.7	LOS B	10.4	75.1	0.48	0.42	0.48	49.3
SouthWest: Yandina Coolum Road															
30	L2	All MCs	107	3.1	107	3.1	0.211	35.3	LOS D	4.0	28.9	0.80	0.76	0.80	36.9
32	R2	All MCs	64	3.1	64	3.1	* 0.294	50.3	LOS D	3.0	21.3	0.95	0.75	0.95	32.0
Approach			172	3.1	172	3.1	0.294	41.0	LOS D	4.0	28.9	0.86	0.76	0.86	34.9
All Vehicles			1420	3.1	1420	3.1	0.471	18.9	LOS B	13.7	98.2	0.57	0.51	0.57	45.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: David Low Way (North)												
P7	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
SouthWest: Yandina Coolum Road												
P8	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

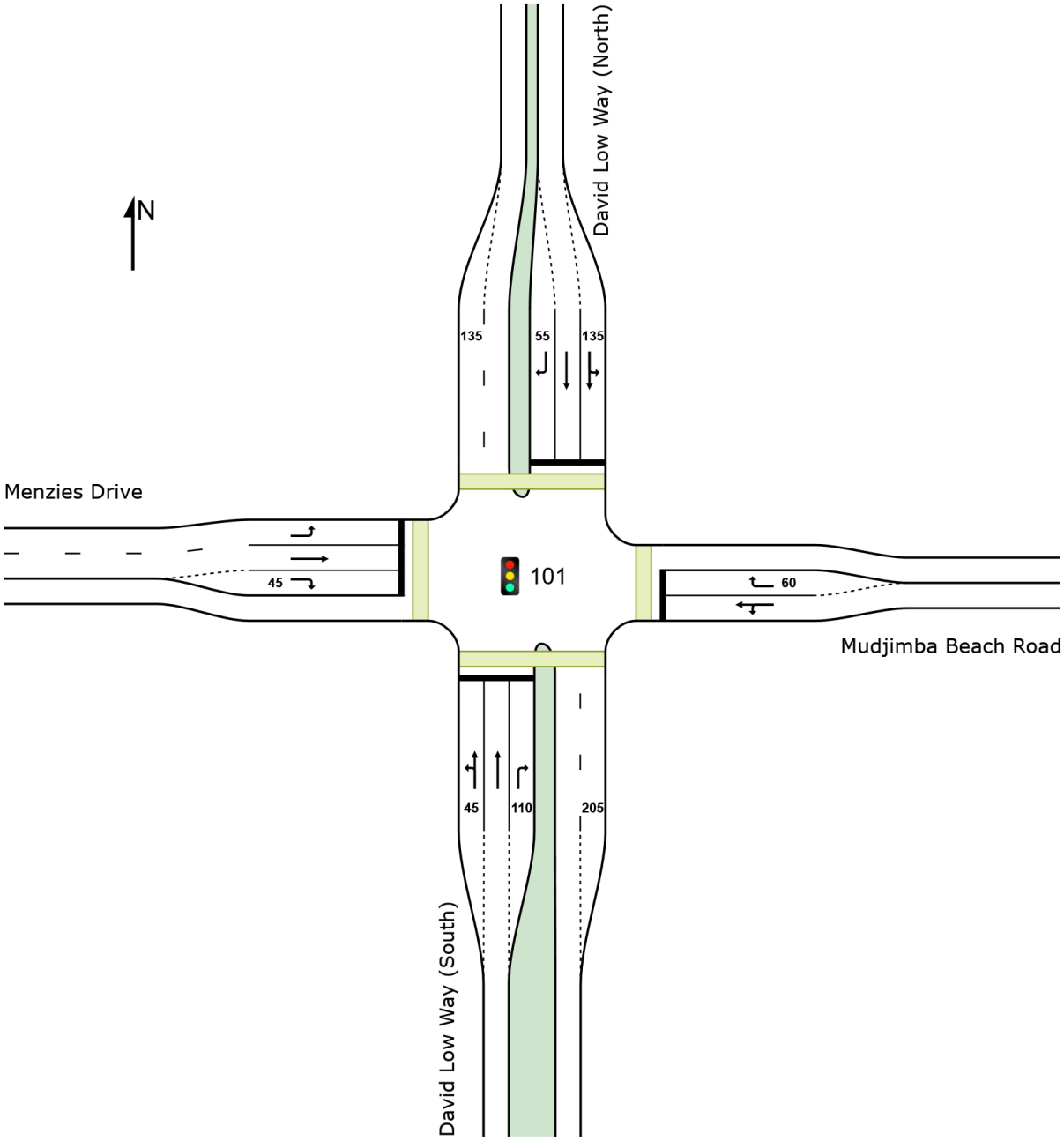
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SITE LAYOUT

Site: 101 [David Low Way / Mudjimba Beach Road / Menzies Drive (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Beach Road / Menzies Drive
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Beach Road / Menzies Drive (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Beach Road / Menzies Drive
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	1	2.9	1	2.9	0.070	24.1	LOS C	0.9	6.3	0.87	0.63	0.87	35.9
2	T1	All MCs	49	2.9	49	2.9	* 0.095	39.2	LOS D	1.2	8.8	0.88	0.64	0.88	36.7
3	R2	All MCs	139	2.9	139	2.9	0.477	48.0	LOS D	6.4	45.6	0.96	0.79	0.96	32.8
Approach			189	2.9	189	2.9	0.477	45.5	LOS D	6.4	45.6	0.94	0.75	0.94	33.8
East: Mudjimba Beach Road															
4	L2	All MCs	109	2.9	109	2.9	0.461	34.1	LOS C	8.0	57.6	0.92	0.78	0.92	35.2
5	T1	All MCs	77	2.9	77	2.9	* 0.461	49.3	LOS D	8.0	57.6	0.92	0.78	0.92	36.1
6	R2	All MCs	220	2.9	220	2.9	* 0.526	42.5	LOS D	9.6	68.6	0.93	0.81	0.93	34.5
Approach			406	2.9	406	2.9	0.526	41.5	LOS D	9.6	68.6	0.92	0.80	0.92	35.0
North: David Low Way (North)															
7	L2	All MCs	16	2.9	16	2.9	0.077	32.1	LOS C	1.0	7.3	0.86	0.68	0.86	35.0
8	T1	All MCs	33	2.9	33	2.9	0.077	43.5	LOS D	1.0	7.3	0.88	0.65	0.88	36.5
9	R2	All MCs	154	2.9	154	2.9	* 0.528	48.4	LOS D	7.1	50.9	0.97	0.80	0.97	32.8
Approach			202	2.9	202	2.9	0.528	46.3	LOS D	7.1	50.9	0.94	0.77	0.94	33.5
West: Menzies Drive															
10	L2	All MCs	102	2.9	102	2.9	0.140	26.4	LOS C	3.1	22.5	0.67	0.73	0.67	40.8
11	T1	All MCs	45	2.9	45	2.9	0.113	34.6	LOS C	1.8	12.9	0.84	0.64	0.84	38.4
12	R2	All MCs	11	2.9	11	2.9	0.025	37.5	LOS D	0.4	2.8	0.80	0.67	0.80	36.2
Approach			158	2.9	158	2.9	0.140	29.5	LOS C	3.1	22.5	0.73	0.70	0.73	39.7
All Vehicles			956	2.9	956	2.9	0.528	41.4	LOS D	9.6	68.6	0.90	0.77	0.90	35.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Mudjimba Beach Road												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Menzies Drive												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Beach Road / Menzies Drive (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Beach Road / Menzies Drive
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	1	2.9	1	2.9	0.098	24.1	LOS C	1.2	8.9	0.88	0.65	0.88	35.8
2	T1	All MCs	69	2.9	69	2.9	0.133	39.4	LOS D	1.7	12.4	0.89	0.66	0.89	36.6
3	R2	All MCs	89	2.9	89	2.9	0.307	46.6	LOS D	4.0	28.4	0.93	0.77	0.93	33.2
Approach			160	2.9	160	2.9	0.307	43.3	LOS D	4.0	28.4	0.91	0.72	0.91	34.6
East: Mudjimba Beach Road															
4	L2	All MCs	101	2.9	101	2.9	0.470	32.9	LOS C	8.0	57.7	0.91	0.78	0.91	35.5
5	T1	All MCs	86	2.9	86	2.9	*0.470	47.2	LOS D	8.0	57.7	0.91	0.78	0.91	36.5
6	R2	All MCs	222	2.9	222	2.9	*0.531	42.6	LOS D	9.7	69.4	0.93	0.81	0.93	34.5
Approach			409	2.9	409	2.9	0.531	41.2	LOS D	9.7	69.4	0.92	0.80	0.92	35.1
North: David Low Way (North)															
7	L2	All MCs	15	2.9	15	2.9	0.159	28.2	LOS C	2.0	14.5	0.90	0.70	0.90	34.8
8	T1	All MCs	81	2.9	81	2.9	*0.159	42.8	LOS D	2.1	14.9	0.90	0.68	0.90	36.1
9	R2	All MCs	152	2.9	152	2.9	*0.521	48.3	LOS D	7.0	50.1	0.96	0.80	0.96	32.8
Approach			247	2.9	247	2.9	0.521	45.3	LOS D	7.0	50.1	0.94	0.76	0.94	33.9
West: Menzies Drive															
10	L2	All MCs	144	2.9	144	2.9	0.198	27.0	LOS C	4.6	32.7	0.69	0.74	0.69	40.5
11	T1	All MCs	116	2.9	116	2.9	0.288	36.2	LOS D	4.8	34.5	0.88	0.71	0.88	37.7
12	R2	All MCs	9	2.9	9	2.9	0.023	37.5	LOS D	0.4	2.6	0.80	0.66	0.80	36.3
Approach			269	2.9	269	2.9	0.288	31.3	LOS C	4.8	34.5	0.78	0.72	0.78	39.1
All Vehicles			1086	2.9	1086	2.9	0.531	40.0	LOS D	9.7	69.4	0.89	0.76	0.89	35.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Mudjimba Beach Road												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Menzies Drive												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Beach Road / Menzies Drive (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Beach Road / Menzies Drive
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	2	2.9	2	2.9	0.110	30.5	LOS C	1.4	10.0	0.88	0.65	0.88	35.7
2	T1	All MCs	77	2.9	77	2.9	0.149	39.6	LOS D	2.0	14.0	0.89	0.67	0.89	36.5
3	R2	All MCs	119	2.9	119	2.9	0.327	43.1	LOS D	5.1	36.3	0.90	0.78	0.90	34.3
Approach			198	2.9	198	2.9	0.327	41.6	LOS D	5.1	36.3	0.90	0.73	0.90	35.1
East: Mudjimba Beach Road															
4	L2	All MCs	203	2.9	203	2.9	0.525	30.0	LOS C	11.4	81.9	0.88	0.80	0.88	36.8
5	T1	All MCs	76	2.9	76	2.9	*0.525	51.2	LOS D	11.4	81.9	0.88	0.80	0.88	37.9
6	R2	All MCs	132	2.9	132	2.9	*0.517	50.1	LOS D	6.2	44.3	0.97	0.79	0.97	32.2
Approach			411	2.9	411	2.9	0.525	40.3	LOS D	11.4	81.9	0.91	0.80	0.91	35.4
North: David Low Way (North)															
7	L2	All MCs	21	2.9	21	2.9	0.167	34.8	LOS C	2.1	15.2	0.89	0.70	0.89	34.8
8	T1	All MCs	80	2.9	80	2.9	*0.167	42.0	LOS D	2.2	15.7	0.90	0.69	0.90	36.1
9	R2	All MCs	187	2.9	187	2.9	*0.515	44.9	LOS D	8.3	59.8	0.94	0.81	0.94	33.8
Approach			288	2.9	288	2.9	0.515	43.3	LOS D	8.3	59.8	0.93	0.77	0.93	34.5
West: Menzies Drive															
10	L2	All MCs	137	2.9	137	2.9	0.153	20.8	LOS C	3.6	26.1	0.58	0.72	0.58	43.4
11	T1	All MCs	106	2.9	106	2.9	0.214	31.3	LOS C	4.1	29.3	0.82	0.66	0.82	39.7
12	R2	All MCs	6	2.9	6	2.9	0.025	45.9	LOS D	0.3	1.9	0.89	0.65	0.89	33.5
Approach			249	2.9	249	2.9	0.214	25.9	LOS C	4.1	29.3	0.69	0.69	0.69	41.5
All Vehicles			1146	2.9	1146	2.9	0.525	38.2	LOS D	11.4	81.9	0.87	0.76	0.87	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Mudjimba Beach Road												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Menzies Drive												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Beach Road / Menzies Drive (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Beach Road / Menzies Drive
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	2	3.1	2	3.1	0.097	27.1	LOS C	1.2	8.8	0.88	0.65	0.88	35.7
2	T1	All MCs	67	3.1	67	3.1	0.132	39.6	LOS D	1.7	12.3	0.89	0.66	0.89	36.6
3	R2	All MCs	117	3.1	117	3.1	0.338	44.1	LOS D	5.0	36.2	0.91	0.78	0.91	34.0
Approach			186	3.1	186	3.1	0.338	42.3	LOS D	5.0	36.2	0.90	0.73	0.90	34.9
East: Mudjimba Beach Road															
4	L2	All MCs	67	3.1	67	3.1	0.289	29.6	LOS C	4.9	35.1	0.86	0.74	0.86	36.4
5	T1	All MCs	54	3.1	54	3.1	0.289	46.3	LOS D	4.9	35.1	0.86	0.74	0.86	37.4
6	R2	All MCs	188	3.1	188	3.1	* 0.546	46.0	LOS D	8.5	61.2	0.95	0.81	0.95	33.4
Approach			309	3.1	309	3.1	0.546	42.5	LOS D	8.5	61.2	0.92	0.78	0.92	34.7
North: David Low Way (North)															
7	L2	All MCs	33	3.1	33	3.1	0.183	33.7	LOS C	2.4	17.2	0.89	0.72	0.89	34.8
8	T1	All MCs	80	3.1	80	3.1	* 0.183	43.4	LOS D	2.4	17.3	0.90	0.70	0.90	36.1
9	R2	All MCs	178	3.1	178	3.1	* 0.515	45.7	LOS D	8.0	57.4	0.95	0.81	0.95	33.6
Approach			291	3.1	291	3.1	0.515	43.7	LOS D	8.0	57.4	0.93	0.77	0.93	34.4
West: Menzies Drive															
10	L2	All MCs	201	3.1	201	3.1	0.251	24.9	LOS C	6.1	44.0	0.67	0.75	0.67	41.5
11	T1	All MCs	221	3.1	221	3.1	* 0.526	37.6	LOS D	9.7	69.5	0.93	0.78	0.93	37.2
12	R2	All MCs	19	3.1	19	3.1	0.055	41.5	LOS D	0.8	5.5	0.85	0.69	0.85	34.9
Approach			441	3.1	441	3.1	0.526	32.0	LOS C	9.7	69.5	0.81	0.76	0.81	38.9
All Vehicles			1227	3.1	1227	3.1	0.546	39.0	LOS D	9.7	69.5	0.88	0.76	0.88	36.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Mudjimba Beach Road												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Menzies Drive												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Beach Road / Menzies Drive (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Beach Road / Menzies Drive
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	1	3.1	1	3.1	0.112	31.0	LOS C	1.4	10.3	0.88	0.65	0.88	35.8
2	T1	All MCs	80	3.1	80	3.1	0.153	39.4	LOS D	2.0	14.4	0.89	0.67	0.89	36.5
3	R2	All MCs	185	3.1	185	3.1	* 0.486	43.7	LOS D	8.1	58.3	0.93	0.80	0.93	34.1
Approach			266	3.1	266	3.1	0.486	42.4	LOS D	8.1	58.3	0.92	0.76	0.92	34.8
East: Mudjimba Beach Road															
4	L2	All MCs	137	3.1	137	3.1	0.388	28.2	LOS C	7.9	56.5	0.85	0.77	0.85	37.2
5	T1	All MCs	63	3.1	63	3.1	0.388	49.0	LOS D	7.9	56.5	0.85	0.77	0.85	38.3
6	R2	All MCs	112	3.1	112	3.1	* 0.472	50.7	LOS D	5.2	37.7	0.97	0.78	0.97	32.1
Approach			312	3.1	312	3.1	0.472	40.5	LOS D	7.9	56.5	0.89	0.77	0.89	35.4
North: David Low Way (North)															
7	L2	All MCs	29	3.1	29	3.1	0.330	35.6	LOS D	4.3	31.2	0.93	0.74	0.93	34.3
8	T1	All MCs	169	3.1	169	3.1	* 0.330	43.1	LOS D	4.5	32.2	0.93	0.74	0.93	35.6
9	R2	All MCs	166	3.1	166	3.1	0.436	43.3	LOS D	7.2	51.7	0.92	0.80	0.92	34.3
Approach			365	3.1	365	3.1	0.436	42.6	LOS D	7.2	51.7	0.92	0.76	0.92	34.9
West: Menzies Drive															
10	L2	All MCs	132	3.1	132	3.1	0.145	20.2	LOS C	3.4	24.5	0.57	0.71	0.57	43.7
11	T1	All MCs	239	3.1	239	3.1	* 0.481	34.0	LOS C	10.0	71.6	0.90	0.75	0.90	38.6
12	R2	All MCs	23	3.1	23	3.1	0.098	47.8	LOS D	1.0	7.3	0.91	0.71	0.91	32.9
Approach			394	3.1	394	3.1	0.481	30.2	LOS C	10.0	71.6	0.79	0.74	0.79	39.7
All Vehicles			1337	3.1	1337	3.1	0.486	38.4	LOS D	10.0	71.6	0.88	0.76	0.88	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Mudjimba Beach Road												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Menzies Drive												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Mudjimba Beach Road / Menzies Drive (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Beach Road / Menzies Drive
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	2	3.1	2	3.1	0.111	27.8	LOS C	1.4	10.1	0.88	0.66	0.88	35.7
2	T1	All MCs	78	3.1	78	3.1	0.151	39.7	LOS D	2.0	14.2	0.89	0.67	0.89	36.5
3	R2	All MCs	154	3.1	154	3.1	0.498	47.2	LOS D	7.0	50.2	0.95	0.80	0.95	33.0
Approach			234	3.1	234	3.1	0.498	44.6	LOS D	7.0	50.2	0.93	0.75	0.93	34.1
East: Mudjimba Beach Road															
4	L2	All MCs	87	3.1	87	3.1	0.325	28.9	LOS C	6.1	43.8	0.84	0.74	0.84	37.1
5	T1	All MCs	67	3.1	67	3.1	0.325	42.9	LOS D	6.1	43.8	0.84	0.74	0.84	38.2
6	R2	All MCs	175	3.1	175	3.1	* 0.534	46.7	LOS D	7.9	57.1	0.96	0.81	0.96	33.2
Approach			329	3.1	329	3.1	0.534	41.2	LOS D	7.9	57.1	0.90	0.78	0.90	35.1
North: David Low Way (North)															
7	L2	All MCs	41	3.1	41	3.1	0.407	32.6	LOS C	5.4	38.8	0.94	0.76	0.94	34.3
8	T1	All MCs	204	3.1	204	3.1	* 0.407	44.3	LOS D	5.6	40.3	0.94	0.76	0.94	35.5
9	R2	All MCs	168	3.1	168	3.1	* 0.545	47.7	LOS D	7.7	55.6	0.96	0.81	0.96	33.0
Approach			414	3.1	414	3.1	0.545	44.5	LOS D	7.7	55.6	0.95	0.78	0.95	34.3
West: Menzies Drive															
10	L2	All MCs	164	3.1	164	3.1	0.201	23.7	LOS C	4.8	34.5	0.64	0.74	0.64	42.0
11	T1	All MCs	265	3.1	265	3.1	* 0.556	36.4	LOS D	11.4	82.0	0.92	0.78	0.92	38.0
12	R2	All MCs	14	3.1	14	3.1	0.042	43.0	LOS D	0.6	4.0	0.85	0.68	0.85	34.6
Approach			443	3.1	443	3.1	0.556	31.9	LOS C	11.4	82.0	0.82	0.76	0.82	39.0
All Vehicles			1420	3.1	1420	3.1	0.556	39.8	LOS D	11.4	82.0	0.89	0.77	0.89	35.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Mudjimba Beach Road												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Menzies Drive												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

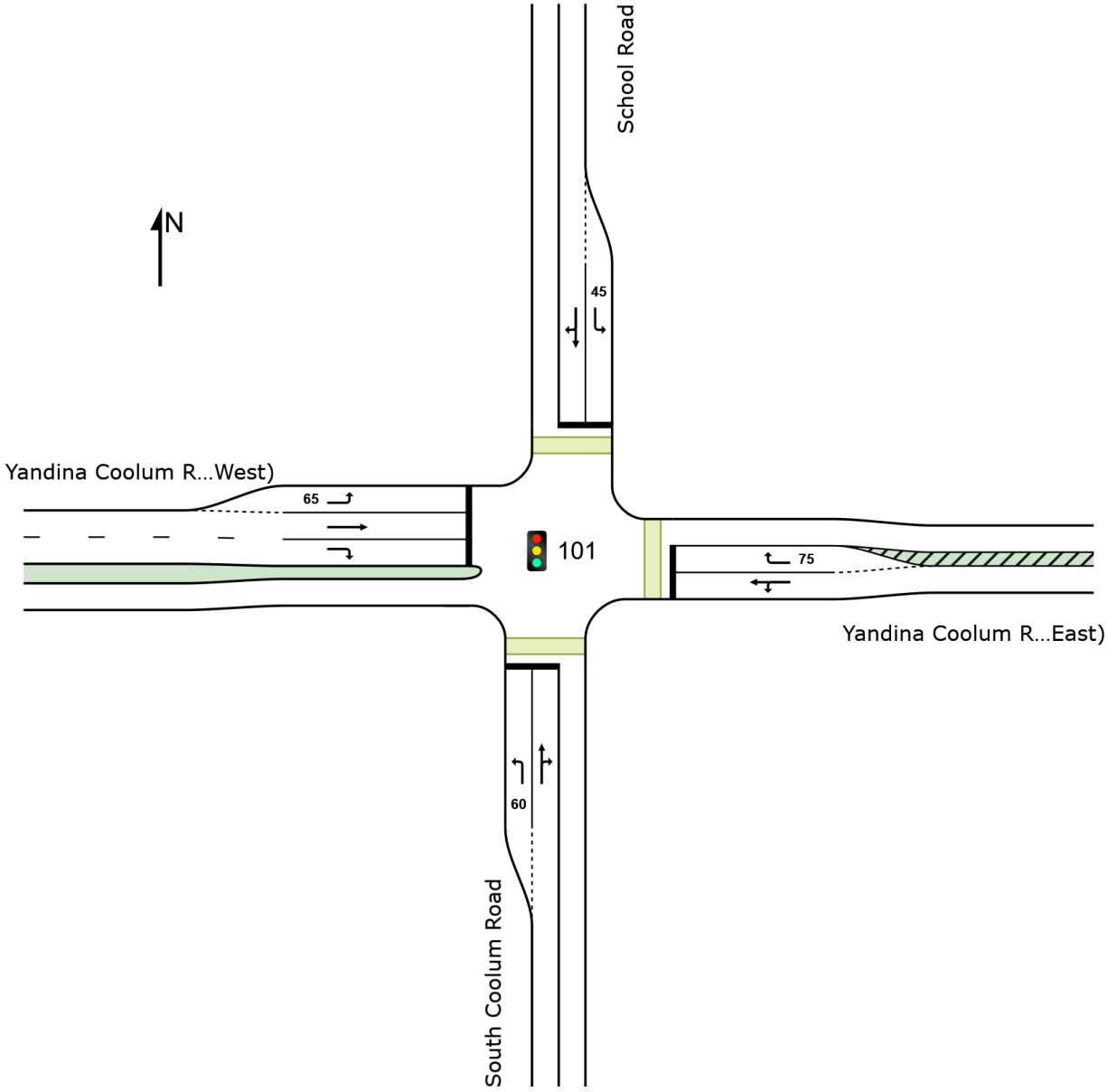
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SITE LAYOUT

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	521	2.9	521	2.9	0.951	92.5	LOS F	38.6	277.0	1.00	1.07	1.33	26.5
2	T1	All MCs	135	2.9	135	2.9	* 1.077	167.9	LOS F	14.6	105.1	1.00	1.29	2.02	17.3
3	R2	All MCs	19	2.9	19	2.9	1.077	173.5	LOS F	14.6	105.1	1.00	1.29	2.02	17.1
Approach			675	2.9	675	2.9	1.077	109.8	LOS F	38.6	277.0	1.00	1.12	1.49	21.1
East: Yandina Coolum Road (East)															
4	L2	All MCs	64	2.9	64	2.9	1.084	166.0	LOS F	71.9	515.8	1.00	1.62	1.83	17.8
5	T1	All MCs	649	2.9	649	2.9	* 1.084	160.5	LOS F	71.9	515.8	1.00	1.62	1.83	18.0
6	R2	All MCs	205	2.9	205	2.9	0.615	74.5	LOS E	11.3	80.8	0.97	0.82	0.97	30.7
Approach			919	2.9	919	2.9	1.084	141.7	LOS F	71.9	515.8	0.99	1.44	1.64	17.9
North: School Road															
7	L2	All MCs	168	2.9	168	2.9	0.271	36.2	LOS D	7.1	51.0	0.77	0.77	0.77	36.6
8	T1	All MCs	97	2.9	97	2.9	* 0.921	73.3	LOS E	12.9	92.3	1.00	1.07	1.42	26.7
9	R2	All MCs	89	2.9	89	2.9	0.921	78.9	LOS E	12.9	92.3	1.00	1.07	1.42	26.2
Approach			355	2.9	355	2.9	0.921	57.1	LOS E	12.9	92.3	0.89	0.93	1.11	30.5
West: Yandina Coolum Road (West)															
10	L2	All MCs	116	2.9	116	2.9	0.147	34.0	LOS C	4.0	29.0	0.64	0.73	0.64	40.1
11	T1	All MCs	481	2.9	481	2.9	0.620	34.8	LOS C	21.6	155.1	0.83	0.74	0.83	41.0
12	R2	All MCs	425	2.9	425	2.9	* 1.079	151.4	LOS F	41.7	299.2	1.00	1.27	1.88	17.0
Approach			1022	2.9	1022	2.9	1.079	83.2	LOS F	41.7	299.2	0.88	0.96	1.25	25.1
All Vehicles			2971	2.9	2971	2.9	1.084	104.2	LOS F	71.9	515.8	0.94	1.14	1.41	21.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												
P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

East: Yandina Coolum Road (East)											
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road											
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	581	2.9	581	2.9	* 1.049	146.6	LOS F	54.5	391.0	1.00	1.25	1.70	19.4
2	T1	All MCs	142	2.9	142	2.9	1.051	150.8	LOS F	14.9	106.8	1.00	1.26	1.89	19.1
3	R2	All MCs	24	2.9	24	2.9	1.051	156.4	LOS F	14.9	106.8	1.00	1.26	1.89	18.9
Approach			747	2.9	747	2.9	1.051	147.7	LOS F	54.5	391.0	1.00	1.25	1.74	17.3
East: Yandina Coolum Road (East)															
4	L2	All MCs	81	2.9	81	2.9	1.093	173.1	LOS F	72.7	521.5	1.00	1.64	1.87	17.2
5	T1	All MCs	628	2.9	628	2.9	* 1.093	167.5	LOS F	72.7	521.5	1.00	1.64	1.87	17.4
6	R2	All MCs	194	2.9	194	2.9	0.639	76.8	LOS E	10.8	77.6	0.99	0.82	0.99	30.2
Approach			903	2.9	903	2.9	1.093	148.6	LOS F	72.7	521.5	1.00	1.46	1.68	17.4
North: School Road															
7	L2	All MCs	171	2.9	171	2.9	0.288	37.9	LOS D	7.4	53.1	0.79	0.78	0.79	36.0
8	T1	All MCs	95	2.9	95	2.9	* 0.911	71.6	LOS E	12.6	90.0	1.00	1.05	1.39	27.1
9	R2	All MCs	89	2.9	89	2.9	0.911	77.2	LOS E	12.6	90.0	1.00	1.05	1.39	26.5
Approach			355	2.9	355	2.9	0.911	56.8	LOS E	12.6	90.0	0.90	0.92	1.10	30.5
West: Yandina Coolum Road (West)															
10	L2	All MCs	121	2.9	121	2.9	0.151	32.8	LOS C	4.2	29.9	0.63	0.73	0.63	40.4
11	T1	All MCs	478	2.9	478	2.9	0.603	33.2	LOS C	21.1	151.3	0.82	0.72	0.82	41.5
12	R2	All MCs	426	2.9	426	2.9	1.081	153.4	LOS F	42.0	301.7	1.00	1.27	1.89	16.8
Approach			1025	2.9	1025	2.9	1.081	83.1	LOS F	42.0	301.7	0.87	0.95	1.24	25.1
All Vehicles			3031	2.9	3031	2.9	1.093	115.5	LOS F	72.7	521.5	0.94	1.18	1.48	20.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												
P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

East: Yandina Coolum Road (East)											
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road											
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	574	2.9	574	2.9	1.038	138.8	LOS F	52.6	377.1	1.00	1.23	1.65	20.1
2	T1	All MCs	138	2.9	138	2.9	* 1.059	156.5	LOS F	15.3	109.7	1.00	1.28	1.93	18.5
3	R2	All MCs	29	2.9	29	2.9	1.059	162.0	LOS F	15.3	109.7	1.00	1.28	1.93	18.3
Approach			741	2.9	741	2.9	1.059	143.0	LOS F	52.6	377.1	1.00	1.24	1.71	17.7
East: Yandina Coolum Road (East)															
4	L2	All MCs	71	2.9	71	2.9	1.081	164.4	LOS F	70.5	505.5	1.00	1.60	1.82	17.9
5	T1	All MCs	634	2.9	634	2.9	* 1.081	158.8	LOS F	70.5	505.5	1.00	1.60	1.82	18.2
6	R2	All MCs	188	2.9	188	2.9	0.621	76.3	LOS E	10.5	75.2	0.98	0.82	0.98	30.3
Approach			893	2.9	893	2.9	1.081	141.8	LOS F	70.5	505.5	1.00	1.44	1.64	17.9
North: School Road															
7	L2	All MCs	171	2.9	171	2.9	0.288	37.9	LOS D	7.4	53.1	0.79	0.78	0.79	36.0
8	T1	All MCs	95	2.9	95	2.9	* 0.911	71.6	LOS E	12.6	90.0	1.00	1.05	1.39	27.1
9	R2	All MCs	89	2.9	89	2.9	0.911	77.2	LOS E	12.6	90.0	1.00	1.05	1.39	26.5
Approach			355	2.9	355	2.9	0.911	56.8	LOS E	12.6	90.0	0.90	0.92	1.10	30.5
West: Yandina Coolum Road (West)															
10	L2	All MCs	129	2.9	129	2.9	0.161	33.7	LOS C	4.5	32.2	0.64	0.73	0.64	40.4
11	T1	All MCs	491	2.9	491	2.9	0.626	34.3	LOS C	21.9	157.4	0.83	0.74	0.83	41.3
12	R2	All MCs	433	2.9	433	2.9	* 1.097	165.6	LOS F	44.2	317.0	1.00	1.30	1.96	15.9
Approach			1053	2.9	1053	2.9	1.097	88.2	LOS F	44.2	317.0	0.88	0.97	1.27	24.2
All Vehicles			3041	2.9	3041	2.9	1.097	113.6	LOS F	70.5	505.5	0.94	1.17	1.47	20.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												
P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

East: Yandina Coolum Road (East)											
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road											
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	495	3.1	495	3.1	0.641	40.1	LOS D	22.0	158.3	0.82	0.83	0.82	38.1
2	T1	All MCs	44	3.1	44	3.1	* 0.973	95.6	LOS F	10.1	72.8	1.00	1.11	1.63	24.0
3	R2	All MCs	91	3.1	91	3.1	0.973	101.2	LOS F	10.1	72.8	1.00	1.11	1.63	23.5
Approach			629	3.1	629	3.1	0.973	52.8	LOS D	22.0	158.3	0.86	0.89	1.00	31.4
East: Yandina Coolum Road (East)															
4	L2	All MCs	82	3.1	82	3.1	1.065	156.1	LOS F	52.4	376.4	1.00	1.52	1.78	18.6
5	T1	All MCs	466	3.1	466	3.1	* 1.065	150.5	LOS F	52.4	376.4	1.00	1.52	1.78	18.9
6	R2	All MCs	58	3.1	58	3.1	0.637	89.8	LOS F	3.6	26.0	1.00	0.80	1.11	27.0
Approach			606	3.1	606	3.1	1.065	145.5	LOS F	52.4	376.4	1.00	1.45	1.71	17.6
North: School Road															
7	L2	All MCs	97	3.1	97	3.1	0.256	48.6	LOS D	4.8	34.3	0.88	0.77	0.88	32.5
8	T1	All MCs	57	3.1	57	3.1	* 0.328	54.9	LOS D	3.8	27.0	0.96	0.74	0.96	31.4
9	R2	All MCs	11	3.1	11	3.1	0.328	60.5	LOS E	3.8	27.0	0.96	0.74	0.96	30.7
Approach			164	3.1	164	3.1	0.328	51.6	LOS D	4.8	34.3	0.91	0.76	0.91	32.0
West: Yandina Coolum Road (West)															
10	L2	All MCs	5	3.1	5	3.1	0.005	23.7	LOS C	0.1	0.9	0.45	0.62	0.45	45.1
11	T1	All MCs	657	3.1	657	3.1	0.608	24.7	LOS C	25.0	180.0	0.71	0.65	0.71	46.2
12	R2	All MCs	643	3.1	643	3.1	* 1.062	132.7	LOS F	61.3	440.4	1.00	1.25	1.74	18.6
Approach			1305	3.1	1305	3.1	1.062	77.9	LOS E	61.3	440.4	0.85	0.95	1.22	26.0
All Vehicles			2705	3.1	2705	3.1	1.065	85.6	LOS F	61.3	440.4	0.89	1.04	1.26	24.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												
P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

