# Gosford Alive

## Stage 1 Development Application
## Transport Impact Assessment

**Prepared by: GTA Consultants (NSW) Pty Ltd for Lederer Group**
**on 22/08/19**
**Reference: N164620**
**Issue #: A**

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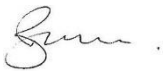
### Quality Record

| Issue | Date | Description | Prepared By | Checked By | Approved By | Signed |
|---|---|---|---|---|---|---|
| A | 22/08/19 | Final | Ingrid Bissaker | Rhys Hazell | Rhys Hazell |  |





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# 1. INTRODUCTION

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## 1.1. Background and Proposal

A Stage 1 Development Application (DA) is to be lodged with the Department of Planning for a significant site located towards the eastern edge of Gosford CBD. The site covers the majority of the block bound by Henry Parry Drive to the west, William Street to the north, Albany Street North to the east and Donnison Street to the south. The site has a land use classification of B4 Mixed Use and covers an area of 14,195sq.m.

The proposal incorporates mixed uses including residential apartments located above retail floor area and intends on delivering 738 residential apartments and 3,692sq.m of retail space.

Lederer Group engaged GTA Consultants to assess the transport implications associated with the Stage 1 DA.

## 1.2. Secretary's Environmental Assessment Requirements

The Department of Planning and Environment (DPE) has issued the Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development (SSD) 9813 for the preparation of a transport assessment for the proposed development. Matters raised in the SEARs have been considered during the preparation of this report and addressed within specified sections, as shown in Table 1.1.

**Table 1.1: Secretary's Environmental Assessment Requirements**

| SEARs | Report section where addressed |
|---|---|
| **Transport and Accessibility (Construction and Operation)** | |
| Assess the traffic impacts of the development on the surrounding local and classified road network using SIDRA or similar traffic model and specify any road upgrade works (local and classified) required to maintain acceptable levels of service. | Sections 8 |
| The assessment is to include traffic and parking generated by existing and approved developments, as well as that by the proposal, and consider car sharing facilities to reduce overall parking demands in the area. | Sections 5.1.5, 8 |
| Estimate the total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips. | Section 6.2, 8.1 |
| Assess the adequacy of public transport, pedestrian and bicycle provisions to meet the likely future demand of the proposed development | Section 6 |
| Demonstrate the proposed road layout, access points, and car parking can comply with the relevant Australian Standards and Council requirements. | Section 5.3 |
| Demonstrate sufficient on-site car parking, loading/unloading, pedestrian and cycling facilities (including bicycle parking and end-of-trip facilities) would be provided for the development. | Sections 5, 6, 7 |
| Assess the impact of the proposal on car parking within the Gosford CBD during construction and operation of the proposed development | Sections 5.1.5, 10.5 |
| Describe the measures to be implemented to promote sustainable means of travel, including public transport use, pedestrian and bicycle linkages. | Section 9 |
| Prepare a preliminary Construction Traffic Management Plan for the proposal and outline how construction traffic, public transport, bicycle and pedestrian impacts, and parking impacts would be appropriately managed and mitigated. | Section 10 |

| SEARs | Report section where addressed |
|---|---|
| **Consultation** | |
| During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, local community groups and affected landowners.<br>In particular, you must consult with:<br>• Transport for NSW<br>• NSW Roads and Maritime Services<br>The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided | Section 1.3 |
| **Policies, Plans, Guidelines** | |
| Strategic plans:<br>• Future Transport 2056<br>• Central Coast Regional Plan 2036<br>• Gosford City Centre Development Control Plan 2018<br>• Gosford City Centre Transport Management and Accessibility Plan | Section 2, 5, 6 |

## 1.3. Stakeholder Engagement

GTA consulted with Transport for NSW and Roads and Maritimes Services (Roads and Maritime) to provide input into the preparation of this transport assessment. The key items that have been raised and the report section where these topics are addressed are shown in Table 1.2. Stakeholder correspondence is included as Appendix A.

**Table 1.2: Stakeholder engagement**

| Stage | Topic | Report section where addressed |
|---|---|---|
| Construction | Prepare a draft CTMP | Section 10 |
| Operation | Assessment of public transport accessibility and pedestrian connectivity | Section 3.5, 3.3, 6 |
| | Consider the cumulative impacts of the continued intensification of the Gosford CBD and the surrounding residential areas | Section 8 |
| | Implications of displacing parking demand during construction and post-development | Sections 5.1.5, 10.5 |

## 1.4. Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposal, including consideration of the following:

- existing transport, traffic and parking conditions surrounding the site
- pedestrian and bicycle considerations and requirements
- the traffic generating characteristics of the proposal
- suitability of proposed parking in terms of supply and indicative layout
- suitability of future access arrangements for the precinct
- the transport impact of the proposal on the surrounding network.

## 1.5. References

In preparing this report, reference has been drawn from a number of background sources, including:

- several inspections of the site and its surrounds
- Guide to Traffic Generating Developments, RMS, 2002 and Technical Direction TDT 2013/04, RMS, May 2013
- Gosford Alive Stage 1 DA Architectural Design Report, Revision D, prepared by Buchan, dated August 2019
- Gosford City Centre Development Control Plan (DCP) 2018
- Gosford Local Environmental Plan (LEP) 2014
- Gosford Mixed Use Masterplan - Transport Impact Assessment, prepared by GTA Consultants, June 2016
- other documents and data as referenced in this report.

# 2. SITE CONTEXT

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## 2.1. Regional Context

Gosford is a regional city on the Central Coast of New South Wales located midway between Sydney and Newcastle. Central Coast Regional Plan 2036 (October 2016) projects the region's population will increase by 22 per cent (75,500 people) over twenty years to 2036. An opportunity has been presented to meet the future transportation needs of the growing regional centre. Capitalising on Gosford's geographic position and well-connected infrastructure will play a key role in meeting this challenge. Gosford's regional context is illustrated in Figure 2.1.

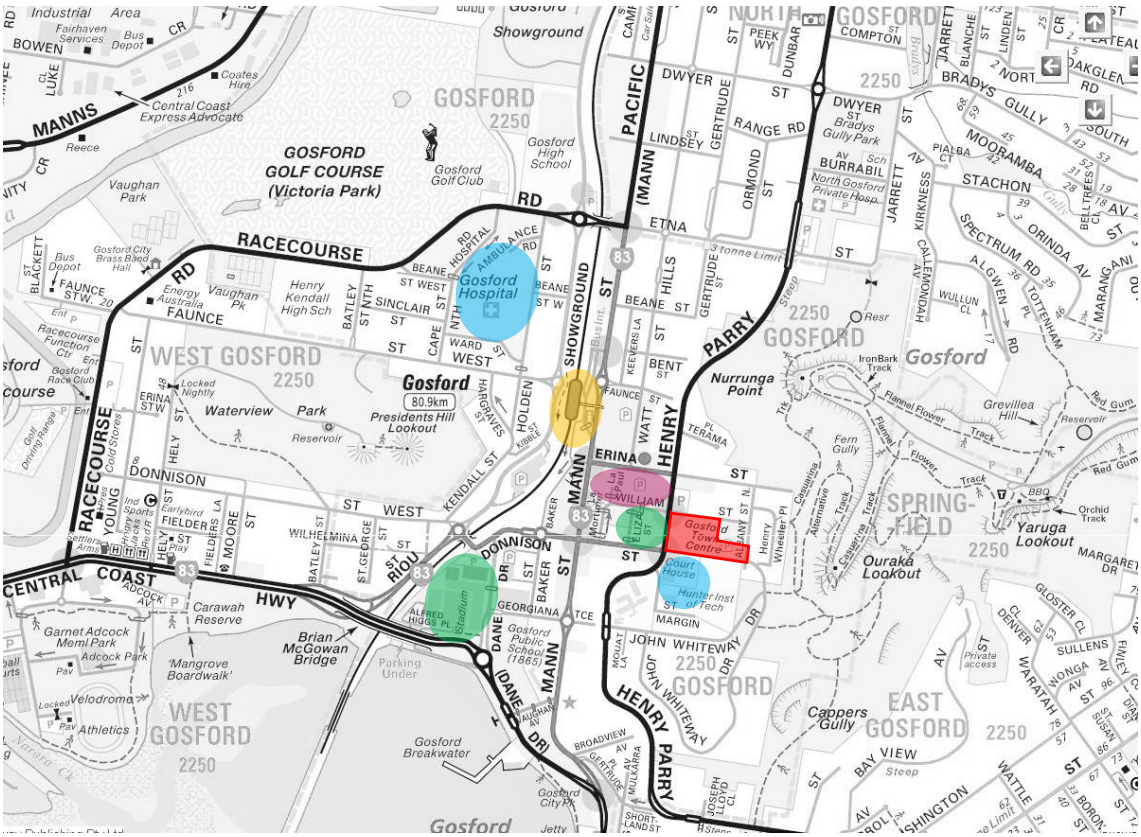
**Figure 2.1: Regional context**


Basemap Source: Sydway

## 2.2. Site Context

The site is centrally located in the eastern section of Gosford CBD, fronting Henry Parry Drive east of Mann Street and approximately 500 metres south-east of Gosford transport interchange. It is easily accessible to several key arterial and state roads that combine with the M1 to connect with both Sydney and Newcastle, as illustrated in Figure 2.2.

**Figure 2.2: Site location and surrounds**




Basemap Source: Sydway

The site was historically a retail centre and is currently vacant. With the retail centre having closed several years ago and given the delays associated with planning for the area generally, the site has permitted free all-day parking for employees and visitors to Gosford CBD. This has always been intended as a temporary use of the site.

The surrounding CBD properties include medium density commercial space with ground floor retail along the key frontages. An increasing number of high-density residential apartments are also located nearby. Significant surrounding CBD sites include Gosford TAFE, Imperial Centre, Kibble Park, Central Coast Stadium and Gosford Hospital. Recreational and open space area surrounds the CBD, including walking paths in bushland to the east, Waterview Park to the west with Gosford Golf Course and Racecourse further to the north and west.

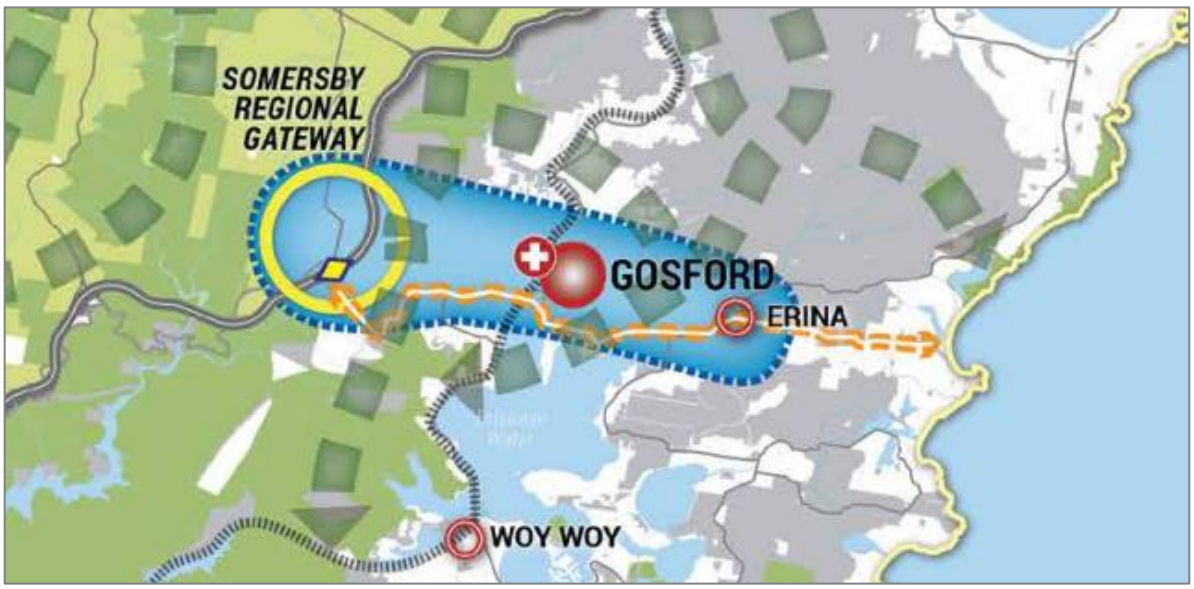
## 2.3. Planning Context

The following key strategies and plans have influenced development opportunities in local and regional area, together with real effects on future travel demand and mode splits.

The Central Coast Regional Plan ('The Plan') was released in October 2016 and outlines the vision and goals for the Central Coast region, with Gosford as its Regional City. The Plan is intended to guide land use planning and inform the determination of development proposals and infrastructure funding decisions.

The area between the Somersby Regional Gateway and Erina has been identified as a Regional Growth Corridor with Gosford City Centre at its core. Infill high density housing is anticipated in these locations together with a variety of land uses including health, retail, commercial and sporting/ recreational uses ensuring good diversity, as illustrated in Figure 2.3. The Gosford City Core and the intended various precincts is detailed in Figure 2.4.

**Figure 2.3: Draft Central Coast Regional Plan overview**



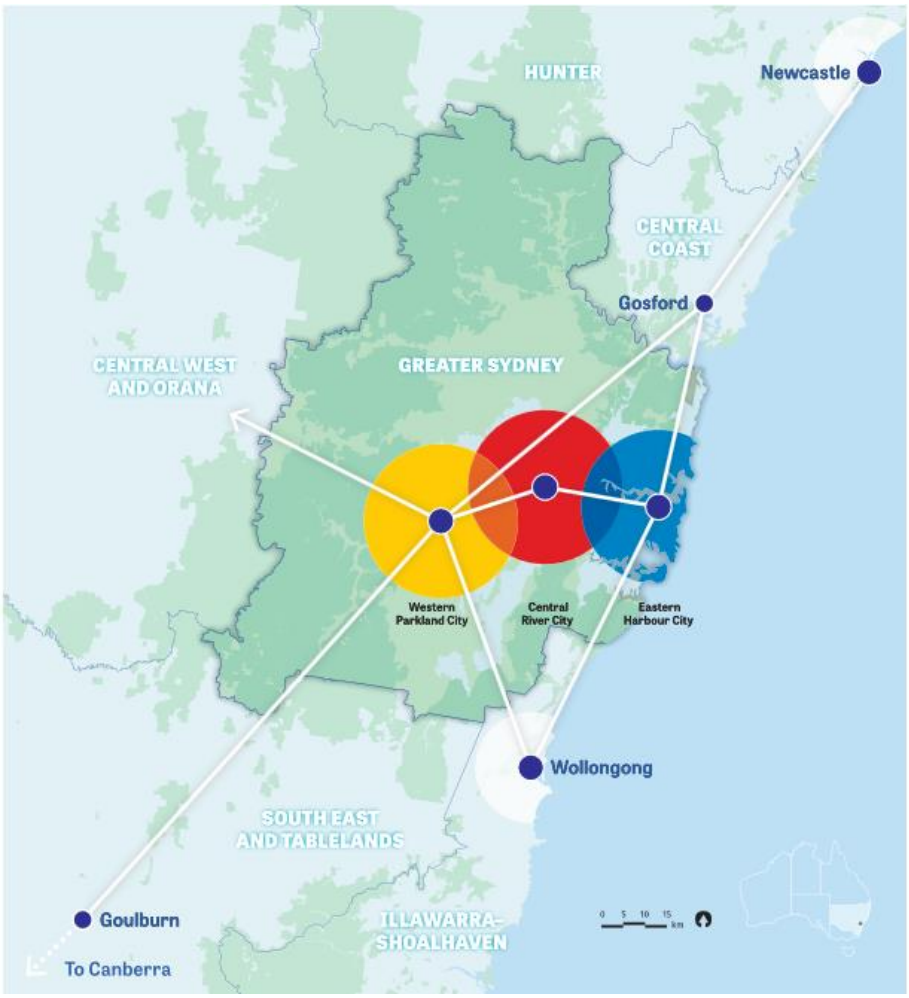

Source: Central Coast Regional Plan, Figure 3, p.11

**Figure 2.4: Gosford City Centre**


Source: Central Coast Regional Plan, Figure 4, p.17

Gosford's strategic and transport relationship to Sydney is well recognised and illustrated in Figure 2.5. In this regard, Future Transport Strategy 2056 projects that economic and housing growth around Greater Sydney will establish Gosford as a 'satellite city' to Sydney. To support Gosford as a satellite city, improvements to existing transport connections will be required and, in the longer term, consideration of higher speed rail.

Figure 2.5: Greater Sydney Regional Context




Source: The Greater Sydney Regional Plan, Figure 31

## 2.4. Sydney Metro

Sydney Metro Stage 1 commenced services in mid-2019 and currently extends from Tallawong Station, Schofields to Chatswood. Stage 2 of Sydney Metro will extend south from Chatswood, under Sydney Harbour, via new underground station precincts in Sydney CBD and stretching through the existing line to Bankstown.

Sydney Metro has to date delivered eight new railway stations and 4,000 commuter car parking spaces in Sydney's growing Northwest. Trains run every four minutes in the peak; that is 15 trains an hour operating as a walk up 'no timetable' services. When complete by 2024, it is expected result in a significant increase in rail capacity across the entire rail system. For Gosford, Sydney Metro is expected to unlock additional capacity on the Central Coast and Newcastle line, allowing additional trains to service Gosford Station during peak periods. Travel times in and out of Sydney are also expected be reduced on all lines, resulting in shorter journey times.

# 3. EXISTING CONDITIONS

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## 3.1. Masterplan Transport Study

A Stage 1 Masterplan Development Application was lodged with the former Gosford City Council in 2016 for the "Gosford Alive" site. The DA comprised a more expansive site that incorporated the subject site, the existing Imperial Centre (retail shopping centre) north west of the site, as well as public domain works in Kibble Park immediately to the west.

GTA Consultants prepared a Transport Assessment[1] for the Masterplan DA, referred to as the "Masterplan Report". This study references data collected as part of the Masterplan.

## 3.2. Overview

A detailed understanding of the key transport networks is fundamental to the sites development and will aid the design process. The established pedestrian and bicycle facilities, together with easy access to public transport services will be central to the way the site functions and how people move to/ from and within the precinct.

GTA has visited the site and surrounding local and regional areas on several occasions and observed existing travel behaviour and the day-to-day activity both within Gosford CBD and its surrounds.

## 3.3. Pedestrian and Cycle Access

### 3.3.1. Pedestrian Access

Gosford CBD caters well for high pedestrian activity with established pedestrian networks, footpaths, through site connections and provision of ample formal crossing facilities. Pedestrian activity is generally high, especially along and across Mann Street/ Pacific Highway and the pedestrian only section of William Street. The pedestrian network is well established and would link the site well with Gosford Interchange in Gosford CBD. The established CBD environment and pedestrian amenity is illustrated in Figure 3.2 and Figure 3.3.

A catchment map has also been prepared to illustrate the high level of walking and cycling connectivity in the surrounding area. This map demonstrates that the site is within an easy walk of Gosford Interchange, Central Coast Stadium as well as the commercial/ retail areas making up the CBD and waterfront recreational areas.

The catchment map is shown in Figure 3.1.

[1] Gosford Mixed Use Masterplan - Transport Impact Assessment, prepared by GTA Consultants, June 2016

Figure 3.1: Catchment map

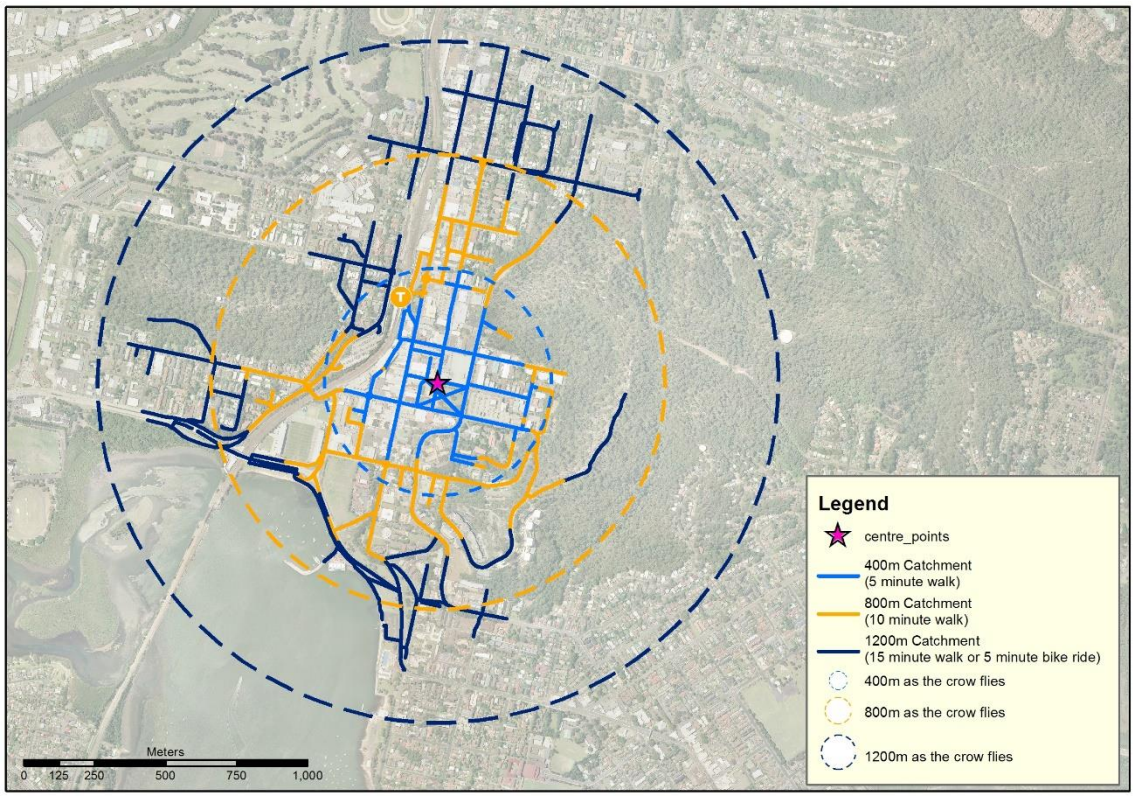
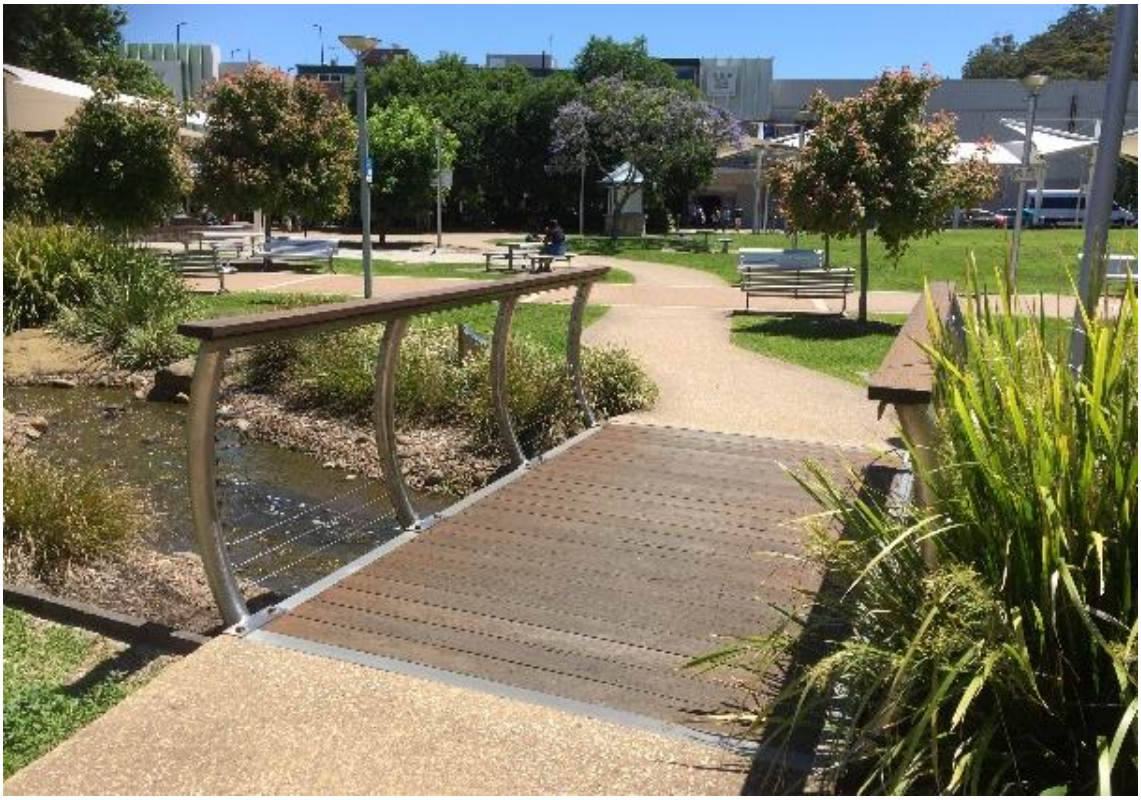



Figure 3.2: Pedestrian only section of William Street

**Figure 3.3: Kibble Park pedestrian facilities**



### 3.3.2. Cycle Access

The Central Coast Cycling Guide identifies more than 52 kilometres of both shared and off-road cycling paths in Gosford LGA with an additional 39 kilometres proposed. Cycle routes connect Gosford CBD to different areas of the Central Coast including Terrigal, The Entrance and Umina.

The current conditions in the vicinity the site cater for cycle traffic but are limited in their capacity to store bicycles. No formal bicycle storage arrangements exist on-site.