East: Yandina Coolum Road (East)											
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road											
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	498	3.1	498	3.1	0.649	40.5	LOS D	22.3	160.1	0.83	0.84	0.83	38.1
2	T1	All MCs	46	3.1	46	3.1	* 1.034	126.6	LOS F	12.3	88.5	1.00	1.21	1.85	20.0
3	R2	All MCs	97	3.1	97	3.1	1.034	132.1	LOS F	12.3	88.5	1.00	1.21	1.85	19.6
Approach			641	3.1	641	3.1	1.034	60.5	LOS E	22.3	160.1	0.87	0.92	1.06	29.5
East: Yandina Coolum Road (East)															
4	L2	All MCs	63	3.1	63	3.1	1.038	137.0	LOS F	48.3	347.2	1.00	1.44	1.66	20.5
5	T1	All MCs	473	3.1	473	3.1	* 1.038	131.4	LOS F	48.3	347.2	1.00	1.44	1.66	20.8
6	R2	All MCs	56	3.1	56	3.1	0.614	88.8	LOS F	3.5	25.0	1.00	0.79	1.09	27.1
Approach			592	3.1	592	3.1	1.038	128.0	LOS F	48.3	347.2	1.00	1.38	1.60	19.3
North: School Road															
7	L2	All MCs	98	3.1	98	3.1	0.259	48.7	LOS D	4.8	34.7	0.88	0.77	0.88	32.5
8	T1	All MCs	55	3.1	55	3.1	* 0.318	54.8	LOS D	3.6	26.1	0.96	0.74	0.96	31.4
9	R2	All MCs	11	3.1	11	3.1	0.318	60.4	LOS E	3.6	26.1	0.96	0.74	0.96	30.7
Approach			163	3.1	163	3.1	0.318	51.5	LOS D	4.8	34.7	0.91	0.76	0.91	32.0
West: Yandina Coolum Road (West)															
10	L2	All MCs	6	3.1	6	3.1	0.006	23.8	LOS C	0.2	1.1	0.45	0.63	0.45	45.1
11	T1	All MCs	658	3.1	658	3.1	0.610	24.7	LOS C	25.1	180.5	0.72	0.65	0.72	46.2
12	R2	All MCs	646	3.1	646	3.1	* 1.067	136.4	LOS F	62.3	447.6	1.00	1.26	1.76	18.2
Approach			1311	3.1	1311	3.1	1.067	79.8	LOS E	62.3	447.6	0.85	0.95	1.23	25.7
All Vehicles			2706	3.1	2706	3.1	1.067	84.1	LOS F	62.3	447.6	0.89	1.03	1.25	24.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												
P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

East: Yandina Coolum Road (East)											
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road											
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	535	3.1	535	3.1	0.718	44.9	LOS D	25.2	181.3	0.87	0.85	0.87	37.3
2	T1	All MCs	54	3.1	54	3.1	* 0.985	102.8	LOS F	10.6	75.9	1.00	1.13	1.67	23.4
3	R2	All MCs	83	3.1	83	3.1	0.985	108.4	LOS F	10.6	75.9	1.00	1.13	1.67	22.9
Approach			672	3.1	672	3.1	0.985	57.4	LOS E	25.2	181.3	0.90	0.91	1.04	30.2
East: Yandina Coolum Road (East)															
4	L2	All MCs	105	3.1	105	3.1	1.078	166.8	LOS F	56.6	406.6	1.00	1.56	1.83	17.7
5	T1	All MCs	469	3.1	469	3.1	* 1.078	161.2	LOS F	56.6	406.6	1.00	1.56	1.83	18.0
6	R2	All MCs	48	3.1	48	3.1	0.533	89.9	LOS F	3.0	21.5	1.00	0.76	1.02	27.2
Approach			623	3.1	623	3.1	1.078	156.6	LOS F	56.6	406.6	1.00	1.50	1.77	16.7
North: School Road															
7	L2	All MCs	99	3.1	99	3.1	0.261	48.7	LOS D	4.9	35.1	0.88	0.77	0.88	32.5
8	T1	All MCs	53	3.1	53	3.1	* 0.308	54.7	LOS D	3.5	25.3	0.96	0.74	0.96	31.4
9	R2	All MCs	11	3.1	11	3.1	0.308	60.3	LOS E	3.5	25.3	0.96	0.74	0.96	30.7
Approach			162	3.1	162	3.1	0.308	51.4	LOS D	4.9	35.1	0.91	0.76	0.91	32.0
West: Yandina Coolum Road (West)															
10	L2	All MCs	6	3.1	6	3.1	0.006	23.4	LOS C	0.2	1.1	0.45	0.63	0.45	45.1
11	T1	All MCs	645	3.1	645	3.1	0.598	24.1	LOS C	24.4	175.2	0.71	0.64	0.71	46.3
12	R2	All MCs	629	3.1	629	3.1	* 1.066	136.1	LOS F	60.5	434.7	1.00	1.26	1.76	18.3
Approach			1281	3.1	1281	3.1	1.066	79.2	LOS E	60.5	434.7	0.85	0.95	1.22	25.8
All Vehicles			2738	3.1	2738	3.1	1.078	89.8	LOS F	60.5	434.7	0.90	1.05	1.28	24.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												
P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

East: Yandina Coolum Road (East)											
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road											
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

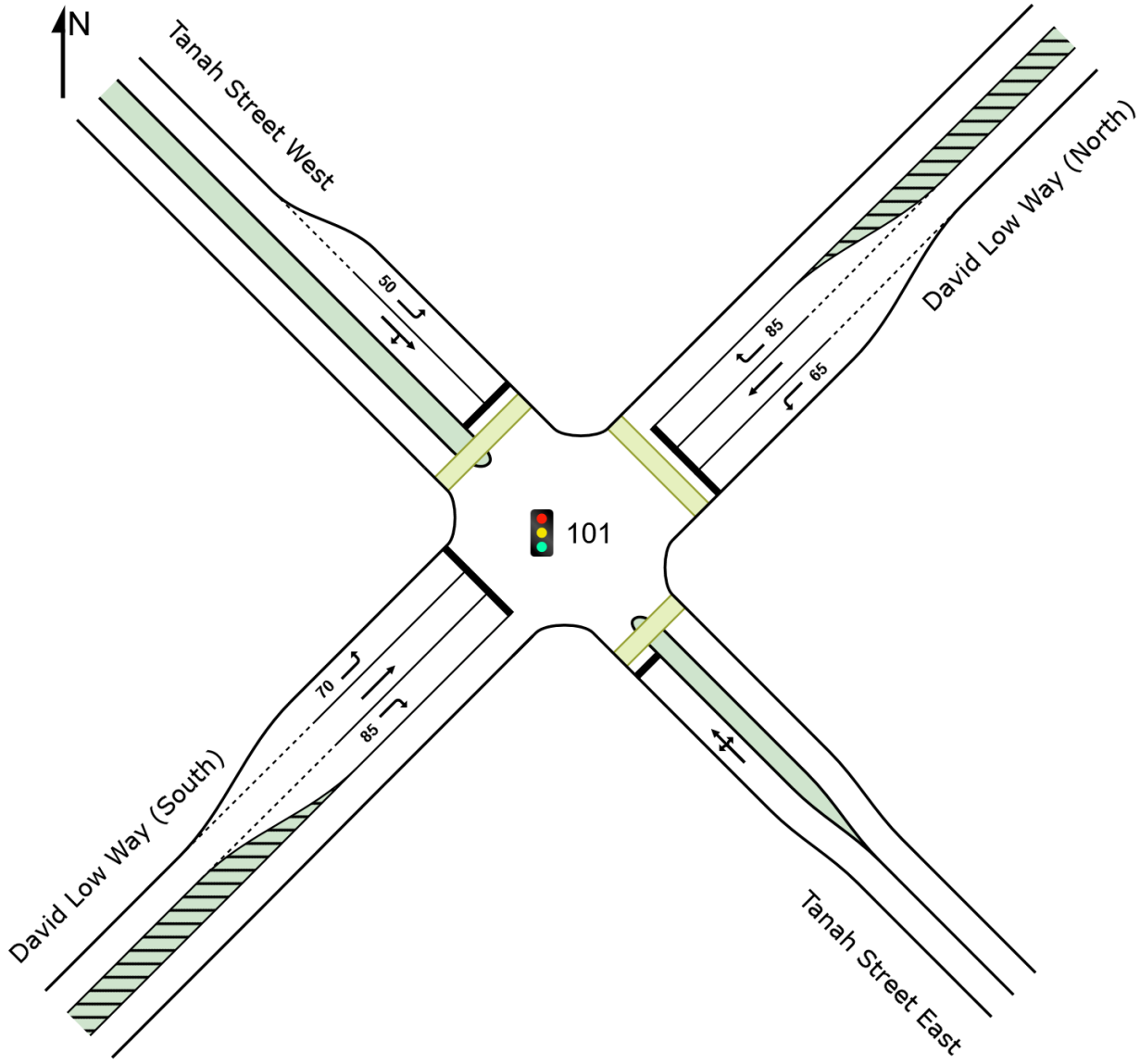
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SITE LAYOUT

Site: 101 [David Low Way / Tanah Street West / Tanah Street East (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Tanah Street West / Tanah Street East
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA \SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101 [David Low Way / Tanah Street West / Tanah Street East (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Tanah Street West / Tanah Street East
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tanah Street East															
21	L2	All MCs	25	2.9	25	2.9	*0.398	21.7	LOS C	1.8	13.1	0.98	0.74	0.98	38.9
22	T1	All MCs	17	2.9	17	2.9	*0.398	33.6	LOS C	1.8	13.1	0.98	0.74	0.98	40.1
23	R2	All MCs	18	2.9	18	2.9	0.398	39.2	LOS D	1.8	13.1	0.98	0.74	0.98	39.0
Approach			60	2.9	60	2.9	0.398	30.3	LOS C	1.8	13.1	0.98	0.74	0.98	39.2
NorthEast: David Low Way (North)															
24	L2	All MCs	9	2.9	9	2.9	0.009	17.4	LOS B	0.2	1.3	0.46	0.63	0.46	46.5
25	T1	All MCs	537	2.9	537	2.9	*0.633	23.2	LOS C	18.2	130.7	0.83	0.74	0.83	44.7
26	R2	All MCs	53	2.9	53	2.9	0.434	52.5	LOS D	2.4	17.2	1.00	0.74	1.00	31.5
Approach			599	2.9	599	2.9	0.633	25.7	LOS C	18.2	130.7	0.84	0.73	0.84	42.1
NorthWest: Tanah Street West															
27	L2	All MCs	67	2.9	67	2.9	0.139	32.8	LOS C	2.3	16.3	0.80	0.74	0.80	37.9
28	T1	All MCs	11	2.9	11	2.9	*0.444	38.4	LOS D	5.2	37.4	0.95	0.78	0.95	35.0
29	R2	All MCs	116	2.9	116	2.9	0.444	44.0	LOS D	5.2	37.4	0.95	0.78	0.95	34.2
Approach			194	2.9	194	2.9	0.444	39.8	LOS D	5.2	37.4	0.90	0.77	0.90	35.4
SouthWest: David Low Way (South)															
30	L2	All MCs	31	2.9	31	2.9	0.029	10.0	LOS A	0.3	2.1	0.45	0.65	0.45	49.6
31	T1	All MCs	482	2.9	482	2.9	0.567	20.0	LOS B	15.7	112.7	0.80	0.70	0.80	45.2
32	R2	All MCs	21	2.9	21	2.9	0.174	51.0	LOS D	0.9	6.7	0.97	0.70	0.97	31.8
Approach			534	2.9	534	2.9	0.567	20.6	LOS C	15.7	112.7	0.78	0.70	0.78	44.7
All Vehicles			1386	2.9	1386	2.9	0.633	25.9	LOS C	18.2	130.7	0.83	0.73	0.83	41.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Tanah Street East												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

NorthEast: David Low Way (North)												
P6	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
NorthWest: Tanah Street West												
P7	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		150	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Tanah Street West / Tanah Street East (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Tanah Street West / Tanah Street East
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tanah Street East															
21	L2	All MCs	29	2.9	29	2.9	*0.397	22.2	LOS C	1.9	13.6	0.98	0.74	0.98	38.9
22	T1	All MCs	15	2.9	15	2.9	*0.397	34.7	LOS C	1.9	13.6	0.98	0.74	0.98	40.1
23	R2	All MCs	18	2.9	18	2.9	0.397	40.3	LOS D	1.9	13.6	0.98	0.74	0.98	38.9
Approach			62	2.9	62	2.9	0.397	30.4	LOS C	1.9	13.6	0.98	0.74	0.98	39.2
NorthEast: David Low Way (North)															
24	L2	All MCs	9	2.9	9	2.9	0.009	17.7	LOS B	0.2	1.3	0.46	0.63	0.46	46.5
25	T1	All MCs	545	2.9	545	2.9	*0.643	23.7	LOS C	18.6	133.6	0.84	0.74	0.84	44.7
26	R2	All MCs	54	2.9	54	2.9	0.443	52.5	LOS D	2.4	17.6	1.00	0.74	1.00	31.5
Approach			608	2.9	608	2.9	0.643	26.2	LOS C	18.6	133.6	0.84	0.74	0.84	41.8
NorthWest: Tanah Street West															
27	L2	All MCs	71	2.9	71	2.9	0.145	32.8	LOS C	2.4	17.1	0.80	0.74	0.80	37.9
28	T1	All MCs	9	2.9	9	2.9	*0.400	38.1	LOS D	4.7	33.4	0.94	0.78	0.94	35.1
29	R2	All MCs	104	2.9	104	2.9	0.400	43.7	LOS D	4.7	33.4	0.94	0.78	0.94	34.3
Approach			184	2.9	184	2.9	0.400	39.3	LOS D	4.7	33.4	0.89	0.76	0.89	35.6
SouthWest: David Low Way (South)															
30	L2	All MCs	20	2.9	20	2.9	0.019	9.9	LOS A	0.2	1.4	0.44	0.64	0.44	49.6
31	T1	All MCs	498	2.9	498	2.9	0.585	20.2	LOS C	16.4	117.7	0.81	0.71	0.81	45.1
32	R2	All MCs	24	2.9	24	2.9	0.200	51.2	LOS D	1.1	7.7	0.98	0.71	0.98	31.7
Approach			542	2.9	542	2.9	0.585	21.2	LOS C	16.4	117.7	0.80	0.71	0.80	44.4
All Vehicles			1397	2.9	1397	2.9	0.643	26.2	LOS C	18.6	133.6	0.84	0.73	0.84	41.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Tanah Street East												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

NorthEast: David Low Way (North)												
P6	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
NorthWest: Tanah Street West												
P7	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		150	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Tanah Street West / Tanah Street East (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Tanah Street West / Tanah Street East
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tanah Street East															
21	L2	All MCs	31	2.9	31	2.9	*0.402	22.3	LOS C	1.9	13.9	0.98	0.74	0.98	38.8
22	T1	All MCs	14	2.9	14	2.9	*0.402	34.9	LOS C	1.9	13.9	0.98	0.74	0.98	40.0
23	R2	All MCs	19	2.9	19	2.9	0.402	40.5	LOS D	1.9	13.9	0.98	0.74	0.98	38.9
Approach			63	2.9	63	2.9	0.402	30.5	LOS C	1.9	13.9	0.98	0.74	0.98	39.1
NorthEast: David Low Way (North)															
24	L2	All MCs	9	2.9	9	2.9	0.009	20.7	LOS C	0.2	1.3	0.46	0.63	0.46	46.5
25	T1	All MCs	617	2.9	617	2.9	*0.729	27.9	LOS C	22.3	159.8	0.88	0.79	0.88	44.0
26	R2	All MCs	51	2.9	51	2.9	0.417	53.7	LOS D	2.3	16.5	1.00	0.74	1.00	31.5
Approach			677	2.9	677	2.9	0.729	29.8	LOS C	22.3	159.8	0.89	0.78	0.89	40.2
NorthWest: Tanah Street West															
27	L2	All MCs	71	2.9	71	2.9	0.145	32.8	LOS C	2.4	17.1	0.80	0.74	0.80	37.9
28	T1	All MCs	20	2.9	20	2.9	*0.551	39.2	LOS D	6.6	47.4	0.97	0.80	0.97	34.9
29	R2	All MCs	137	2.9	137	2.9	0.551	44.8	LOS D	6.6	47.4	0.97	0.80	0.97	34.0
Approach			227	2.9	227	2.9	0.551	40.6	LOS D	6.6	47.4	0.92	0.78	0.92	35.2
SouthWest: David Low Way (South)															
30	L2	All MCs	41	2.9	41	2.9	0.039	11.9	LOS B	0.4	2.9	0.45	0.66	0.45	49.6
31	T1	All MCs	553	2.9	553	2.9	0.655	23.0	LOS C	19.0	136.4	0.84	0.75	0.84	44.6
32	R2	All MCs	15	2.9	15	2.9	0.121	50.6	LOS D	0.6	4.6	0.97	0.69	0.97	31.9
Approach			608	2.9	608	2.9	0.655	22.9	LOS C	19.0	136.4	0.82	0.74	0.82	43.5
All Vehicles			1576	2.9	1576	2.9	0.729	28.7	LOS C	22.3	159.8	0.87	0.76	0.87	40.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Tanah Street East												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

NorthEast: David Low Way (North)												
P6	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
NorthWest: Tanah Street West												
P7	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		150	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Tanah Street West / Tanah Street East (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Tanah Street West / Tanah Street East
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tanah Street East															
21	L2	All MCs	12	3.1	12	3.1	0.251	20.9	LOS C	1.1	7.8	0.97	0.71	0.97	39.1
22	T1	All MCs	15	3.1	15	3.1	*0.251	32.0	LOS C	1.1	7.8	0.97	0.71	0.97	40.3
23	R2	All MCs	9	3.1	9	3.1	0.251	37.6	LOS D	1.1	7.8	0.97	0.71	0.97	39.1
Approach			36	3.1	36	3.1	0.251	29.9	LOS C	1.1	7.8	0.97	0.71	0.97	39.6
NorthEast: David Low Way (North)															
24	L2	All MCs	17	3.1	17	3.1	0.017	18.8	LOS B	0.3	2.3	0.47	0.65	0.47	46.5
25	T1	All MCs	566	3.1	566	3.1	*0.671	25.1	LOS C	19.7	141.5	0.85	0.76	0.85	44.5
26	R2	All MCs	83	3.1	83	3.1	*0.687	54.6	LOS D	3.9	28.3	1.00	0.84	1.16	30.9
Approach			666	3.1	666	3.1	0.687	28.6	LOS C	19.7	141.5	0.86	0.76	0.88	40.6
NorthWest: Tanah Street West															
27	L2	All MCs	54	3.1	54	3.1	0.111	32.5	LOS C	1.8	12.9	0.79	0.73	0.79	38.0
28	T1	All MCs	27	3.1	27	3.1	*0.546	39.2	LOS D	6.6	47.1	0.97	0.80	0.97	34.9
29	R2	All MCs	128	3.1	128	3.1	0.546	44.8	LOS D	6.6	47.1	0.97	0.80	0.97	34.1
Approach			209	3.1	209	3.1	0.546	40.9	LOS D	6.6	47.1	0.92	0.78	0.92	35.1
SouthWest: David Low Way (South)															
30	L2	All MCs	7	3.1	7	3.1	0.007	10.6	LOS B	0.1	0.5	0.44	0.62	0.44	49.7
31	T1	All MCs	527	3.1	527	3.1	0.621	21.4	LOS C	17.8	127.7	0.82	0.73	0.82	44.8
32	R2	All MCs	35	3.1	35	3.1	0.287	51.7	LOS D	1.6	11.2	0.99	0.72	0.99	31.6
Approach			569	3.1	569	3.1	0.621	23.1	LOS C	17.8	127.7	0.83	0.73	0.83	43.4
All Vehicles			1481	3.1	1481	3.1	0.687	28.2	LOS C	19.7	141.5	0.86	0.75	0.87	40.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Tanah Street East												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

NorthEast: David Low Way (North)												
P6	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
NorthWest: Tanah Street West												
P7	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		150	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Tanah Street West / Tanah Street East (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Tanah Street West / Tanah Street East
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tanah Street East															
21	L2	All MCs	11	3.1	11	3.1	0.264	20.7	LOS C	1.1	8.1	0.97	0.71	0.97	39.1
22	T1	All MCs	17	3.1	17	3.1	* 0.264	31.5	LOS C	1.1	8.1	0.97	0.71	0.97	40.3
23	R2	All MCs	9	3.1	9	3.1	0.264	37.1	LOS D	1.1	8.1	0.97	0.71	0.97	39.1
Approach			37	3.1	37	3.1	0.264	29.8	LOS C	1.1	8.1	0.97	0.71	0.97	39.6
NorthEast: David Low Way (North)															
24	L2	All MCs	17	3.1	17	3.1	0.017	19.4	LOS B	0.3	2.3	0.47	0.65	0.47	46.5
25	T1	All MCs	582	3.1	582	3.1	* 0.690	26.0	LOS C	20.5	147.3	0.86	0.77	0.86	44.3
26	R2	All MCs	85	3.1	85	3.1	* 0.704	54.9	LOS D	4.1	29.2	1.00	0.85	1.18	30.8
Approach			684	3.1	684	3.1	0.704	29.5	LOS C	20.5	147.3	0.87	0.77	0.89	40.3
NorthWest: Tanah Street West															
27	L2	All MCs	45	3.1	45	3.1	0.093	32.4	LOS C	1.5	10.8	0.78	0.72	0.78	38.1
28	T1	All MCs	32	3.1	32	3.1	* 0.631	40.1	LOS D	7.7	55.7	0.99	0.82	1.01	34.6
29	R2	All MCs	148	3.1	148	3.1	0.631	45.7	LOS D	7.7	55.7	0.99	0.82	1.01	33.8
Approach			225	3.1	225	3.1	0.631	42.3	LOS D	7.7	55.7	0.95	0.80	0.97	34.7
SouthWest: David Low Way (South)															
30	L2	All MCs	8	3.1	8	3.1	0.008	10.8	LOS B	0.1	0.6	0.44	0.62	0.44	49.7
31	T1	All MCs	531	3.1	531	3.1	0.625	21.6	LOS C	17.9	128.8	0.83	0.73	0.83	44.8
32	R2	All MCs	32	3.1	32	3.1	0.261	51.5	LOS D	1.4	10.1	0.98	0.72	0.98	31.6
Approach			571	3.1	571	3.1	0.625	23.1	LOS C	17.9	128.8	0.83	0.73	0.83	43.4
All Vehicles			1517	3.1	1517	3.1	0.704	29.0	LOS C	20.5	147.3	0.87	0.76	0.88	40.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Tanah Street East												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

NorthEast: David Low Way (North)												
P6	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
NorthWest: Tanah Street West												
P7	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		150	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Tanah Street West / Tanah Street East (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Tanah Street West / Tanah Street East
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tanah Street East															
21	L2	All MCs	14	3.1	14	3.1	0.260	20.9	LOS C	1.1	8.1	0.97	0.72	0.97	39.3
22	T1	All MCs	15	3.1	15	3.1	*0.260	32.0	LOS C	1.1	8.1	0.97	0.72	0.97	40.5
23	R2	All MCs	9	3.1	9	3.1	0.260	37.6	LOS D	1.1	8.1	0.97	0.72	0.97	39.3
Approach			38	3.1	38	3.1	0.260	29.4	LOS C	1.1	8.1	0.97	0.72	0.97	39.8
NorthEast: David Low Way (North)															
24	L2	All MCs	17	3.1	17	3.1	0.017	21.7	LOS C	0.3	2.3	0.47	0.65	0.47	46.5
25	T1	All MCs	638	3.1	638	3.1	*0.758	29.9	LOS C	23.9	171.7	0.90	0.82	0.92	43.4
26	R2	All MCs	83	3.1	83	3.1	*0.687	56.9	LOS E	3.9	28.3	1.00	0.84	1.16	30.9
Approach			738	3.1	738	3.1	0.758	32.8	LOS C	23.9	171.7	0.90	0.82	0.93	38.9
NorthWest: Tanah Street West															
27	L2	All MCs	49	3.1	49	3.1	0.102	32.4	LOS C	1.6	11.8	0.79	0.72	0.79	38.0
28	T1	All MCs	37	3.1	37	3.1	*0.731	42.3	LOS D	9.4	67.4	1.00	0.88	1.11	33.9
29	R2	All MCs	172	3.1	172	3.1	0.731	47.9	LOS D	9.4	67.4	1.00	0.88	1.11	33.1
Approach			258	3.1	258	3.1	0.731	44.1	LOS D	9.4	67.4	0.96	0.85	1.05	34.1
SouthWest: David Low Way (South)															
30	L2	All MCs	4	3.1	4	3.1	0.004	12.7	LOS B	0.0	0.3	0.43	0.61	0.43	49.7
31	T1	All MCs	573	3.1	573	3.1	0.675	24.2	LOS C	20.0	143.5	0.85	0.76	0.85	44.4
32	R2	All MCs	26	3.1	26	3.1	0.217	51.3	LOS D	1.2	8.4	0.98	0.71	0.98	31.7
Approach			603	3.1	603	3.1	0.675	25.3	LOS C	20.0	143.5	0.86	0.76	0.86	42.3
All Vehicles			1637	3.1	1637	3.1	0.758	31.7	LOS C	23.9	171.7	0.90	0.80	0.92	39.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
SouthEast: Tanah Street East												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

NorthEast: David Low Way (North)												
P6	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
NorthWest: Tanah Street West												
P7	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		150	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

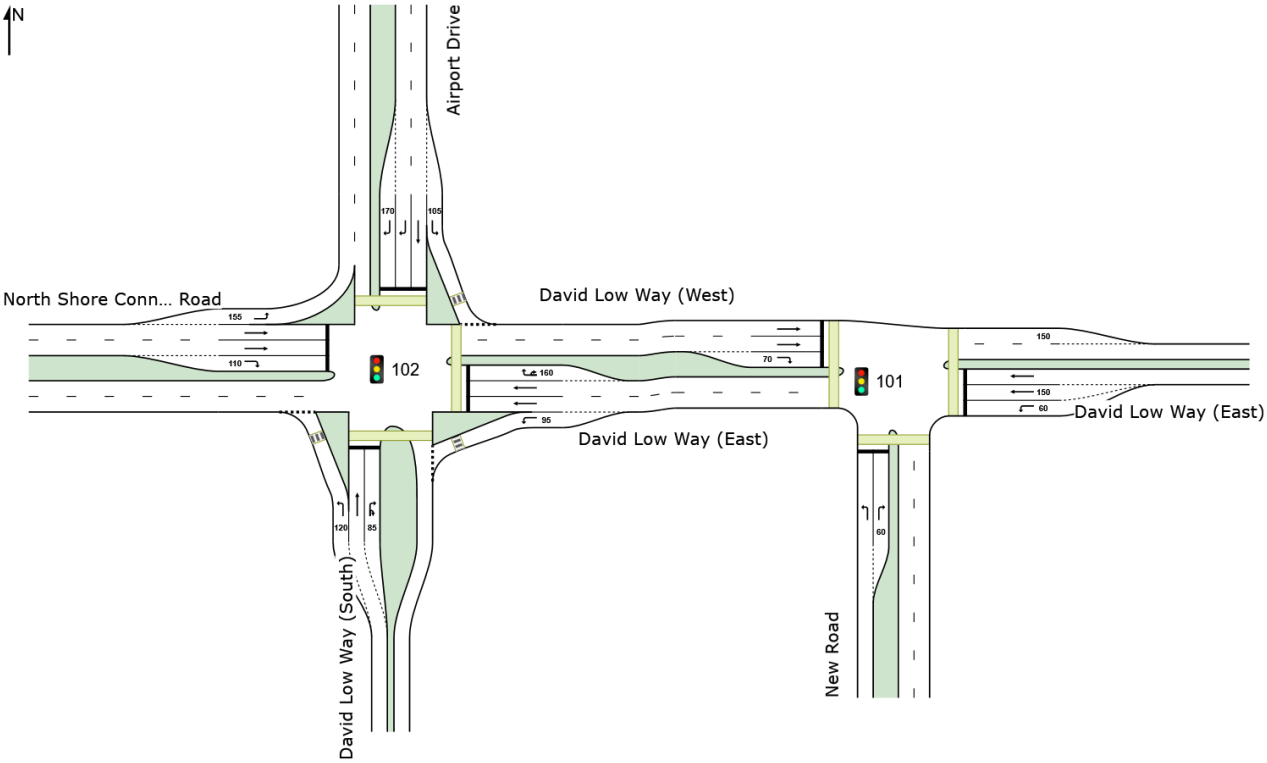
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NETWORK LAYOUT

Network: N101 [2044 AM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive & David Low Way / New Road
2043 AM Peak Pre Development Conditions
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
102	NA	North Shore Connection Road / David Low Way / Airport Drive
101	NA	David Low Way / Gateway Access

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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA \SCA_V1.sip9

MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2044 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	257	2.9	257	2.9	0.290	12.4	LOS B	4.9	34.9	0.49	0.70	0.49	48.3
2	T1	All MCs	145	2.9	145	2.9	* 0.542	44.6	LOS D	6.8	48.9	0.98	0.79	0.98	34.8
3	R2	All MCs	68	2.9	68	2.9	0.274	48.3	LOS D	3.1	22.4	0.93	0.75	0.93	23.7
3u	U	All MCs	1	2.9	1	2.9	0.274	49.8	LOS D	3.1	22.4	0.93	0.75	0.93	32.7
Approach			472	2.9	472	2.9	0.542	27.6	LOS C	6.8	48.9	0.70	0.73	0.70	39.8
East: David Low Way (East)															
4	L2	All MCs	131	2.9	131	2.9	0.095	6.1	LOS A	0.3	2.4	0.08	0.57	0.08	52.0
5	T1	All MCs	647	2.9	647	2.9	* 0.546	35.3	LOS D	14.3	102.3	0.95	0.81	0.95	36.7
6	R2	All MCs	58	2.9	58	2.9	0.326	43.2	LOS D	2.4	17.1	0.83	0.72	0.83	32.9
6u	U	All MCs	1	2.9	1	2.9	0.326	44.5	LOS D	2.4	17.1	0.83	0.72	0.83	22.2
Approach			837	2.9	837	2.9	0.546	31.3	LOS C	14.3	102.3	0.80	0.77	0.80	38.1
North: Airport Drive															
7	L2	All MCs	55	2.9	55	2.9	0.053	8.8	LOS A	0.6	4.5	0.32	0.62	0.32	46.8
8	T1	All MCs	109	2.9	109	2.9	0.272	36.1	LOS D	4.5	32.5	0.88	0.70	0.88	37.8
9	R2	All MCs	411	2.9	411	2.9	* 0.537	44.3	LOS D	9.1	65.3	0.94	0.81	0.94	34.1
Approach			575	2.9	575	2.9	0.537	39.3	LOS D	9.1	65.3	0.87	0.77	0.87	35.3
West: North Shore Connection Road															
10	L2	All MCs	822	2.9	822	2.9	0.452	5.8	LOS A	0.0	0.0	0.00	0.53	0.00	53.1
11	T1	All MCs	383	2.9	383	2.9	0.323	28.5	LOS C	7.2	51.5	0.81	0.67	0.81	31.5
12	R2	All MCs	94	2.9	94	2.9	* 0.515	54.0	LOS D	4.6	32.7	0.99	0.78	0.99	31.4
Approach			1299	2.9	1299	2.9	0.515	16.0	LOS B	7.2	51.5	0.31	0.59	0.31	45.1
All Vehicles			3182	2.9	3182	2.9	0.546	26.0	LOS C	14.3	102.3	0.60	0.69	0.60	40.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2044 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road
2044 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	29	2.9	29	2.9	0.042	25.6	LOS C	0.9	6.3	0.65	0.69	0.65	32.8
3	R2	All MCs	8	2.9	8	2.9	* 0.026	42.0	LOS D	0.3	2.4	0.85	0.66	0.85	34.8
Approach			38	2.9	38	2.9	0.042	29.3	LOS C	0.9	6.3	0.69	0.68	0.69	33.5
East: David Low Way (East)															
4	L2	All MCs	13	2.9	13	2.9	0.010	11.3	LOS B	0.2	1.4	0.34	0.62	0.34	48.8
5	T1	All MCs	805	2.9	805	2.9	* 0.457	19.7	LOS B	13.3	95.7	0.73	0.64	0.73	36.7
Approach			818	2.9	818	2.9	0.457	19.6	LOS B	13.3	95.7	0.73	0.64	0.73	37.0
West: David Low Way (West)															
11	T1	All MCs	465	2.9	465	2.9	0.289	24.6	LOS C	9.3	66.4	0.85	0.62	0.85	41.6
12	R2	All MCs	37	2.9	37	2.9	* 0.112	22.3	LOS C	0.7	5.2	0.41	0.64	0.41	41.3
Approach			502	2.9	502	2.9	0.289	24.5	LOS C	9.3	66.4	0.82	0.62	0.82	41.6
All Vehicles			1358	2.9	1358	2.9	0.457	21.7	LOS C	13.3	95.7	0.76	0.63	0.76	39.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											
P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		158	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2044 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	258	2.9	258	2.9	0.321	15.7	LOS B	6.0	43.1	0.58	0.73	0.58	46.3
2	T1	All MCs	165	2.9	165	2.9	* 0.617	45.3	LOS D	7.9	56.6	0.99	0.81	1.00	34.6
3	R2	All MCs	56	2.9	56	2.9	0.225	47.9	LOS D	2.5	18.2	0.93	0.74	0.93	23.8
3u	U	All MCs	1	2.9	1	2.9	0.225	49.4	LOS D	2.5	18.2	0.93	0.74	0.93	32.8
Approach			480	2.9	480	2.9	0.617	29.7	LOS C	7.9	56.6	0.76	0.76	0.77	39.1
East: David Low Way (East)															
4	L2	All MCs	142	2.9	142	2.9	0.104	6.0	LOS A	0.3	2.0	0.06	0.56	0.06	52.1
5	T1	All MCs	643	2.9	643	2.9	* 0.646	44.2	LOS D	15.8	113.1	1.00	0.87	1.00	33.4
6	R2	All MCs	84	2.9	84	2.9	0.523	55.8	LOS E	4.2	30.4	1.00	0.78	1.00	29.3
6u	U	All MCs	1	2.9	1	2.9	0.523	57.1	LOS E	4.2	30.4	1.00	0.78	1.00	18.8
Approach			871	2.9	871	2.9	0.646	39.1	LOS D	15.8	113.1	0.85	0.81	0.85	34.9
North: Airport Drive															
7	L2	All MCs	94	2.9	94	2.9	0.087	8.7	LOS A	1.1	7.7	0.32	0.63	0.32	47.0
8	T1	All MCs	106	2.9	106	2.9	0.206	30.4	LOS C	4.0	28.8	0.81	0.65	0.81	40.1
9	R2	All MCs	637	2.9	637	2.9	* 0.648	40.9	LOS D	13.9	100.0	0.94	0.84	0.94	35.2
Approach			837	2.9	837	2.9	0.648	35.9	LOS D	13.9	100.0	0.86	0.79	0.86	36.4
West: North Shore Connection Road															
10	L2	All MCs	1246	2.9	1246	2.9	0.685	6.0	LOS A	0.0	0.0	0.00	0.52	0.00	52.8
11	T1	All MCs	363	2.9	363	2.9	0.365	32.8	LOS C	7.3	52.4	0.86	0.71	0.86	29.4
12	R2	All MCs	98	2.9	98	2.9	* 0.598	55.8	LOS E	4.9	35.1	1.00	0.80	1.04	30.9
Approach			1707	2.9	1707	2.9	0.685	14.6	LOS B	7.3	52.4	0.24	0.58	0.24	46.2
All Vehicles			3895	2.9	3895	2.9	0.685	26.5	LOS C	15.8	113.1	0.57	0.70	0.57	40.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2044 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2044 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	22	2.9	22	2.9	0.042	32.8	LOS C	0.8	5.5	0.75	0.69	0.75	29.1
2	T1	All MCs	78	2.9	78	2.9	* 0.296	38.1	LOS D	4.5	32.5	0.90	0.73	0.90	36.5
3	R2	All MCs	28	2.9	28	2.9	0.296	43.7	LOS D	4.5	32.5	0.90	0.73	0.90	35.7
Approach			128	2.9	128	2.9	0.296	38.4	LOS D	4.5	32.5	0.87	0.72	0.87	35.5
East: David Low Way (East)															
4	L2	All MCs	5	2.9	5	2.9	0.006	16.1	LOS B	0.1	0.6	0.55	0.62	0.55	47.5
5	T1	All MCs	771	2.9	771	2.9	* 0.650	33.7	LOS C	16.4	117.4	0.92	0.80	0.92	29.4
6	R2	All MCs	82	2.9	82	2.9	* 0.645	58.6	LOS E	4.2	30.4	1.00	0.82	1.10	30.0
Approach			858	2.9	858	2.9	0.650	36.0	LOS D	16.4	117.4	0.93	0.80	0.94	29.1
North: Gateway Precinct Access															
7	L2	All MCs	47	2.9	47	2.9	0.200	20.0	LOS C	1.8	13.1	0.86	0.72	0.86	42.1
8	T1	All MCs	23	2.9	23	2.9	* 0.200	29.7	LOS C	1.8	13.1	0.86	0.72	0.86	43.5
9	R2	All MCs	72	2.9	72	2.9	0.200	42.6	LOS D	2.9	20.6	0.88	0.75	0.88	25.6
Approach			142	2.9	142	2.9	0.200	33.0	LOS C	2.9	20.6	0.87	0.73	0.87	34.7
West: David Low Way (West)															
10	L2	All MCs	38	2.9	38	2.9	0.039	24.3	LOS C	1.4	9.7	0.78	0.61	0.78	40.2
11	T1	All MCs	419	2.9	419	2.9	0.387	30.9	LOS C	8.7	62.7	0.86	0.72	0.86	38.5
12	R2	All MCs	53	2.9	53	2.9	0.413	38.6	LOS D	2.0	14.2	0.75	0.70	0.75	34.3
Approach			509	2.9	509	2.9	0.413	31.2	LOS C	8.7	62.7	0.84	0.71	0.84	38.2
All Vehicles			1638	2.9	1638	2.9	0.650	34.4	LOS C	16.4	117.4	0.89	0.76	0.90	33.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access											
P3	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	189	2.9	189	2.9	0.260	19.2	LOS B	5.0	35.7	0.63	0.73	0.63	44.4
2	T1	All MCs	183	2.9	183	2.9	*0.736	48.7	LOS D	9.2	66.1	1.00	0.89	1.12	33.5
3	R2	All MCs	65	2.9	65	2.9	0.282	49.3	LOS D	3.0	21.7	0.94	0.75	0.94	23.4
3u	U	All MCs	1	2.9	1	2.9	0.282	50.8	LOS D	3.0	21.7	0.94	0.75	0.94	32.4
Approach			439	2.9	439	2.9	0.736	36.1	LOS D	9.2	66.1	0.83	0.80	0.88	36.3
East: David Low Way (East)															
4	L2	All MCs	161	2.9	161	2.9	0.119	5.8	LOS A	0.2	1.6	0.02	0.56	0.02	52.3
5	T1	All MCs	912	2.9	912	2.9	*0.768	46.7	LOS D	22.6	162.2	1.00	0.93	1.03	32.6
6	R2	All MCs	74	2.9	74	2.9	0.459	48.1	LOS D	3.4	24.1	0.91	0.75	0.91	31.4
6u	U	All MCs	1	2.9	1	2.9	0.459	49.3	LOS D	3.4	24.1	0.91	0.75	0.91	20.8
Approach			1147	2.9	1147	2.9	0.768	41.0	LOS D	22.6	162.2	0.86	0.86	0.88	34.3
North: Airport Drive															
7	L2	All MCs	87	2.9	87	2.9	0.092	10.4	LOS B	1.3	9.2	0.38	0.65	0.38	45.0
8	T1	All MCs	117	2.9	117	2.9	0.265	34.3	LOS C	4.7	33.9	0.86	0.69	0.86	38.5
9	R2	All MCs	643	2.9	643	2.9	*0.768	47.7	LOS D	15.7	112.3	0.99	0.89	1.09	33.1
Approach			847	2.9	847	2.9	0.768	42.0	LOS D	15.7	112.3	0.91	0.84	0.98	34.3
West: North Shore Connection Road															
10	L2	All MCs	1228	2.9	1228	2.9	0.675	6.0	LOS A	0.0	0.0	0.00	0.52	0.00	52.8
11	T1	All MCs	619	2.9	619	2.9	0.522	30.7	LOS C	12.5	89.6	0.88	0.75	0.88	30.4
12	R2	All MCs	114	2.9	114	2.9	*0.694	57.2	LOS E	5.8	41.8	1.00	0.85	1.12	30.5
Approach			1961	2.9	1961	2.9	0.694	16.8	LOS B	12.5	89.6	0.33	0.61	0.34	44.4
All Vehicles			4395	2.9	4395	2.9	0.768	29.9	LOS C	22.6	162.2	0.63	0.74	0.66	38.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	21	2.9	21	2.9	0.041	33.6	LOS C	0.7	5.3	0.76	0.69	0.76	28.8
2	T1	All MCs	66	2.9	66	2.9	* 0.298	38.1	LOS D	4.5	32.5	0.90	0.74	0.90	36.3
3	R2	All MCs	40	2.9	40	2.9	0.298	43.7	LOS D	4.5	32.5	0.90	0.74	0.90	35.5
Approach			127	2.9	127	2.9	0.298	39.1	LOS D	4.5	32.5	0.88	0.73	0.88	35.2
East: David Low Way (East)															
4	L2	All MCs	8	2.9	8	2.9	0.010	26.4	LOS C	0.1	0.9	0.54	0.63	0.54	47.6
5	T1	All MCs	1063	2.9	1063	2.9	* 0.889	57.3	LOS E	29.5	212.0	1.00	1.06	1.21	24.2
6	R2	All MCs	80	2.9	80	2.9	* 0.733	70.2	LOS E	4.3	30.5	1.00	0.86	1.21	29.4
Approach			1152	2.9	1152	2.9	0.889	58.0	LOS E	29.5	212.0	1.00	1.04	1.21	21.9
North: Gateway Precinct Access															
7	L2	All MCs	54	2.9	54	2.9	0.215	21.2	LOS C	2.0	14.2	0.87	0.72	0.87	42.0
8	T1	All MCs	25	2.9	25	2.9	* 0.215	30.1	LOS C	2.0	14.2	0.87	0.72	0.87	43.4
9	R2	All MCs	60	2.9	60	2.9	0.174	42.7	LOS D	2.5	17.8	0.87	0.74	0.87	25.4
Approach			139	2.9	139	2.9	0.215	32.1	LOS C	2.5	17.8	0.87	0.73	0.87	35.8
West: David Low Way (West)															
10	L2	All MCs	38	2.9	38	2.9	0.039	22.9	LOS C	1.3	9.2	0.74	0.62	0.74	40.9
11	T1	All MCs	678	2.9	678	2.9	0.606	25.1	LOS C	13.3	95.6	0.79	0.68	0.79	41.5
12	R2	All MCs	53	2.9	53	2.9	0.482	50.8	LOS D	2.5	17.7	0.92	0.73	0.92	30.5
Approach			768	2.9	768	2.9	0.606	26.7	LOS C	13.3	95.6	0.80	0.68	0.80	40.5
All Vehicles			2186	2.9	2186	2.9	0.889	44.3	LOS D	29.5	212.0	0.91	0.88	1.02	29.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access											
P3	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2044 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	216	3.1	216	3.1	0.224	12.7	LOS B	4.0	29.1	0.48	0.69	0.48	48.1
2	T1	All MCs	135	3.1	135	3.1	0.503	44.3	LOS D	6.3	45.2	0.97	0.78	0.97	34.9
3	R2	All MCs	191	3.1	191	3.1	* 0.754	54.3	LOS D	9.7	69.8	1.00	0.89	1.14	22.1
3u	U	All MCs	1	3.1	1	3.1	0.754	55.7	LOS E	9.7	69.8	1.00	0.89	1.14	31.1
Approach			542	3.1	542	3.1	0.754	35.2	LOS D	9.7	69.8	0.79	0.78	0.84	35.1
East: David Low Way (East)															
4	L2	All MCs	154	3.1	154	3.1	0.131	6.8	LOS A	0.6	4.6	0.11	0.58	0.11	51.5
5	T1	All MCs	327	3.1	327	3.1	0.428	38.5	LOS D	7.2	51.4	0.93	0.75	0.93	35.4
6	R2	All MCs	48	3.1	48	3.1	0.183	35.0	LOS D	1.6	11.7	0.69	0.69	0.69	35.8
6u	U	All MCs	1	3.1	1	3.1	0.183	36.3	LOS D	1.6	11.7	0.69	0.69	0.69	25.2
Approach			531	3.1	531	3.1	0.428	29.0	LOS C	7.2	51.4	0.67	0.70	0.67	39.0
North: Airport Drive															
7	L2	All MCs	85	3.1	85	3.1	0.095	13.7	LOS B	1.6	11.8	0.48	0.67	0.48	41.7
8	T1	All MCs	211	3.1	211	3.1	0.408	32.5	LOS C	8.5	61.0	0.87	0.72	0.87	39.3
9	R2	All MCs	767	3.1	767	3.1	* 0.782	45.4	LOS D	18.5	133.0	0.99	0.90	1.07	33.8
Approach			1063	3.1	1063	3.1	0.782	40.3	LOS D	18.5	133.0	0.92	0.85	0.99	35.1
West: North Shore Connection Road															
10	L2	All MCs	717	3.1	717	3.1	0.395	5.8	LOS A	0.0	0.0	0.00	0.53	0.00	53.2
11	T1	All MCs	614	3.1	614	3.1	* 0.803	45.8	LOS D	15.5	111.6	1.00	0.94	1.14	24.4
12	R2	All MCs	215	3.1	215	3.1	* 0.788	54.8	LOS D	11.0	79.3	1.00	0.92	1.17	31.2
Approach			1545	3.1	1545	3.1	0.803	28.5	LOS C	15.5	111.6	0.54	0.75	0.62	37.5
All Vehicles			3681	3.1	3681	3.1	0.803	33.0	LOS C	18.5	133.0	0.70	0.77	0.76	36.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	4	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	5	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
North: Airport Drive										
P3 Full	2	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	12	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2044 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak Pre Development (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road
2044 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	13	3.1	13	3.1	0.018	25.3	LOS C	0.4	2.7	0.64	0.66	0.64	33.0
3	R2	All MCs	5	3.1	5	3.1	0.016	41.8	LOS D	0.2	1.5	0.84	0.65	0.84	34.8
Approach			18	3.1	18	3.1	0.018	30.2	LOS C	0.4	2.7	0.70	0.66	0.70	33.8
East: David Low Way (East)															
4	L2	All MCs	8	3.1	8	3.1	0.007	11.3	LOS B	0.1	0.9	0.34	0.62	0.34	48.8
5	T1	All MCs	507	3.1	507	3.1	0.289	17.9	LOS B	7.6	54.9	0.66	0.56	0.66	38.1
Approach			516	3.1	516	3.1	0.289	17.8	LOS B	7.6	54.9	0.66	0.56	0.66	38.3
West: David Low Way (West)															
11	T1	All MCs	784	3.1	784	3.1	* 0.489	27.9	LOS C	16.1	115.9	0.91	0.68	0.91	40.1
12	R2	All MCs	102	3.1	102	3.1	* 0.312	25.7	LOS C	2.7	19.1	0.55	0.69	0.55	39.7
Approach			886	3.1	886	3.1	0.489	27.7	LOS C	16.1	115.9	0.87	0.68	0.87	40.0
All Vehicles			1420	3.1	1420	3.1	0.489	24.1	LOS C	16.1	115.9	0.79	0.64	0.79	39.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											
P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		158	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2044 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	188	3.1	188	3.1	0.225	17.2	LOS B	4.5	32.3	0.59	0.72	0.59	45.5
2	T1	All MCs	155	3.1	155	3.1	* 0.810	53.7	LOS D	8.2	59.0	1.00	0.94	1.25	32.0
3	R2	All MCs	78	3.1	78	3.1	0.436	53.5	LOS D	3.8	27.4	0.98	0.77	0.98	22.3
3u	U	All MCs	1	3.1	1	3.1	0.436	55.0	LOS D	3.8	27.4	0.98	0.77	0.98	31.3
Approach			422	3.1	422	3.1	0.810	37.4	LOS D	8.2	59.0	0.81	0.81	0.90	35.5
East: David Low Way (East)															
4	L2	All MCs	181	3.1	181	3.1	0.154	6.2	LOS A	0.4	2.9	0.06	0.57	0.06	51.9
5	T1	All MCs	431	3.1	431	3.1	0.626	35.1	LOS D	9.9	71.1	0.90	0.74	0.90	36.7
6	R2	All MCs	51	3.1	51	3.1	0.179	46.9	LOS D	2.3	16.4	0.93	0.74	0.93	31.8
6u	U	All MCs	1	3.1	1	3.1	0.179	48.2	LOS D	2.3	16.4	0.93	0.74	0.93	21.1
Approach			663	3.1	663	3.1	0.626	28.2	LOS C	9.9	71.1	0.67	0.70	0.67	39.4
North: Airport Drive															
7	L2	All MCs	162	3.1	162	3.1	0.160	11.3	LOS B	2.7	19.2	0.42	0.67	0.42	44.0
8	T1	All MCs	184	3.1	184	3.1	0.301	27.6	LOS C	6.8	48.6	0.80	0.66	0.80	41.4
9	R2	All MCs	1027	3.1	1027	3.1	* 0.883	51.2	LOS D	28.0	200.9	1.00	0.99	1.21	32.1
Approach			1374	3.1	1374	3.1	0.883	43.3	LOS D	28.0	200.9	0.90	0.91	1.06	33.7
West: North Shore Connection Road															
10	L2	All MCs	972	3.1	972	3.1	0.535	5.9	LOS A	0.0	0.0	0.00	0.52	0.00	53.0
11	T1	All MCs	584	3.1	584	3.1	* 0.849	50.4	LOS D	15.6	111.8	1.00	1.00	1.23	23.1
12	R2	All MCs	241	3.1	241	3.1	* 0.829	56.3	LOS E	12.7	91.5	1.00	0.96	1.22	30.8
Approach			1797	3.1	1797	3.1	0.849	27.1	LOS C	15.6	111.8	0.46	0.74	0.56	38.7
All Vehicles			4256	3.1	4256	3.1	0.883	33.5	LOS C	28.0	200.9	0.67	0.79	0.77	36.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2044 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak GAP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2044 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	16	3.1	16	3.1	0.026	29.6	LOS C	0.5	3.7	0.70	0.67	0.70	30.7
2	T1	All MCs	51	3.1	51	3.1	*0.432	39.3	LOS D	6.7	47.9	0.93	0.78	0.93	35.3
3	R2	All MCs	101	3.1	101	3.1	0.432	44.9	LOS D	6.7	47.9	0.93	0.78	0.93	34.5
Approach			167	3.1	167	3.1	0.432	41.8	LOS D	6.7	47.9	0.91	0.77	0.91	34.5
East: David Low Way (East)															
4	L2	All MCs	14	3.1	14	3.1	0.018	14.4	LOS B	0.2	1.5	0.59	0.65	0.59	46.8
5	T1	All MCs	445	3.1	445	3.1	0.431	32.7	LOS C	9.0	65.0	0.88	0.73	0.88	29.2
6	R2	All MCs	83	3.1	83	3.1	0.416	52.3	LOS D	4.0	28.4	0.97	0.77	0.97	31.6
Approach			542	3.1	542	3.1	0.431	35.3	LOS D	9.0	65.0	0.88	0.73	0.88	30.3
North: Gateway Precinct Access															
7	L2	All MCs	89	3.1	89	3.1	*0.493	24.0	LOS C	5.9	42.7	0.93	0.82	0.93	37.9
8	T1	All MCs	56	3.1	56	3.1	*0.493	41.5	LOS D	5.9	42.7	0.93	0.82	0.93	39.0
9	R2	All MCs	200	3.1	200	3.1	0.493	45.8	LOS D	7.6	54.6	0.94	0.80	0.94	25.1
Approach			345	3.1	345	3.1	0.493	39.4	LOS D	7.6	54.6	0.94	0.81	0.94	31.5
West: David Low Way (West)															
10	L2	All MCs	65	3.1	65	3.1	0.073	28.6	LOS C	2.6	18.8	0.88	0.60	0.88	38.2
11	T1	All MCs	631	3.1	631	3.1	*0.669	40.2	LOS D	15.7	112.7	0.99	0.84	0.99	34.9
12	R2	All MCs	133	3.1	133	3.1	0.664	34.3	LOS C	5.3	37.9	0.81	0.76	0.83	35.9
Approach			828	3.1	828	3.1	0.669	38.4	LOS D	15.7	112.7	0.95	0.81	0.95	35.3
All Vehicles			1883	3.1	1883	3.1	0.669	38.0	LOS D	15.7	112.7	0.93	0.79	0.93	33.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access											
P3	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	199	3.1	199	3.1	0.273	21.9	LOS C	5.7	40.8	0.69	0.75	0.69	42.9
2	T1	All MCs	144	3.1	144	3.1	* 0.943	67.9	LOS E	8.7	62.8	1.00	1.09	1.61	28.5
3	R2	All MCs	74	3.1	74	3.1	0.517	56.2	LOS E	3.7	26.8	1.00	0.76	1.00	21.6
3u	U	All MCs	1	3.1	1	3.1	0.517	57.7	LOS E	3.7	26.8	1.00	0.76	1.00	30.6
Approach			418	3.1	418	3.1	0.943	43.9	LOS D	8.7	62.8	0.85	0.87	1.06	33.3
East: David Low Way (East)															
4	L2	All MCs	224	3.1	224	3.1	0.196	6.5	LOS A	0.7	4.9	0.08	0.57	0.08	51.7
5	T1	All MCs	764	3.1	764	3.1	0.769	40.8	LOS D	18.9	136.0	0.98	0.91	1.05	34.6
6	R2	All MCs	62	3.1	62	3.1	0.250	44.1	LOS D	2.6	18.8	0.86	0.74	0.86	32.6
6u	U	All MCs	1	3.1	1	3.1	0.250	45.4	LOS D	2.6	18.8	0.86	0.74	0.86	22.0
Approach			1052	3.1	1052	3.1	0.769	33.7	LOS C	18.9	136.0	0.78	0.82	0.83	37.1
North: Airport Drive															
7	L2	All MCs	120	3.1	120	3.1	0.137	15.7	LOS B	2.6	18.8	0.53	0.69	0.53	39.9
8	T1	All MCs	243	3.1	243	3.1	0.454	32.2	LOS C	9.9	70.9	0.88	0.73	0.88	39.4
9	R2	All MCs	981	3.1	981	3.1	* 0.964	73.1	LOS E	32.4	232.7	1.00	1.14	1.46	26.9
Approach			1344	3.1	1344	3.1	0.964	60.6	LOS E	32.4	232.7	0.94	1.03	1.27	29.1
West: North Shore Connection Road															
10	L2	All MCs	947	3.1	947	3.1	0.521	5.8	LOS A	0.0	0.0	0.00	0.53	0.00	53.1
11	T1	All MCs	975	3.1	975	3.1	* 0.981	74.2	LOS E	33.5	240.6	1.00	1.30	1.53	17.9
12	R2	All MCs	254	3.1	254	3.1	* 0.997	92.0	LOS F	18.0	129.1	1.00	1.23	1.73	23.7
Approach			2176	3.1	2176	3.1	0.997	46.5	LOS D	33.5	240.6	0.56	0.95	0.88	30.2
All Vehicles			4989	3.1	4989	3.1	0.997	47.4	LOS D	33.5	240.6	0.73	0.94	0.99	31.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
East: David Low Way (East)										
P2 Full	16	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01
North: Airport Drive										
P3 Full	1	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	26	44.2	LOS E	0.0	0.0	0.94	0.94	198.1	200.0	1.01

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak MP (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	22	3.1	22	3.1	0.041	32.0	LOS C	0.8	5.4	0.74	0.69	0.74	29.5
2	T1	All MCs	53	3.1	53	3.1	* 0.474	39.7	LOS D	7.4	53.1	0.94	0.79	0.94	35.1
3	R2	All MCs	114	3.1	114	3.1	0.474	45.3	LOS D	7.4	53.1	0.94	0.79	0.94	34.4
Approach			188	3.1	188	3.1	0.474	42.2	LOS D	7.4	53.1	0.91	0.78	0.91	34.2
East: David Low Way (East)															
4	L2	All MCs	19	3.1	19	3.1	0.023	17.6	LOS B	0.3	2.1	0.57	0.66	0.57	47.2
5	T1	All MCs	784	3.1	784	3.1	0.686	35.4	LOS D	17.1	122.6	0.94	0.81	0.94	28.9
6	R2	All MCs	78	3.1	78	3.1	0.536	56.3	LOS E	3.9	27.9	1.00	0.77	1.00	30.6
Approach			881	3.1	881	3.1	0.686	36.9	LOS D	17.1	122.6	0.94	0.81	0.94	28.8
North: Gateway Precinct Access															
7	L2	All MCs	91	3.1	91	3.1	0.546	28.3	LOS C	7.1	50.9	0.95	0.83	0.95	36.6
8	T1	All MCs	52	3.1	52	3.1	* 0.546	43.6	LOS D	7.1	50.9	0.95	0.83	0.95	37.6
9	R2	All MCs	238	3.1	238	3.1	0.546	46.7	LOS D	8.5	61.2	0.95	0.81	0.95	25.0
Approach			380	3.1	380	3.1	0.546	41.9	LOS D	8.5	61.2	0.95	0.82	0.95	30.2
West: David Low Way (West)															
10	L2	All MCs	57	3.1	57	3.1	0.060	21.4	LOS C	1.3	9.6	0.52	0.68	0.52	43.5
11	T1	All MCs	979	3.1	979	3.1	* 0.978	40.5	LOS D	30.9	221.7	0.92	0.96	1.13	36.9
12	R2	All MCs	131	3.1	131	3.1	* 0.898	59.7	LOS E	6.9	49.2	1.00	0.88	1.17	29.6
Approach			1166	3.1	1166	3.1	0.978	41.8	LOS D	30.9	221.7	0.91	0.94	1.10	34.4
All Vehicles			2616	3.1	2616	3.1	0.978	40.2	LOS D	30.9	221.7	0.93	0.86	1.01	32.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: David Low Way (East)											
P2	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Gateway Precinct Access											
P3	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: David Low Way (West)											
P4	Full	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

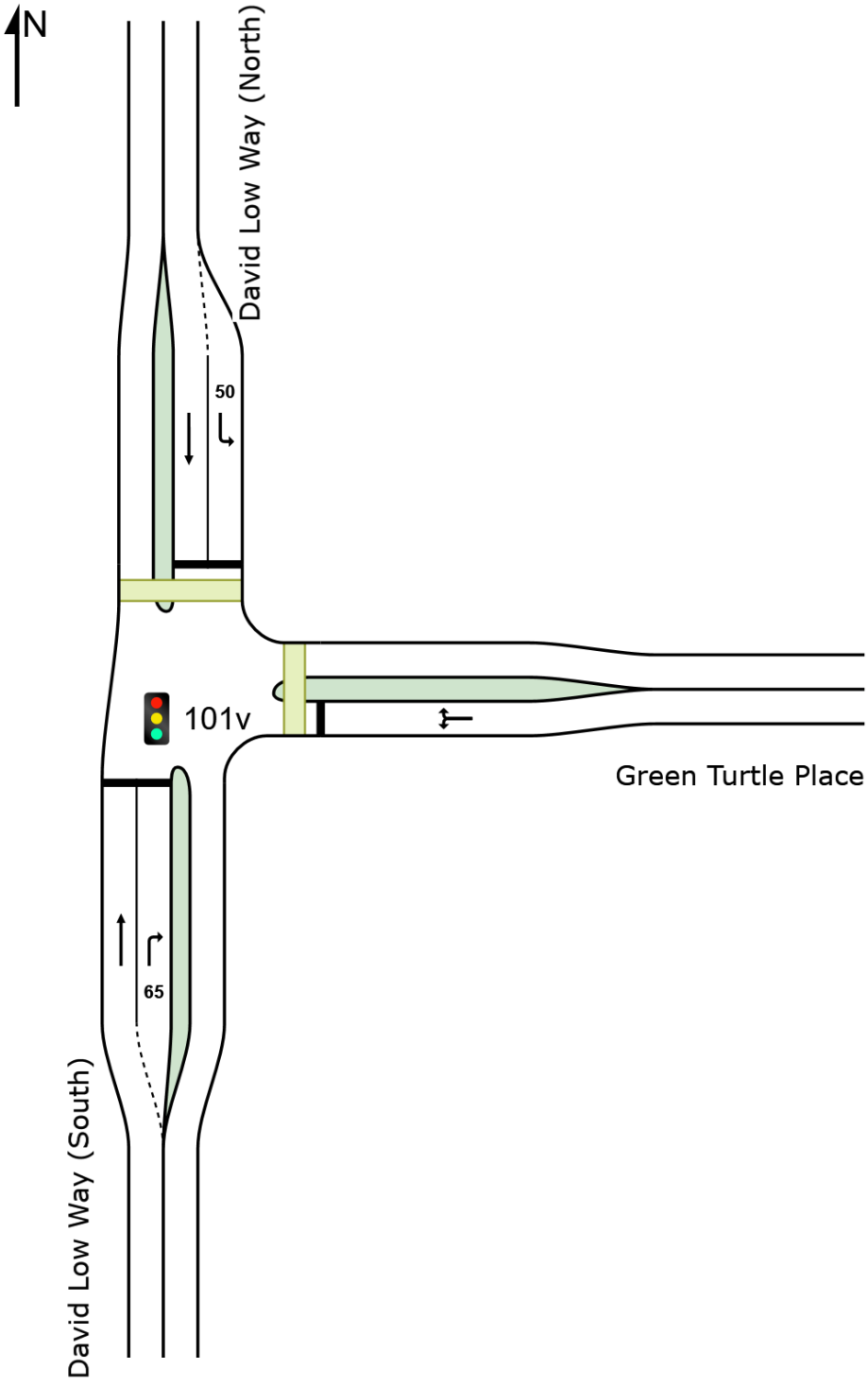
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SITE LAYOUT

Site: 101v [David Low Way / Green Turtle Place (Site Folder: 2044 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place (Site Folder: 2044 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	294	2.9	294	2.9	0.294	12.9	LOS B	7.2	51.7	0.60	0.52	0.60	49.5
3	R2	All MCs	25	2.9	25	2.9	* 0.096	42.3	LOS D	1.0	7.1	0.90	0.71	0.90	34.4
Approach			319	2.9	319	2.9	0.294	15.3	LOS B	7.2	51.7	0.63	0.53	0.63	47.8
East: Green Turtle Place															
4	L2	All MCs	33	2.9	33	2.9	0.391	31.4	LOS C	4.2	30.3	0.95	0.78	0.95	33.8
6	R2	All MCs	69	2.9	69	2.9	* 0.391	50.8	LOS D	4.2	30.3	0.95	0.78	0.95	33.8
Approach			102	2.9	102	2.9	0.391	44.6	LOS D	4.2	30.3	0.95	0.78	0.95	33.8
North: David Low Way (North)															
7	L2	All MCs	59	2.9	59	2.9	0.046	10.0	LOS A	0.8	5.6	0.33	0.64	0.33	49.6
8	T1	All MCs	412	2.9	412	2.9	* 0.412	14.0	LOS B	10.9	78.4	0.65	0.57	0.65	48.8
Approach			471	2.9	471	2.9	0.412	13.5	LOS B	10.9	78.4	0.61	0.58	0.61	48.9
All Vehicles			892	2.9	892	2.9	0.412	17.7	LOS B	10.9	78.4	0.65	0.58	0.65	46.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2044 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	297	2.9	297	2.9	0.291	12.4	LOS B	7.1	51.1	0.59	0.51	0.59	49.9
3	R2	All MCs	25	2.9	25	2.9	* 0.096	42.3	LOS D	1.0	7.1	0.90	0.71	0.90	34.4
Approach			322	2.9	322	2.9	0.291	14.7	LOS B	7.1	51.1	0.61	0.52	0.61	48.2
East: Green Turtle Place															
4	L2	All MCs	33	2.9	33	2.9	0.423	32.4	LOS C	4.3	30.8	0.96	0.78	0.96	33.4
6	R2	All MCs	69	2.9	69	2.9	* 0.423	52.1	LOS D	4.3	30.8	0.96	0.78	0.96	33.4
Approach			102	2.9	102	2.9	0.423	45.8	LOS D	4.3	30.8	0.96	0.78	0.96	33.4
North: David Low Way (North)															
7	L2	All MCs	59	2.9	59	2.9	0.046	10.0	LOS A	0.8	5.6	0.33	0.64	0.33	49.6
8	T1	All MCs	427	2.9	427	2.9	* 0.419	13.5	LOS B	11.2	80.3	0.64	0.57	0.64	49.1
Approach			486	2.9	486	2.9	0.419	13.1	LOS B	11.2	80.3	0.61	0.57	0.61	49.2
All Vehicles			911	2.9	911	2.9	0.423	17.3	LOS B	11.2	80.3	0.65	0.58	0.65	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	302	2.9	302	2.9	0.513	24.5	LOS C	10.1	72.4	0.82	0.80	0.82	40.7
2	T1	All MCs	329	2.9	329	2.9	* 0.788	37.7	LOS D	12.3	88.4	0.99	0.93	1.13	37.7
3	R2	All MCs	25	2.9	25	2.9	0.185	45.5	LOS D	1.0	7.1	0.97	0.71	0.97	33.5
Approach			657	2.9	657	2.9	0.788	31.9	LOS C	12.3	88.4	0.91	0.86	0.99	38.8
East: Green Turtle Place															
4	L2	All MCs	33	2.9	33	2.9	0.278	30.0	LOS C	3.5	24.8	0.88	0.76	0.88	37.2
5	T1	All MCs	1	2.9	1	2.9	* 0.278	32.1	LOS C	3.5	24.8	0.88	0.76	0.88	38.3
6	R2	All MCs	69	2.9	69	2.9	0.278	37.7	LOS D	3.5	24.8	0.88	0.76	0.88	37.4
Approach			103	2.9	103	2.9	0.278	35.2	LOS D	3.5	24.8	0.88	0.76	0.88	37.3
North: David Low Way (North)															
7	L2	All MCs	59	2.9	59	2.9	0.086	14.8	LOS B	0.9	6.5	0.67	0.70	0.67	46.6
8	T1	All MCs	469	2.9	469	2.9	0.743	34.4	LOS C	11.2	80.6	0.97	0.84	1.04	38.6
9	R2	All MCs	74	2.9	74	2.9	* 0.540	47.3	LOS D	3.0	21.6	1.00	0.77	1.03	33.0
Approach			602	2.9	602	2.9	0.743	34.1	LOS C	11.2	80.6	0.95	0.82	1.00	38.4
West: Airport North Precinct Access															
10	L2	All MCs	79	2.9	79	2.9	0.158	26.7	LOS C	1.2	8.9	0.79	0.73	0.79	44.7
11	T1	All MCs	1	2.9	1	2.9	* 0.832	46.6	LOS D	13.6	97.7	1.00	0.96	1.24	34.8
12	R2	All MCs	318	2.9	318	2.9	0.832	52.2	LOS D	13.6	97.7	1.00	0.96	1.24	34.0
Approach			398	2.9	398	2.9	0.832	47.1	LOS D	13.6	97.7	0.96	0.92	1.15	33.1
All Vehicles			1760	2.9	1760	2.9	0.832	36.3	LOS D	13.6	97.7	0.93	0.85	1.02	37.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