## 3.4. Existing Travel Behaviour

Journey to work data has been sourced from the Australian Bureau of Statistics 2016 census and provides an idea of existing travel patterns from the local area. Figure 3.4 details the catchment of census data analysed which corresponds to the Transport for NSW's Transport Performance and Analytics geographical area of a Travel Zone (TZ). The relevant TZ used for this assessment is 5334, Gosford Station East, is illustrated in Figure 3.4.

**Figure 3.4: Travel zone containing the subject site (TZ 5334)**


Base image source: Google Maps

Table 3.1 and Figure 3.5 provide a summary of the existing main modes of transport residents in the surrounding area take to get to work. The results indicate that 66 per cent of trips were made via private car (as driver or passenger), 25 per cent via public transport and nine per cent via walking.

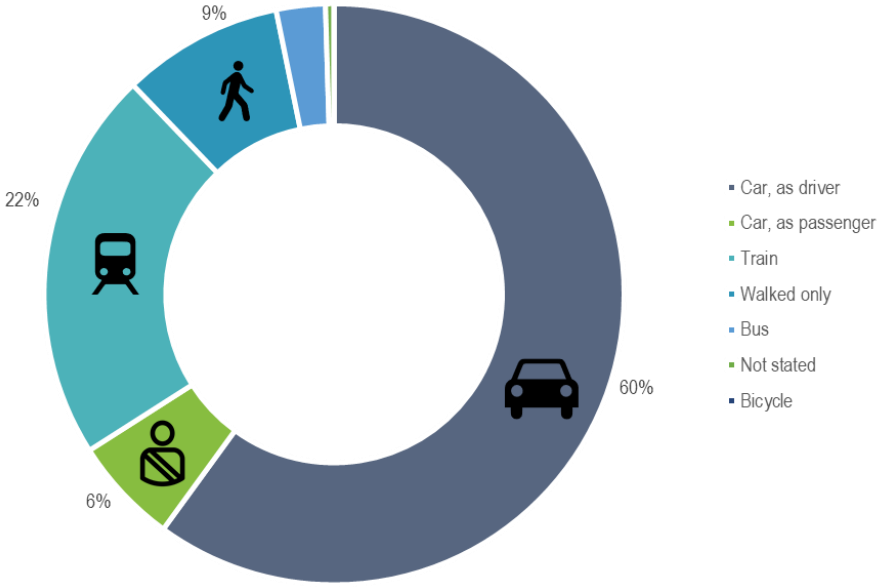
**Table 3.1: Existing travel mode share from Gosford Station East (TZ 5334)**

| Mode of travel | Mode share (%) [1] |
|---|---|
| Car, as driver | 60 |
| Car, as passenger | 6 |
| Train | 22 |
| Bus | 3 |
| Walked Only | 8 |
| Not Stated | 1 |
| Bicycle | 0 |
| **Total** | **100** |

TZ5334 comprises SA1 1103219, 1103220, 1103221, 1103224, 1103226, 1103245, 1103248

[1] Does not include residents who worked at home, did not go to work or who were not applicable.

Figure 3.5: Existing travel mode share from Gosford Station East (TZ 5334)




## 3.5. Public Transport

The site is well served by public transport services with Gosford Interchange within 500m to the north-west. Gosford is considered a major node in the Sydney Trains network and is well served by the Central Coast and Newcastle Line. The rail journey times from Gosford to Sydney CBD and Newcastle Station are 80 to 90 minutes during the weekday peaks.

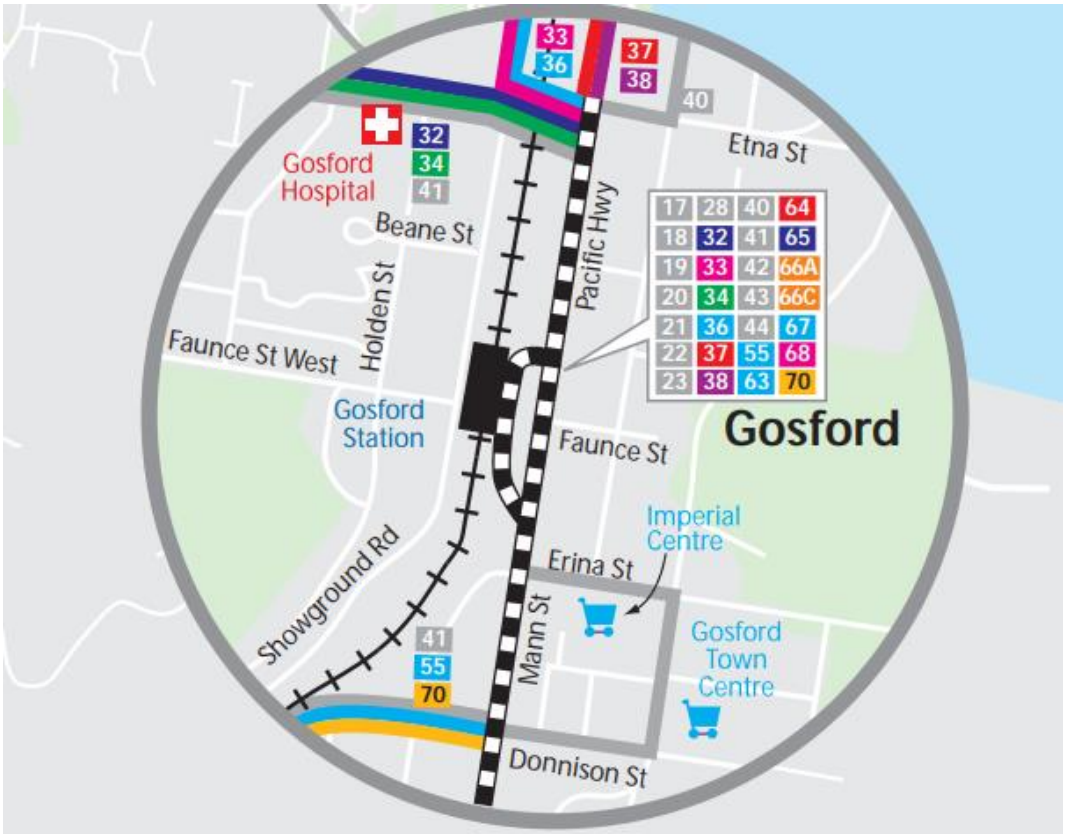
Gosford Interchange also functions as one of the main bus interchanges in the Central Coast region. Many bus routes travel through the interchange, servicing key destinations including Tuggerah, Terrigal and Umina Beach.

A review of the rail and bus services available in the vicinity of the site are illustrated in Figure 3.6 and Figure 3.7 and summarised in Table 3.2.

Figure 3.6: Surrounding public transport network


Source: Busways

**Figure 3.7: Gosford Interchange public transport map**




[2] Source: Busways

**Table 3.2: Public transport summary**

| Service | Route # | Route Description | Frequency On/ Off-Peak |
|---|---|---|---|
| Train | CCN | Central Coast & Newcastle Line | 15 min/ 30 min |
| Bus | 17 | Gosford to The Entrance North via Bateau Bay & Long Jetty | Limited AM and PM services |
| | 18 | The Entrance to Gosford via Long Jetty & Tumbi Umbi | |
| | 19 | Gosford to Wyong via Erina Fair, Bay Village & Tuggerah | 60 min/ 60 min |
| | 20 | Gosford Loop via Erina Fair, Holgate & Matcham | Limited AM and PM services |
| | 21-23 | Gosford to The Entrance North via Erina Fair, Bateau Bay, Bay Village & Long Jetty | 60 min/ 60 min |
| | 28 | The Entrance to Gosford via Long Jetty, Bay Village, Tumbi Umbi, Erina Fair & Springfield | Limited evening services |
| | 32 | Spencer-Mangrove-Somersby-Gosford | Limited AM and PM services |
| | 33 | Gosford & West Gosford/Somersby Industrial Areas | |
| | 34 | Gosford-Kariong Loop-Gosford | 30 min/ 60 min |
| | 36 | Gosford to Niagara Park & Tuggerah (loop service) | |
| | 37 | Gosford-Lisarow-Ourimbah-Tuggerah | |
| | 38 | Gosford-Wyoming Loop-Gosford | 30 min/ 60 min mornings and evenings only |

| Service | Route # | Route Description | Frequency On/ Off-Peak |
|---|---|---|---|
| | 40 | Gosford Loop services (via North Gosford, West Gosford and Point Frederick) | 30 min/ 60 min (and 60 min/ 120 min) |
| | 43 | Springfield to Gosford via East Gosford | 30 min. mornings only |
| | 44 | Gosford to Erina Fair via East Gosford & Springfield | 30 min/ 30 min |
| | 63 | Gosford & Saratoga/ Davistown via Green Point & Kincumber | 60 min/ 60 min |
| | 64 | Gosford to Woy Woy via Kincumber & Empire Bay | 30 min/ 60 min |
| | 65 | Gosford to Wagstaffe via Kincumber & McMasters Beach | Limited AM and PM services |
| | 66A and 66C | Gosford & Copacabana/ Avoca Loop via Green Pt & Kincumber | 30 min AM and PM only |
| | 67-68 | Gosford & Nth Avoca via Terrigal | 60 min/ 60 min |

## 3.6. Road Hierarchy

Roads are classified according to the functions they perform. The main purpose of defining a road's functional class is to provide a basis for establishing the policies which guide the management of the road according to their intended service or qualities.

In terms of functional road classification, State roads are strategically important as they form the primary network used for the movement of people and goods between regions, and throughout the State. Roads and Maritime responsible for funding, prioritising and carrying out works on State roads. State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993, and the regulation to manage the road system is stated in the Australian Road Rules, most recently amended on 19 March 2018.

Roads and Maritime defines four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

**Arterial Roads** – Controlled by Roads and Maritime, typically no limit in flow and designed to carry vehicles long distance between regional centres.

**Sub-Arterial Roads** – Managed by either Council or Roads and Maritime under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).

**Collector Roads** – Provide connectivity between local sites and the sub-arterial road network, and typically carry between 2,000 and 10,000 vehicles per day.

**Local Roads** – Provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

## 3.7. Road Network

### 3.7.1. Adjoining Roads

#### Harry Parry Drive

Henry Parry Drive is a Roads and Maritime Classified Road (Main Road, MR673) linking directly with the Pacific Highway to the north and Central Coast Highway to the south, as well as several local and connecting roads along its length. It runs along the western frontage of the site and includes two traffic lanes in each direction within a 12m wide carriageway and 23m wide road reserve. Kerbside parking is not permitted in the immediate vicinity and is shown Figure 3.8.

**Figure 3.8: Henry Parry Drive (looking north)**

### William Street

William Street is a local road and aligned in an east-west direction adjacent to the northern boundary of the site and traversing Kibble Park west of Henry Parry Drive. It is a two-way road generally configured one traffic lane and one parking lane in each direction with more capacity close to Henry Parry Drive.

It primarily provides access to the Imperial Centre immediately west of Henry Parry Drive with a Shared Zone further to the west. It also provides a pedestrian only zone at its western end, close to Mann Street. It provides one traffic lane and one parking lane in each direction east of Henry Parry Drive. Time restricted kerbside parking is generally permitted east of Henry Parry Drive and a partial section to the west.

William Street intersects with Henry Parry Drive at a signalised intersection, with the section along the northern site boundary is shown in Figure 3.9.

**Figure 3.9: William Street (looking east)**

### Donnison Street

Donnison Street functions as a local road and is aligned in an east-west direction along the southern boundary of the site. It is a two-way road generally configured with one traffic lane and one parking lane in each direction, with additional traffic lanes at key intersections.

Gosford City Library is within Kibble Park, with direct access to a small at-grade car park via Donnison Street. Time restricted kerbside parking is generally permitted on both sides with a bus zone adjacent to the library. Donnison Street is shown in Figure 3.10**Error! Reference source not found.**.

**Figure 3.10: Donnison Street (looking west to Henry Parry Drive)**

### 3.7.2. Surrounding Intersections

The following key signalised intersections currently exist in the immediate vicinity:

- Henry Parry Drive/ William Street
- Henry Parry Drive/ Donnison Street
- Henry Parry Drive/ Erina Street East
- Mann Street/ Erina Street East
- Mann Street/ Donnison Street.

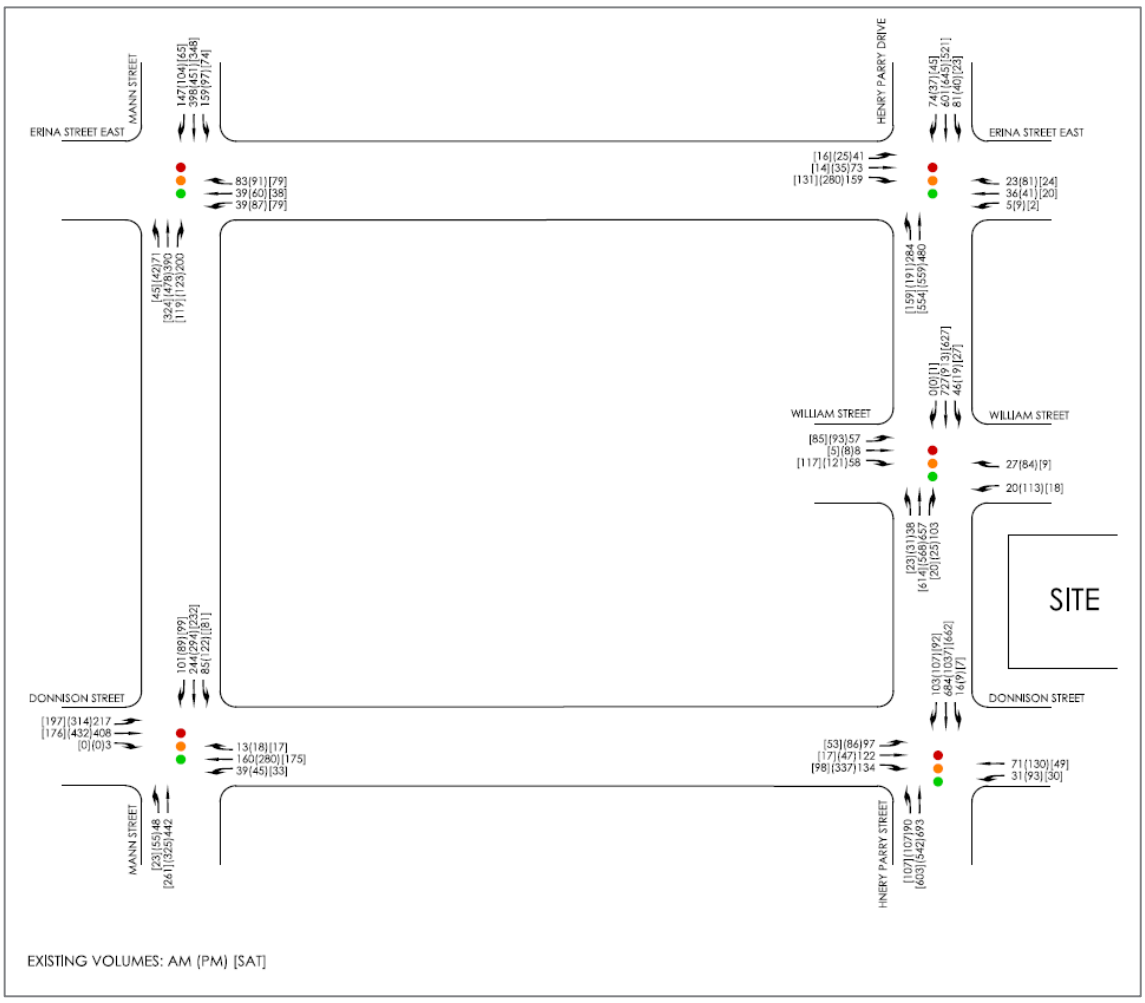
## 3.8. Traffic Volumes

### 3.8.1. Traffic Data

GTA commissioned traffic counts on the key intersections in the vicinity of the site on Thursday 16 May 2019 and Wednesday 18 May 2019. These counts were completed during the weekday AM and PM, and Saturday midday peak periods. The road network peaks are as follows, with the traffic volumes summarised in Figure 3.11 and full survey data included in Appendix B.

- AM peak hour: 8:30am – 9:30am
- PM peak hour: 4:15pm – 5:15pm
- Saturday peak hour 11:30am – 12:30pm.

**Figure 3.11: Existing peak hour traffic volumes**




## 3.8.2. Previous Traffic Data

As discussed, the site currently provides free car parking under agreement with Council and is at capacity most weekdays. in this regard, it is understood that Council commissioned a study for all public parking in Gosford CBD, with these details discussed later in this report.

To determine the traffic generation of the existing site, the transport assessment (GTA, 2016) completed as part of the Masterplan included surveys of the existing site access driveways on William Street and Albany Street North. These were completed during the weekday peak periods and Saturday midday. Based on this survey data, the existing site generated traffic was able to be determined for each of the road network peak hours. This traffic generation is summarised in Table 3.3 and**Error! Reference source not found.** full survey results included in Appendix B.

**Table 3.3: Existing site traffic generation**

| Location | AM peak hour [1] | | | PM peak hour | | | Saturday peak hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total |
| Subject site | 217 | 6 | **223** | 3 | 215 | **218** | 3 | 5 | **8** |

[1] Road network peak hours are as follows: weekday AM 8:30am to 9:30am, weekday PM 4:15pm to 5:15pm and Saturday 11:30am to 12:30pm

Table 3.3 indicates that the existing site generates approximately 220 vehicle trips during a typical weekday with no real activity on weekends. This traffic generation and directional flows confirm the current use of the site as a temporary relief for parking demand in Gosford CBD.

## 3.9. Intersection Operation

The operation of the key intersections within the study area have been assessed using SIDRA INTERSECTION[2], a computer based modelling package which calculates intersection performance.

The commonly used measure of intersection performance, as defined by Roads and Maritime, is vehicle delay. SIDRA INTERSECTION determines the average delay that vehicles encounter and provides a measure of the level of service. Table 3.4 shows the criteria that SIDRA adopts in assessing the level of service.

**Table 3.4: SIDRA INTERSECTION Level of Service criteria**

| Level of Service (LOS) | Average Delay per vehicle (secs/veh) | Traffic Signals, Roundabout | Give Way & Stop Sign |
|---|---|---|---|
| A | Less than 14 | Good operation | Good operation |
| B | 15 to 28 | Good with acceptable delays and spare capacity | Acceptable delays and spare capacity |
| C | 29 to 42 | Satisfactory | Satisfactory, but accident study required |
| D | 43 to 56 | Near capacity | Near capacity, accident study required |
| E | 57 to 70 | At capacity, at signals incidents will cause excessive delays | At capacity, requires other control mode |
| F | Greater than 70 | Extra capacity required | Extreme delay, major treatment required |

Table 3.5 presents a summary of the existing operation of the intersections, with full results presented in Appendix C of this report.

It is noted that the SIDRA INTERSECTION model has been calibrated to reflect the following site conditions:

- During the PM peak period, the Henry Parry Drive southbound kerbside lane is heavily used on account of the centre lane having to facilitate right turns into both Erina Street East and Donnison Street. This increases queuing in the kerbside lane with site observations indicating this extends substantially further than the centre lane.
- During the weekday peak periods, the Henry Parry Drive northbound kerbside lane is heavily used on approach to Donnison Street due to drivers making an early decision to avoid the centre lane, in turn avoiding delay due to vehicles turning right into William Street.

**Table 3.5: Existing operating conditions**

| Intersection | Peak | Degree of Saturation (DOS) | Average Delay (sec) | 95th Percentile Queue (m) | Level of Service (LOS) |
|---|---|---|---|---|---|
| Henry Parry Drive/ Donnison Street | AM | 0.89 | 33 | 270 | C |
| | PM | 0.92 | 33 | 200 | C |
| | Sat | 0.56 | 15 | 72 | B |
| Henry Parry Drive/ William Street | AM | 0.57 | 13 | 76 | A |
| | PM | 0.84 | 16 | 65 | B |

[2] Program used under license from Akcelik & Associates Pty Ltd.

| Intersection | Peak | Degree of Saturation (DOS) | Average Delay (sec) | 95th Percentile Queue (m) | Level of Service (LOS) |
|---|---|---|---|---|---|
| | Sat | 0.48 | 9 | 52 | A |
| Henry Parry Drive/ Erina Street East | AM | 0.68 | 17 | 84 | B |
| | PM | 0.61 | 23 | 173 | B |
| | Sat | 0.48 | 14 | 56 | A |
| Mann Street/ Erina Street East | AM | 0.65 | 12 | 74 | A |
| | PM | 0.70 | 15 | 98 | B |
| | Sat | 0.43 | 12 | 52 | A |
| Mann Street/ Donnison Street | AM | 0.73 | 22 | 111 | B |
| | PM | 0.65 | 21 | 101 | B |
| | Sat | 0.45 | 18 | 56 | B |

Table 3.5 indicates that queuing and delay is generally acceptable at all key intersections within the study area. It is noted that longer queues do occur at the Henry Parry Drive/ Donnison Street intersection in both peak hours due to through vehicles avoiding delay associated with vehicles turning right.

In addition, site observations indicate that the road network surrounding the site generally operates well with some queuing and delay for select approaches during the weekday peak periods. These observations are consistent with the findings of the SIDRA assessment.

## 3.10. Car Parking

Demand for on-street parking is generally moderate during weekdays, with the majority of parking time restricted. Parking is also not permitted along both sides of Henry Parry Drive and the northern side of Donnison Street west of Henry Parry Drive.

The time restricted parking is generally limited to 1P or less on weekdays with a range of taxi zones, bus zones and loading zones also occupying kerbsides in the vicinity of the site. Donnison Street and Albany Street North have moderate to low demand with some small demand associated with the surrounding commercial land uses.

# 4. PROPOSED DEVELOPMENT

04

## 4.1. Land Uses

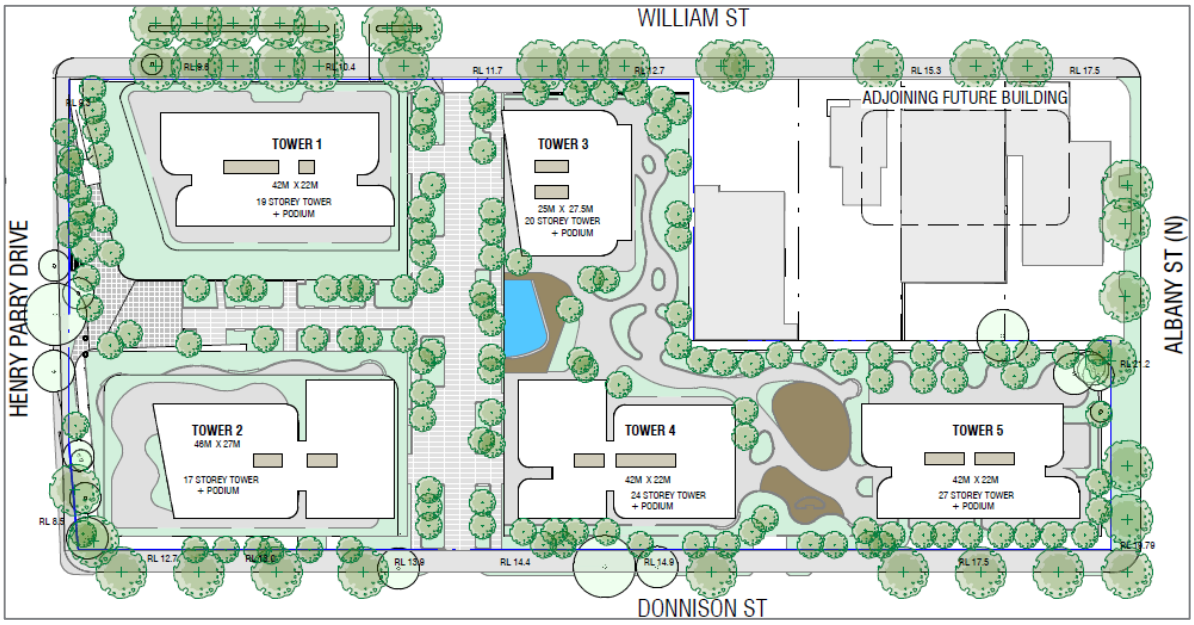
The proposal includes a mixed-use development comprising residential apartments and retail space above basement car parking across five towers. The staged development incorporates a consolidated basement with parking for all proposed uses and access dispersed across the three frontage streets. A central north-south through site link would ensure permeability for vehicles and pedestrians, with a focus on pedestrian connectivity throughout.

The proposed land uses are summarised in Table 4.1, with the site layout shown in Figure 4.1.