East: Green Turtle Place												
P2	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: Airport North Precinct Access												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	211	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place (Site Folder: 2044 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	518	3.1	518	3.1	*0.469	11.7	LOS B	13.1	93.8	0.62	0.55	0.62	50.3
3	R2	All MCs	57	3.1	57	3.1	*0.217	43.3	LOS D	2.3	16.3	0.92	0.75	0.92	34.1
Approach			575	3.1	575	3.1	0.469	14.9	LOS B	13.1	93.8	0.65	0.57	0.65	48.0
East: Green Turtle Place															
4	L2	All MCs	45	3.1	45	3.1	0.449	37.9	LOS D	3.7	26.3	0.98	0.77	0.98	32.7
6	R2	All MCs	39	3.1	39	3.1	*0.449	60.0	LOS E	3.7	26.3	0.98	0.77	0.98	32.7
Approach			84	3.1	84	3.1	0.449	48.1	LOS D	3.7	26.3	0.98	0.77	0.98	32.7
North: David Low Way (North)															
7	L2	All MCs	45	3.1	45	3.1	0.036	9.9	LOS A	0.6	4.3	0.32	0.64	0.32	49.6
8	T1	All MCs	417	3.1	417	3.1	0.377	10.9	LOS B	9.8	70.3	0.58	0.51	0.58	50.8
Approach			462	3.1	462	3.1	0.377	10.8	LOS B	9.8	70.3	0.55	0.52	0.55	50.7
All Vehicles			1121	3.1	1121	3.1	0.469	15.7	LOS B	13.1	93.8	0.64	0.57	0.64	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2044 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	537	3.1	537	3.1	*0.506	13.2	LOS B	14.5	103.9	0.66	0.59	0.66	49.3
3	R2	All MCs	25	3.1	25	3.1	*0.096	42.4	LOS D	1.0	7.1	0.90	0.71	0.90	34.4
Approach			562	3.1	562	3.1	0.506	14.5	LOS B	14.5	103.9	0.68	0.60	0.68	48.3
East: Green Turtle Place															
4	L2	All MCs	33	3.1	33	3.1	0.509	34.4	LOS C	4.5	32.0	0.99	0.78	0.99	32.6
6	R2	All MCs	69	3.1	69	3.1	*0.509	54.8	LOS D	4.5	32.0	0.99	0.78	0.99	32.7
Approach			102	3.1	102	3.1	0.509	48.3	LOS D	4.5	32.0	0.99	0.78	0.99	32.7
North: David Low Way (North)															
7	L2	All MCs	59	3.1	59	3.1	0.046	10.0	LOS A	0.8	5.6	0.33	0.64	0.33	49.6
8	T1	All MCs	431	3.1	431	3.1	0.405	12.2	LOS B	10.8	77.2	0.62	0.54	0.62	49.9
Approach			489	3.1	489	3.1	0.405	12.0	LOS B	10.8	77.2	0.58	0.55	0.58	49.9
All Vehicles			1154	3.1	1154	3.1	0.509	16.4	LOS B	14.5	103.9	0.66	0.59	0.66	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Green Turtle Place												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	105	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	447	3.1	447	3.1	0.620	26.3	LOS C	18.1	130.2	0.83	0.83	0.83	39.7
2	T1	All MCs	536	3.1	536	3.1	* 0.952	73.4	LOS E	31.9	228.9	0.99	1.19	1.37	30.1
3	R2	All MCs	25	3.1	25	3.1	0.232	68.9	LOS E	1.3	9.0	0.98	0.71	0.98	30.3
Approach			1008	3.1	1008	3.1	0.952	52.4	LOS D	31.9	228.9	0.92	1.02	1.12	31.9
East: Green Turtle Place															
4	L2	All MCs	33	3.1	33	3.1	0.338	41.6	LOS D	4.5	32.6	0.92	0.77	0.92	33.4
5	T1	All MCs	1	3.1	1	3.1	* 0.338	43.1	LOS D	4.5	32.6	0.92	0.77	0.92	34.3
6	R2	All MCs	69	3.1	69	3.1	0.338	48.8	LOS D	4.5	32.6	0.92	0.77	0.92	33.5
Approach			103	3.1	103	3.1	0.338	46.4	LOS D	4.5	32.6	0.92	0.77	0.92	33.5
North: David Low Way (North)															
7	L2	All MCs	59	3.1	59	3.1	0.077	15.8	LOS B	1.1	8.1	0.63	0.70	0.63	46.0
8	T1	All MCs	462	3.1	462	3.1	0.523	32.9	LOS C	11.6	83.5	0.87	0.73	0.87	39.3
9	R2	All MCs	100	3.1	100	3.1	* 0.917	70.4	LOS E	5.9	42.1	1.00	1.02	1.59	27.4
Approach			621	3.1	621	3.1	0.917	37.3	LOS D	11.6	83.5	0.87	0.78	0.97	37.2
West: Airport North Precinct Access															
10	L2	All MCs	96	3.1	96	3.1	0.188	41.1	LOS D	2.1	15.4	0.80	0.74	0.80	43.0
11	T1	All MCs	1	3.1	1	3.1	* 0.929	78.1	LOS E	22.7	163.4	1.00	1.07	1.40	29.0
12	R2	All MCs	372	3.1	372	3.1	0.929	83.7	LOS F	22.7	163.4	1.00	1.07	1.40	28.4
Approach			468	3.1	468	3.1	0.929	75.0	LOS E	22.7	163.4	0.96	1.00	1.27	26.5
All Vehicles			2201	3.1	2201	3.1	0.952	52.7	LOS D	31.9	228.9	0.91	0.93	1.10	31.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Green Turtle Place												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Airport North Precinct Access												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		50	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

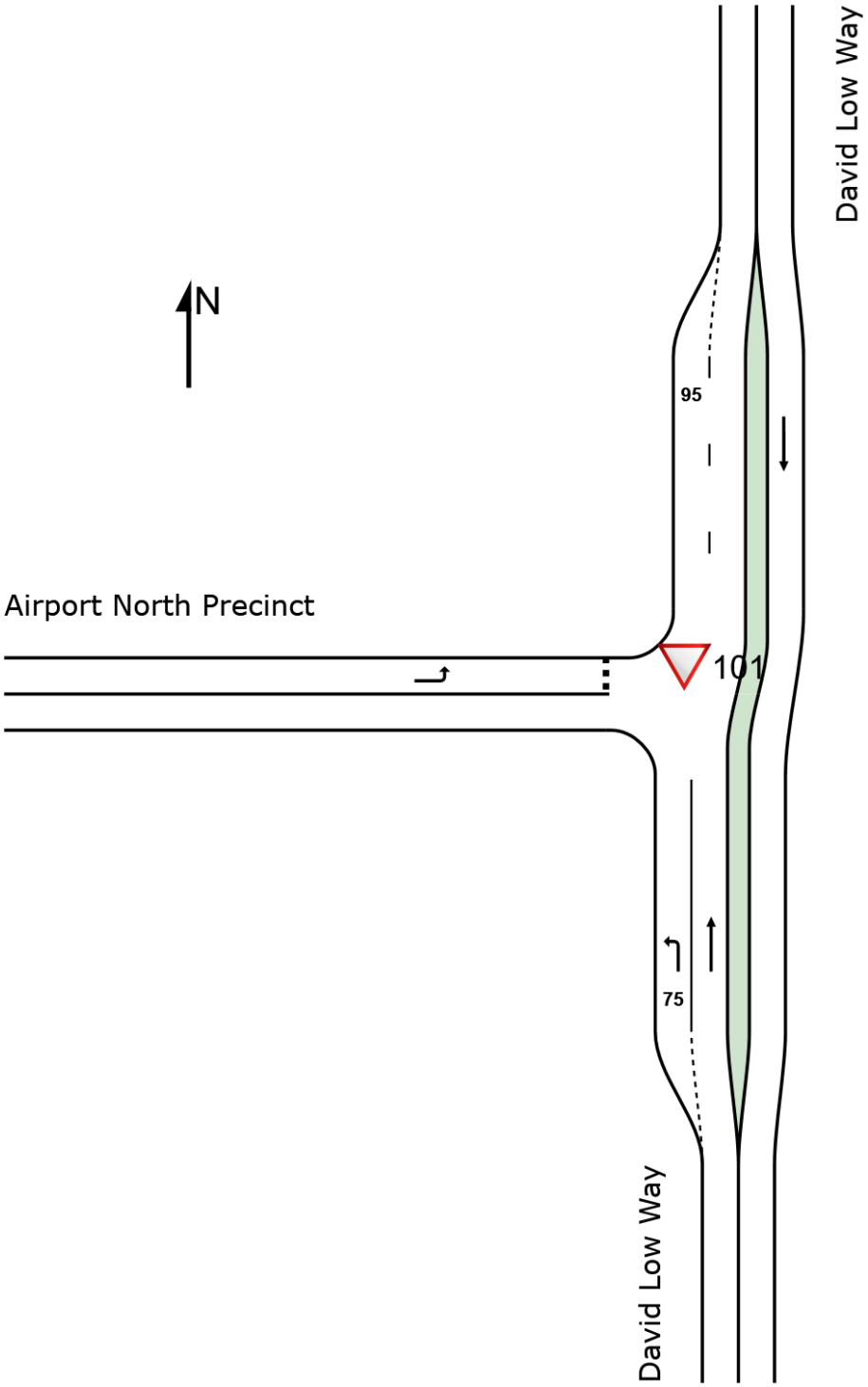
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SITE LAYOUT

Site: 101 [David Low Way / Airport North (Site Folder: 2044 AM Peak MP)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

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



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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA\SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
1	L2	All MCs	74	2.9	74	2.9	0.040	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	334	2.9	334	2.9	0.174	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			407	2.9	407	2.9	0.174	1.0	NA	0.0	0.0	0.00	0.10	0.00	58.5
North: David Low Way															
8	T1	All MCs	543	2.9	543	2.9	0.284	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			543	2.9	543	2.9	0.284	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Airport North Precinct															
10	L2	All MCs	123	2.9	123	2.9	0.105	6.8	LOS A	0.4	3.0	0.40	0.63	0.40	51.6
Approach			123	2.9	123	2.9	0.105	6.8	LOS A	0.4	3.0	0.40	0.63	0.40	51.6
All Vehicles			1074	2.9	1074	2.9	0.284	1.2	NA	0.4	3.0	0.05	0.11	0.05	58.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Airport North (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Airport North
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way															
1	L2	All MCs	82	3.1	82	3.1	0.045	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	554	3.1	554	3.1	0.290	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			636	3.1	636	3.1	0.290	0.8	NA	0.0	0.0	0.00	0.07	0.00	58.8
North: David Low Way															
8	T1	All MCs	562	3.1	562	3.1	0.294	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			562	3.1	562	3.1	0.294	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: Airport North Precinct															
10	L2	All MCs	108	3.1	108	3.1	0.121	8.2	LOS A	0.5	3.3	0.52	0.74	0.52	50.9
Approach			108	3.1	108	3.1	0.121	8.2	LOS A	0.5	3.3	0.52	0.74	0.52	50.9
All Vehicles			1306	3.1	1306	3.1	0.294	1.1	NA	0.5	3.3	0.04	0.10	0.04	58.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Appendix E

SLR Electra Lane Assessment Technical Note

Technical Memorandum

To:	Rob Blake	**From:**	Jess Peters Taylor Beauchamp
Company:	Sunshine Coast Airport		**SLR Consulting Australia Pty Ltd**
cc:	Arup, RPS	**Date:**	28 October 2025
		Project No.	620.041841.00001

RE: Sunshine Coast Airport Gateway Precinct Master Plan
Electra Lane Operational Assessment

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1.0 Introduction

SLR Consulting Australia Pty Ltd (**SLR**) has been engaged by Sunshine Coast Airport (**SCA**) to provide specialist advice relating to the transport aspects for the Sunshine Coast Airport Gateway Precinct Master Plan (**Gateway PMP**).

This technical memorandum summarises the findings of the operational assessment undertaken by SLR of the proposed secondary access intersection for the Gateway PMP via Electra Lane for the year of opening and design horizon. The proposed intersection location is indicatively shown on **Figure 1**.

Figure 1 Airport Drive/Electra Lane



2.0 Context

The following assessment relates to an operational assessment of the proposed access intersection for the Gateway PMP via Electra Lane. The assessment of the state-controlled road network was undertaken by Arup in accordance with Transport and Main Road's (**TMR**) Guide to Traffic Impact Assessment (**GTIA**) and covers the wider Priority Development Area (**PDA**).

Broader transport planning considerations and integration (such as public transport and active transport networks for the Gateway precinct and the wider PDA) have been presented in the Multi-Modal Transport Assessment (by SLR, dated 30 July 2025).

3.0 Proposed Development

Nominal development yields were adopted as provided by RPS/SCA during development of the Gateway PMP. The yields are generally consistent with the PDA Development Scheme. The breakdown in land uses and yields is outlined in **Table 1**.

Table 1 Gateway PMP Land Use and Yield Breakdown

Land Use	Nominal Assessed Yield
Car Wash	6 bays
Childcare Centre	100 places
Education Facility	250 places
Fast Food (Major)	200m²
Fast Food (Minor)	200m²
Food & Drink Outlet	400m²
Health Care Centre	250m²
Indoor Recreation	500m²
Light Industry	19,600m²
Office	5,000m²
Research & Tech Industry	9,500m²
Hotel/Short Term Accom	250 rooms
Service Station	240m²
Speciality Shops	700m²
Supermarket	1,500m²

4.0 Traffic Generation Assumptions

For the following assessment, most of the previous assumptions and inputs as captured in the previous assessment undertaken by PTT have been utilised for the following assessment for consistency. To summarise, the following inputs have been utilised:

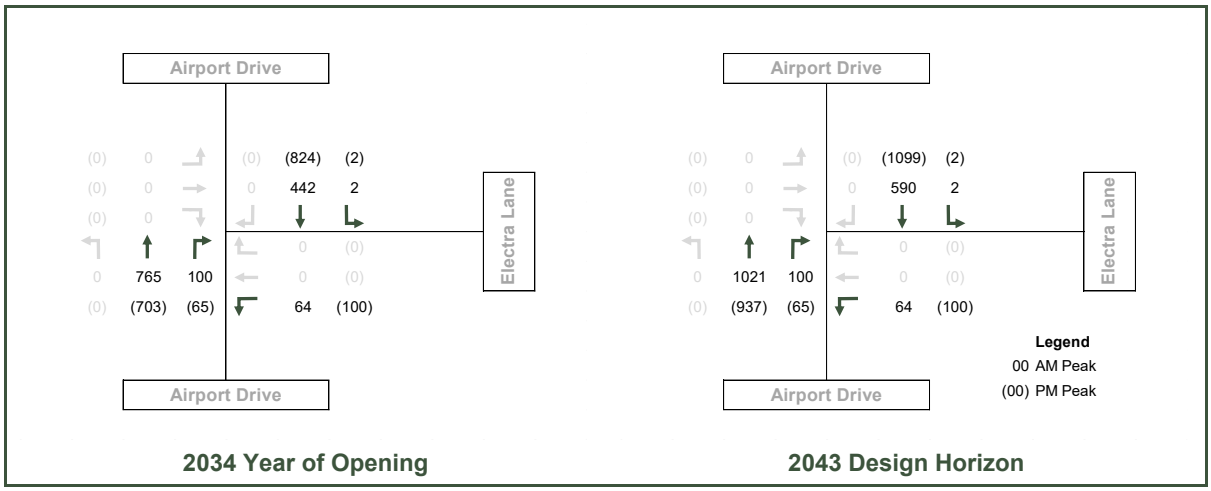
- Portion of Drop-In vs New Trips by Land-Use
- Portion of Internal/Shared Trips
- Split of Inbound/Outbound Trips by Land Use
- External Distribution for New Trips and Drop-In Trips

Following discussions with Arup, who have been engaged to undertake the GTIA assessment for the wider state-controlled road network on behalf of SCA, the traffic generation rates adopted for the following assessment have been revised from those within PTT's previous assessment and reporting. These rates are based on the latest guidance, and utilising rates consistent with Arup's assessment, ensures a uniform approach to the overall traffic-generating potential of the site.

Regarding the traffic growth for Airport Drive, in lieu of applying a percentage growth factor, a review of the projected passenger growth for the airport was undertaken. The projected increase from the survey year was conservatively applied to the existing surveyed traffic on Airport Drive.

The resultant traffic volumes for the year of opening and the design horizon (as per the GTIA), based on the above inputs, are shown in **Figure 2**. A nominal two trips were included from Airport Drive north turning left into Electra Lane, however it is estimated that all trips would originate from Airport Drive south.

Figure 2 Airport Drive/Electra Lane Traffic Volumes

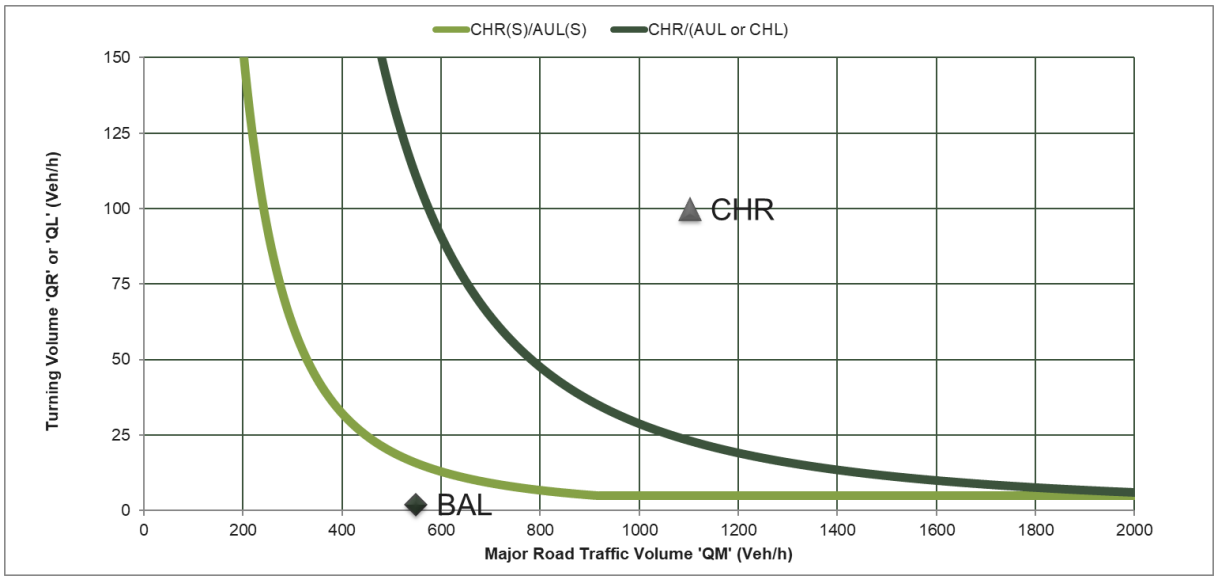


5.0 Operational Assessment and Results

5.1 Airport Drive/Electra Lane Intersection Assessment

To confirm the recommended intersection geometry facilitating safe turning movements into Electra Lane from Airport Drive, a Turn Warrant Assessment (**TWA**) was undertaken. The results of the TWA, which can be seen for the worst-case scenario in the design horizon (2043) in either the AM or PM peak, are shown in **Figure 3**.

Figure 3 Airport Drive/Electra Lane Turn Warrant Assessment - 2043



As documented in **Figure 3**, based on the volume of vehicle movements at the Airport Drive/Electra Lane intersection, a full-length channelised right turn lane (CHR) is required to cater for the traffic demands entering the Gateway precinct. .

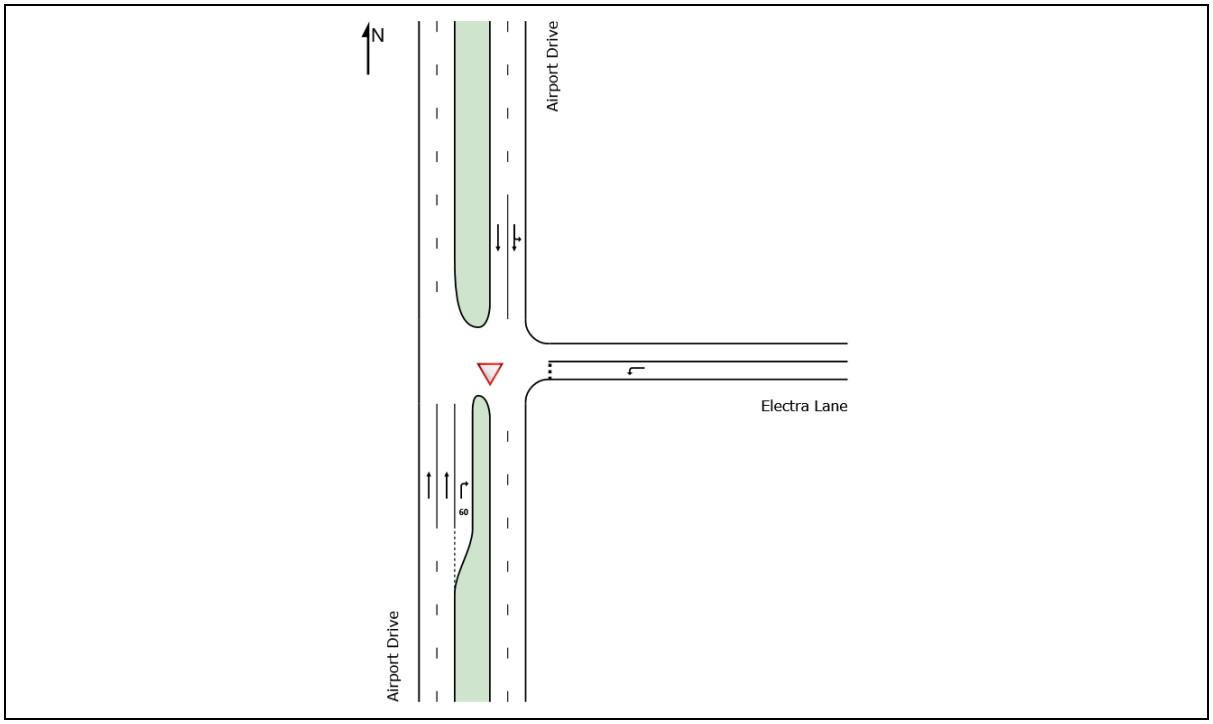
Whilst the TWA shows that a BAL is required for the intersection, this standard of treatment is shown as the minimum within a TWA and does not consider the very low volume of vehicles anticipated to undertake this movement during the peak periods.

It is noted that in this instance, it is very unlikely that a vehicle would access the Gateway PMP from the northern approach of Airport Drive, as there are existing connections internal to the airport precinct (i.e., Friendship Ave). For the small portion of vehicles that may require a left turn into Electra Lane from Airport Drive, a simple left turn treatment (shared left turn from a through lane) is considered sufficient based on the following:

- The anticipated demands for this movement are very low, based on the surrounding land use attractors and road network.
- The speed environment on Airport Drive within the vicinity of the proposed intersection is 60km/h. In addition to this lower speed environment, given the urban location of the site and the sufficient sight lines on approach to the proposed Electra Lane intersection location, it is not anticipated that a simple left turn treatment will significantly impact the safety and operation of the road network.

Based on this, the layout of the Airport Drive/Electra Lane intersection, as assessed in the SIDRA model, is shown in **Figure 4**. As shown in the layout, the intersection has been assessed with a CHR, and a simple left turn treatment, assuming any vehicles turning left from Airport Drive into Electra Lane will do so sharing the through lane.

Figure 4 Airport Drive/Electra Lane Intersection Form



The results of the assessment based on the above proposed intersection layout are outlined in **Table 2**. Detailed SIDRA results are provided in **Attachment 1**.

Table 2 SIDRA Outputs: Airport Drive/Electra Lane Intersection

Scenario	AM Peak			PM Peak		
	DOS	Crit. Delay (sec)	95thile Queue (m)	DOS	Crit. Delay (sec)	95thile Queue (m)
Proposed Intersection Layout						
2034 Opening Year	0.21	8.0	3.0	0.23	11.8	3.3
2043 Design Horizon	0.28	9.3	3.6	0.30	17.5	3.6

The results outlined in **Table 2** show that the proposed intersection layout, with a CHR and simple left turn treatment, is suitable to cater for the traffic demands associated with the ultimate scenario assessed. The noted critical delays for turning traffic are also within generally adopted thresholds (i.e. less than 42 seconds).

Whilst the above assessment is isolated to the Airport Drive/Electra Lane intersection, consideration has been given to the potential interaction between the Airport Drive/Electra Lane intersection and intersections to the north and south on Airport Drive.

Results from the prior assessment undertaken for the roundabout to the north on Airport Drive show that queueing from the roundabout is not anticipated to occur to an extent that would impact the operation of the Airport Drive/Electra Lane intersection.

In addition, from the documented results in **Table 2**, it can be seen that the proposed right turn lane is sufficient to accommodate the projected traffic demands, with no upstream impacts to the David Low Way/Northshore Connection Road/Airport Drive signalised intersection anticipated.

6.0 Closure

This memorandum outlines the findings of SLR's operational assessment of the proposed access intersection to Electra Lane for the Sunshine Coast Airport Gateway PMP for the year of opening and design horizon.

To accommodate the forecast traffic demands associated with the Gateway PMP, it is recommended to provide the Airport Drive/Electra Lane intersection with a Channelised Right Turn (CHR) treatment and a simple left turn treatment.

Broader transport network integration (such as active transport and public transport considerations) has previously been addressed in the Multi-Modal Transport Assessment (by SLR, dated 30 July 2025).

Regards,

SLR Consulting Australia Pty Ltd





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Attachment 1 Detailed SIDRA Outputs

SLR Ref No.: 620.041841-M02-v1.1 Electra Lane Assessment 20251028.docx

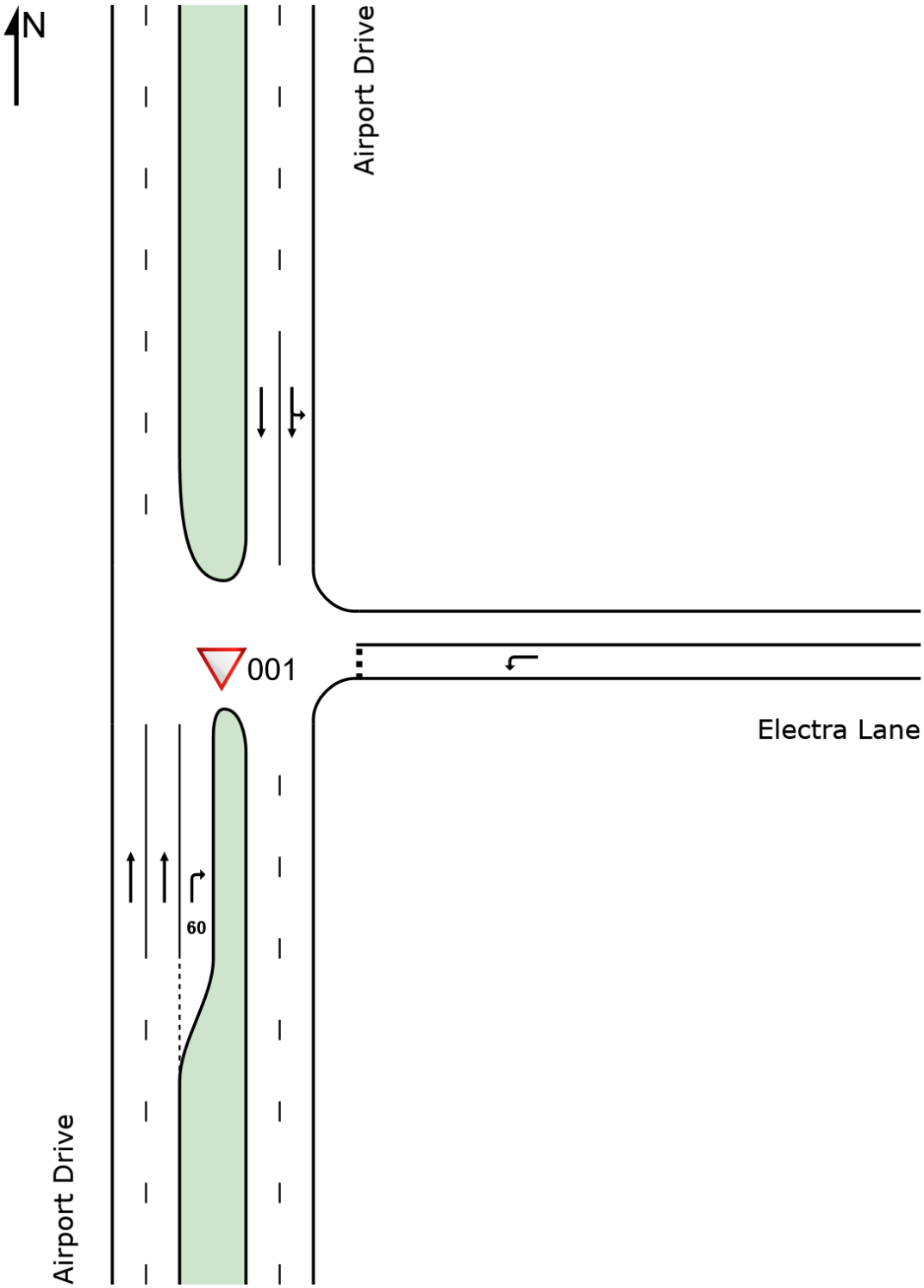
Attachment 1 SIDRA Outputs

SITE LAYOUT

Site: 001 [001 - 2034 AM BG+D (Site Folder: General)]

NA
Site Category: NA
Give-Way (Two-Way)

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



MOVEMENT SUMMARY

Site: 001 [001 - 2034 AM BG+D (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA
Site Category: NA
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Airport Drive															
2	T1	All MCs	806	3.0	806	3.0	0.211	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	105	3.0	105	3.0	0.122	8.0	LOS A	0.4	3.0	0.42	0.68	0.42	41.9
Approach			911	3.0	911	3.0	0.211	1.0	NA	0.4	3.0	0.05	0.08	0.05	57.0
East: Electra Lane															
4	L2	All MCs	67	3.0	67	3.0	0.064	6.6	LOS A	0.2	1.7	0.32	0.59	0.32	42.8
Approach			67	3.0	67	3.0	0.064	6.6	LOS A	0.2	1.7	0.32	0.59	0.32	42.8
North: Airport Drive															
7	L2	All MCs	2	3.0	2	3.0	0.122	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	50.9
8	T1	All MCs	466	3.0	466	3.0	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			468	3.0	468	3.0	0.122	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			1446	3.0	1446	3.0	0.211	0.9	NA	0.4	3.0	0.05	0.08	0.05	57.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 001 [001 - 2034 PM BG+D (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA
Site Category: NA
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Airport Drive															
2	T1	All MCs	740	3.0	740	3.0	0.193	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	68	3.0	68	3.0	0.135	11.8	LOS B	0.4	3.0	0.67	0.86	0.67	37.9
Approach			808	3.0	808	3.0	0.193	1.0	NA	0.4	3.0	0.06	0.07	0.06	57.1
East: Electra Lane															
4	L2	All MCs	105	3.0	105	3.0	0.129	7.9	LOS A	0.5	3.3	0.47	0.71	0.47	41.6
Approach			105	3.0	105	3.0	0.129	7.9	LOS A	0.5	3.3	0.47	0.71	0.47	41.6
North: Airport Drive															
7	L2	All MCs	2	3.0	2	3.0	0.227	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	50.9
8	T1	All MCs	867	3.0	867	3.0	0.227	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			870	3.0	870	3.0	0.227	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
All Vehicles			1783	3.0	1783	3.0	0.227	0.9	NA	0.5	3.3	0.05	0.08	0.05	57.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 001 [001 - 2043 AM BG+D (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA
Site Category: NA
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Airport Drive															
2	T1	All MCs	1074	3.0	1074	3.0	0.281	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	105	3.0	105	3.0	0.148	9.3	LOS A	0.5	3.6	0.53	0.77	0.53	40.5
Approach			1179	3.0	1179	3.0	0.281	0.9	NA	0.5	3.6	0.05	0.07	0.05	57.4
East: Electra Lane															
4	L2	All MCs	67	3.0	67	3.0	0.070	7.0	LOS A	0.3	1.8	0.38	0.63	0.38	42.6
Approach			67	3.0	67	3.0	0.070	7.0	LOS A	0.3	1.8	0.38	0.63	0.38	42.6
North: Airport Drive															
7	L2	All MCs	2	3.0	2	3.0	0.163	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	50.9
8	T1	All MCs	621	3.0	621	3.0	0.163	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			623	3.0	623	3.0	0.163	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			1869	3.0	1869	3.0	0.281	0.8	NA	0.5	3.6	0.04	0.07	0.04	57.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 001 [001 - 2043 PM BG+D (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA
Site Category: NA
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Airport Drive															
2	T1	All MCs	987	3.0	987	3.0	0.258	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	68	3.0	68	3.0	0.217	17.5	LOS C	0.7	4.7	0.81	0.93	0.86	33.1
Approach			1055	3.0	1055	3.0	0.258	1.2	NA	0.7	4.7	0.05	0.06	0.06	56.9
East: Electra Lane															
4	L2	All MCs	105	3.0	105	3.0	0.157	9.3	LOS A	0.6	4.0	0.55	0.79	0.55	40.1
Approach			105	3.0	105	3.0	0.157	9.3	LOS A	0.6	4.0	0.55	0.79	0.55	40.1
North: Airport Drive															
7	L2	All MCs	2	3.0	2	3.0	0.303	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	50.9
8	T1	All MCs	1157	3.0	1157	3.0	0.303	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			1159	3.0	1159	3.0	0.303	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
All Vehicles			2319	3.0	2319	3.0	0.303	1.0	NA	0.7	4.7	0.05	0.06	0.05	57.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Appendix F