**Table 4.1: Development schedule**

| Use | Description | No. apartments/ Size |
|---|---|---|
| Residential | 1 Bedroom | 179 |
| | 2 Bedroom | 468 |
| | 3+ Bedroom | 91 |
| | **Total** | **738** |
| Retail | | 3,692sq.m GFA (3,507sq.m NLA) |

**Figure 4.1: Proposed site plan**




Source: Gosford Alive Stage 1 DA Architectural Design Report, Appendix A - Drawings for Approval, Revision D, prepared by The Buchan Group, dated August 2019

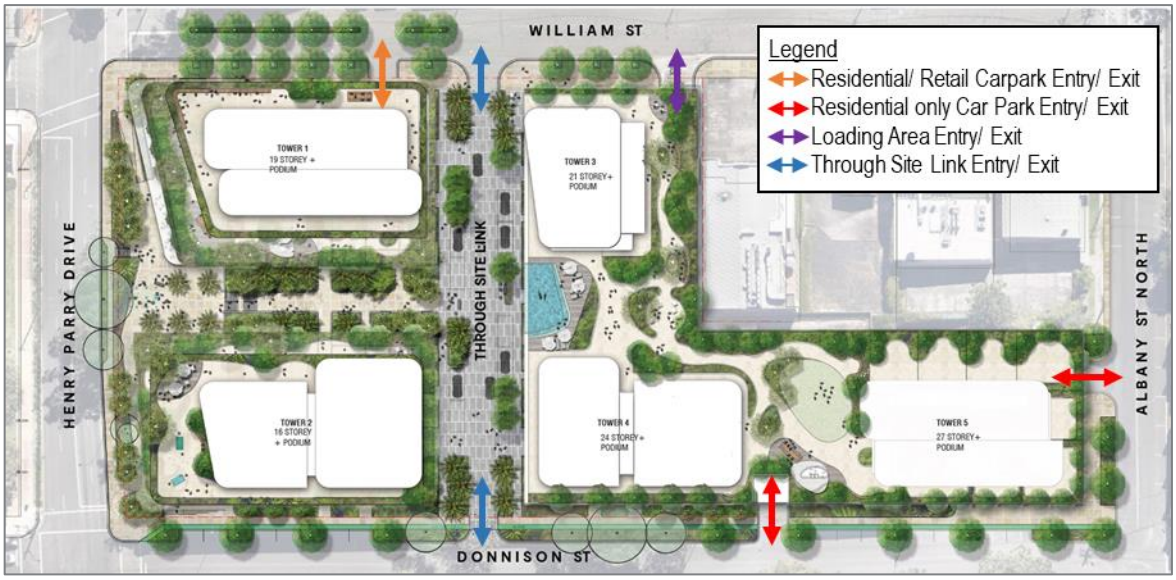
## 4.2. Vehicle Access

The proposal aims to incorporate the site into the surrounding CBD environment without unnecessarily modifying existing transport patterns. A total of six vehicle crossovers are proposed to provide access to on-site basement parking, loading area and the through site link. The main vehicle accesses are proposed along William Street and Donnison Street with a secondary access on Albany Street North to the east.

The mid-block through site link travels north-south through the centre of the site. It is intended to be two-way and designed as a shared area with well considered design to facilitate a range of vehicle and pedestrian access requirements and to encourage use and activation. It is proposed to connect William Street and Donnison Street to allow for easy entry and exit from all directions.

Separate basement car park accesses would allow for the logical separation of uses, with a quantum of on-street parking to encourage use in areas that currently experience low demand in a vehicle dominated environment. The proposed access driveways are shown in Figure 4.2.

**Figure 4.2: Potential vehicular access locations**




Base Image Source: Gosford Alive Stage 1 DA Architectural Design Report, Appendix A - Drawings for Approval, Revision D, prepared by Buchan, dated August 2019

Given the lane configuration and select turn restrictions in the area, the majority of vehicles will access the site via William Street, with vehicles turning right on entry and left on exit, thereby reducing vehicle conflicts on approach and departure. Nevertheless, the volumes are likely to be low and unlikely to cause delay to any movement.

## 4.3. Car Parking and Servicing

The proposal includes provision of 1,014 parking spaces, including 942 spaces for residents and 72 spaces for the retail uses across five car parking levels. Visitors and retail parking would be separated from resident parking as much as practical. Some parking on the through site link would accommodate informal loading by small vehicles, short-term parking and set-down/ pick-up activity. Provision of disabled parking will be in accordance with DCP 2018 and the BCA.

It is also proposed to wholly separate the loading dock from all car parking to ensure cars and service vehicles are not required to cross paths unnecessarily. Service vehicle access for all land uses are proposed within the ground level parking with direct access to/ from William Street. Manoeuvring has been tested and the design aims to accommodate service vehicles up to 8.8 metre medium rigid trucks and 12.5 metre large rigid trucks. Waste collection facilities and space for deliveries, including removalist trucks would accommodate the day-to-day servicing demands of the site. Emergency vehicles (including fire appliance) would be able to access the site and frontage streets to ensure practical use.

## 4.4. Pedestrian and Bicycle Facilities

The proposal has been designed to ensure a high level of pedestrian permeability throughout. Site planning includes distinct permeability and pedestrian amenity by way of through site links and key linkages with Gosford CBD and transport interchange, particularly recognising the need to strengthen links between site and Imperial Centre and Mann Street via Kibble Park. This includes a generous 24 metres wide shared area and vehicular through site link.

Established two to three metre wide pedestrian paths are common throughout Gosford CBD with a high level of existing amenity. This provision will ensure the proposal is able to incorporate well-considered pedestrian amenity into the established surrounding pedestrian network, and in-turn, connections to public regular public transport services.

The development is required to provide parking for 331 bicycles with these facilities to be within the secure basement levels for use by residents and staff. The public domain space can provide adequate facilities for visitors. This could also include spaces along the Henry Parry Drive and William Street frontages and within the through site link and public domain area.

## 4.5. Car Share Services

There is also opportunity to negotiate with car share providers, such as GoGet, to provide car share vehicles within the development or in close vicinity to further encourage lower car usage rates.

Car share spaces could be provided within the basement car park and along the internal shared area or on-street to maximise visibility and be more accessible to the general public, increasing the feasibility for the provider.

The provision of car share spaces is becoming common in DCPs and are acknowledged to be able to be used as a method to reduce car parking provisions for developments.

# 5. PARKING ASSESSMENT

05

## 5.1. Car Parking Requirements

### 5.1.1. Parking Requirements

The car parking requirements for different development types are set out in Gosford City Council's Development Control Plan (DCP 2018) and Local Environmental Plan (LEP 2014) for residential, retail and commercial uses. A review of the car parking rates and floor area schedules result in a parking requirement as summarised in Table 5.1.

**Table 5.1: DCP/LEP car parking requirements**

| Use | Type | Parking Rate | No./ Size | Total Parking Requirement |
|---|---|---|---|---|
| Residential Apartments | 1-bed | 1 space/ apartment | 179 | 179 |
| | 2-bed | 1.2 space/ apartment | 468 | 562 |
| | 3+bed | 1.5 space/ apartment | 91 | 136 |
| | Visitor | 1 space/ 5 apartments | 738 | 148 |
| | **Sub-Total** | | | **1,025 spaces** |
| Retail | | 1 space/ 40sq.m GFA | 3,692sq.m GFA | 92 |
| **Total** | | | | **1,117 spaces** |

Based on Table 5.1, the proposal is required to provide a total of 1,117 parking spaces, including 1,025 spaces for the residential uses and 92 spaces for the retail uses.

### 5.1.2. Empirical Assessment

#### Residential Land Use

Given the sites ease of access to high frequency public transport services and to better understand the appropriate parking requirements of the residential component of the development, the Roads and Maritime Guide (2002) has also been referenced for sites located in metropolitan sub-regional centres, as summarised in Table 5.2.

**Table 5.2: Roads and Maritime Guide car parking requirements**

| Use | Type | Parking Rate | No./ Size | Total Parking Requirement |
|---|---|---|---|---|
| Residential | 1-bed | 0.6 space/ apartment | 179 | 107 |
| | 2-bed | 0.9 space/ apartment | 468 | 421 |
| | 3-bed | 1.4 space/ apartment | 91 | 128 |
| | Visitor | 1 space/ 5 apartments | 738 | 148 |
| | **Total** | | | **804 spaces** |

Based on Table 5.2, the development is required to provide 804 residential car parking spaces as per the requirements of the Roads and Maritime Guide.

It is also recognised that as a development increases in size the relationship between apartments and visitor parking demand changes. It is important to establish the correct quantum of visitor parking in any residential development thereby avoiding the potential for underutilisation, and misuse by residents. With this in mind, it is reasonable to also consider reducing visitor parking as part of the proposal.

The Roads and Maritime Guide recommends for sites located in metropolitan regional (CBD) centres, a parking rate of one space per seven apartments be provided. Adoption of this parking rate would result in the need to provide 105 visitor spaces.

This would likely better accommodate the parking demands of visitors to the development, better activates the on-street environment and recognises the sites location in the eastern section of Gosford CBD.

#### Retail Land Uses

Based on an historical understanding of the operational characteristics of similar mixed used developments, the retail component of the development is likely to act ancillary to the residential land use and adjacent Imperial Centre. In this regard, a reduced parking rate could be considered more reflective of the site for the following reasons:

- mixed-use nature of the development that encourages internal trips and pedestrian activity associated with the surrounding residents and employees
- close proximity to frequent and varied public transport services.

On the above basis, it is recommended a parking rate of one space per 50 square metres GFA of the retail uses be provided.

### 5.1.3. Recommended Parking Provision

Based on the analysis and discussions in this report, the recommended parking rates are summarised in Table 5.3.

**Table 5.3: Proposed car parking provision**

| Use | Type | Parking Rate | No./ Size | Total Parking Requirement |
|---|---|---|---|---|
| Residential | 1-bed | 0.9 space/ apartment | 179 | 161 |
| | 2-bed | 1 space/ apartment | 468 | 468 |
| | 3-bed | 1.5 space/ apartment | 91 | 137 |
| | Visitor | 1 space/ 7 apartments | 738 | 105 |
| | **Sub-Total** | | | **871 spaces** |
| Retail | | 1 space/ 50sq.m | 3,692sq.m GFA | 74 |
| **Total** | | | | **945 spaces** |

Based on the above, the proposed development would need to provide 945 car parking spaces, including 871 spaces for residents and 74 for retail.

Overall, the proposed parking provision recognises the surrounding environment, most importantly the sites proximity in Gosford CBD and close to the transport interchange, while also considering the need for residents to be afforded equitable use of appropriate parking.

On the above basis, the proposed parking provision is considered adequate for the anticipated transport demands of residents, visitors and the retail uses.

While the specific parking provision will be confirmed as part of each staged development application, the overall site includes an appropriate quantum of parking able to support the development. Further consideration of the proposed breakdown and allocation of parking spaces within the basement car park will also be detailed as part of each staged DA.

### 5.1.4. Motorbike Parking Requirements

The proposed development is also required to provide motorbike parking in accordance with DCP 2018, as follows:

- one space per 15 dwellings (or part thereof) for residential land uses
- one space per 25 car parking spaces (or part thereof) for retail and commercial land uses.

Applying this to the proposed parking provision results in the need to provide 49 motorbike spaces for use by residents and three spaces for retail use.

### 5.1.5. Existing On-Site Car Parking

As discussed, the site has over recent years provided convenient and free parking for visitors and workers alike. It is understood that Council engaged Bitzios to complete a short-term car parking strategy for the Gosford CBD[3], which looked at this site and several other sites in Gosford. The strategy outlines short term actions to alleviate the all-day car parking shortfall within the CBD. These include utilising spare capacity at the Barker Street parking station and Central Coast Leagues Club, in addition to constructing temporary car parks on the fringe of the CBD. Irrespective, this development will not inherently change traffic as a result of the proposal and may facilitate Council having a more coordinated approach to parking across the CBD more generally. It is also worth noting that it is not the role or responsibility of the applicant to be responsible for displacement of existing on-site parking nor traffic associated with it.

## 5.2. Car Share Requirements

DCP 2018 and LEP 2014 do not refer to car share requirements however given the site is a key location within the Gosford CBD, the provision of car share parking is considered reasonable in the context of the development proposal and the wider renewal of Gosford CBD.

In this regard, consideration has been given to car share provisions included in Hornsby Council DCP (being the closest relevant LGA). It states that car share spaces are encouraged in the following circumstances:

- any residential development containing more than two residential units, or
- (development) is located within 800 metre radial catchment of a railway station, or within a transit node centre that is serviced by a strategic bus corridor.

Based on the requirements applicable in Hornsby LGA, the site would satisfy all applicable criteria for the provision of car share vehicles within the site.

It is also noted that Hornsby DCP requires all car share proposals are supported by a parking study (to be submitted with future staged DAs). As such, it is recommended that consultation with a car share provider (such as GoGet) be initiated as to the suitability an equitable number of car share spaces both within the development site and on-street in the vicinity.

## 5.3. Car Park Layout Review

Given that the design details for the car park are still being developed, there remains several areas that require a greater level of specialist design input. That said, the car park layout should always be designed in accordance with the Australian Standard for Off Street Car Parking (AS/NZS2890.1:2004 and AS/NZS2890.6:2009). This includes the following considerations:

- bay and aisle width
- adjacent structures and turnaround facilities
- circulation roads and ramps
- height clearances

[3] Central Coast Parking Strategy, Part 1: Short-term Gosford CBD Strategy, Bitzios, 12 June 2018

- internal queuing and set-down/ pick-up areas
- parking for persons with disabilities
- motorcycle parking.

With consideration for the above, the proposed residential car spaces should be designed as User Class 1A that requires each space to be a minimum 2.4m wide and 5.4m long, with adjacent 5.8m wide aisles. Furthermore, the proposed retail car parking spaces should be designed as a User Class 3 facility that requires each space to be a minimum 2.6m wide and 5.4m long, with adjacent 6.6m wide aisles.