Network delay calculation

Total Intersection Aggregate Delay Impact VISUM Only

GAP			MP		
Sum WD (GAP)	991,830.04	16,530.50	Sum WD (MP)	1,091,637.67	18,193.96
Sum BC (DN)	965,695.96	16,094.93	Sum BC (GAP)	991,830.04	16,530.50
ID	26,134.08	435.57	ID	99,807.63	1,663.46
% Impact	2.71%		% Impact	10.06%	

VISUM Assessed Intersections	GAP Aggregate Delay	2.7% increase	MP Aggregate Delay	13.0% increase

2034 AM Peak Base Case	
All Vehicles	486154.4

2034 PM Peak Base Case	
All Vehicles	479541.6

2034 AM Peak GAP	
All Vehicles	499238.7

2034 PM Peak GAP	
All Vehicles	492591.3

2034 AM Peak MP	
All Vehicles	556044.9

2034 PM Peak MP	
All Vehicles	535592.8

Total Intersection Aggregate Delay Impact 2034

GAP			MP		
Sum WD (GAP)	1,696,518.05	28,275.30	Sum WD (MP)	2,176,568.93	36,276.15
Sum BC (DN)	1,595,807.91	26,596.80	Sum BC (GAP)	1,696,518.05	28,275.30
ID	100,710.13	1,678.50	ID	480,050.88	8,000.85
% Impact	6.31%		% Impact	28.30%	

North Shore Connection Road / David Low Way / Airport Drive — GAP Aggregate Delay (per intersection) — 3.3% increase — MP Aggregate Delay (per intersection) — 11.6% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	217	10.3	2235.1
2	T1	93	45.4	4222.2
3	R2	63	50.5	3181.5
3u	U	1	51.9	51.9
Approach		374	25.9	
4	L2	117	6.0	702.0
5	T1	603	32.2	19416.6
6	R2	33	42.1	1389.3
6u	U	1	43.4	43.4
Approach		754	28.6	
7	L2	33	8.5	280.5
8	T1	81	39.5	3199.5
9	R2	273	46.8	12776.4
Approach		386	42	
10	L2	574	5.7	3271.8
11	T1	381	24.4	9296.4
12	R2	82	52.3	4288.6
Approach		1037	16.3	
All Vehicles		2551	25.2	64355.2

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	187	9.7	1813.9
2	T1	81	39.5	3199.5
3	R2	189	48.4	9147.6
3u	U	1	49.8	49.8
Approach		459	31	
4	L2	141	6.7	944.7
5	T1	276	36.4	10046.4
6	R2	41	43.7	1791.7
6u	U	1	45	45.0
Approach		459	28	
7	L2	48	12.3	590.4
8	T1	155	36.1	5595.5
9	R2	512	44.5	22784.0
Approach		715	40.5	
10	L2	487	5.7	2775.9
11	T1	546	37.8	20638.8
12	R2	160	51.3	8208
Approach		1194	26.5	
All Vehicles		2826	31.0	87631.2

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	217	13.0	2821
2	T1	93	45.6	4240.8
3	R2	63	49.5	3118.5
3u	U	1	51	51
Approach		374	29.6	
4	L2	117	5.9	690.3
5	T1	603	41.9	25265.7
6	R2	33	53.2	1755.6
6u	U	1	54.5	54.5
Approach		754	36.6	
7	L2	33	8.5	280.5
8	T1	81	32.2	2608.2
9	R2	273	41.3	11274.9
Approach		386	37.8	
10	L2	574	5.9	3386.6
11	T1	381	30.9	11772.9
12	R2	82	54.2	4444.4
Approach		1037	15.1	
All Vehicles		2551	26.4	71764.9

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	187	12.0	2244.0
2	T1	81	50.3	4074.3
3	R2	189	55	10395.0
3u	U	1	56.5	56.5
Approach		459	35.6	
4	L2	141	6.0	846.0
5	T1	276	33.4	9218.4
6	R2	41	41.8	1713.8
6u	U	1	43.1	43.1
Approach		459	25.8	
7	L2	48	10.3	494.4
8	T1	155	26.9	4169.5
9	R2	512	36.7	18790.4
Approach		715	33.4	
10	L2	487	5.8	2824.6
11	T1	546	40.5	22113.0
12	R2	160	51.2	8192.0
Approach		1194	22.9	
All Vehicles		2826	27.9	85175.0

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	217	16.1	3493.7
2	T1	93	49.8	4631.4
3	R2	63	53.5	3370.5
3u	U	1	55	55
Approach		374	36.9	
4	L2	117	5.8	678.6
5	T1	603	42.5	25627.5
6	R2	33	50.3	1659.9
6u	U	1	51.6	51.6
Approach		754	37.4	
7	L2	33	10.5	346.5
8	T1	81	35.1	2843.1
9	R2	273	44.6	12175.8
Approach		386	41.2	
10	L2	574	5.9	3386.6
11	T1	381	27.3	10401.3
12	R2	82	55.8	4575.6
Approach		1037	16.4	
All Vehicles		2551	28.4	73297.1

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	187	17.7	3309.9
2	T1	81	56.3	4560.3
3	R2	189	59.9	11321.1
3u	U	1	61.4	61.4
Approach		459	37	
4	L2	141	6.1	860.1
5	T1	276	39.6	10929.6
6	R2	41	50.5	2070.5
6u	U	1	51.8	51.8
Approach		459	32.4	
7	L2	48	13.6	652.8
8	T1	155	30.1	4665.5
9	R2	512	45.1	23091.2
Approach		715	40.9	
10	L2	487	5.8	2824.6
11	T1	546	41.7	22768.2
12	R2	160	57.6	9216.0
Approach		1194	28.6	
All Vehicles		2826	33.5	96383.0

David Low Way / New Road / Gateway Precinct Access — GAP Aggregate Delay (per intersection) — 58.98% increase — MP Aggregate Delay (per intersection) — 54.8% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	19	25.4	482.6
2	T1	0	0.0	0.0
3	R2	3	41.4	124.2
Approach		20	26.3	
4	L2	4	11.2	44.8
5	T1	733	19.3	14146.9
6	R2	0	0	0.0
Approach		737	19.2	
7	L2	0	0.0	0.0
8	T1	0	0.0	0.0
9	R2	0	0.0	0.0
Approach		0	0.0	
10	L2	0	0.0	0.0
11	T1	432	23.6	10195.2
12	R2	43	23.5	1010.5
Approach		475	23.6	
All Vehicles		1232	21.0	26004.2

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	19	25.5	484.5
2	T1	0	0.0	0.0
3	R2	5	41.8	209
Approach		24	29	
4	L2	7	11.3	79.1
5	T1	435	17.5	7612.5
6	R2	0	0.0	0.0
Approach		442	17.4	
7	L2	0	0.0	0.0
8	T1	0	0.0	0.0
9	R2	0	0.0	0.0
Approach		0	0.0	
10	L2	0	0.0	0.0
11	T1	703	26.2	18418.6
12	R2	81	26.7	2162.7
Approach		784	26.3	
All Vehicles		1251	23.2	28966.4

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	19	31.7	602.3
2	T1	0	37.0	0.0
3	R2	3	42.6	127.8
Approach		20	36.8	
4	L2	4	13.6	54.4
5	T1	733	32.3	23675.9
6	R2	0	56.6	0.0
Approach		737	34.7	
7	L2	0	20.0	0.0
8	T1	0	30.6	0.0
9	R2	0	42.8	0.0
Approach		0	32.6	
10	L2	0	26.1	0.0
11	T1	432	29.6	12787.2
12	R2	43	35.9	1543.7
Approach		475	29.7	
All Vehicles		1232	33.0	38791.3

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	19	26.0	494.0
2	T1	0	38.7	0.0
3	R2	5	44.4	222.0
Approach		24	41.2	
4	L2	7	16.1	112.7
5	T1	435	37.1	16138.5
6	R2	0	46.1	0.0
Approach		442	37.8	
7	L2	0	19.1	0.0
8	T1	0	35.5	0.0
9	R2	0	44.5	0.0
Approach		0	34.8	
10	L2	0	33.3	0.0
11	T1	703	42.8	30088.4
12	R2	81	19.1	1547.1
Approach		784	39.5	
All Vehicles		1251	38.2	48602.7

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	19	33.3	632.7
2	T1	0	37.7	0.0
3	R2	3	43.4	130.2
Approach		20	38.7	
4	L2	4	24.6	98.4
5	T1	733	49.3	36136.9
6	R2	0	68.7	0.0
Approach		737	50.6	
7	L2	0	21.8	0.0
8	T1	0	31.5	0.0
9	R2	0	42.4	0.0
Approach		0	31.1	
10	L2	0	24.1	0.0
11	T1	432	28.3	12225.6
12	R2	43	49.9	2145.7
Approach		475	28.9	
All Vehicles		1232	41.0	51369.5

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	19	33.5	636.5
2	T1	0	39.1	0.0
3	R2	5	44.8	224.0
Approach		24	42.1	
4	L2	7	13.5	94.5
5	T1	435	31.1	13528.5
6	R2	0	60.4	0.0
Approach		442	33.5	
7	L2	0	23.5	0.0
8	T1	0	32.2	0.0
9	R2	0	44.4	0.0
Approach		0	34.4	
10	L2	0	19.1	0.0
11	T1	703	21.1	14833.3
12	R2	81	54.2	4390.2
Approach		784	22.7	
All Vehicles		1251	29.4	33707.0

David Low Way / Green Turtle Place / Airport North Precinct Access — GAP Aggregate Delay (per intersection) — 2.6% increase — MP Aggregate Delay (per intersection) — 147.2% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	0	0.0	0.0
2	T1	265	13.3	3524.5
3	R2	25	42.3	1057.5
Approach		291	15.8	
4	L2	33	30.5	1006.5
5	T1	0	0.0	0.0
6	R2	69	49.5	3415.5
Approach		102	43.4	
7	L2	59	10.0	590.0
8	T1	379	14.3	5419.7
9	R2	0	0.0	0.0
Approach		438	13.7	
10	L2	0	0.0	0.0
11	T1	0	0.0	0.0
12	R2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		831	18.1	15013.7

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	0	0.0	0.0
2	T1	486	12.1	5880.6
3	R2	57	43.3	2468.1
Approach		543	15.4	
4	L2	45	36.8	1656.0
5	T1	0	0.0	0.0
6	R2	39	58.4	2277.6
Approach		84	46.8	
7	L2	45	9.9	445.5
8	T1	378	11.2	4233.6
9	R2	0	0.0	0.0
Approach		423	11.1	
10	L2	0	0.0	0.0
11	T1	0	0.0	0.0
12	R2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		1051	16.2	16961.4

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	0	0.0	0.0
2	T1	265	13.4	3551.0
3	R2	25	42.3	1057.5
Approach		291	15.8	
4	L2	33	30.5	1006.5
5	T1	0	0.0	0.0
6	R2	69	49.5	3415.5
Approach		102	43.4	
7	L2	59	10.0	590.0
8	T1	379	14.4	5457.6
9	R2	0	0.0	0.0
Approach		438	13.8	
10	L2	0	0.0	0.0
11	T1	0	0.0	0.0
12	R2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		831	18.1	15078.1

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	0	0.0	0.0
2	T1	486	13.4	6512.4
3	R2	57	42.4	2416.8
Approach		543	14.8	
4	L2	45	33.4	1503.0
5	T1	0	0.0	0.0
6	R2	39	53.4	2082.6
Approach		84	47.0	
7	L2	45	10	450.0
8	T1	378	12.6	4762.8
9	R2	0	0.0	0.0
Approach		423	12.2	
10	L2	0	0.0	0.0
11	T1	0	0.0	0.0
12	R2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		1051	16.8	17727.6

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	0	24.8	0.0
2	T1	265	39.1	10361.5
3	R2	25	45.5	1137.5
Approach		291	32.5	
4	L2	33	29.9	986.7
5	T1	0	32.1	0.0
6	R2	69	37.7	2601.3
Approach		102	35.2	
7	L2	59	15.3	902.7
8	T1	379	35.5	13454.5
9	R2	0	47.4	0.0
Approach		438	35.0	
10	L2	0	25.9	0.0
11	T1	0	43.3	0.0
12	R2	0	48.9	0.0
Approach		0	44.6	
All Vehicles		831	36.3	29444.2

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	0	25.6	0.0
2	T1	486	59.7	29014.2
3	R2	57	66.8	3807.6
Approach		543	44.4	
4	L2	45	41.5	1867.5
5	T1	0	43.1	0.0
6	R2	39	48.8	1903.2
Approach		84	46.4	
7	L2	45	15.8	711.0
8	T1	378	32.5	12285.0
9	R2	0	68.2	0.0
Approach		423	36.8	
10	L2	0	40.9	0.0
11	T1	0	76.5	0.0
12	R2	0	82.1	0.0
Approach		0	74.1	
All Vehicles		1051	48.9	49588.5

David Low Way / Airport North LILO Access — GAP Aggregate Delay (per intersection) — 0.0% increase — MP Aggregate Delay (per intersection) — 64.9% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)

1	L2	0	0.0	0.0
2	T1	265	0.0	0.0
Approach		265	0.0	
8	T1	378	0.1	37.8
Approach		378	0.1	
10	L2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		643	0.1	37.8

1	L2	0	0.0	0.0
2	T1	491	0.0	0.0
Approach		491	0.0	
8	T1	379	0.1	37.9
Approach		379	0.1	
10	L2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		869	0.1	37.9

1	L2	0	0.0	0.0
2	T1	265	0.0	0.0
Approach		265	0.0	
8	T1	378	0.1	37.8
Approach		378	0.1	
10	L2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		643	0.1	37.8

1	L2	0	0.0	0.0
2	T1	491	0.0	0.0
Approach		491	0.0	
8	T1	379	0.1	37.9
Approach		379	0.1	
10	L2	0	0.0	0.0
Approach		0	0.0	
All Vehicles		869	0.1	37.9

1	L2	0	5.6	0.0
2	T1	265	0.0	0.0
Approach		265	1.1	
8	T1	378	0.1	37.8
Approach		378	0.1	
10	L2	0	6.7	0.0
Approach		0	6.7	
All Vehicles		643	1.3	37.8

1	L2	0	5.6	0.0
2	T1	491	0.1	49.1
Approach		491	0.9	
8	T1	379	0.1	37.9
Approach		379	0.1	
10	L2	0	7.8	0.0
Approach		0	7.8	
All Vehicles		869	1.2	87.0

David Low Way / Sunshine Motorway Ramps — GAP Aggregate Delay (per intersection) — 29.2% increase — MP Aggregate Delay (per intersection) — 20.3% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	135	4.5	607.5
2	T1	1	5.4	5.4
3	R2	647	11.5	7440.5
Approach		783	10.3	
4	L2	797	3.9	3108.3
5	T1	207	5.0	1035.0
6	R2	228	11.2	2553.6
Approach		1233	5.4	
7	L2	91	16.4	1492.4
8	T1	1	13.4	13.4
9	R2	241	20.5	4940.5
Approach		333	19.4	
10	L2	794	10.7	8495.8
11	T1	242	21.9	5299.8
12	R2	365	28.9	10548.5
Approach		1401	17.4	
All Vehicles		3749	12.2	45540.7

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	200	5.5	1100.0
2	T1	1	8.1	8.1
3	R2	946	15	14190
Approach		1147	13.3	
4	L2	607	2.6	1578.2
5	T1	221	5.0	1105.0
6	R2	93	11.2	1041.6
Approach		921	4	
7	L2	140	23.7	3318.0
8	T1	1	61.3	61.3
9	R2	400	68.4	27360.0
Approach		541	56.8	
10	L2	543	13.5	7330.5
11	T1	219	40.5	8869.5
12	R2	222	47.8	10611.6
Approach		984	27.3	
All Vehicles		3594	21.3	76573.8

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	135	4.7	634.5
2	T1	1	5.7	5.7
3	R2	647	11.8	7634.6
Approach		783	10.6	
4	L2	797	3.9	3108.3
5	T1	207	5.3	1097.1
6	R2	228	11.4	2599.2
Approach		1233	5.5	
7	L2	91	16.3	1483.3
8	T1	1	17.4	17.4
9	R2	241	24.6	5928.6
Approach		333	22.7	
10	L2	794	12.3	9766.2
11	T1	242	21.6	5227.2
12	R2	365	28.7	10475.5
Approach		1401	18.0	
All Vehicles		3749	13	47977.6

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	200	6.0	1200.0
2	T1	1	9.1	9.1
3	R2	946	16	15136
Approach		1147	14.2	
4	L2	607	2.6	1578.2
5	T1	221	5.4	1193.4
6	R2	93	11.4	1060.2
Approach		921	4.2	
7	L2	140	25.7	3598.0
8	T1	1	145.4	145.4
9	R2	400	152.5	61000.0
Approach		541	122.7	
10	L2	543	14.8	8036.4
11	T1	219	34.5	7555.5
12	R2	222	41.6	9235.2
Approach		984	24.7	
All Vehicles		3594	31.8	109747.4

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	135	5.1	688.5
2	T1	1	6.6	6.6
3	R2	647	12.4	8022.8
Approach		783	11.1	
4	L2	797	4.3	3427.1
5	T1	207	5.9	1221.3
6	R2	228	11.8	2690.4
Approach		1233	5.9	
7	L2	91	16.6	1510.6
8	T1	1	23.6	23.6
9	R2	241	30.8	7422.8
Approach		333	27.7	
10	L2	794	15.9	12624.6
11	T1	242	23.6	5711.2
12	R2	365	30.6	11169.0
Approach		1401	20.7	
All Vehicles		3749	14.8	54518.5

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	200	6.7	1340.0
2	T1	1	9.8	9.8
3	R2	946	16.7	15798.2
Approach		1147	15	
4	L2	607	2.6	1578.2
5	T1	221	6.1	1348.1
6	R2	93	11.9	1106.7
Approach		921	4.5	
7	L2	140	19.2	2688.0
8	T1	1	119.3	119.3
9	R2	400	126.5	50600.0
Approach		541	103.4	
10	L2	543	14.1	7656.3
11	T1	219	19.5	4270.5
12	R2	222	26.6	5905.2
Approach		984	17.6	
All Vehicles		3594	28.9	92420.3

David Low Way / Ocean Drive / Twin Waters West Access — GAP Aggregate Delay (per intersection) — -0.3% increase — MP Aggregate Delay (per intersection) — 0.4% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
21	L2	2	37.5	75.0
21a	L1	558	37.4	20869.2
23	R2	12	67.7	812.4
Approach		572	38	
24	L2	27	43.4	1171.8
25	T1	14	37.8	529.2
26a	R1	575	49.7	28577.5
Approach		616	49.2	
10a	L1	469	15.4	7222.6
12a	R1	428	39.5	16906.0
12b	R3	49	72.8	3567.2
Approach		947	29.3	
30b	L3	97	74.0	7178.0
31	T1	155	52.0	8060.0
32	R2	35	57.6	2016.0
Approach		286	60.1	
All Vehicles		2421	40.0	96984.9

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
21	L2	2	32.8	65.6
21a	L1	400	32.0	12800.0
23	R2	17	62.2	1057.4
Approach		419	33.2	
24	L2	51	48.9	2493.9
25	T1	24	43.3	1039.2
26a	R1	461	52.5	24202.5
Approach		536	51.7	
10a	L1	637	17.5	11147.5
12a	R1	444	36.2	16072.8
12b	R3	80	67.6	5408.0
Approach		1161	28.1	
30b	L3	52	64.9	3374.8
31	T1	33	50.3	1659.9
32	R2	6	56.0	336.0
Approach		91	59.0	
All Vehicles		2206	36.1	79657.6

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	2	37.5	75.0
21a	L1	558	37.3	20813.4
23	R2	12	67.2	806.4
Approach		572	37.7	
24	L2	27	44.2	1193.4
25	T1	14	38.6	540.4
26a	R1	575	50.5	29037.5
Approach		616	50.0	
10a	L1	469	16	7504.0
12a	R1	428	39.5	16906.0
12b	R3	49	72.7	3562.3
Approach		947	29.5	
30b	L3	97	73.7	7148.9
31	T1	155	51.3	7951.5
32	R2	35	56.9	1991.5
Approach		286	59.0	
All Vehicles		2421	40.2	97530.3

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	2	33.6	67.2
21a	L1	400	32.9	13160.0
23	R2	17	66.9	1137.3
Approach		419	34.7	
24	L2	51	45.2	2305.2
25	T1	24	39.6	950.4
26a	R1	461	49.9	23003.9
Approach		536	49.0	
10a	L1	637	15.7	10000.9
12a	R1	444	37.3	16561.2
12b	R3	80	71.9	5752.0
Approach		1161	27.3	
30b	L3	52	69.6	3619.2
31	T1	33	50.5	1666.5
32	R2	6	56.2	337.2
Approach		91	61.1	
All Vehicles		2206	36.1	78561.0

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	2	39.1	78.2
21a	L1	558	39.4	21985.2
23	R2	12	66.6	799.2
Approach		572	40.3	
24	L2	27	41.9	1131.3
25	T1	14	36.3	508.2
26a	R1	575	49.4	28405
Approach		616	48.7	
10a	L1	469	15.6	7316.4
12a	R1	428	41.3	17676.4
12b	R3	49	71.1	3483.9
Approach		947	30.0	
30b	L3	97	73.3	7110.1
31	T1	155	54.1	8385.5
32	R2	35	59.7	2089.5
Approach		286	61.9	
All Vehicles		2421	41.4	98968.9

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	2	33.6	67.2
21a	L1	400	32.8	13120.0
23	R2	17	65.6	1115.2
Approach		419	34.8	
24	L2	51	46.3	2361.3
25	T1	24	40.7	976.8
26a	R1	461	50.2	23142.2
Approach		536	49.4	
10a	L1	637	15.9	10128.3
12a	R1	444	36.7	16294.8
12b	R3	80	69.5	5560.0
Approach		1161	27.2	
30b	L3	52	67.9	3530.8
31	T1	33	50.7	1673.1
32	R2	6	56.3	337.8
Approach		91	59.9	
All Vehicles		2206	36.2	78307.5

David Low Way / Mudjimba Beach Road / Menzies Drive — GAP Aggregate Delay (per intersection) — -1.8% increase — MP Aggregate Delay (per intersection) — -0.3% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	1	24.1	24.1
2	T1	49	39.2	1920.8
3	R2	139	48	6672.0
Approach		189	45.5	
4	L2	109	34.1	3716.9
5	T1	77	49.3	3796.1
6	R2	220	42.5	9350.0
Approach		406	41.5	
7	L2	16	32.1	513.6
8	T1	33	43.5	1435.5
9	R2	154	48.4	7453.6
Approach		202	46.3	
10	L2	102	26.4	2692.8
11	T1	45	34.6	1557.0
12	R2	11	37.5	412.5
Approach		158	29.5	
All Vehicles		956	41.4	39544.9

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	2	27.1	54.2
2	T1	67	39.6	2653.2
3	R2	117	44.1	5159.7
Approach		186	42.3	
4	L2	67	29.6	1983.2
5	T1	54	46.3	2500.2
6	R2	188	46	8648
Approach		309	42.5	
7	L2	33	33.7	1112.1
8	T1	80	43.4	3472.0
9	R2	178	45.7	8134.6
Approach		291	43.7	
10	L2	201	24.9	5004.9
11	T1	221	37.6	8309.6
12	R2	19	41.5	788.5
Approach		441	32.0	
All Vehicles		1227	39.0	47820.2

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	1	24.2	24.2
2	T1	49	39.1	1915.9
3	R2	139	46.6	6477.4
Approach		189	43.2	
4	L2	109	32.9	3586.1
5	T1	77	47.2	3634.4
6	R2	220	42.6	9372.0
Approach		406	41.2	
7	L2	16	28.2	451.2
8	T1	33	42.8	1412.4
9	R2	154	48.3	7438.2
Approach		202	45.3	
10	L2	102	26.5	2703.0
11	T1	45	36.2	1629.0
12	R2	11	37.5	412.5
Approach		158	31.0	
All Vehicles		956	39.9	39056.3

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	2	31.0	62.0
2	T1	67	39.4	2639.8
3	R2	117	43.7	5112.9
Approach		186	42.4	
4	L2	67	28.2	1889.4
5	T1	54	49.0	2646.0
6	R2	188	50.7	9531.6
Approach		309	40.5	
7	L2	33	35.6	1174.8
8	T1	80	43.1	3448.0
9	R2	178	43.3	7707.4
Approach		291	42.6	
10	L2	201	20.2	4060.2
11	T1	221	34.0	7514.0
12	R2	19	47.8	908.2
Approach		441	30.2	
All Vehicles		1227	38.4	46694.3

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	1	30.5	30.5
2	T1	49	39.6	1940.4
3	R2	139	43.1	5990.9
Approach		189	41.6	
4	L2	109	30.0	3270.0
5	T1	77	51.2	3942.4
6	R2	220	50.1	11022.0
Approach		406	40.3	
7	L2	16	34.8	556.8
8	T1	33	42.0	1386.0
9	R2	154	44.9	6914.6
Approach		202	43.3	
10	L2	102	20.8	2121.6
11	T1	45	31.3	1408.5
12	R2	11	45.9	504.9
Approach		158	25.9	
All Vehicles		956	38.2	39088.6

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	2	27.8	55.6
2	T1	67	39.7	2659.9
3	R2	117	47.2	5522.4
Approach		186	44.6	
4	L2	67	28.9	1936.3
5	T1	54	42.9	2316.6
6	R2	188	46.7	8779.6
Approach		309	41.2	
7	L2	33	32.6	1075.8
8	T1	80	44.3	3544.0
9	R2	178	47.7	8490.6
Approach		291	44.5	
10	L2	201	23.7	4763.7
11	T1	221	36.4	8044.4
12	R2	19	43.0	817.0
Approach		441	31.9	
All Vehicles		1227	39.8	48005.9

David Low Way / Mudjimba Esplanade — GAP Aggregate Delay (per intersection) — 7.5% increase — MP Aggregate Delay (per intersection) — 6078.6% increase

2034 AM Peak Base Case | **2034 PM Peak Base Case** | **2034 AM Peak GAP** | **2034 PM Peak GAP** | **2034 AM Peak MP** | **2034 PM Peak MP**

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
2	T1	328	0.0	0.0
3	R2	31	8.6	266.6
Approach		359	0.8	
4	L2	46	9.1	418.6
6	R2	59	19.6	1156.4
Approach		105	15.0	
7	L2	91	5.6	509.6
8	T1	478	0.1	47.8
Approach		568	0.9	
All Vehicles		1033	2.3	2399.0

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
2	T1	580	0.1	58.0
3	R2	49	8.1	396.9
Approach		629	0.7	
4	L2	41	10.9	446.9
6	R2	71	30.8	2186.8
Approach		112	23.4	
7	L2	112	5.6	627.2
8	T1	387	0.1	38.7
Approach		499	1.3	
All Vehicles		1240	3.0	3754.5

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
2	T1	328	0.0	0.0
3	R2	31	8.8	272.8
Approach		359	0.8	
4	L2	46	9.7	446.2
6	R2	59	21.3	1256.7
Approach		105	15.9	
7	L2	91	5.6	509.6
8	T1	478	0.1	47.8
Approach		568	0.9	
All Vehicles		1033	2.5	2533.1

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
2	T1	580	0.1	58.0
3	R2	49	8.3	406.7
Approach		629	0.7	
4	L2	41	12.3	504.3
6	R2	71	34.5	2449.5
Approach		112	25.2	
7	L2	112	5.6	627.2
8	T1	387	0.1	38.7
Approach		499	1.2	
All Vehicles		1240	3.4	4084.4

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
2	T1	328	0.1	32.8
3	R2	31	14.3	443.3
Approach		359	0.7	
4	L2	46	570.2	26229.2
6	R2	59	639.2	37712.8
Approach		105	611.7	
7	L2	91	5.6	509.6
8	T1	478	0.2	95.6
Approach		568	0.8	
All Vehicles		1033	41.6	65023.3

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
2	T1	580	0.2	116.0
3	R2	49	13	637.0
Approach		629	0.7	
4	L2	41	2723.5	111663.5
6	R2	71	2846.4	202094.4
Approach		112	2810.4	
7	L2	112	5.6	627.2
8	T1	387	0.1	38.7
Approach		499	1.0	
All Vehicles		1240	177.5	315176.8

David Low Way / Suncoast Beach Drive GAP Aggregate Delay (per intersection) 0.0% increase MP Aggregate Delay (per intersection) 0.4% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	219	8.3	1817.7
2	T1	314	33.2	10424.8
Approach		533	23.0	
8	T1	359	8	2872.0
9	R2	319	28.8	9187.2
Approach		678	17.8	
10	L2	219	35.2	7708.8
12	R2	60	30.1	1806.0
Approach		279	34.1	
All Vehicles		1489	22.7	33816.5

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	158	7.2	1137.6
2	T1	336	30.3	10180.8
Approach		494	22.9	
8	T1	498	10.5	5229.0
9	R2	207	33.6	6955.2
Approach		705	17.3	
10	L2	234	31.5	7371.0
12	R2	116	27.5	3190.0
Approach		349	30.2	
All Vehicles		1548	22.0	34063.6

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	219	8.4	1839.6
2	T1	314	33.2	10424.8
Approach		533	22.3	
8	T1	359	8	2872.0
9	R2	319	28.8	9187.2
Approach		678	17.9	
10	L2	219	35.4	7752.6
12	R2	60	30.2	1812.0
Approach		279	34.2	
All Vehicles		1489	22.7	33888.2

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	158	7.4	1169.2
2	T1	336	30.3	10180.8
Approach		494	23.3	
8	T1	498	10	4980.0
9	R2	207	32.8	6789.6
Approach		705	16.8	
10	L2	234	32.5	7605.0
12	R2	116	28.3	3282.8
Approach		349	31.1	
All Vehicles		1548	21.9	34007.4

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	219	9.1	1992.9
2	T1	314	31.9	10016.6
Approach		533	22.6	
8	T1	359	7.2	2584.8
9	R2	319	29.5	9410.5
Approach		678	17.5	
10	L2	219	37.4	8190.6
12	R2	60	32.4	1944.0
Approach		279	35.9	
All Vehicles		1489	22.7	34139.4

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	158	7.5	1185.0
2	T1	336	29.6	9945.6
Approach		494	21.7	
8	T1	498	9.7	4830.6
9	R2	207	33.0	6831.0
Approach		705	16.2	
10	L2	234	33.5	7839.0
12	R2	116	29.4	3410.4
Approach		349	32.0	
All Vehicles		1548	21.2	34041.6

David Low Way / Tanah Street West / Tanah Street East GAP Aggregate Delay (per intersection) 1.5% increase MP Aggregate Delay (per intersection) 11.8% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
21	L2	25	21.7	542.5
22	T1	17	33.6	571.2
23	R2	18	39.2	705.6
Approach		60	30.3	
24	L2	9	17.4	156.6
25	T1	537	23.2	12458.4
26	R2	53	52.5	2782.5
Approach		599	25.7	
27	L2	67	32.8	2197.6
28	T1	11	38.4	422.4
29	R2	116	44.0	5104.0
Approach		194	39.8	
30	L2	31	10.0	310.0
31	T1	482	20.0	9640.0
32	R2	21	51.0	1071.0
Approach		534	20.6	
All Vehicles		1386	25.9	35961.8

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
21	L2	12	20.9	250.8
22	T1	15	32.0	480.0
23	R2	9	37.6	338.4
Approach		36	29.9	
24	L2	17	18.8	319.6
25	T1	566	25.1	14206.6
26	R2	83	54.6	4531.8
Approach		666	28.6	
27	L2	54	32.5	1755.0
28	T1	27	39.2	1058.4
29	R2	128	44.8	5734.4
Approach		209	40.9	
30	L2	7	10.6	74.2
31	T1	527	21.4	11277.8
32	R2	35	51.7	1809.5
Approach		569	23.1	
All Vehicles		1481	28.2	41836.5

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	25	22.2	555.0
22	T1	17	34.7	589.9
23	R2	18	40.3	725.4
Approach		60	30.4	
24	L2	9	17.7	159.3
25	T1	537	23.7	12726.9
26	R2	53	52.5	2782.5
Approach		599	26.2	
27	L2	67	32.8	2197.6
28	T1	11	38.1	419.1
29	R2	116	43.7	5069.2
Approach		194	39.3	
30	L2	31	9.9	306.9
31	T1	482	20.2	9736.4
32	R2	21	51.2	1075.2
Approach		534	21.2	
All Vehicles		1386	26.2	36343.4

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	12	20.7	248.4
22	T1	15	31.5	472.5
23	R2	9	37.1	333.9
Approach		36	29.8	
24	L2	17	19.4	329.8
25	T1	566	26.0	14716.0
26	R2	83	54.9	4556.7
Approach		666	29.5	
27	L2	54	32.4	1749.6
28	T1	27	40.1	1082.7
29	R2	128	45.7	5849.6
Approach		209	42.3	
30	L2	7	10.8	75.6
31	T1	527	21.6	11383.2
32	R2	35	51.5	1802.5
Approach		569	23.1	
All Vehicles		1481	29.0	42600.5

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	25	22.3	557.5
22	T1	17	34.9	593.3
23	R2	18	40.5	729
Approach		60	30.5	
24	L2	9	20.7	186.3
25	T1	537	27.9	14982.3
26	R2	53	53.7	2846.1
Approach		599	29.8	
27	L2	67	32.8	2197.6
28	T1	11	39.2	431.2
29	R2	116	44.8	5196.8
Approach		194	40.6	
30	L2	31	11.9	368.9
31	T1	482	23.0	11086.0
32	R2	21	50.6	1062.6
Approach		534	22.9	
All Vehicles		1386	28.7	40237.6