Car parking spaces for people with disabilities should be designed as a User Class 4 facility that requires each space to be a minimum 2.4m wide and 5.4m long, with a shared area 2.4m wide and 5.4m long on one side of the dedicated space. A centrally located bollard will also be required in the shared area.

The loading dock access driveway would need to be designed in accordance with Australian Standard (AS2890.2:2002) for access by service vehicles up to 8.8m medium rigid trucks, 12.5m large rigid vehicles and 10-11m long garbage trucks.

The car parking levels would provide for resident parking, with separate security doors and/ or boom gates ensuring secure access at all times.

# 6. SUSTAINABLE TRANSPORT

06

## 6.1. Bicycle End of Trip Facilities

DCP 2018 sets out design controls for the provision of bicycle parking, as summarised in Table 6.1.

**Table 6.1: DCP 2018 bicycle parking requirements**

| Land Use | Bicycle Parking Rate | No./ Size | Bicycle Parking Requirement |
|---|---|---|---|
| Residential | 1 space/ 3 dwellings | 738 units | 246 spaces |
| | 1 space/ 12 dwellings for visitors | | 62 spaces |
| | **Sub-Total** | | **308 spaces** |
| Retail | 1 space/ 200sq.m floor space for employees | 3,692sq.m GFA | 18 spaces |
| | 1 space/ 750sq.m floor space for visitors | | 5 spaces |
| | **Sub-Total** | | **23 spaces** |
| **Total** | | | **331 spaces** |

Overall, the proposal is required to provide 331 bicycle spaces, including 308 for residential uses and 23 for retail use. DCP 2018 also requires bicycle parking to be located in a safe and secure location that is under cover and convenient for users.

For retail developments providing employment for 20 persons or more, adequate change and shower facilities should be provided and should be sufficient in number to provide for the number of cyclists catered for by way of the bicycle parking provision. These facilities should be conveniently located close to bicycle storage areas.

The provision of bicycle spaces within the basement car park should meet the requirements of DCP 2018 for the residential uses with the retail provision be provided on ground level along key connections and as part of the expanded public domain.

## 6.2. Active Travel Trip Generation

Based on the existing mode share of Gosford interchange, detailed in Section 3.4, and an assumed average of 1.5 to two people per dwelling, it is likely there would be a demand for 270 to 360 public transport trips and 100 to 130 active travel trips during the weekday peak hours. In saying that, this conservatively assumes all residents are working and commuting to work each day. The impact of additional pedestrian trips between the development and Gosford interchange is assessed in Section 8.3.3.

## 6.3. Walking and Cycling Network

The proposed development works hard to ensure pedestrians and cyclists have remained a key consideration. The design includes a high level of pedestrian amenity that will ensure good activation of the public domain along Henry Parry Drive leading towards Kibble Park and through Gosford CBD.

The convenient connections between the multiple site accesses and the well-established existing pedestrian network along both Henry Parry Drive and William Street will also be key to ensuring the area functions as intended.

## 6.4. Public Transport

As discussed, the site is well served by several high frequency rail services and bus routes. Rail services provide access to both Sydney and Newcastle. As noted in Section **Error! Reference source not found.**, construction of Sydney Metro is expected to further improve accessibility between Sydney, the Central Coast and Newcastle by train by freeing up services on the broader network.

High frequency bus services that run along Mann Street combine to provide convenient access to the several key destinations throughout the Central Coast.

An overview Green Travel Plan is included later in this report and provides context and strategies necessary to implement small measures over time to encourage non car-based trips in an ever changing CBD location.

# 7. LOADING FACILITIES

07

## 7.1. Proposed Loading Arrangements

### 7.1.1. Anticipated Loading Demand

The average residential apartment turnover rate is approximately 0.2 per cent of all apartments in any given week. Conservatively assuming a rate of 0.5 per cent to account for seasonal variations and given the proposed 738 apartments, there would be an average of four apartments moving in or out in any given week.

GTA's database of loading demand associated with the proposed uses also indicates that specialty retail stores typically receive an average of 0.5 deliveries per day per tenant. Assuming a conservative average retail tenancy size of 200 square metres, this would result in up to 18 tenancies and would likely result in nine deliveries per day. Applying a 50 per cent contingency results in up to 20 deliveries per day.

### 7.1.2. Proposed Loading Arrangements

A combined retail and residential loading dock is proposed, with access to be provided via an access on William Street east of the through site link. There arise ample sight lines available at the proposed access given the configuration and alignment of William Street. This access also considers the intended cross section of William Street.

Given the proposed mix of residential and retail uses, it is proposed to provide:

- three to four loading bays capable of accommodating 8.8m medium rigid vehicles
- one loading bay capable of accommodating 12.5m large rigid vehicles
- other capacity for vans and utes etc.

It is proposed to utilise the loading areas to accommodate removalist trucks (LRVs or smaller) for residents moving in and out of the residential apartments, and 10-11m long garbage trucks. This mix of servicing activities for the various uses would need to be appropriately managed on-site (by a dock management system) to ensure peak demand times do not overlap.

Height clearances for garbage trucks can be confirmed as part of future staged DAs however travel heights are typically lower (less than 4.0m) than the operational height requirements (up to 5.5m). The details vary depending on bin type/ size and garbage truck dimensions etc.

The exact design of the servicing areas would need to be tested by way of swept path assessments during the progression of the design prior to the submission of the DA's for each stage.

Loading bays for vehicles up to 6.4m small rigid vehicles would be beneficial in the through site link to improve loading convenience. Where required, additional loading activity could also be carried out on-street along the Donnison Street and William Street frontages.

# 8. TRANSPORT IMPACT ASSESSMENT

08

## 8.1. Traffic Generation

### 8.1.1. Design Rates

Traffic generation estimates for the development have been sourced from the *Guide to Traffic Generating Developments* (RMS, 2002) and *Technical Direction TDT 2013/ 04 Guide to Traffic Generating Developments Updated traffic surveys* (TDT 2013/ 04) together with GTA's own database of traffic generation surveys from like developments across New South Wales.

### 8.1.2. Retail Uses

#### Roads and Maritime Guide Rates for Shopping Centres

The Guide 2002 suggests the following rates for retail uses:

- Specialty retail:
  - 4.6 and 10.7 trips per 100 square metres GLFA respectively during the weekday PM and Saturday peak hour
- Office, Medical:
  - 2.2 trips per 100 square metres GLFA respectively during the weekday PM peak hour

In estimating the retail weekday AM peak hour traffic generation rate, a 0.5 factor has been applied to the weekday PM peak hour rate to account for slower trade during the morning. The weekday PM office, medical rate has also been applied to the Saturday peak hour.

It is uncertain what the mix of retail tenants would be but has potential to include a mix of cafes/ restaurants and office/ medical facilities, such as a medical centre. Based on the RMS guide, these would represent specialty shops and office, medical uses. Assuming a 50:50 split, the combined anticipated traffic generated by the retail component of the development is summarised in Table 8.1.

**Table 8.1: Retail traffic generation**

| Description | GLFA | Traffic generation rate (trips/ hour) | | | Traffic generation estimates (trips/ hour) | | |
|---|---|---|---|---|---|---|---|
| | | AM | PM | Sat | AM | PM | Sat |
| Specialty Shops | 1,754sq.m | 2.3 vehicles trips per 100sq.m GLFA | 4.6 vehicles trips per 100sq.m GLFA | 10.7 vehicles trips per 100sq.m GLFA | 40 | 81 | 188 |
| Office, Medical | 1,754sq.m | 1.1 vehicles trips per 100sq.m GLFA | 2.2 vehicles trips per 100sq.m GLFA | 2.2 vehicles trips per 100sq.m GLFA | 19 | 39 | 39 |
| **Total** | | | | | **59** | **119** | **226** |

Based on the rates specified in the Guide the retail space could theoretically generate up to 226 vehicle trips per hour on Saturdays. This estimated trip generation has been adopted for the purposes of the future intersection analysis.

### 8.1.3. Residential Uses

A conservative approach has been taken to determine the future traffic generation by adopting traffic generation rates as a unit rate per apartment. TDT 2013/ 04 provides updated rates for high density residential flat dwellings (2012 surveys) that are close to public transport services, greater than six storeys and almost exclusively residential in nature. TDT 2013/ 04 specifies an average morning peak hour trip generation for Sydney of 0.19 trips per apartment. The proposed development is certainly high density and close to high frequency public transport services though not predominantly residential and a little removed from typical Sydney metropolitan CBD locations. As such, these rates are not considered quite an accurate reflection of the future residential uses.

As such, the slightly higher rates detailed in the Roads and Maritime Guide of 0.29 trips per apartment is considered a more accurate reflection of the development and Gosford CBD more broadly. Following stakeholder engagement and recognising traffic-based travel in the area (and the daily commuters), GTA has adopted the more conservative rate of 0.35 trips per apartment as part of this assessment. Application of the trip rate results in the residential component generating 258 vehicle trips in any peak hour.

### 8.1.4. Summary

Estimates of peak hour traffic volumes associated with the development are set out in the following tables and assume the directional split of traffic (i.e. the ratio between the inbound and outbound traffic movements) as detailed in Table 8.2 and Table 8.3.

**Table 8.2: Traffic directional splits**

| Use | Thursday AM peak hour | | Thursday PM peak hour | | Saturday peak hour | |
|---|---|---|---|---|---|---|
| | In | Out | In | Out | In | Out |
| Residential | 30% | 70% | 70% | 30% | 50% | 50% |
| Retail | 80% | 20% | 50% | 50% | 50% | 50% |

**Table 8.3: Development traffic**

| Use | Thursday AM peak hour | | | Thursday PM peak hour | | | Saturday peak hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total |
| Residential | 77 | 181 | **258** | 181 | 77 | **258** | 129 | 129 | **258** |
| Retail | 48 | 12 | **60** | 60 | 60 | **120** | 113 | 113 | **226** |
| **Total** | **124** | **193** | **318** | **241** | **137** | **378** | **242** | **242** | **484** |

Based on Table 8.3, the development could potentially generate up to 378 vehicle trips per hour on a Thursday evening and 484 vehicle trips on a Saturday midday.

## 8.2. Distribution and Assignment

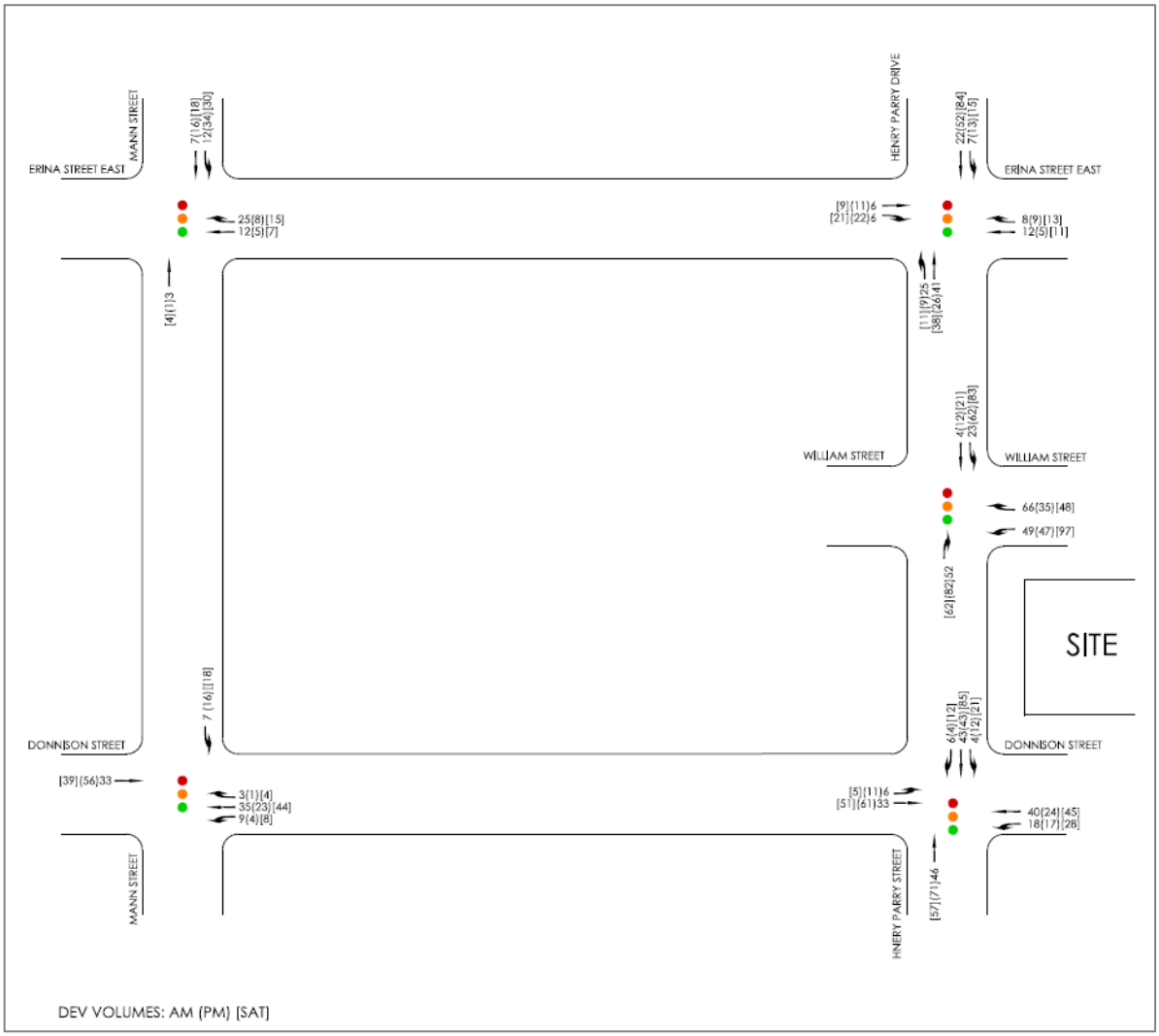
The directional distribution and assignment of traffic generated by the proposal will be influenced by a number of factors, including:

- existing traffic movements associated with the site
- configuration of the arterial road network in the immediate vicinity of the site
- existing operation and directional distributions of traffic at intersections providing access between the local and arterial road network
- distribution of households in the vicinity of the site
- surrounding employment centres, retail centres and schools in relation to the site
- configuration of site access points and existing turn bans.

Having consideration of the above and for the purposes of estimating future vehicle movements, the anticipated development traffic has been distributed through the study intersections. It has also been assumed that 60 per cent of vehicles would use the William Street access, 30 per cent the Donnison Street access and 10 per cent the Albany Street North access.

Figure 8.1 has been prepared to show the estimated marginal increase in turning movements near the site following the completed site development.

**Figure 8.1: AM (PM) [Sat] peak hour site generated traffic volumes**




## 8.3. Traffic Impact

### 8.3.1. Comparative Analysis

A comparative analysis of the existing and proposed traffic generation estimates indicates that the proposed site will have a net increase in vehicle generation of between 95 and 160 vehicle trips respectively in the weekday AM and PM peak periods, and 476 vehicle trips during the Saturday peak hour. Furthermore, it is noted that the development largely results in the reversal of traffic flow generated by the site during the weekday AM and PM peak hours. This will likely benefit the local area as the development trips oppose the direction of peak flow. Irrespective, this development will not inherently change traffic throughout the Gosford CBD in the weekday AM and PM peak hours, with less traffic constraint on Saturdays.

### 8.3.2. Intersection Operation

Table 8.4 presents a summary of the anticipated future operation of the intersections following full development of the site, with full results included in Appendix C of this report. It is noted that turning movements in and out of the existing site have been deducted from the background volumes and replaced with traffic generated by the proposal.

**Table 8.4: Post development operating conditions**

| Intersection | Peak | Degree of Saturation (DOS) | Average Delay (sec) | 95th Percentile Queue (m) | Level of Service (LOS) |
|---|---|---|---|---|---|
| Henry Parry Drive/ Donnison Street | AM | 0.87 | 32 | 248 | C |
| | PM | 0.92 | 33 | 264 | C |
| | Sat | 0.67 | 21 | 131 | B |
| Henry Parry Drive/ William Street | AM | 0.55 | 15 | 70 | B |
| | PM | 0.84 | 15 | 70 | B |
| | Sat | 0.84 | 22 | 116 | B |
| Henry Parry Drive/ Erina Street East | AM | 0.67 | 17 | 86 | B |
| | PM | 0.66 | 25 | 194 | B |
| | Sat | 0.55 | 13 | 53 | A |
| Mann Street/ Erina Street East | AM | 0.80 | 13 | 75 | A |
| | PM | 0.71 | 15 | 98 | B |
| | Sat | 0.50 | 12 | 55 | A |
| Mann Street/ Donnison Street | AM | 0.65 | 21 | 97 | B |
| | PM | 0.75 | 21 | 124 | B |
| | Sat | 0.48 | 18 | 59 | B |

Table 8.4 demonstrates that all intersections will continue to operate similar to their existing condition detailed in Table 3.5, indicating that development will not inherently change traffic conditions throughout the Gosford CBD.

An assessment of the future operation of the intersections 10 years post development has also been completed. To project the traffic conditions, a background traffic growth of 1.5 per cent has been applied to the existing traffic volumes. This accounts for both localised development (under construction or in planning) and regional transport network growth. The growth rate would also naturally account for other unknown development in the area. The results of the assessment are summarised in Table 8.5 .

**Table 8.5: 10 years post development operating conditions**

| Intersection | Peak | Degree of Saturation (DOS) | Average Delay (sec) | 95th Percentile Queue (m) | Level of Service (LOS) |
|---|---|---|---|---|---|
| Henry Parry Drive/ Donnison Street | AM | 1.04 | 49 | 427 | D |
| | PM | 1.05 | 61 | 264 | E |
| | Sat | 0.77 | 18 | 131 | B |
| Henry Parry Drive/ William Street | AM | 0.80 | 18 | 86 | B |
| | PM | 1.04 | 20 | 94 | B |
| | Sat | 0.86 | 14 | 87 | A |
| | AM | 0.85 | 20 | 120 | B |

| Intersection | Peak | Degree of Saturation (DOS) | Average Delay (sec) | 95th Percentile Queue (m) | Level of Service (LOS) |
|---|---|---|---|---|---|
| Henry Parry Drive/ Erina Street East | PM | 0.76 | 26 | 244 | B |
| | Sat | 0.62 | 14 | 69 | A |
| Mann Street/ Erina Street East | AM | 0.82 | 15 | 111 | B |
| | PM | 0.88 | 20 | 170 | B |
| | Sat | 0.57 | 13 | 66 | A |
| Mann Street/ Donnison Street | AM | 0.78 | 24 | 122 | B |
| | PM | 1.03 | 42 | 318 | C |
| | Sat | 0.58 | 19 | 71 | B |

Table 8.5 indicates the Henry Parry Drive/ Donnison Street intersection is expected to experience some congestion with existing background volumes during both the AM and PM peak periods in 2029. In saying that, all other study intersections are expected to operate well and with spare capacity during each peak hour, with some increased queuing and delay on select approaches.

It is noted that initial stakeholder engagement indicates that local improvements are being investigated along Henry Parry Drive between Margin Street and William Street, which will include the intersection at Donnison Street. While the exact nature or timing of these improvements is not yet known, it is understood that they will likely include the removal of the right turns into existing site access driveways south of Donnison Street and the provision of extended through lanes on Henry Parry Drive.

It could be reasonably expected that these works would have a positive impact on the operation of the Henry Parry Drive/ Donnison Street intersection (and Henry Parry Drive generally), leading to improved peak period operation. However, the impact of any such upgrades and/ or broader road network improvements is to be confirmed as part of future traffic modelling adopting the outputs as developed by Council/ Roads and Maritime.

### 8.3.3. Sensitivity Scenario

To understand the impact of increased pedestrian movements traveling between the site, Gosford CBD and public transport facilities, the 10 year post development scenario has been tested with significantly increased pedestrian volumes on the southern leg of the Henry Parry Drive/ William Street intersection. Results indicate that increased pedestrian volumes do not have a material impact on intersection operation during the weekday AM and PM road network peak hours. Additional pedestrian activity on Saturdays would result in delay for specific movements, mostly the left turn from William Street into Donnison Street. While this adds delay and increases queuing to traffic movements, detailed modelling and stakeholder consultation will completed as part of ongoing work to ensure outcomes that more than adequately accommodates increased pedestrian activity in an area that will work hard to better accommodate pedestrians generally.

# 9. OVERVIEW GREEN TRAVEL PLAN

09

## 9.1. Introduction

### 9.1.1. Travel plan framework

Transport is a necessary part of life which has effects that can be managed. The transport sector is one of the fastest growing emissions sectors in Australia and therefore a travel plan provides an opportunity for reducing greenhouse gases, and for managing traffic congestion (which has adverse economic, health and social outcomes). As well as delivering better environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and will ensure strong and prosperous communities.

The physical infrastructure being provided as part of the development is only part of the solution. A green travel plan will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and co-ordinated to achieve the most sustainable outcome possible.

### 9.1.2. What is a Green Travel Plan

A green travel plan (GTP) is a package of actions and strategies aimed at encouraging sustainable modes of transport such as walking, cycling, public transport and higher-occupancy car use for travel. The GTP for Gosford Alive will aim to mitigate (as far as possible) private car commuting to allow people to carry out their daily business in a more sustainable manner using the following measures:

- measures which encourage reduced car use (disincentives or 'sticks')
- measures which encourage or support sustainable travel (such as active transport, public transport and multi-occupant vehicle use)
- reduce the need to travel or make travelling more efficient (incentives or 'carrots').

A GTP would allow residents, staff and visitors to the proposed facility to achieve the above outcomes by providing flexibility to residents, staff and visitors about how and when they travel. This is especially important in regionally significant precincts, such as the Gosford CBD, which attracts a high number of staff and visitors per day. As part of the proposed development, a GTP would be implemented after the opening of the development.

The GTP would seek to understand the existing public transport, cycling and walking catchments to identify gaps in the network for improvement. Similarly, opportunities would also be identified to provide better connectivity between the site and other centres. The GTP would also understand the origins and destinations of future residents to understand what targeted actions would bring about the most benefit. Future travel conditions, including expected mode shares for different scenarios would be considered prior to the development of actions.

Implementation of a GTP for the development will benefit from the established pedestrian and cycling network surrounding it as well as the high frequency of bus and train services that runs near to it. The travel plan will seek to:

- advise residents, staff and visitors on the wider travel choices available to them and encourage use of sustainable travel modes
- aim to reduce congestion on the surrounding road network by causing mode shift from private vehicles, or at the very least encourage higher vehicle occupancy to reduce private vehicle trips.

## 9.2. Key objectives

The aim of the GTP is to bring about better transport arrangements for living and working at the site. The key objectives of the Travel Plan are:

- to encourage walking
- to encourage cycling

- to encourage the use of public transport
- to reduce the use of the car, in particular single car occupancy
- where it is necessary to use the car, encourage more efficient use.

It is the intention therefore that the travel plan will deliver the following benefits:

- enable higher public and active travel mode share targets to be achieved
- contribute to greenhouse gas emission reductions and carbon footprint minimisation
- contribute to healthy living for all
- contribute to social equity and reduction in social exclusion
- improve knowledge and contribute to learning.

## 9.3. Site specific measures

The location of the site, in terms of its proximity to a wide range of sustainable transport including frequent bus routes from the Gosford Interchange and train services from Gosford Railway Station, is a key consideration for development in the precinct.

A GTP will put in place measures to raise awareness and further influence the travel patterns of people living, working or visiting the site with a view to encouraging modal shift away from cars.

The following potential measures and initiatives could be implemented to encourage more sustainable travel modes:

1. Limiting on-site parking provision.
2. Provide a Travel Access Guide (TAG) which would be provided to all residents and staff and publicly available to all visitors. The document would be based on facilities available at the site and include detail on the surrounding public transport services and active transport initiatives. The TAG would be updated as the surrounding transport environment changes.
3. Providing public transport information boards/ apps to inform residents, staff and visitors of alternative transport options (the format of such information boards would be based upon the TAG).
4. Providing a car sharing pod(s) on-site or nearby and promoting the availability of car sharing pods for trips that require the use of private vehicles.
5. Providing bicycle facilities including secure bicycle parking for staff, bicycle racks/ rails for visitors and shower and change room facilities.
6. Encouraging staff that drive to work and park on surrounding roads to carpool through creation of a carpooling club or registry/ forum.
7. Regularly promoting ride/ walk to work days.
8. Providing a regular newsletter to all residents and staff members bringing the latest news on sustainable travel initiatives in the area.

### 9.3.1. Travel Access Guide

A TAG provides information to residents, staff and visitors on how to travel to the site using sustainable transport modes such as walking and public transport. The information is presented visually in the format of a map (or app) showing the site location and nearby transport modes highlighting available pedestrian and cycle routes. The information is usually presented as a brochure (or app) to be included in a welcome pack or on the back of company stationery and business cards.

### 9.3.2. Information and communication

Several opportunities exist to provide residents, staff and visitors with information about nearby transport options. Connecting residents, staff and visitors with information would help to facilitate journey planning and increase their awareness of convenient and inexpensive transport options which support change in travel behaviour. These include:

- Transport NSW provides bus, train and ferry routes, timetables and journey planning through their Transport Info website: http://www.transportnsw.info.
- Council provides a number of services and a range of information and events to encourage people of all levels of experience to travel by bicycle.

In addition, connecting residents, staff and visitors via social media may provide a platform to informally pilot new programs or create travel-buddy networks and communication.