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	12	20.9	250.8
22	T1	15	32.0	480.0
23	R2	9	37.6	338.4
Approach		36	29.4	
24	L2	17	21.7	368.9
25	T1	566	29.9	16923.4
26	R2	83	56.9	4722.7
Approach		666	32.8	
27	L2	54	32.4	1749.6
28	T1	27	42.3	1142.1
29	R2	128	47.9	6131.2
Approach		209	44.1	
30	L2	7	12.7	88.9
31	T1	527	24.2	12753.4
32	R2	35	51.3	1795.5
Approach		569	25.3	
All Vehicles		1481	31.7	46744.9

David Low Way / Yandina Coolum Road GAP Aggregate Delay (per intersection) -0.5% increase MP Aggregate Delay (per intersection) 4.2% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
21	L2	61	16.4	1000.4
22	T1	581	20.0	11620.0
Approach		642	19.6	
28	T1	411	3.9	1602.9
29	R2	96	54.0	5184.0
Approach		506	13.3	
30	L2	143	38.8	5548.4
32	R2	65	50.4	3276.0
Approach		208	42.4	
All Vehicles		1357	20.8	28231.7

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
21	L2	69	15.6	1076.4
22	T1	462	18.8	8685.6
Approach		532	18.4	
28	T1	556	5.2	2891.2
29	R2	92	52.1	4793.2
Approach		647	11.8	
30	L2	65	35.4	2301.0
32	R2	64	50.3	3219.2
Approach		129	42.8	
All Vehicles		1308	17.5	22966.6

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	61	16.6	1012.6
22	T1	581	20.4	11852.4
Approach		642	19.9	
28	T1	411	3.9	1602.9
29	R2	96	54.0	5184.0
Approach		506	13.5	
30	L2	143	38.2	5462.6
32	R2	65	50.4	3276.0
Approach		208	42.5	
All Vehicles		1357	20.6	28390.5

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	69	14.9	1028.1
22	T1	462	17.6	8131.2
Approach		532	17.3	
28	T1	556	5.3	2946.8
29	R2	92	53.2	4894.4
Approach		647	11.6	
30	L2	65	36.2	2353.0
32	R2	64	50.3	3219.2
Approach		129	43.2	
All Vehicles		1308	17.0	22572.7

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	61	17.4	1061.4
22	T1	581	21.7	12607.7
Approach		642	21.2	
28	T1	411	4	1644.0
29	R2	96	54.3	5212.8
Approach		506	13.3	
30	L2	143	38.3	5476.9
32	R2	65	50.4	3276.0
Approach		208	42.6	
All Vehicles		1357	20.9	29278.8

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
21	L2	69	16.7	1152.3
22	T1	462	20.4	9424.8
Approach		532	20	
28	T1	556	5.8	3224.8
29	R2	92	51.7	4756.4
Approach		647	12.7	
30	L2	65	35.3	2294.5
32	R2	64	50.3	3219.2
Approach		129	41.0	
All Vehicles		1308	18.9	24072.0

Yandina Coolum Road / South Coolum Road / School Road GAP Aggregate Delay (per intersection) 5.0% increase MP Aggregate Delay (per intersection) 7.1% increase

2034 AM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	521	92.5	48192.5
2	T1	135	167.9	22666.5
3	R2	19	173.5	3296.5
Approach		675	109.8	
4	L2	64	166	10624.0
5	T1	649	160.5	104164.5
6	R2	205	74.5	15272.5
Approach		919	141.7	

2034 PM Peak Base Case

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	BC (veh-sec)
1	L2	495	40.1	19849.5
2	T1	44	95.6	4206.4
3	R2	91	101.2	9209.2
Approach		629	52.8	
4	L2	82	156.1	12800.2
5	T1	466	150.5	70133.0
6	R2	58	89.8	5208.4
Approach		606	145.5	

2034 AM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	521	146.6	76378.6
2	T1	135	150.8	20358.0
3	R2	19	156.4	2971.6
Approach		675	147.7	
4	L2	64	173.1	11078.4
5	T1	649	167.5	108707.5
6	R2	205	76.8	15744
Approach		919	148.6	

2034 PM Peak GAP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	495	40.5	20047.5
2	T1	44	126.6	5570.4
3	R2	91	132.1	12021.1
Approach		629	60.5	
4	L2	82	137	11234.0
5	T1	466	131.4	61232.4
6	R2	58	88.8	5150.4
Approach		606	128.0	

2034 AM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	521	138.8	72314.8
2	T1	135	156.5	21127.5
3	R2	19	162	3078.0
Approach		675	143	
4	L2	64	164.4	10521.6
5	T1	649	158.8	103061.2
6	R2	205	76.3	15641.5
Approach		919	141.8	

2034 PM Peak MP

Mov ID	OD Mov	Total (veh/h)	Average Delay (sec)	WD (veh-sec)
1	L2	495	44.9	22225.5
2	T1	44	102.8	4523.2
3	R2	91	108.4	9864.4
Approach		629	57.4	
4	L2	82	166.8	13677.6
5	T1	466	161.2	75119.2
6	R2	58	89.9	5214.2
Approach		606	156.6	

7	L2	168	36.2	6081.6
8	T1	97	73.3	7110.1
9	R2	89	78.9	7022.1
Approach		355	57.1	
10	L2	116	34.0	3944.0
11	T1	481	34.8	16738.8
12	R2	425	151.4	64345.0
Approach		1022	83.2	
All Vehicles		2971	104.2	309458.1

7	L2	97	48.6	4714.2
8	T1	57	54.9	3129.3
9	R2	11	60.5	665.5
Approach		164	51.6	
10	L2	5	23.7	118.5
11	T1	657	24.7	16227.9
12	R2	643	132.7	85326.1
Approach		1305	77.9	
All Vehicles		2705	85.6	231588.2

7	L2	168	37.9	6367.2
8	T1	97	71.6	6945.2
9	R2	89	77.2	6870.8
Approach		355	56.8	
10	L2	116	32.8	3804.8
11	T1	481	33.2	15969.2
12	R2	425	153.4	65195.0
Approach		1022	83.1	
All Vehicles		2971	115.5	340390.3

7	L2	97	48.7	4723.9
8	T1	57	54.8	3123.6
9	R2	11	60.4	664.4
Approach		164	51.5	
10	L2	5	23.8	119.0
11	T1	657	24.7	16227.9
12	R2	643	136.4	87705.2
Approach		1305	79.8	
All Vehicles		2705	84.1	227819.8

7	L2	168	37.9	6367.2
8	T1	97	71.6	6945.2
9	R2	89	77.2	6870.8
Approach		355	56.8	
10	L2	116	33.7	3909.2
11	T1	481	34.3	16498.3
12	R2	425	165.6	70380.0
Approach		1022	88.2	
All Vehicles		2971	113.6	336715.3

7	L2	97	48.7	4723.9
8	T1	57	54.7	3117.9
9	R2	11	60.3	663.3
Approach		164	51.4	
10	L2	5	23.4	117.0
11	T1	657	24.1	15833.7
12	R2	643	136.1	87512.3
Approach		1305	79.2	
All Vehicles		2705	89.8	242592.2

VISUM Assessed Intersections | GAP Aggregate Delay | 0.2% increase | MP Aggregate Delay | 16.2% increase

2034 AM Peak Base Case	
All Vehicles	122795.1

2034 PM Peak Base Case	
All Vehicles	103806.4

2034 AM Peak GAP	
All Vehicles	122104.2

2034 PM Peak GAP	
All Vehicles	105001.3

2034 AM Peak MP	
All Vehicles	149125.1

2034 PM Peak MP	
All Vehicles	114198.1

Appendix G

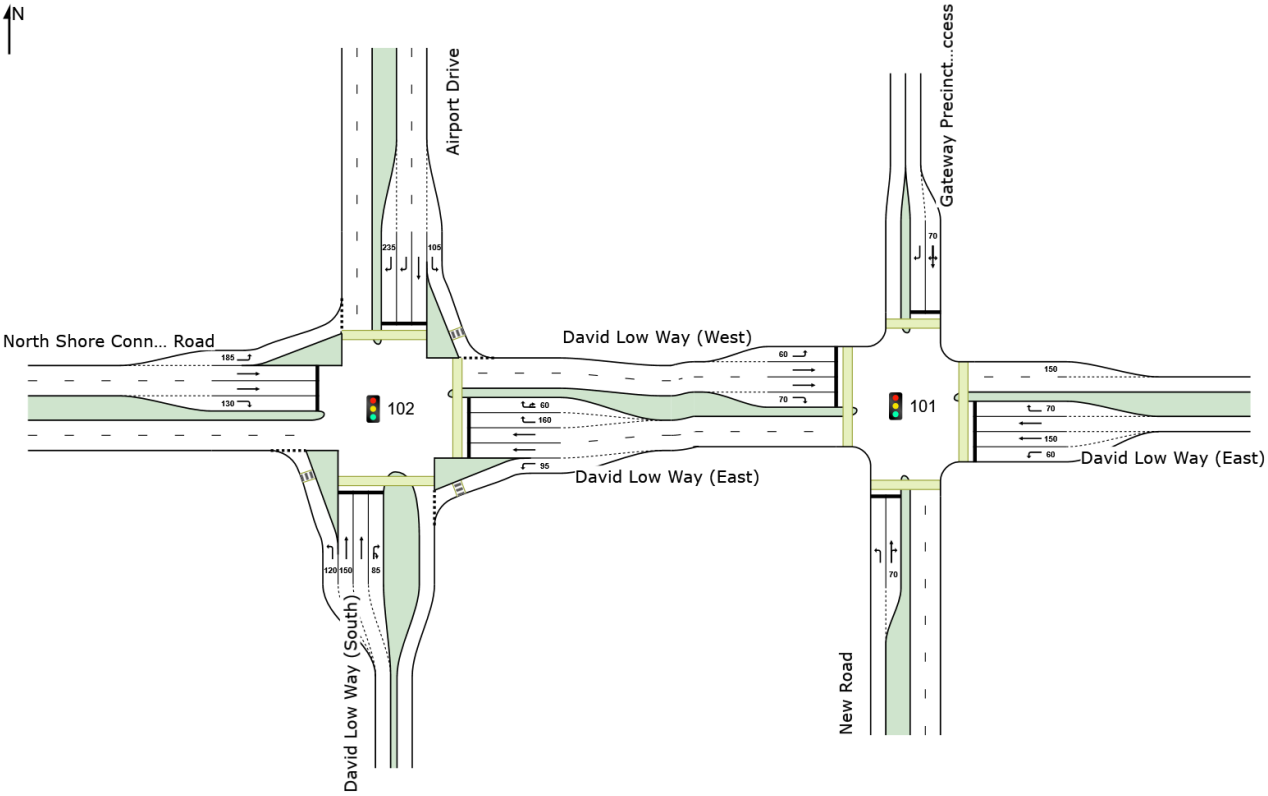
Upgraded intersection SIDRA outputs

NETWORK LAYOUT

Network: N101 [2044 AM Peak MP - Upgraded (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive & David Low Way / New Road / Gateway Precinct Access
2044 AM Peak Full Masterplan Conditions
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
102	NA	North Shore Connection Road / David Low Way / Airport Drive - Upgrade
101	NA	David Low Way / Gateway Access - Upgrade

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive - Upgrade (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak MP - Upgraded (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	189	2.9	189	2.9	0.296	21.6	LOS C	6.0	43.1	0.63	0.74	0.63	43.1
2	T1	All MCs	183	2.9	183	2.9	* 0.638	61.7	LOS E	5.5	39.7	1.00	0.81	1.06	30.0
3	R2	All MCs	65	2.9	65	2.9	0.489	66.1	LOS E	3.9	28.2	1.00	0.76	1.00	19.5
3u	U	All MCs	1	2.9	1	2.9	0.489	67.6	LOS E	3.9	28.2	1.00	0.76	1.00	28.3
Approach			439	2.9	439	2.9	0.638	45.1	LOS D	6.0	43.1	0.84	0.77	0.87	33.2
East: David Low Way (East)															
4	L2	All MCs	161	2.9	161	2.9	0.116	10.5	LOS B	0.2	1.6	0.02	0.56	0.02	52.3
5	T1	All MCs	912	2.9	912	2.9	* 0.667	52.3	LOS D	26.3	188.6	1.00	0.84	1.00	31.6
6	R2	All MCs	74	2.9	74	2.9	0.225	62.6	LOS E	2.1	15.3	0.97	0.73	0.97	27.6
6u	U	All MCs	1	2.9	1	2.9	0.225	63.9	LOS E	2.1	15.1	0.97	0.73	0.97	17.3
Approach			1147	2.9	1147	2.9	0.667	47.1	LOS D	26.3	188.6	0.86	0.79	0.86	32.3
North: Airport Drive															
7	L2	All MCs	87	2.9	87	2.9	0.092	10.2	LOS B	1.4	9.9	0.34	0.64	0.34	45.3
8	T1	All MCs	117	2.9	117	2.9	0.229	36.9	LOS D	5.3	38.2	0.82	0.66	0.82	37.6
9	R2	All MCs	643	2.9	643	2.9	* 0.663	48.1	LOS D	16.9	121.1	0.95	0.84	0.95	33.0
Approach			847	2.9	847	2.9	0.663	42.7	LOS D	16.9	121.1	0.87	0.80	0.87	34.1
West: North Shore Connection Road															
10	L2	All MCs	1228	2.9	1228	2.9	0.814	8.6	LOS A	25.2	181.1	0.55	0.74	0.55	50.7
11	T1	All MCs	619	2.9	619	2.9	0.441	30.7	LOS C	13.6	97.5	0.81	0.69	0.81	30.5
12	R2	All MCs	114	2.9	114	2.9	* 0.682	66.2	LOS E	6.9	49.2	1.00	0.84	1.09	28.5
Approach			1961	2.9	1961	2.9	0.814	18.9	LOS B	25.2	181.1	0.66	0.73	0.66	42.9
All Vehicles			4395	2.9	4395	2.9	0.814	33.5	LOS C	26.3	188.6	0.77	0.76	0.77	36.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
East: David Low Way (East)										
P2 Full	16	54.2	LOS E	0.1	0.1	0.95	0.95	208.0	200.0	0.96
North: Airport Drive										
P3 Full	1	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
All Pedestrians	26	54.2	LOS E	0.1	0.1	0.95	0.95	208.0	200.0	0.96

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

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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA \SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access - Upgrade (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 AM Peak MP - Upgraded (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	21	2.9	21	2.9	0.045	41.1	LOS D	0.9	6.6	0.78	0.69	0.78	25.8
2	T1	All MCs	66	2.9	66	2.9	* 0.340	48.3	LOS D	5.6	40.1	0.93	0.75	0.93	33.0
3	R2	All MCs	40	2.9	40	2.9	0.340	53.9	LOS D	5.6	40.1	0.93	0.75	0.93	32.3
Approach			127	2.9	127	2.9	0.340	48.9	LOS D	5.6	40.1	0.90	0.74	0.90	31.9
East: David Low Way (East)															
4	L2	All MCs	8	2.9	8	2.9	0.009	26.0	LOS C	0.1	0.9	0.47	0.63	0.47	48.0
5	T1	All MCs	1063	2.9	1063	2.9	* 0.714	43.9	LOS D	26.5	190.1	0.90	0.80	0.90	29.4
6	R2	All MCs	80	2.9	80	2.9	* 0.660	78.6	LOS E	4.9	35.3	1.00	0.82	1.10	27.6
Approach			1152	2.9	1152	2.9	0.714	46.2	LOS D	26.5	190.1	0.91	0.80	0.91	25.1
North: Gateway Precinct Access															
7	L2	All MCs	54	2.9	54	2.9	0.242	26.5	LOS C	2.7	19.4	0.89	0.73	0.89	39.0
8	T1	All MCs	25	2.9	25	2.9	* 0.242	39.9	LOS D	2.7	19.4	0.89	0.73	0.89	40.2
9	R2	All MCs	60	2.9	60	2.9	0.198	52.6	LOS D	3.1	22.0	0.90	0.75	0.90	22.4
Approach			139	2.9	139	2.9	0.242	40.2	LOS D	3.1	22.0	0.90	0.74	0.90	32.5
West: David Low Way (West)															
10	L2	All MCs	38	2.9	38	2.9	0.035	23.6	LOS C	1.5	10.8	0.73	0.57	0.73	40.6
11	T1	All MCs	678	2.9	678	2.9	0.485	28.3	LOS C	15.3	109.6	0.78	0.67	0.78	39.9
12	R2	All MCs	53	2.9	53	2.9	0.434	52.1	LOS D	2.7	19.0	0.84	0.72	0.84	30.1
Approach			768	2.9	768	2.9	0.485	29.7	LOS C	15.3	109.6	0.78	0.67	0.78	39.1
All Vehicles			2186	2.9	2186	2.9	0.714	40.2	LOS D	26.5	190.1	0.86	0.75	0.87	31.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: David Low Way (East)											
P2	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: Gateway Precinct Access											
P3	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)											
P4	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		211	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 102 [North Shore Connection Road / David Low Way / Airport Drive - Upgrade (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak MP - Upgraded (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
North Shore Connection Road / David Low Way / Airport Drive
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	199	3.1	199	3.1	0.284	23.9	LOS C	6.6	47.6	0.66	0.74	0.66	42.0
2	T1	All MCs	144	3.1	144	3.1	0.754	67.2	LOS E	4.6	33.0	1.00	0.86	1.22	28.7
3	R2	All MCs	74	3.1	74	3.1	* 0.826	75.4	LOS E	4.9	35.1	1.00	0.91	1.34	17.8
3u	U	All MCs	1	3.1	1	3.1	0.826	76.8	LOS E	4.9	35.1	1.00	0.91	1.34	26.4
Approach			418	3.1	418	3.1	0.826	48.1	LOS D	6.6	47.6	0.84	0.81	0.98	32.0
East: David Low Way (East)															
4	L2	All MCs	224	3.1	224	3.1	0.192	6.0	LOS A	0.3	2.4	0.03	0.56	0.03	52.1
5	T1	All MCs	764	3.1	764	3.1	0.685	43.0	LOS D	21.0	151.1	0.96	0.84	0.96	33.9
6	R2	All MCs	62	3.1	62	3.1	0.110	55.5	LOS E	1.7	12.2	0.94	0.73	0.94	29.4
6u	U	All MCs	1	3.1	1	3.1	0.110	56.8	LOS E	1.7	12.1	0.94	0.73	0.94	18.9
Approach			1052	3.1	1052	3.1	0.685	35.8	LOS D	21.0	151.1	0.76	0.77	0.76	36.2
North: Airport Drive															
7	L2	All MCs	120	3.1	120	3.1	0.136	15.8	LOS B	2.9	20.8	0.49	0.68	0.49	39.9
8	T1	All MCs	243	3.1	243	3.1	0.424	36.2	LOS D	11.4	81.9	0.85	0.72	0.85	37.8
9	R2	All MCs	981	3.1	981	3.1	* 0.900	62.1	LOS E	32.2	231.5	1.00	1.00	1.21	29.3
Approach			1344	3.1	1344	3.1	0.900	53.3	LOS D	32.2	231.5	0.93	0.92	1.08	31.0
West: North Shore Connection Road															
10	L2	All MCs	947	3.1	947	3.1	0.627	7.4	LOS A	11.9	85.8	0.35	0.67	0.35	51.7
11	T1	All MCs	975	3.1	975	3.1	* 0.874	52.5	LOS D	30.5	219.0	1.00	1.02	1.16	22.6
12	R2	All MCs	254	3.1	254	3.1	* 0.882	70.1	LOS E	16.7	119.7	1.00	1.00	1.27	27.7
Approach			2176	3.1	2176	3.1	0.882	34.9	LOS C	30.5	219.0	0.72	0.87	0.82	34.2
All Vehicles			4989	3.1	4989	3.1	0.900	41.2	LOS D	32.2	231.5	0.79	0.86	0.89	33.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: David Low Way (South)										
P1 Full	9	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
East: David Low Way (East)										
P2 Full	16	54.2	LOS E	0.1	0.1	0.95	0.95	208.0	200.0	0.96
North: Airport Drive										
P3 Full	1	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
All Pedestrians	26	54.2	LOS E	0.1	0.1	0.95	0.95	208.0	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Gateway Access - Upgrade (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2044 PM Peak MP - Upgraded (Network Folder: General)]

307887-00 Sunshine Coast Airport TIA
David Low Way / New Road / Gateway Precinct Access
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: New Road															
1	L2	All MCs	22	3.1	22	3.1	0.043	38.7	LOS D	0.9	6.7	0.75	0.69	0.75	26.7
2	T1	All MCs	53	3.1	53	3.1	*0.541	50.3	LOS D	9.1	65.4	0.97	0.80	0.97	31.9
3	R2	All MCs	114	3.1	114	3.1	0.541	55.9	LOS E	9.1	65.4	0.97	0.80	0.97	31.3
Approach			188	3.1	188	3.1	0.541	52.3	LOS D	9.1	65.4	0.94	0.79	0.94	31.1
East: David Low Way (East)															
4	L2	All MCs	19	3.1	19	3.1	0.020	18.8	LOS B	0.3	2.2	0.51	0.65	0.51	47.5
5	T1	All MCs	784	3.1	784	3.1	0.552	35.2	LOS D	18.0	129.3	0.84	0.74	0.84	29.8
6	R2	All MCs	78	3.1	78	3.1	0.468	65.3	LOS E	4.5	32.5	0.99	0.77	0.99	28.8
Approach			881	3.1	881	3.1	0.552	37.5	LOS D	18.0	129.3	0.85	0.74	0.85	28.6
North: Gateway Precinct Access															
7	L2	All MCs	91	3.1	91	3.1	*0.622	34.3	LOS C	9.1	65.3	0.98	0.84	0.98	33.5
8	T1	All MCs	52	3.1	52	3.1	*0.622	55.8	LOS E	9.1	65.3	0.98	0.84	0.98	34.4
9	R2	All MCs	238	3.1	238	3.1	0.622	57.7	LOS E	10.5	75.3	0.98	0.82	0.98	21.9
Approach			380	3.1	380	3.1	0.622	51.9	LOS D	10.5	75.3	0.98	0.83	0.98	27.0
West: David Low Way (West)															
10	L2	All MCs	57	3.1	57	3.1	0.055	27.7	LOS C	1.9	13.7	0.62	0.67	0.62	41.5
11	T1	All MCs	979	3.1	979	3.1	*0.787	33.6	LOS C	24.5	176.2	0.81	0.73	0.82	40.9
12	R2	All MCs	131	3.1	131	3.1	0.784	61.5	LOS E	7.5	53.9	0.97	0.81	1.02	29.5
Approach			1166	3.1	1166	3.1	0.787	36.5	LOS D	24.5	176.2	0.82	0.73	0.84	36.4
All Vehicles			2616	3.1	2616	3.1	0.787	40.2	LOS D	24.5	176.2	0.86	0.75	0.87	32.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New Road											

P1	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: David Low Way (East)											
P2	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: Gateway Precinct Access											
P3	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: David Low Way (West)											
P4	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		211	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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

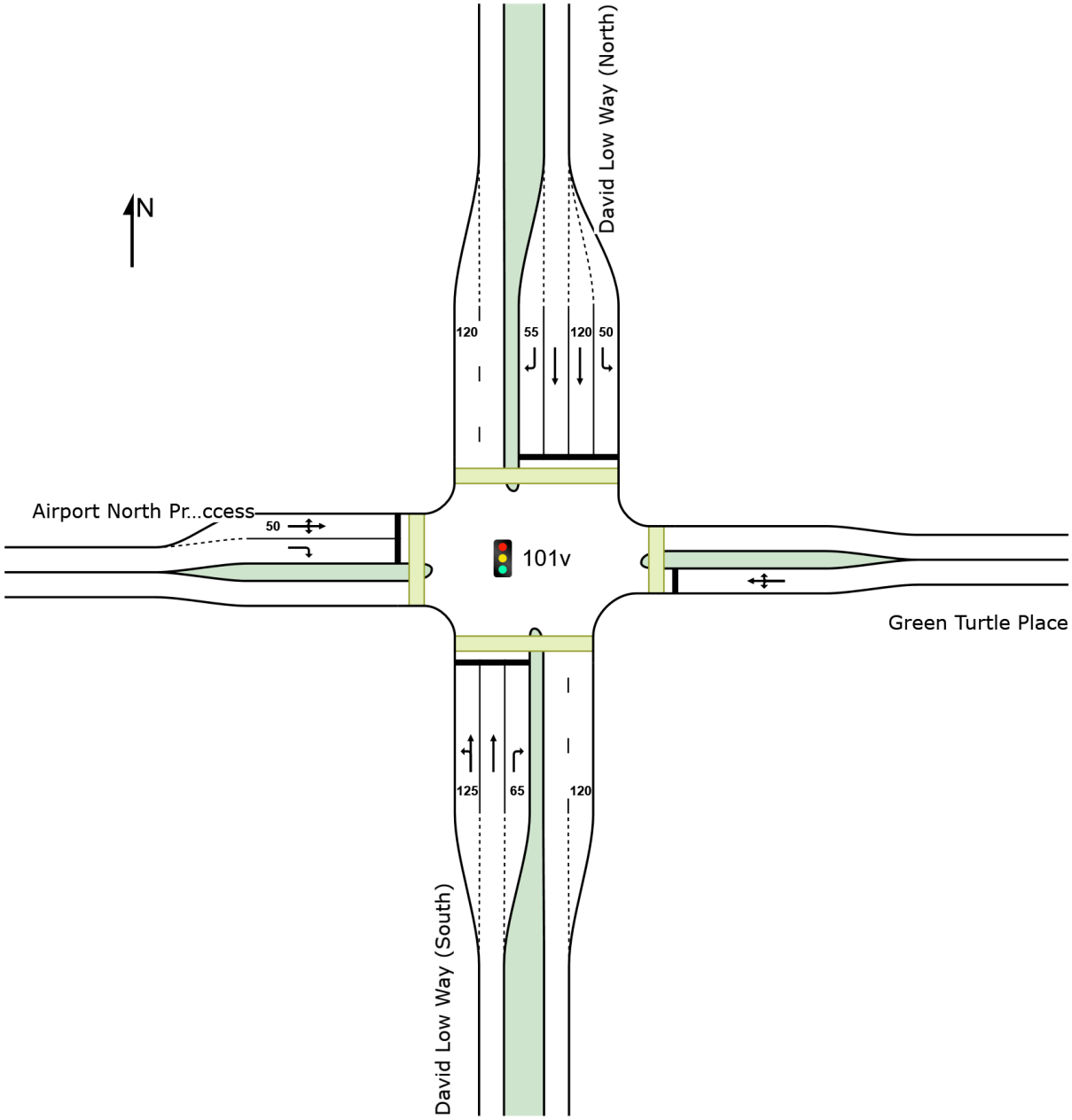
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SITE LAYOUT

Site: 101v [David Low Way / Green Turtle Place / Airport North Access - Upgrade (Site Folder: 2044 AM Peak MP)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access - Upgrade (Site Folder: 2044 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	302	2.9	302	2.9	0.513	24.5	LOS C	10.1	72.4	0.82	0.80	0.82	40.7
2	T1	All MCs	329	2.9	329	2.9	* 0.788	37.7	LOS D	12.3	88.4	0.99	0.93	1.13	37.7
3	R2	All MCs	25	2.9	25	2.9	0.185	45.5	LOS D	1.0	7.1	0.97	0.71	0.97	33.5
Approach			657	2.9	657	2.9	0.788	31.9	LOS C	12.3	88.4	0.91	0.86	0.99	38.8
East: Green Turtle Place															
4	L2	All MCs	33	2.9	33	2.9	0.278	29.8	LOS C	3.5	24.8	0.88	0.76	0.88	37.2
5	T1	All MCs	1	2.9	1	2.9	* 0.278	32.1	LOS C	3.5	24.8	0.88	0.76	0.88	38.3
6	R2	All MCs	69	2.9	69	2.9	0.278	37.7	LOS D	3.5	24.8	0.88	0.76	0.88	37.4
Approach			103	2.9	103	2.9	0.278	35.1	LOS D	3.5	24.8	0.88	0.76	0.88	37.3
North: David Low Way (North)															
7	L2	All MCs	59	2.9	59	2.9	0.086	14.8	LOS B	0.9	6.5	0.67	0.70	0.67	46.6
8	T1	All MCs	469	2.9	469	2.9	0.743	34.3	LOS C	11.2	80.6	0.97	0.84	1.04	38.6
9	R2	All MCs	74	2.9	74	2.9	0.540	47.3	LOS D	3.0	21.6	1.00	0.77	1.03	33.0
Approach			602	2.9	602	2.9	0.743	34.0	LOS C	11.2	80.6	0.95	0.82	1.00	38.4
West: Airport North Precinct Access															
10	L2	All MCs	79	2.9	79	2.9	* 0.384	18.7	LOS B	3.9	28.1	0.87	0.81	0.87	40.7
11	T1	All MCs	1	2.9	1	2.9	0.384	28.2	LOS C	3.9	28.1	0.87	0.81	0.87	42.0
12	R2	All MCs	318	2.9	318	2.9	* 0.572	35.9	LOS D	8.4	60.1	0.92	0.81	0.92	37.7
Approach			398	2.9	398	2.9	0.572	32.5	LOS C	8.4	60.1	0.91	0.81	0.91	38.3
All Vehicles			1760	2.9	1760	2.9	0.788	33.0	LOS C	12.3	88.4	0.92	0.83	0.97	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

East: Green Turtle Place												
P2	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: Airport North Precinct Access												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	211	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Green Turtle Place / Airport North Access - Upgrade (Site Folder: 2044 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Green Turtle Place
2044 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
1	L2	All MCs	447	3.1	447	3.1	0.537	22.9	LOS C	15.6	112.3	0.73	0.80	0.73	41.9
2	T1	All MCs	536	3.1	536	3.1	*0.825	47.2	LOS D	25.1	180.5	0.98	0.94	1.08	37.2
3	R2	All MCs	25	3.1	25	3.1	0.199	65.0	LOS E	1.2	8.8	0.97	0.71	0.97	30.7
Approach			1008	3.1	1008	3.1	0.825	36.8	LOS D	25.1	180.5	0.87	0.87	0.92	36.9
East: Green Turtle Place															
4	L2	All MCs	33	3.1	33	3.1	0.338	40.7	LOS D	4.5	32.6	0.92	0.77	0.92	33.4
5	T1	All MCs	1	3.1	1	3.1	*0.338	43.4	LOS D	4.5	32.6	0.92	0.77	0.92	34.3
6	R2	All MCs	69	3.1	69	3.1	0.338	49.1	LOS D	4.5	32.6	0.92	0.77	0.92	33.5
Approach			103	3.1	103	3.1	0.338	46.4	LOS D	4.5	32.6	0.92	0.77	0.92	33.5
North: David Low Way (North)															
7	L2	All MCs	59	3.1	59	3.1	0.069	13.7	LOS B	0.9	6.7	0.57	0.69	0.57	47.2
8	T1	All MCs	462	3.1	462	3.1	0.444	28.3	LOS C	10.7	77.2	0.81	0.69	0.81	41.2
9	R2	All MCs	100	3.1	100	3.1	0.786	61.4	LOS E	5.4	38.5	1.00	0.90	1.27	29.3
Approach			621	3.1	621	3.1	0.786	32.2	LOS C	10.7	77.2	0.82	0.72	0.86	39.1
West: Airport North Precinct Access															
10	L2	All MCs	96	3.1	96	3.1	*0.555	29.0	LOS C	7.1	50.8	0.95	0.83	0.95	36.4
11	T1	All MCs	1	3.1	1	3.1	0.555	44.0	LOS D	7.1	50.8	0.95	0.83	0.95	37.4
12	R2	All MCs	372	3.1	372	3.1	*0.828	54.7	LOS D	14.4	103.5	0.99	0.92	1.13	32.3
Approach			468	3.1	468	3.1	0.828	49.4	LOS D	14.4	103.5	0.98	0.90	1.10	32.6
All Vehicles			2201	3.1	2201	3.1	0.828	38.7	LOS D	25.1	180.5	0.88	0.83	0.94	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

East: Green Turtle Place												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: David Low Way (North)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Airport North Precinct Access												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		50	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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

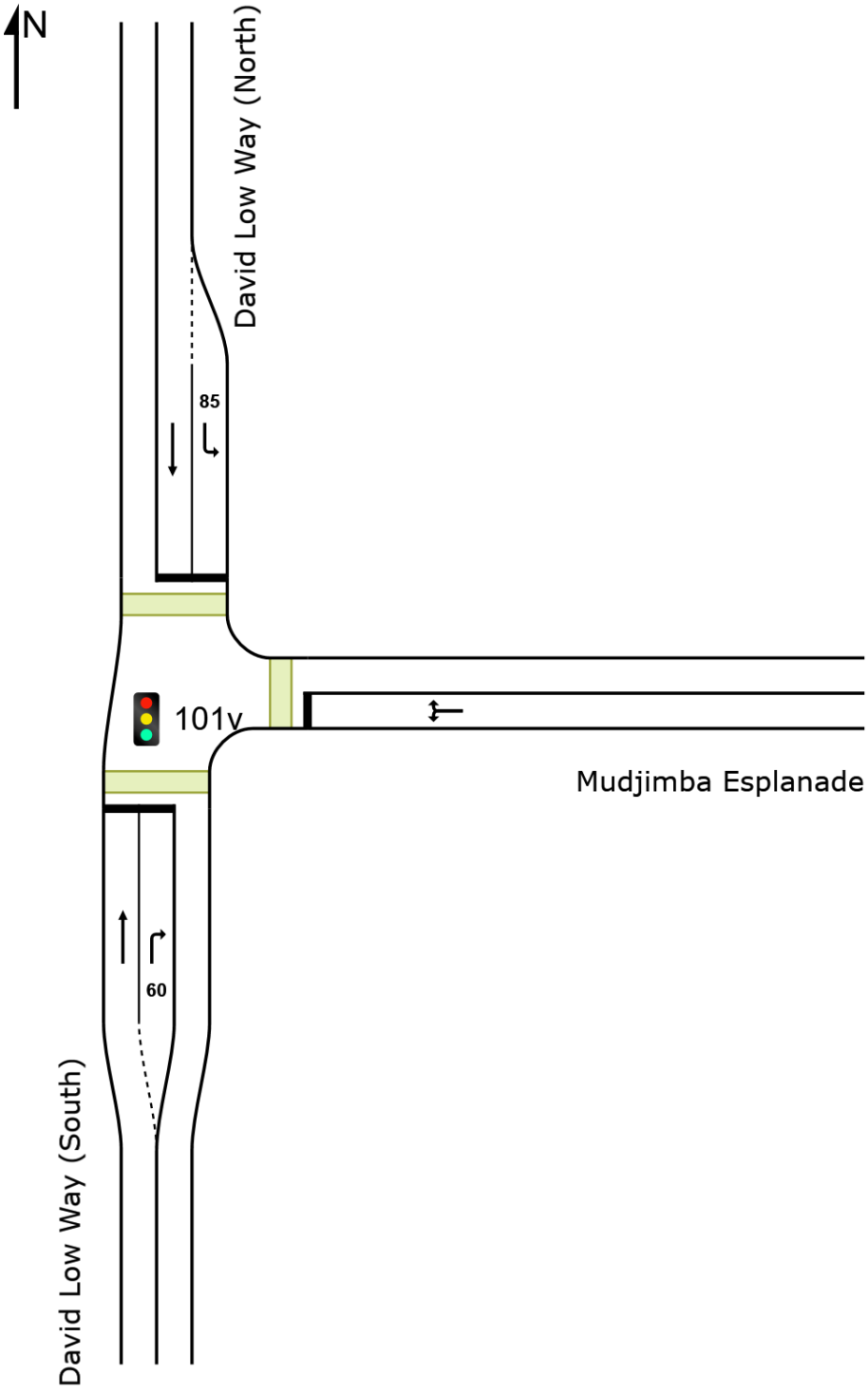
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SITE LAYOUT

Site: 101v [David Low Way / Mudjimba Esplanade - Upgrade (Site Folder: 2034 AM Peak Pre Development)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



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Project: C:\Users\Holly.Rice\OneDrive - Arup\307887-00 SCA GP TRAFFIC & TRANSPORT - Airport North Precinct\Modelling\SIDRA \SCA_V1.sip9

MOVEMENT SUMMARY

Site: 101v [David Low Way / Mudjimba Esplanade - Upgrade (Site Folder: 2034 AM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	328	2.9	328	2.9	0.343	12.9	LOS B	7.7	55.3	0.64	0.55	0.64	49.4
3	R2	All MCs	31	2.9	31	2.9	* 0.122	39.2	LOS D	1.1	7.8	0.91	0.72	0.91	35.3
Approach			359	2.9	359	2.9	0.343	15.2	LOS B	7.7	55.3	0.67	0.57	0.67	47.8
East: Mudjimba Esplanade															
4	L2	All MCs	46	2.9	46	2.9	0.369	29.0	LOS C	3.8	27.3	0.93	0.77	0.93	35.6
6	R2	All MCs	59	2.9	59	2.9	* 0.369	46.8	LOS D	3.8	27.3	0.93	0.77	0.93	35.5
Approach			105	2.9	105	2.9	0.369	39.0	LOS D	3.8	27.3	0.93	0.77	0.93	35.6
North: David Low Way (North)															
7	L2	All MCs	91	2.9	91	2.9	0.072	9.9	LOS A	1.1	8.2	0.35	0.65	0.35	49.7
8	T1	All MCs	478	2.9	478	2.9	* 0.499	14.3	LOS B	12.4	89.1	0.71	0.63	0.71	48.5
Approach			568	2.9	568	2.9	0.499	13.6	LOS B	12.4	89.1	0.66	0.63	0.66	48.7
All Vehicles			1033	2.9	1033	2.9	0.499	16.8	LOS B	12.4	89.1	0.69	0.62	0.69	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
East: Mudjimba Esplanade												
P2	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		0	158	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Mudjimba Esplanade - Upgrade (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	335	2.9	335	2.9	0.350	13.0	LOS B	7.9	56.6	0.65	0.56	0.65	49.4
3	R2	All MCs	31	2.9	31	2.9	* 0.122	39.2	LOS D	1.1	7.8	0.91	0.72	0.91	35.3
Approach			365	2.9	365	2.9	0.350	15.2	LOS B	7.9	56.6	0.67	0.57	0.67	47.8
East: Mudjimba Esplanade															
4	L2	All MCs	54	2.9	54	2.9	0.401	29.4	LOS C	4.2	30.2	0.94	0.78	0.94	35.5
6	R2	All MCs	62	2.9	62	2.9	* 0.401	47.6	LOS D	4.2	30.2	0.94	0.78	0.94	35.5
Approach			116	2.9	116	2.9	0.401	39.2	LOS D	4.2	30.2	0.94	0.78	0.94	35.5
North: David Low Way (North)															
7	L2	All MCs	88	2.9	88	2.9	0.071	9.9	LOS A	1.1	8.0	0.35	0.65	0.35	49.7
8	T1	All MCs	503	2.9	503	2.9	* 0.526	14.6	LOS B	13.3	95.5	0.73	0.64	0.73	48.4
Approach			592	2.9	592	2.9	0.526	13.9	LOS B	13.3	95.5	0.67	0.64	0.67	48.5
All Vehicles			1073	2.9	1073	2.9	0.526	17.1	LOS B	13.3	95.5	0.70	0.63	0.70	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
East: Mudjimba Esplanade												
P2	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: David Low Way (North)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		0	158	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Mudjimba Esplanade - Upgrade (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	662	2.9	662	2.9	0.518	14.0	LOS B	20.4	146.6	0.54	0.49	0.54	50.8
3	R2	All MCs	29	2.9	29	2.9	* 0.175	68.8	LOS E	1.8	12.7	0.96	0.72	0.96	28.1
Approach			692	2.9	692	2.9	0.518	16.4	LOS B	20.4	146.6	0.56	0.50	0.56	47.2
East: Mudjimba Esplanade															
4	L2	All MCs	47	2.9	47	2.9	0.639	56.3	LOS E	7.6	54.2	1.00	0.81	1.03	27.7
6	R2	All MCs	72	2.9	72	2.9	* 0.639	76.0	LOS E	7.6	54.2	1.00	0.81	1.03	27.7
Approach			119	2.9	119	2.9	0.639	68.1	LOS E	7.6	54.2	1.00	0.81	1.03	27.7
North: David Low Way (North)															
7	L2	All MCs	117	2.9	117	2.9	0.081	13.1	LOS B	1.6	11.4	0.24	0.63	0.24	50.5
8	T1	All MCs	854	2.9	854	2.9	* 0.695	17.9	LOS B	32.3	232.0	0.66	0.61	0.66	49.1
Approach			971	2.9	971	2.9	0.695	17.3	LOS B	32.3	232.0	0.61	0.61	0.61	46.5
All Vehicles			1781	2.9	1781	2.9	0.695	20.3	LOS C	32.3	232.0	0.62	0.58	0.62	44.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
East: Mudjimba Esplanade												
P2	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
North: David Low Way (North)												
P3	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
All Pedestrians		0	158	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94

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

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Mudjimba Esplanade - Upgrade (Site Folder: 2034 PM Peak Pre Development)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 PM Peak Pre Development Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	580	3.1	580	3.1	*0.551	14.9	LOS B	16.2	116.4	0.69	0.62	0.69	48.9
3	R2	All MCs	49	3.1	49	3.1	*0.223	46.6	LOS D	2.0	14.6	0.94	0.74	0.94	33.3
Approach			629	3.1	629	3.1	0.551	17.4	LOS B	16.2	116.4	0.71	0.63	0.71	46.5
East: Mudjimba Esplanade															
4	L2	All MCs	41	3.1	41	3.1	0.455	34.0	LOS C	4.7	33.6	0.96	0.78	0.96	33.6
6	R2	All MCs	71	3.1	71	3.1	*0.455	51.6	LOS D	4.7	33.6	0.96	0.78	0.96	33.5
Approach			112	3.1	112	3.1	0.455	45.1	LOS D	4.7	33.6	0.96	0.78	0.96	33.5
North: David Low Way (North)															
7	L2	All MCs	112	3.1	112	3.1	0.085	9.5	LOS A	1.4	10.2	0.31	0.65	0.31	50.0
8	T1	All MCs	387	3.1	387	3.1	0.365	11.9	LOS B	9.4	67.5	0.60	0.52	0.60	50.2
Approach			499	3.1	499	3.1	0.365	11.3	LOS B	9.4	67.5	0.53	0.55	0.53	50.1
All Vehicles			1240	3.1	1240	3.1	0.551	17.5	LOS B	16.2	116.4	0.66	0.61	0.66	46.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
East: Mudjimba Esplanade												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Mudjimba Esplanade - Upgrade (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	587	3.1	587	3.1	*0.558	15.2	LOS B	16.5	118.6	0.69	0.62	0.69	48.9
3	R2	All MCs	48	3.1	48	3.1	*0.218	46.8	LOS D	2.0	14.3	0.94	0.74	0.94	33.3
Approach			636	3.1	636	3.1	0.558	17.6	LOS B	16.5	118.6	0.71	0.63	0.71	46.3
East: Mudjimba Esplanade															
4	L2	All MCs	54	3.1	54	3.1	0.512	34.9	LOS C	5.4	39.1	0.97	0.79	0.97	33.5
6	R2	All MCs	75	3.1	75	3.1	*0.512	53.1	LOS D	5.4	39.1	0.97	0.79	0.97	33.4
Approach			128	3.1	128	3.1	0.512	45.5	LOS D	5.4	39.1	0.97	0.79	0.97	33.4
North: David Low Way (North)															
7	L2	All MCs	112	3.1	112	3.1	0.085	9.5	LOS A	1.4	10.2	0.31	0.65	0.31	50.0
8	T1	All MCs	419	3.1	419	3.1	0.395	12.1	LOS B	10.4	74.6	0.61	0.54	0.61	50.0
Approach			531	3.1	531	3.1	0.395	11.6	LOS B	10.4	74.6	0.55	0.56	0.55	50.0
All Vehicles			1295	3.1	1295	3.1	0.558	17.9	LOS B	16.5	118.6	0.67	0.62	0.67	45.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
East: Mudjimba Esplanade												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: David Low Way (North)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		0	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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

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

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Mudjimba Esplanade - Upgrade (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Mudjimba Esplanade
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: David Low Way (South)															
2	T1	All MCs	983	3.1	983	3.1	*0.779	24.4	LOS C	41.8	300.1	0.74	0.68	0.74	48.0
3	R2	All MCs	36	3.1	36	3.1	*0.213	75.4	LOS E	2.2	15.6	0.96	0.73	0.96	28.0
Approach			1019	3.1	1019	3.1	0.779	26.2	LOS C	41.8	300.1	0.75	0.68	0.75	41.8
East: Mudjimba Esplanade															
4	L2	All MCs	38	3.1	38	3.1	0.723	57.0	LOS E	8.5	60.9	1.00	0.85	1.11	27.2
6	R2	All MCs	92	3.1	92	3.1	*0.723	76.5	LOS E	8.5	60.9	1.00	0.85	1.11	27.1
Approach			129	3.1	129	3.1	0.723	70.8	LOS E	8.5	60.9	1.00	0.85	1.11	27.1
North: David Low Way (North)															
7	L2	All MCs	149	3.1	149	3.1	0.104	11.1	LOS B	2.1	14.9	0.24	0.64	0.24	50.4
8	T1	All MCs	761	3.1	761	3.1	0.616	14.6	LOS B	26.2	188.2	0.60	0.55	0.60	49.9
Approach			911	3.1	911	3.1	0.616	14.0	LOS B	26.2	188.2	0.54	0.57	0.54	48.5
All Vehicles			2059	3.1	2059	3.1	0.779	23.6	LOS C	41.8	300.1	0.68	0.64	0.68	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: David Low Way (South)												
P1	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
East: Mudjimba Esplanade												
P2	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
North: David Low Way (North)												
P3	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
All Pedestrians		0	158	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94

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

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

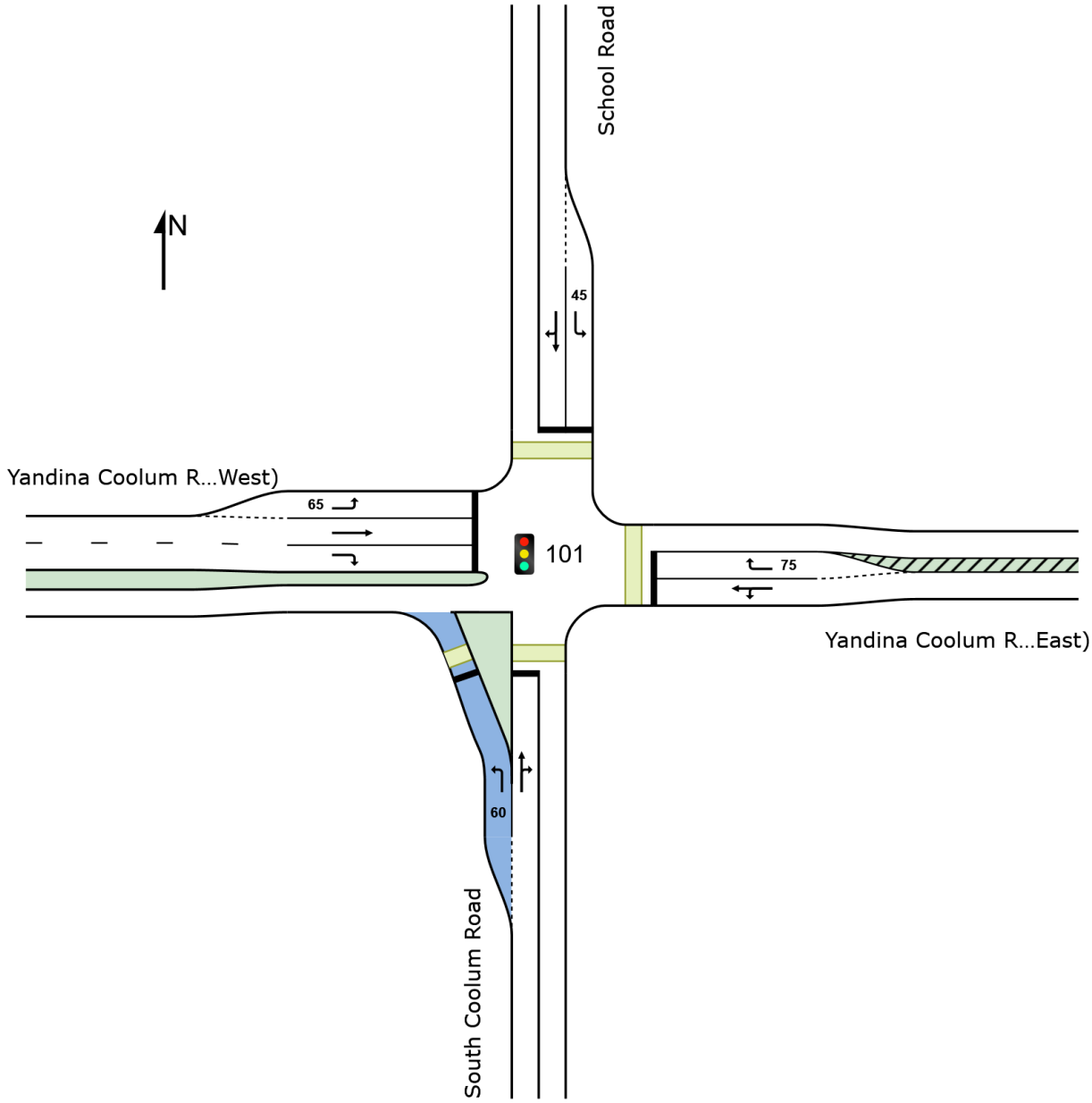
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SITE LAYOUT

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 1 (Site Folder: 2034 AM Peak GAP)]

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 1 (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	581	2.9	581	2.9	0.831	45.9	LOS D	28.1	201.4	0.96	0.91	1.03	37.2
2	T1	All MCs	142	2.9	142	2.9	* 1.051	140.2	LOS F	14.9	106.8	1.00	1.26	1.89	19.1
3	R2	All MCs	24	2.9	24	2.9	1.051	145.7	LOS F	14.9	106.8	1.00	1.26	1.89	18.9
Approach			747	2.9	747	2.9	1.051	67.1	LOS E	28.1	201.4	0.97	0.99	1.22	28.2
East: Yandina Coolum Road (East)															
4	L2	All MCs	81	2.9	81	2.9	1.093	173.1	LOS F	72.7	521.5	1.00	1.64	1.87	17.2
5	T1	All MCs	628	2.9	628	2.9	* 1.093	167.5	LOS F	72.7	521.5	1.00	1.64	1.87	17.4
6	R2	All MCs	194	2.9	194	2.9	0.608	75.6	LOS E	10.7	76.6	0.98	0.82	0.98	30.5
Approach			903	2.9	903	2.9	1.093	148.3	LOS F	72.7	521.5	0.99	1.46	1.68	17.4
North: School Road															
7	L2	All MCs	171	2.9	171	2.9	0.281	37.1	LOS D	7.3	52.4	0.78	0.77	0.78	36.3
8	T1	All MCs	95	2.9	95	2.9	* 0.911	71.6	LOS E	12.6	90.0	1.00	1.05	1.39	27.1
9	R2	All MCs	89	2.9	89	2.9	0.911	77.2	LOS E	12.6	90.0	1.00	1.05	1.39	26.5
Approach			355	2.9	355	2.9	0.911	56.4	LOS E	12.6	90.0	0.89	0.92	1.10	30.7
West: Yandina Coolum Road (West)															
10	L2	All MCs	121	2.9	121	2.9	0.154	33.9	LOS C	4.2	30.4	0.64	0.73	0.64	40.1
11	T1	All MCs	478	2.9	478	2.9	0.617	34.5	LOS C	21.4	153.8	0.83	0.74	0.83	41.1
12	R2	All MCs	426	2.9	426	2.9	* 1.081	153.4	LOS F	42.0	301.7	1.00	1.27	1.89	16.8
Approach			1025	2.9	1025	2.9	1.081	83.9	LOS F	42.0	301.7	0.88	0.96	1.25	25.0
All Vehicles			3031	2.9	3031	2.9	1.093	95.7	LOS F	72.7	521.5	0.94	1.11	1.35	23.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
P1B	Slip/ Bypass	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 1 (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	574	2.9	574	2.9	0.820	44.4	LOS D	27.1	194.6	0.95	0.90	1.01	37.6
2	T1	All MCs	138	2.9	138	2.9	* 1.059	145.8	LOS F	15.3	109.7	1.00	1.28	1.93	18.5
3	R2	All MCs	29	2.9	29	2.9	1.059	151.3	LOS F	15.3	109.7	1.00	1.28	1.93	18.3
Approach			741	2.9	741	2.9	1.059	67.5	LOS E	27.1	194.6	0.96	0.98	1.22	28.1
East: Yandina Coolum Road (East)															
4	L2	All MCs	71	2.9	71	2.9	1.081	164.4	LOS F	70.5	505.5	1.00	1.60	1.82	17.9
5	T1	All MCs	634	2.9	634	2.9	* 1.081	158.8	LOS F	70.5	505.5	1.00	1.60	1.82	18.2
6	R2	All MCs	188	2.9	188	2.9	0.621	76.3	LOS E	10.5	75.2	0.98	0.82	0.98	30.3
Approach			893	2.9	893	2.9	1.081	141.8	LOS F	70.5	505.5	1.00	1.44	1.64	17.9
North: School Road															
7	L2	All MCs	171	2.9	171	2.9	0.288	37.9	LOS D	7.4	53.1	0.79	0.78	0.79	36.0
8	T1	All MCs	95	2.9	95	2.9	* 0.911	71.6	LOS E	12.6	90.0	1.00	1.05	1.39	27.1
9	R2	All MCs	89	2.9	89	2.9	0.911	77.2	LOS E	12.6	90.0	1.00	1.05	1.39	26.5
Approach			355	2.9	355	2.9	0.911	56.8	LOS E	12.6	90.0	0.90	0.92	1.10	30.5
West: Yandina Coolum Road (West)															
10	L2	All MCs	129	2.9	129	2.9	0.161	33.7	LOS C	4.5	32.2	0.64	0.73	0.64	40.4
11	T1	All MCs	491	2.9	491	2.9	0.626	34.3	LOS C	21.9	157.4	0.83	0.74	0.83	41.3
12	R2	All MCs	433	2.9	433	2.9	* 1.097	165.6	LOS F	44.2	317.0	1.00	1.30	1.96	15.9
Approach			1053	2.9	1053	2.9	1.097	88.2	LOS F	44.2	317.0	0.88	0.97	1.27	24.2
All Vehicles			3041	2.9	3041	2.9	1.097	95.3	LOS F	70.5	505.5	0.93	1.10	1.35	23.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
P1B	Slip/ Bypass	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 1 (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	498	3.1	498	3.1	0.492	19.6	LOS B	15.3	110.1	0.64	0.77	0.64	44.5
2	T1	All MCs	46	3.1	46	3.1	* 1.034	119.1	LOS F	12.3	88.5	1.00	1.21	1.85	20.0
3	R2	All MCs	97	3.1	97	3.1	1.034	124.6	LOS F	12.3	88.5	1.00	1.21	1.85	19.6
Approach			641	3.1	641	3.1	1.034	42.6	LOS D	15.3	110.1	0.72	0.87	0.91	34.6
East: Yandina Coolum Road (East)															
4	L2	All MCs	63	3.1	63	3.1	1.038	137.0	LOS F	48.3	347.2	1.00	1.44	1.66	20.5
5	T1	All MCs	473	3.1	473	3.1	* 1.038	131.4	LOS F	48.3	347.2	1.00	1.44	1.66	20.8
6	R2	All MCs	56	3.1	56	3.1	0.614	88.8	LOS F	3.5	25.0	1.00	0.79	1.09	27.1
Approach			592	3.1	592	3.1	1.038	128.0	LOS F	48.3	347.2	1.00	1.38	1.60	19.3
North: School Road															
7	L2	All MCs	98	3.1	98	3.1	0.259	48.7	LOS D	4.8	34.7	0.88	0.77	0.88	32.5
8	T1	All MCs	55	3.1	55	3.1	* 0.318	54.8	LOS D	3.6	26.1	0.96	0.74	0.96	31.4
9	R2	All MCs	11	3.1	11	3.1	0.318	60.4	LOS E	3.6	26.1	0.96	0.74	0.96	30.7
Approach			163	3.1	163	3.1	0.318	51.5	LOS D	4.8	34.7	0.91	0.76	0.91	32.0
West: Yandina Coolum Road (West)															
10	L2	All MCs	6	3.1	6	3.1	0.006	23.8	LOS C	0.2	1.1	0.45	0.63	0.45	45.1
11	T1	All MCs	658	3.1	658	3.1	0.610	24.7	LOS C	25.1	180.5	0.72	0.65	0.72	46.2
12	R2	All MCs	646	3.1	646	3.1	* 1.067	136.4	LOS F	62.3	447.6	1.00	1.26	1.76	18.2
Approach			1311	3.1	1311	3.1	1.067	79.8	LOS E	62.3	447.6	0.85	0.95	1.23	25.7
All Vehicles			2706	3.1	2706	3.1	1.067	79.8	LOS E	62.3	447.6	0.86	1.01	1.22	25.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
P1B	Slip/ Bypass	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 1 (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	535	3.1	535	3.1	0.556	23.5	LOS C	17.9	128.6	0.70	0.79	0.70	43.6
2	T1	All MCs	54	3.1	54	3.1	* 0.985	95.0	LOS F	10.6	75.9	1.00	1.13	1.67	23.4
3	R2	All MCs	83	3.1	83	3.1	0.985	100.5	LOS F	10.6	75.9	1.00	1.13	1.67	22.9
Approach			672	3.1	672	3.1	0.985	38.8	LOS D	17.9	128.6	0.76	0.86	0.90	35.9
East: Yandina Coolum Road (East)															
4	L2	All MCs	105	3.1	105	3.1	1.050	145.3	LOS F	53.2	382.3	1.00	1.46	1.70	19.7
5	T1	All MCs	469	3.1	469	3.1	* 1.050	139.8	LOS F	53.2	382.3	1.00	1.46	1.70	20.0
6	R2	All MCs	48	3.1	48	3.1	0.533	89.4	LOS F	3.0	21.5	1.00	0.76	1.02	27.2
Approach			623	3.1	623	3.1	1.050	136.8	LOS F	53.2	382.3	1.00	1.41	1.65	18.4
North: School Road															
7	L2	All MCs	99	3.1	99	3.1	0.261	48.7	LOS D	4.9	35.1	0.88	0.77	0.88	32.5
8	T1	All MCs	53	3.1	53	3.1	* 0.308	54.7	LOS D	3.5	25.3	0.96	0.74	0.96	31.4
9	R2	All MCs	11	3.1	11	3.1	0.308	60.3	LOS E	3.5	25.3	0.96	0.74	0.96	30.7
Approach			162	3.1	162	3.1	0.308	51.4	LOS D	4.9	35.1	0.91	0.76	0.91	32.0
West: Yandina Coolum Road (West)															
10	L2	All MCs	6	3.1	6	3.1	0.006	23.4	LOS C	0.2	1.1	0.45	0.63	0.45	45.1
11	T1	All MCs	645	3.1	645	3.1	0.598	24.1	LOS C	24.4	175.2	0.71	0.64	0.71	46.3
12	R2	All MCs	629	3.1	629	3.1	* 1.094	157.5	LOS F	64.2	461.6	1.00	1.31	1.90	16.5
Approach			1281	3.1	1281	3.1	1.094	89.7	LOS F	64.2	461.6	0.85	0.97	1.29	24.0
All Vehicles			2738	3.1	2738	3.1	1.094	85.7	LOS F	64.2	461.6	0.87	1.03	1.25	24.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
P1B	Slip/ Bypass	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		400	421	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

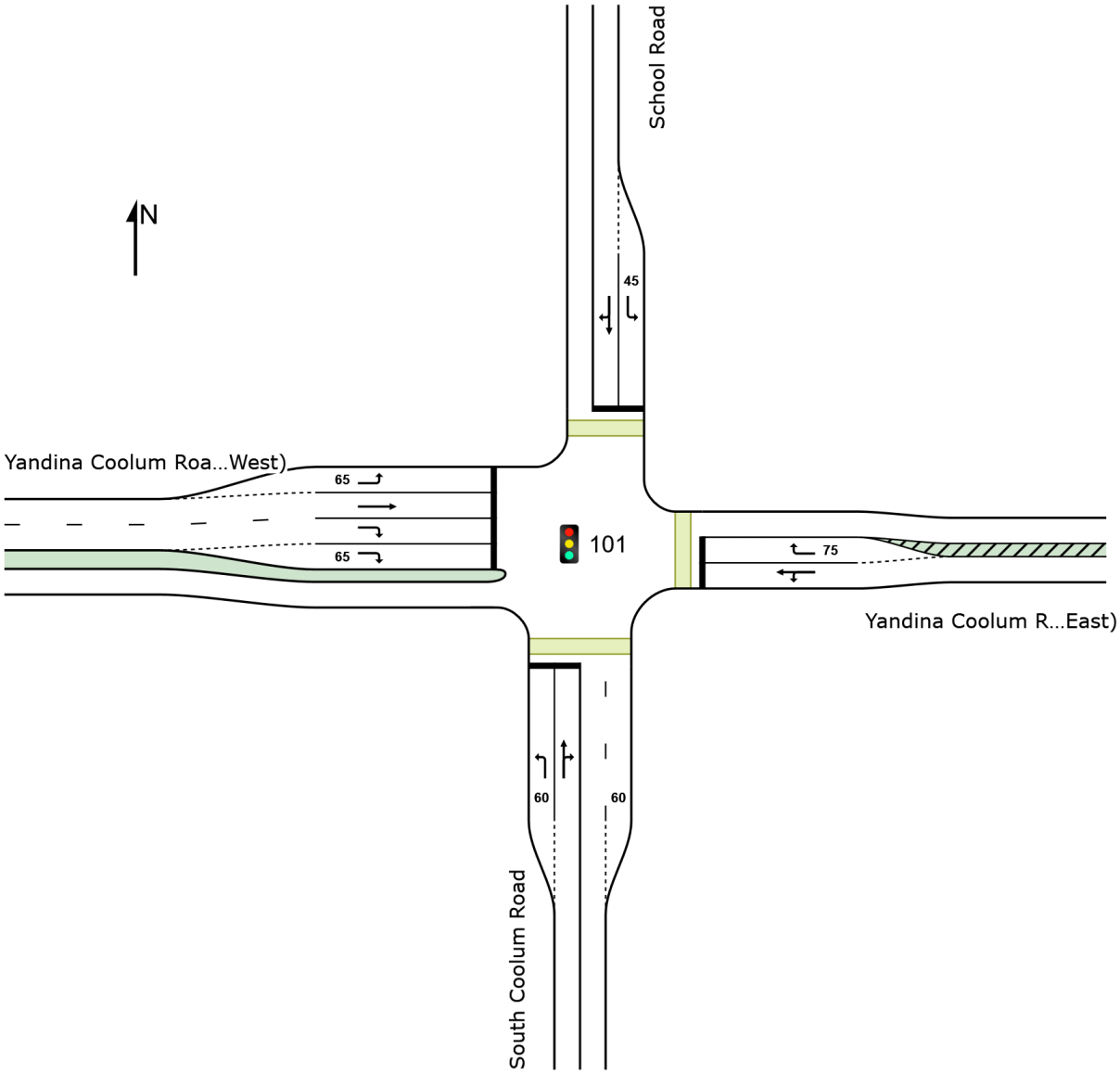
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SITE LAYOUT

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 2 (Site Folder: 2034 AM Peak GAP)]

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 2 (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	581	2.9	581	2.9	* 1.072	163.7	LOS F	57.2	410.2	1.00	1.29	1.81	17.8
2	T1	All MCs	142	2.9	142	2.9	0.876	89.6	LOS F	10.9	78.2	1.00	1.00	1.32	28.3
3	R2	All MCs	24	2.9	24	2.9	0.876	95.2	LOS F	10.9	78.2	1.00	1.00	1.32	27.7
Approach			747	2.9	747	2.9	1.072	147.4	LOS F	57.2	410.2	1.00	1.23	1.70	17.4
East: Yandina Coolum Road (East)															
4	L2	All MCs	81	2.9	81	2.9	1.072	157.6	LOS F	69.7	499.7	1.00	1.57	1.78	18.6
5	T1	All MCs	628	2.9	628	2.9	* 1.072	151.3	LOS F	69.7	499.7	1.00	1.57	1.78	18.9
6	R2	All MCs	194	2.9	194	2.9	0.672	77.9	LOS E	11.0	79.2	0.99	0.83	1.02	29.8
Approach			903	2.9	903	2.9	1.072	136.2	LOS F	69.7	499.7	1.00	1.41	1.61	18.5
North: School Road															
7	L2	All MCs	171	2.9	171	2.9	0.296	38.7	LOS D	7.5	53.8	0.80	0.78	0.80	35.7
8	T1	All MCs	95	2.9	95	2.9	* 0.911	72.3	LOS E	12.6	90.0	1.00	1.05	1.39	27.1
9	R2	All MCs	89	2.9	89	2.9	0.911	77.3	LOS E	12.6	90.0	1.00	1.05	1.39	26.6
Approach			355	2.9	355	2.9	0.911	57.4	LOS E	12.6	90.0	0.90	0.92	1.11	30.5
West: Yandina Coolum Road (West)															
10	L2	All MCs	121	2.9	121	2.9	0.154	33.9	LOS C	4.2	30.4	0.64	0.73	0.64	40.1
11	T1	All MCs	478	2.9	478	2.9	0.617	34.5	LOS C	21.4	153.8	0.83	0.74	0.83	41.1
12	R2	All MCs	426	2.9	426	2.9	0.926	73.9	LOS E	21.7	156.0	0.97	0.96	1.23	27.5
Approach			1025	2.9	1025	2.9	0.926	50.8	LOS D	21.7	156.0	0.87	0.83	0.97	32.3
All Vehicles			3031	2.9	3031	2.9	1.072	100.9	LOS F	69.7	499.7	0.94	1.11	1.36	22.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 2 (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	574	2.9	574	2.9	* 1.061	155.5	LOS F	55.2	395.8	1.00	1.27	1.76	18.5
2	T1	All MCs	138	2.9	138	2.9	0.963	105.2	LOS F	12.4	88.6	1.00	1.12	1.56	25.2
3	R2	All MCs	29	2.9	29	2.9	0.963	110.8	LOS F	12.4	88.6	1.00	1.12	1.56	24.7
Approach			741	2.9	741	2.9	1.061	144.4	LOS F	55.2	395.8	1.00	1.24	1.71	17.6
East: Yandina Coolum Road (East)															
4	L2	All MCs	71	2.9	71	2.9	1.061	149.4	LOS F	67.5	484.4	1.00	1.53	1.72	19.4
5	T1	All MCs	634	2.9	634	2.9	* 1.061	143.2	LOS F	67.5	484.4	1.00	1.53	1.72	19.7
6	R2	All MCs	188	2.9	188	2.9	0.690	79.0	LOS E	10.9	78.1	1.00	0.84	1.05	29.5
Approach			893	2.9	893	2.9	1.061	130.1	LOS F	67.5	484.4	1.00	1.38	1.58	19.1
North: School Road															
7	L2	All MCs	171	2.9	171	2.9	0.304	39.6	LOS D	7.6	54.5	0.81	0.78	0.81	35.4
8	T1	All MCs	95	2.9	95	2.9	* 0.911	72.3	LOS E	12.6	90.0	1.00	1.05	1.39	27.1
9	R2	All MCs	89	2.9	89	2.9	0.911	77.3	LOS E	12.6	90.0	1.00	1.05	1.39	26.6
Approach			355	2.9	355	2.9	0.911	57.8	LOS E	12.6	90.0	0.91	0.92	1.11	30.4
West: Yandina Coolum Road (West)															
10	L2	All MCs	129	2.9	129	2.9	0.158	32.5	LOS C	4.4	31.7	0.63	0.73	0.63	40.6
11	T1	All MCs	491	2.9	491	2.9	0.612	33.0	LOS C	21.6	154.8	0.82	0.72	0.82	41.7
12	R2	All MCs	433	2.9	433	2.9	0.902	70.0	LOS E	21.2	151.9	0.97	0.94	1.18	28.4
Approach			1053	2.9	1053	2.9	0.902	48.1	LOS D	21.6	154.8	0.86	0.81	0.94	33.1
All Vehicles			3041	2.9	3041	2.9	1.061	96.8	LOS F	67.5	484.4	0.94	1.10	1.34	23.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 2 (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	498	3.1	498	3.1	0.693	44.8	LOS D	23.4	168.5	0.87	0.85	0.87	37.0
2	T1	All MCs	46	3.1	46	3.1	* 0.930	86.2	LOS F	10.0	71.9	1.00	1.06	1.49	25.9
3	R2	All MCs	97	3.1	97	3.1	0.930	91.8	LOS F	10.0	71.9	1.00	1.06	1.49	25.4
Approach			641	3.1	641	3.1	0.930	54.9	LOS D	23.4	168.5	0.90	0.90	1.01	30.9
East: Yandina Coolum Road (East)															
4	L2	All MCs	63	3.1	63	3.1	0.953	92.2	LOS F	39.4	283.4	1.00	1.18	1.33	27.3
5	T1	All MCs	473	3.1	473	3.1	* 0.953	85.4	LOS F	39.4	283.4	1.00	1.18	1.33	27.9
6	R2	All MCs	56	3.1	56	3.1	0.614	86.9	LOS F	3.5	25.0	1.00	0.79	1.09	27.1
Approach			592	3.1	592	3.1	0.953	86.3	LOS F	39.4	283.4	1.00	1.14	1.31	24.8
North: School Road															
7	L2	All MCs	98	3.1	98	3.1	0.259	48.7	LOS D	4.8	34.7	0.88	0.77	0.88	32.5
8	T1	All MCs	55	3.1	55	3.1	* 0.318	55.9	LOS E	3.6	26.1	0.96	0.74	0.96	31.4
9	R2	All MCs	11	3.1	11	3.1	0.318	60.4	LOS E	3.6	26.1	0.96	0.74	0.96	30.8
Approach			163	3.1	163	3.1	0.318	51.9	LOS D	4.8	34.7	0.91	0.76	0.91	32.0
West: Yandina Coolum Road (West)															
10	L2	All MCs	6	3.1	6	3.1	0.006	24.7	LOS C	0.2	1.1	0.46	0.63	0.46	44.9
11	T1	All MCs	658	3.1	658	3.1	0.619	25.9	LOS C	25.6	184.0	0.73	0.66	0.73	45.8
12	R2	All MCs	646	3.1	646	3.1	* 0.975	88.4	LOS F	36.1	259.2	0.95	1.01	1.26	26.7
Approach			1311	3.1	1311	3.1	0.975	56.7	LOS E	36.1	259.2	0.84	0.83	0.99	30.7
All Vehicles			2706	3.1	2706	3.1	0.975	62.5	LOS E	39.4	283.4	0.89	0.91	1.06	29.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

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MOVEMENT SUMMARY

Site: 101 [Yandina Coolum Road / South Coolum Road / School Road - Upgrade Option 2 (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
Yandina Coolum Road / South Coolum Road / School Road
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: South Coolum Road															
1	L2	All MCs	535	3.1	535	3.1	0.782	52.6	LOS D	27.7	198.8	0.93	0.88	0.96	35.4
2	T1	All MCs	54	3.1	54	3.1	* 0.985	105.3	LOS F	10.6	75.9	1.00	1.13	1.67	23.4
3	R2	All MCs	83	3.1	83	3.1	0.985	110.8	LOS F	10.6	75.9	1.00	1.13	1.67	23.0
Approach			672	3.1	672	3.1	0.985	64.0	LOS E	27.7	198.8	0.94	0.93	1.10	28.7
East: Yandina Coolum Road (East)															
4	L2	All MCs	105	3.1	105	3.1	0.970	98.7	LOS F	44.1	317.0	1.00	1.21	1.37	26.3
5	T1	All MCs	469	3.1	469	3.1	* 0.970	91.9	LOS F	44.1	317.0	1.00	1.21	1.37	26.8
6	R2	All MCs	48	3.1	48	3.1	0.533	87.6	LOS F	3.0	21.5	1.00	0.76	1.02	27.2
Approach			623	3.1	623	3.1	0.970	92.7	LOS F	44.1	317.0	1.00	1.18	1.34	23.7
North: School Road															
7	L2	All MCs	99	3.1	99	3.1	0.261	48.7	LOS D	4.9	35.1	0.88	0.77	0.88	32.5
8	T1	All MCs	53	3.1	53	3.1	* 0.308	55.9	LOS E	3.5	25.3	0.96	0.74	0.96	31.4
9	R2	All MCs	11	3.1	11	3.1	0.308	60.3	LOS E	3.5	25.3	0.96	0.74	0.96	30.8
Approach			162	3.1	162	3.1	0.308	51.8	LOS D	4.9	35.1	0.91	0.76	0.91	32.0
West: Yandina Coolum Road (West)															
10	L2	All MCs	6	3.1	6	3.1	0.006	23.4	LOS C	0.2	1.1	0.45	0.63	0.45	45.1
11	T1	All MCs	645	3.1	645	3.1	0.598	24.1	LOS C	24.4	175.2	0.71	0.64	0.71	46.3
12	R2	All MCs	629	3.1	629	3.1	* 0.972	87.8	LOS F	34.9	251.0	0.95	1.01	1.26	26.7
Approach			1281	3.1	1281	3.1	0.972	55.4	LOS E	34.9	251.0	0.83	0.82	0.98	31.1
All Vehicles			2738	3.1	2738	3.1	0.985	65.8	LOS E	44.1	317.0	0.90	0.93	1.09	28.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: South Coolum Road												

P1	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
East: Yandina Coolum Road (East)												
P2	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
North: School Road												
P3	Full	100	105	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96
All Pedestrians		300	316	54.4	LOS E	0.3	0.3	0.95	0.95	208.2	200.0	0.96

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

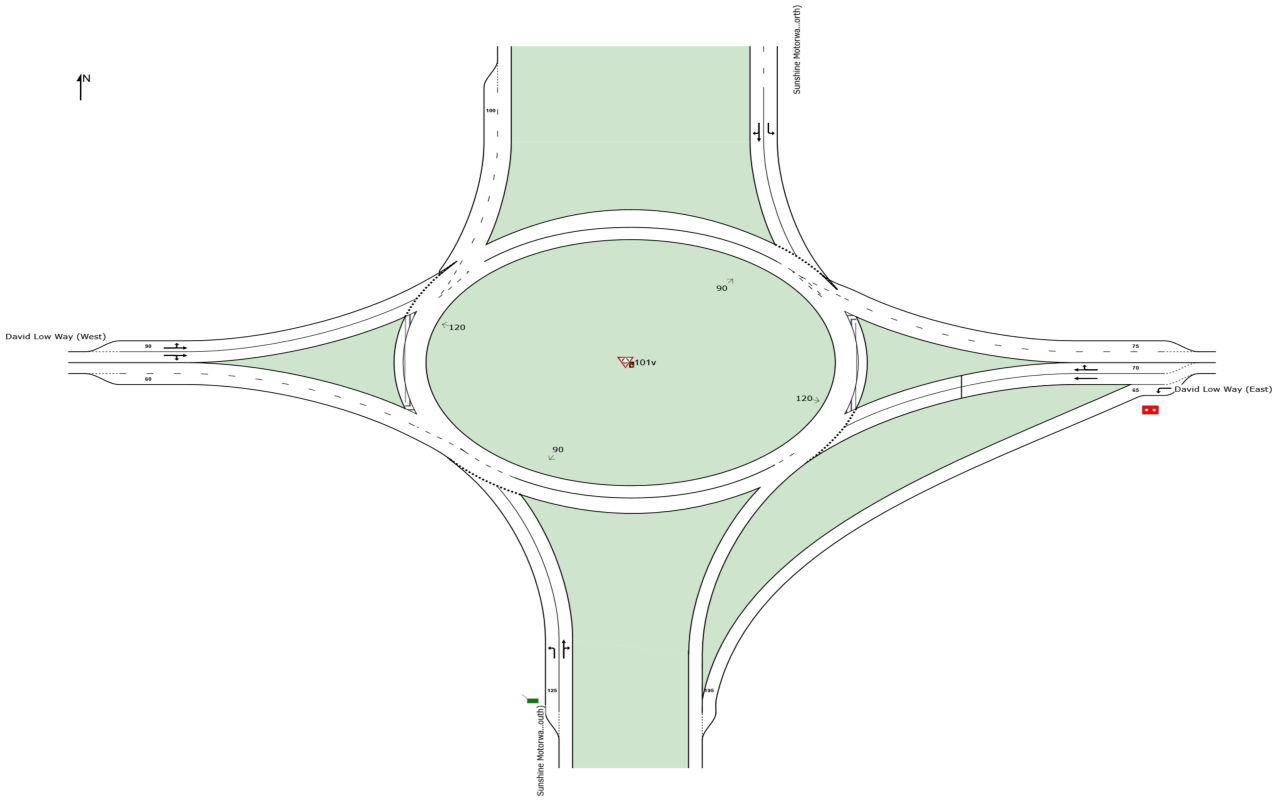
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SITE LAYOUT

Site: 101v [David Low Way / Sunshine Motorway Ramps - Upgrade Option 1 (Site Folder: 2034 AM Peak GAP)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout Metering

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



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MOVEMENT SUMMARY

Site: 101v [David Low Way / Sunshine Motorway Ramps - Upgrade Option 1 (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout Metering

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	135	2.9	135	2.9	0.149	3.2	LOS A	0.4	2.7	0.45	0.31	0.45	55.8
2	T1	All MCs	1	2.9	1	2.9	0.537	7.6	LOS A	2.8	20.1	0.59	0.89	0.82	50.3
3	R2	All MCs	653	2.9	653	2.9	0.537	13.7	LOS B	2.8	20.1	0.59	0.89	0.82	49.9
Approach			788	2.9	788	2.9	0.537	11.9	LOS B	2.8	20.1	0.56	0.79	0.76	50.7
East: David Low Way (East)															
4	L2	All MCs	789	2.9	789	2.9	0.419	3.9	LOS A	0.0	0.0	0.00	0.22	0.00	57.8
5	T1	All MCs	205	2.9	205	2.9	0.653	9.8	LOS A	4.5	32.4	0.95	0.90	1.07	50.9
6	R2	All MCs	220	2.9	220	2.9	0.653	18.0	LOS B	4.5	32.4	0.98	1.05	1.35	48.3
Approach			1215	2.9	1215	2.9	0.653	7.5	LOS A	4.5	32.4	0.34	0.48	0.42	54.4
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	83	2.9	83	2.9	0.146	13.2	LOS B	0.4	2.7	0.73	0.79	0.73	51.2
8	T1	All MCs	1	2.9	1	2.9	0.399	4.2	LOS A	1.4	9.9	0.78	0.72	0.78	49.9
9	R2	All MCs	291	2.9	291	2.9	0.399	11.4	LOS B	1.4	9.9	0.78	0.72	0.78	49.5
Approach			375	2.9	375	2.9	0.399	11.8	LOS B	1.4	9.9	0.77	0.73	0.77	49.8
West: David Low Way (West)															
10	L2	All MCs	849	2.9	849	2.9	0.682	4.5	LOS A	3.7	26.5	0.78	0.41	0.78	53.8
11	T1	All MCs	246	2.9	246	2.9	0.762	14.4	LOS B	5.3	38.0	0.85	1.20	1.82	47.3
12	R2	All MCs	365	2.9	365	2.9	0.762	21.4	LOS C	5.3	38.0	0.85	1.20	1.82	46.9
Approach			1461	2.9	1461	2.9	0.762	10.4	LOS B	5.3	38.0	0.81	0.74	1.22	50.6
All Vehicles			3839	2.9	3839	2.9	0.762	9.9	LOS A	5.3	38.0	0.60	0.67	0.83	51.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Sunshine Motorway Ramps - Upgrade Option 1 (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Roundabout Metering

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	135	2.9	135	2.9	0.157	3.5	LOS A	0.4	2.9	0.49	0.33	0.49	55.6
2	T1	All MCs	1	2.9	1	2.9	0.568	8.9	LOS A	3.2	23.1	0.63	0.95	0.94	49.7
3	R2	All MCs	655	2.9	655	2.9	0.568	14.7	LOS B	3.2	23.1	0.63	0.95	0.94	49.4
Approach			791	2.9	791	2.9	0.568	12.8	LOS B	3.2	23.1	0.61	0.84	0.87	50.2
East: David Low Way (East)															
4	L2	All MCs	888	2.9	888	2.9	0.471	4.3	LOS A	0.0	0.0	0.00	0.22	0.00	57.7
5	T1	All MCs	211	2.9	211	2.9	0.716	10.5	LOS B	5.0	35.5	0.96	0.95	1.19	50.6
6	R2	All MCs	234	2.9	234	2.9	0.716	19.3	LOS B	5.0	35.5	0.99	1.11	1.55	47.6
Approach			1333	2.9	1333	2.9	0.716	7.9	LOS A	5.0	35.5	0.33	0.49	0.46	54.3
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	96	2.9	96	2.9	0.165	13.0	LOS B	0.4	3.1	0.73	0.79	0.73	51.4
8	T1	All MCs	1	2.9	1	2.9	0.472	4.2	LOS A	1.7	12.0	0.80	0.72	0.80	49.8
9	R2	All MCs	348	2.9	348	2.9	0.472	11.4	LOS B	1.7	12.0	0.80	0.72	0.80	49.4
Approach			445	2.9	445	2.9	0.472	11.7	LOS B	1.7	12.0	0.78	0.73	0.78	49.8
West: David Low Way (West)															
10	L2	All MCs	908	2.9	908	2.9	0.736	4.8	LOS A	4.1	29.1	0.81	0.42	0.81	53.7
11	T1	All MCs	249	2.9	249	2.9	0.764	14.1	LOS B	5.3	38.0	0.85	1.20	1.81	47.4
12	R2	All MCs	365	2.9	365	2.9	0.764	21.1	LOS C	5.3	38.0	0.85	1.20	1.81	47.1
Approach			1523	2.9	1523	2.9	0.764	10.3	LOS B	5.3	38.0	0.83	0.73	1.22	50.7
All Vehicles			4092	2.9	4092	2.9	0.764	10.2	LOS B	5.3	38.0	0.62	0.67	0.85	51.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Sunshine Motorway Ramps - Upgrade Option 1 (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout Metering

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	192	3.1	192	3.1	0.232	4.5	LOS A	0.7	4.7	0.56	0.36	0.56	55.2
2	T1	All MCs	1	3.1	1	3.1	0.836	12.0	LOS B	8.3	59.5	0.84	1.25	1.79	47.4
3	R2	All MCs	917	3.1	917	3.1	0.836	19.0	LOS B	8.3	59.5	0.84	1.25	1.79	47.1
Approach			1109	3.1	1109	3.1	0.836	16.4	LOS B	8.3	59.5	0.79	1.09	1.57	48.2
East: David Low Way (East)															
4	L2	All MCs	676	3.1	676	3.1	0.359	2.6	LOS A	0.0	0.0	0.00	0.22	0.00	57.8
5	T1	All MCs	239	3.1	239	3.1	0.616	10.4	LOS B	3.6	25.8	0.97	0.95	1.14	50.9
6	R2	All MCs	99	3.1	99	3.1	0.616	17.4	LOS B	3.6	25.8	0.98	1.03	1.30	49.6
Approach			1014	3.1	1014	3.1	0.616	5.9	LOS A	3.6	25.8	0.32	0.47	0.40	55.1
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	142	3.1	142	3.1	0.322	20.8	LOS C	0.8	5.8	0.83	0.94	1.15	48.0
8	T1	All MCs	1	3.1	1	3.1	0.818	5.0	LOS A	2.6	18.8	0.95	0.76	0.95	49.3
9	R2	All MCs	461	3.1	461	3.1	0.818	12.1	LOS B	2.6	18.8	0.95	0.76	0.95	48.9
Approach			604	3.1	604	3.1	0.818	14.1	LOS B	2.6	18.8	0.92	0.81	1.00	48.7
West: David Low Way (West)															
10	L2	All MCs	591	3.1	591	3.1	0.564	4.0	LOS A	2.7	19.6	0.79	0.44	0.79	53.8
11	T1	All MCs	219	3.1	219	3.1	0.690	12.9	LOS B	3.2	23.3	0.87	1.11	1.57	48.3
12	R2	All MCs	222	3.1	222	3.1	0.690	20.0	LOS B	3.2	23.3	0.87	1.11	1.57	48.0
Approach			1032	3.1	1032	3.1	0.690	9.3	LOS A	3.2	23.3	0.82	0.73	1.12	51.1
All Vehicles			3759	3.1	3759	3.1	0.836	11.3	LOS B	8.3	59.5	0.69	0.78	1.04	50.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101v [David Low Way / Sunshine Motorway Ramps - Upgrade Option 1 (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Roundabout Metering

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	172	3.1	172	3.1	0.222	5.0	LOS A	0.6	4.5	0.60	0.38	0.60	55.1
2	T1	All MCs	1	3.1	1	3.1	0.821	12.9	LOS B	7.7	55.0	0.85	1.26	1.85	47.0
3	R2	All MCs	836	3.1	836	3.1	0.821	19.8	LOS B	7.7	55.0	0.85	1.26	1.85	46.6
Approach			1008	3.1	1008	3.1	0.821	17.3	LOS B	7.7	55.0	0.81	1.11	1.63	47.7
East: David Low Way (East)															
4	L2	All MCs	623	3.1	623	3.1	0.331	2.6	LOS A	0.0	0.0	0.00	0.22	0.00	57.9
5	T1	All MCs	245	3.1	245	3.1	0.688	11.4	LOS B	3.9	28.2	0.98	1.01	1.29	50.4
6	R2	All MCs	104	3.1	104	3.1	0.688	18.6	LOS B	3.9	28.2	1.00	1.09	1.51	48.9
Approach			973	3.1	973	3.1	0.688	6.5	LOS A	3.9	28.2	0.36	0.51	0.49	54.6
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	146	3.1	146	3.1	0.286	16.8	LOS B	0.8	5.6	0.79	0.89	1.00	49.9
8	T1	All MCs	1	3.1	1	3.1	0.826	4.8	LOS A	3.0	21.2	0.94	0.75	0.94	49.3
9	R2	All MCs	534	3.1	534	3.1	0.826	11.9	LOS B	3.0	21.2	0.94	0.75	0.94	48.9
Approach			681	3.1	681	3.1	0.826	13.0	LOS B	3.0	21.2	0.91	0.78	0.95	49.1
West: David Low Way (West)															
10	L2	All MCs	687	3.1	687	3.1	0.599	3.8	LOS A	3.1	22.0	0.77	0.42	0.77	53.9
11	T1	All MCs	223	3.1	223	3.1	0.606	10.3	LOS B	2.8	20.3	0.81	1.02	1.28	49.8
12	R2	All MCs	222	3.1	222	3.1	0.606	17.3	LOS B	2.8	20.3	0.81	1.02	1.28	49.5
Approach			1133	3.1	1133	3.1	0.606	7.7	LOS A	3.1	22.0	0.79	0.66	0.97	52.0
All Vehicles			3795	3.1	3795	3.1	0.826	10.9	LOS B	7.7	55.0	0.70	0.76	1.02	50.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

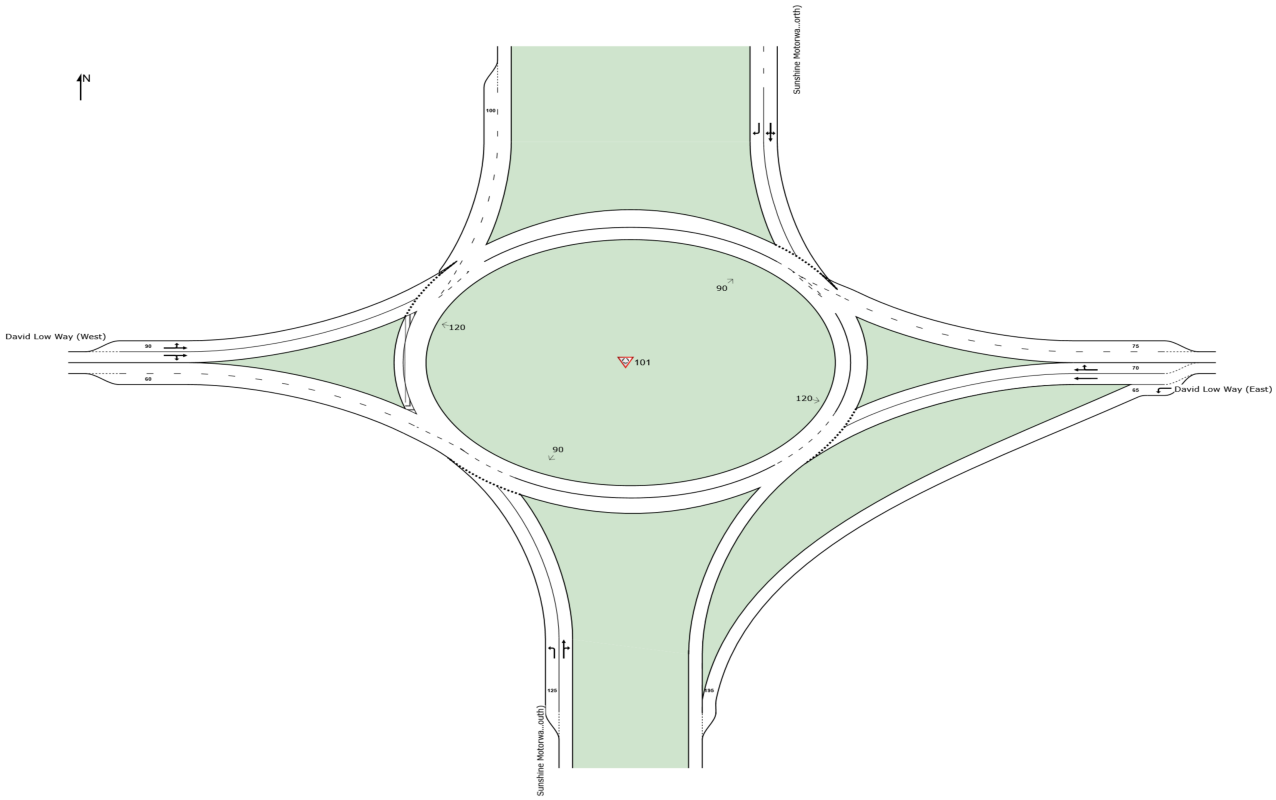
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SITE LAYOUT

Site: 101 [David Low Way / Sunshine Motorway Ramps - Upgrade Option 2 (Site Folder: 2034 AM Peak GAP)]

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout

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



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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps - Upgrade Option 2 (Site Folder: 2034 AM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	135	2.9	135	2.9	0.136	4.1	LOS A	0.6	4.2	0.54	0.46	0.54	55.3
2	T1	All MCs	1	2.9	1	2.9	0.482	5.2	LOS A	3.0	21.5	0.64	0.73	0.68	50.4
3	R2	All MCs	653	2.9	653	2.9	0.482	11.3	LOS B	3.0	21.5	0.64	0.73	0.68	50.0
Approach			788	2.9	788	2.9	0.482	10.1	LOS B	3.0	21.5	0.62	0.68	0.65	50.8
East: David Low Way (East)															
4	L2	All MCs	789	2.9	789	2.9	0.419	3.9	LOS A	0.0	0.0	0.00	0.22	0.00	57.8
5	T1	All MCs	205	2.9	205	2.9	0.166	3.8	LOS A	1.0	7.3	0.56	0.43	0.56	53.4
6	R2	All MCs	220	2.9	220	2.9	0.166	10.2	LOS B	1.0	7.3	0.56	0.56	0.56	51.4
Approach			1215	2.9	1215	2.9	0.419	5.0	LOS A	1.0	7.3	0.20	0.32	0.20	55.6
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	83	2.9	83	2.9	0.373	15.9	LOS B	3.6	25.6	1.00	0.83	1.00	47.5
8	T1	All MCs	1	2.9	1	2.9	0.373	13.6	LOS B	3.6	25.6	1.00	0.83	1.00	47.5
9	R2	All MCs	291	2.9	291	2.9	0.373	22.6	LOS C	3.6	25.6	1.00	0.84	1.02	45.8
Approach			375	2.9	375	2.9	0.373	21.1	LOS C	3.6	25.6	1.00	0.84	1.02	46.2
West: David Low Way (West)															
10	L2	All MCs	849	2.9	849	2.9	0.678	11.9	LOS B	10.9	77.9	1.00	0.96	1.35	51.0
11	T1	All MCs	246	2.9	246	2.9	0.784	20.5	LOS C	13.0	93.0	1.00	1.20	1.79	44.2
12	R2	All MCs	365	2.9	365	2.9	0.784	27.5	LOS C	13.0	93.0	1.00	1.20	1.79	43.9
Approach			1461	2.9	1461	2.9	0.784	17.3	LOS B	13.0	93.0	1.00	1.06	1.54	47.7
All Vehicles			3839	2.9	3839	2.9	0.784	12.3	LOS B	13.0	93.0	0.67	0.72	0.88	50.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps - Upgrade Option 2 (Site Folder: 2034 AM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 AM Peak Full Masterplan Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	135	2.9	135	2.9	0.138	4.3	LOS A	0.6	4.4	0.57	0.48	0.57	55.2
2	T1	All MCs	1	2.9	1	2.9	0.498	5.8	LOS A	3.2	23.3	0.67	0.75	0.73	50.3
3	R2	All MCs	655	2.9	655	2.9	0.498	11.6	LOS B	3.2	23.3	0.67	0.75	0.73	49.9
Approach			791	2.9	791	2.9	0.498	10.3	LOS B	3.2	23.3	0.66	0.71	0.71	50.6
East: David Low Way (East)															
4	L2	All MCs	888	2.9	888	2.9	0.471	4.3	LOS A	0.0	0.0	0.00	0.22	0.00	57.7
5	T1	All MCs	211	2.9	211	2.9	0.176	4.0	LOS A	1.1	7.8	0.58	0.44	0.58	53.3
6	R2	All MCs	234	2.9	234	2.9	0.176	10.3	LOS B	1.1	7.8	0.58	0.58	0.58	51.3
Approach			1333	2.9	1333	2.9	0.471	5.3	LOS A	1.1	7.8	0.19	0.32	0.19	55.6
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	96	2.9	96	2.9	0.448	18.0	LOS B	4.6	33.2	1.00	0.89	1.10	46.3
8	T1	All MCs	1	2.9	1	2.9	0.448	15.6	LOS B	4.6	33.2	1.00	0.89	1.10	46.3
9	R2	All MCs	348	2.9	348	2.9	0.448	25.4	LOS C	4.6	33.2	1.00	0.91	1.16	44.5
Approach			445	2.9	445	2.9	0.448	23.8	LOS C	4.6	33.2	1.00	0.91	1.14	44.8
West: David Low Way (West)															
10	L2	All MCs	908	2.9	908	2.9	0.741	15.0	LOS B	14.0	100.5	1.00	1.08	1.54	49.1
11	T1	All MCs	249	2.9	249	2.9	0.797	22.1	LOS C	13.8	98.9	1.00	1.24	1.86	43.5
12	R2	All MCs	365	2.9	365	2.9	0.797	29.1	LOS C	13.8	98.9	1.00	1.24	1.86	43.2
Approach			1523	2.9	1523	2.9	0.797	19.6	LOS B	14.0	100.5	1.00	1.15	1.67	46.5
All Vehicles			4092	2.9	4092	2.9	0.797	13.6	LOS B	14.0	100.5	0.67	0.76	0.94	49.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps - Upgrade Option 2 (Site Folder: 2034 PM Peak GAP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 PM Peak Gateway and Aerospace Precincts Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	192	3.1	192	3.1	0.203	5.0	LOS A	1.0	6.8	0.61	0.49	0.61	55.0
2	T1	All MCs	1	3.1	1	3.1	0.721	6.4	LOS A	6.9	49.4	0.81	0.91	1.05	49.8
3	R2	All MCs	917	3.1	917	3.1	0.721	13.3	LOS B	6.9	49.4	0.81	0.91	1.05	49.4
Approach			1109	3.1	1109	3.1	0.721	11.9	LOS B	6.9	49.4	0.77	0.84	0.97	50.2
East: David Low Way (East)															
4	L2	All MCs	676	3.1	676	3.1	0.359	2.6	LOS A	0.0	0.0	0.00	0.22	0.00	57.8
5	T1	All MCs	239	3.1	239	3.1	0.134	3.8	LOS A	0.8	5.7	0.56	0.42	0.56	53.5
6	R2	All MCs	99	3.1	99	3.1	0.134	10.1	LOS B	0.8	5.7	0.56	0.47	0.56	52.6
Approach			1014	3.1	1014	3.1	0.359	3.7	LOS A	0.8	5.7	0.19	0.29	0.19	56.1
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	142	3.1	142	3.1	0.760	56.9	LOS E	14.0	100.4	1.00	1.43	2.17	32.9
8	T1	All MCs	1	3.1	1	3.1	0.760	51.9	LOS E	14.0	100.4	1.00	1.43	2.17	32.9
9	R2	All MCs	461	3.1	461	3.1	0.760	62.3	LOS E	14.0	100.4	1.00	1.39	2.12	32.1
Approach			604	3.1	604	3.1	0.760	61.0	LOS E	14.0	100.4	1.00	1.40	2.14	32.3
West: David Low Way (West)															
10	L2	All MCs	591	3.1	591	3.1	0.623	12.7	LOS B	9.5	68.5	1.00	0.98	1.29	49.9
11	T1	All MCs	219	3.1	219	3.1	0.780	27.9	LOS C	12.2	87.4	1.00	1.25	1.83	41.1
12	R2	All MCs	222	3.1	222	3.1	0.780	34.9	LOS C	12.2	87.4	1.00	1.25	1.83	40.9
Approach			1032	3.1	1032	3.1	0.780	20.7	LOS C	12.2	87.4	1.00	1.10	1.52	45.5
All Vehicles			3759	3.1	3759	3.1	0.780	20.0	LOS B	14.0	100.4	0.71	0.85	1.10	45.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [David Low Way / Sunshine Motorway Ramps - Upgrade Option 2 (Site Folder: 2034 PM Peak MP)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

307887-00 Sunshine Coast Airport TIA
David Low Way / Sunshine Motorway Ramps
2034 PM Peak Full Masterplan Conditions
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Sunshine Motorway Ramps (South)															
1	L2	All MCs	172	3.1	172	3.1	0.186	5.3	LOS A	0.9	6.3	0.63	0.50	0.63	54.9
2	T1	All MCs	1	3.1	1	3.1	0.682	6.3	LOS A	6.1	43.5	0.81	0.90	1.03	49.8
3	R2	All MCs	836	3.1	836	3.1	0.682	13.1	LOS B	6.1	43.5	0.81	0.90	1.03	49.4
Approach			1008	3.1	1008	3.1	0.682	11.8	LOS B	6.1	43.5	0.78	0.83	0.96	50.1
East: David Low Way (East)															
4	L2	All MCs	623	3.1	623	3.1	0.331	2.6	LOS A	0.0	0.0	0.00	0.22	0.00	57.9
5	T1	All MCs	245	3.1	245	3.1	0.144	4.0	LOS A	0.9	6.5	0.61	0.43	0.61	53.3
6	R2	All MCs	104	3.1	104	3.1	0.144	10.3	LOS B	0.9	6.5	0.61	0.48	0.61	52.3
Approach			973	3.1	973	3.1	0.331	3.8	LOS A	0.9	6.5	0.22	0.30	0.22	55.9
North: Sunshine Motorway Ramps (North)															
7	L2	All MCs	146	3.1	146	3.1	0.724	40.1	LOS D	12.2	87.6	1.00	1.30	1.92	37.7
8	T1	All MCs	1	3.1	1	3.1	0.724	36.1	LOS D	12.2	87.6	1.00	1.30	1.92	37.7
9	R2	All MCs	534	3.1	534	3.1	0.724	46.3	LOS D	12.2	87.6	1.00	1.28	1.90	36.6
Approach			681	3.1	681	3.1	0.724	45.0	LOS D	12.2	87.6	1.00	1.29	1.91	36.8
West: David Low Way (West)															
10	L2	All MCs	687	3.1	687	3.1	0.656	12.0	LOS B	10.4	74.8	1.00	0.98	1.32	50.4
11	T1	All MCs	223	3.1	223	3.1	0.676	16.9	LOS B	8.8	63.1	1.00	1.05	1.46	46.2
12	R2	All MCs	222	3.1	222	3.1	0.676	23.9	LOS C	8.8	63.1	1.00	1.05	1.46	45.9
Approach			1133	3.1	1133	3.1	0.676	15.3	LOS B	10.4	74.8	1.00	1.01	1.38	48.5
All Vehicles			3795	3.1	3795	3.1	0.724	16.7	LOS B	12.2	87.6	0.74	0.83	1.06	47.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
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Roundabout Capacity Model: SIDRA Standard.
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