### 9.3.3. Monitoring of the GTP

There is no standard methodology for monitoring the GTP, but it is suggested that it be monitored to ensure that it is achieving the desired benefits and modify it if required. It will not be possible at this stage to state what additional modifications might be made as this will be dependent upon the particular circumstances prevailing at that time.

The GTP should be monitored on a regular basis, e.g. yearly, by carrying out travel surveys. Travel surveys will allow the most effective initiatives of the GTP to be identified, and conversely less effective initiatives can be modified or replaced to ensure the best outcomes are achieved. It will clearly be important to understand people's reasons for travelling the way they do: - any barriers to changing their behaviour, and their propensity to change.

To ensure the successful implementation of the GTP, a Travel Plan Coordinator (TPC) should be appointed to ensure the successful implementation of the GTP. This could be the building manager or a member of the body corporate.

## 9.4. Coordinated Approach

In our view, this development will naturally attract a different demographic to Gosford CBD, one more willing to accept travel by public transport. With all modes of transport, achieving minor modal shift is still significant. A coordinated travel planning effort for the Gosford CBD may be of value so changes to mode share are not reliant on site specific, ad-hoc approaches. This may involve establishing a Transport Management Association for the Gosford CBD who would be responsible for coordinating green travel plans and championing their actions/ initiatives for new and established development within the area. One successful example includes Connect Macquarie Park and North Ryde, a partnership between leading employers in Macquarie and North Ryde, whose focus is to ensure the area can grow, without growing congestion.

The proposed development would be able to develop and utilise a travel plan to actively promote increased use of sustainable transport modes. Although it is difficult to predict what measures might be achievable, the above measures provide a framework for the site and implementation of a future travel plan.

# 10. OVERVIEW CONSTRUCTION TRAFFIC MANAGEMENT PLAN

10

## 10.1. Overview

This section seeks to provide an overview of the Construction Traffic Management Plan (CTMP) initiatives to be implemented as part of the construction works associated with the proposed development.

Specifically, this overview CTMP considers the following:

- construction site access arrangements
- anticipated truck volumes during construction stages
- truck routes to/ from the site
- requirements for works zones
- pedestrian and cyclist access
- site personnel parking
- traffic control measures
- overview of CTMP requirements.

## 10.2. Principles of Traffic Management

The general principles of traffic management during construction activities are as follows:

- minimise the impact on pedestrian and cyclist movements
- maintain appropriate public transport access
- minimise the loss of on-street parking
- minimise the impact on adjacent and surrounding buildings
- maintain access to/ from adjacent buildings
- restrict construction vehicle movements to designated routes to/ from the site
- manage and control construction vehicle activity near the site
- carry out construction activity in accordance with approved hours of works.

## 10.3. Work Hours

The works will be carried out during the approved work hours. Indicative work hours are as follows:

- Weekdays: 7:00am – 5:00pm
- Saturdays: 7:30am – 3:00pm
- Sundays and public holidays: no work permitted.

Workers would be advised of the approved work hours during induction. Any works outside of the approved work hours would be subject to specific prior approval from the appropriate authorities. Such works may include delivery of cranes, large plant or equipment required on the site that require oversize vehicle access.

## 10.4. Site Access and Loading

Construction vehicle access will likely be provided via William Street however this will be subject to site constraints/ access requirements during each stage of development.

Traffic controllers will likely be needed at the site accesses to manage pedestrian movement when trucks are entering and exiting the site. All loading is expected to take place wholly within the site. Should a works zone be required, an application will be made to the relevant authorities prior to commencement of works.

As part of the detailed CTMP, a traffic control plan (TCP) will be prepared in accordance with the principles of the Roads and Maritime Services Traffic Control at Work Sites manual. The TCPs primarily show where construction signs will be located at specific locations (such as uncontrolled intersections) along the approved truck routes to warn other road users of the increase in construction vehicle movements.

Access to the neighbouring sites by emergency vehicles would not be affected by the works as the road and footpath frontages would be unaffected. Emergency protocols on the site would include a requirement for site personnel to assist with emergency access from the street. All truck movements to the site and/or incident point would be suspended and cleared.

## 10.5. Construction Staff Parking

It is anticipated that there will be up to 100 workers on-site at any given time during peak activities.

Staging of the development may allow workers to use the existing site for parking throughout early stages of construction. Generally, no construction worker parking will be provided. Given the site's proximity to a range of high frequency public transport services, providing both local and regional connections, workers will be encouraged to use public transport to access the site. During site induction, workers will be informed of the existing bus network servicing the site. No workers will be permitted to park on-street. Appropriate arrangements will be made for any equipment/ tool storage and drop-off requirements.

## 10.6. Heavy Vehicle Traffic Generation

Construction vehicles generated by the site would generally include vehicle up to 12.5 metre heavy rigid vehicles however larger construction vehicles up to 19 metre may be required for the delivery of materials and plant. There is expected to be up to 50 trucks per day or five to ten trucks per hour accessing the site during peak activities. These volumes are dependant on the staging of the development.

Construction vehicle movements will be minimised/ avoided during peak hours where possible.

## 10.7. Heavy Vehicle Access Routes

Heavy vehicle movements would be restricted to designated routes and confined to the arterial road network wherever feasible. Truck routes to/ from the site have been identified with the aim of providing the most direct routes to/ from the site as well as minimising the impact of heavy vehicles on local roads and other surrounding developments.

Figure 10.1 provide a summary of the anticipated construction vehicle routes to/ from the site. Truck drivers will be advised of the designated truck routes to/ from the site.

### Approach Routes

- North: M1 Pacific Motorway, Pacific Highway, Henry Parry Drive, William Street/ Donnison Street
- South: M1 Pacific Motorway, Central Coast Highway, Pacific Highway, Donnison Street, Henry Parry Drive, William Street
- South: M1 Pacific Motorway, Central Coast Highway, Pacific Highway, Donnison Street.

Departure Routes

- North: William Street/ Donnison Street, Henry Parry Drive, Pacific Highway, M1 Pacific Motorway
- South: Donnison Street, Pacific Highway, Central Coast Highway, M1 Pacific Motorway
- South: William Street, Henry Parry Drive, Pacific Highway, Central Coast Highway, M1 Pacific Motorway.

**Figure 10.1: Construction vehicle routes**


Base image source: Sydway

## 10.8. Pedestrian and Cyclist Access

Where required B-Class hoardings will be installed along the perimeter of the site where overhead works are occurring to maintain and ensure safe pedestrian and cyclist passage adjacent to the site. Where B-Class hoarding is not required, A-Class hoarding will be provided. It is likely that traffic controllers will be required at both site accesses to also manage pedestrian/ cyclist movements when heavy vehicles are accessing the site. The corresponding traffic management plans will assist in minimising the impacts to pedestrian and cyclist movements along William Street from construction related traffic.

Truck movements will be avoided during peak hours where possible to minimise the impact on pedestrians and cyclists.

## 10.9. Overview of CTMP Requirements

This section provides an overview of the CTMP initiatives that would be implemented for the demolition of the existing retail centre and construction of the Gosford Alive development. A detailed CTMP would cover the following additional information:

- Description of construction activities and duration.
- Construction work hours.
- Detailed assessment of construction traffic impacts including any cumulative impacts.
- Details regarding any one-off activities for installation of cranes and other equipment.
- Swept path analysis of heavy vehicle access to the site and Works Zone.
- Detailed assessment of on-street parking impacts.
- Emergency vehicle access.
- Impacts to public transport services.
- Traffic Control Plan(s).
- Contact details of key project personnel.

# 11.CONCLUSION

11

# CONCLUSION

Based on the analysis and discussions presented within this report, the following conclusions are made:

- The Stage 1 DA incorporates a mixed-use precinct with residential apartments located above retail floor area. It intends to deliver 738 residential apartments and 3,692sq.m of retail space.
- The site and surrounding area are clearly capable of supporting the proposed land uses on transport grounds with residents, visitors and staff able to travel to and from the site with relatively minor impacts on the surrounding local environment.
- The site access arrangements are appropriate and able to accommodate the anticipated peak traffic volumes.
- The provision of a through site link will facilitate a range of vehicle and pedestrian access requirements to encourage use and activation, while connecting William Street and Donnison Street to allow for easy entry and exit from all directions.
- Traffic generation will be moderate and relatively consistent with the volumes generated by the existing use as a free all-day car park, albeit with improvements associated with reversing the flow of vehicles. The only exception being Saturdays when the existing use is not effectively used though this will be at times when there is less traffic on the surrounding road network.
- The proposal is expected to generate a net increase of 95 and 160 vehicle trips respectively in the weekday AM and PM peak periods, and 476 vehicle trips during the Saturday peak hour.
- The calculated traffic volumes and review of intersection operation indicates that development will not inherently change traffic conditions throughout Gosford CBD.
- Basement parking for 1,014 vehicles is expected to adequately service the proposal, having regard for the mixed-use nature of the development located within a major regional CBD.
- It is recommended that consultation with a car share provider (such as GoGet) be initiated as to the suitability an equitable number of car share spaces both within the development site and on-street in the vicinity.
- Secure parking for approximately 331 bicycles would ensure active travel end-of-trip facilities are provided in accordance with DCP 2018.
- The provision of loading facilities is expected to be adequate to service the development, subject to further detail to confirm quantum and management practices during the staged development applications.
- The provision for pedestrian and active travel connectivity through the site is important and how best to incorporate into the surrounding network critical to realising improved pedestrian amenity and connectivity throughout.
- From a transport perspective, the development does not raise specific issues with respect to impacts on the road network.
- While sections of the road network are close to capacity within Gosford CBD and surrounds, the extent and effect of road network improvements can only be determined once broader modelling studies have been completed and other development sites have been assessed.
- Any such need or otherwise for specific road network upgrades will be able to be confirmed as part of the staged development applications.
- It is recommended that ongoing stakeholder consultation be undertaken, especially in regard to any such broader traffic modelling being carried out by others within and surrounding Gosford CBD.

# A. STAKEHOLDER CONSULTATION

A

## Ingrid Bissaker

**From:** Development hunter <Development.hunter@rms.nsw.gov.au>
**Sent:** Wednesday, 26 June 2019 8:01 AM
**To:** Rhys Hazell
**Subject:** RE: Gosford Kibbleplex - transport assessment - request for comment CRM:0102739

Hi Rees,

Our apologies for the delay in providing a response to your below email and telephone calls.

Roads and Maritime do have concerns with the intensification of the Gosford CBD, and have recommended the following to Council:

- On 13 November 2018, Roads and Maritime provided the following advice on the Planning Proposal (RZ/6/2016):

  *"Roads and Maritime consider that there will be an impact on the state network from proposals within the area, which form a larger catchment affecting the Pacific Highway and Sparkes Road. Roads and Maritime recommend Council to undertake an update of the S7.11 plans informed by a Traffic Impact Assessment in consultation with Roads and Maritime, to determine appropriate upgrades to the state road network and funding mechanisms. The Traffic Impact Assessment is to consider the cumulative impacts of the continued intensification of the Gosford CBD and the surrounding residential areas on the State road network."*

- Roads and Maritime raise concern regarding continuing intensification with the Gosford Central Business District (CBD) and surrounds prior to acceptable works being proposed to mitigate the impacts of the development. Should Council approve the subject application prior to adoption of the updated s7.11 plans for this catchment, Roads and Maritime recommend that the developer enter into a Voluntary Planning Agreement with Council to provide contributions towards upgrading the intersections, apportioned relative to the number of trips generated by that development.

- On review of Council's Development Control Plan (DCP) for the Gosford CBD it noted that this plan was last updated in 2003. It is considered that this plan may be out of date and may require updating with the recent significant number of developments proposed in the Gosford CBD. It is further noted that there are no works proposed on Henry Parry Drive in the vicinity of the proposed development.

There are a number of developments in the area which are having an impact on traffic at the intersection mentioned below. We are aware that Council are investigating upgrade options and suggest that you discuss this further with them.

Regards,
Kate

**Land Use Assessment Hunter**
Customer Services Hunter | Regional & Freight
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***Every journey matters***

**Roads and Maritime Services**
Level 8, 266 King St, Newcastle NSW 2300
Locked Bag 2030, Newcastle NSW 2300

**From:** Rhys Hazell [mailto:Rhys.Hazell@gta.com.au]
**Sent:** Wednesday, 22 May 2019 5:09 PM
**To:** Development hunter
**Cc:** Ingrid Bissaker; Ashish Modessa
**Subject:** Gosford Kibbleplex - transport assessment - request for comment CRM:0102739

Hi Peter,

I have left a few voicemail messages for you in relation to this project.

We are assisting the project team as part of the Gosford Kibbleplex development (SSD 9813) and note Roads and Maritime comments as part of the SEARs have been received. We are required to make contact with relevant stakeholders prior to submission and provide the following comments as to our current status.

All updated traffic surveys of the following key intersections have been completed for the weekday AM/ PM and Saturday midday periods.

- Mann Street/ Erina Street
- Henry Parry Drive/ Erina Street
- Henry Parry Drive/ William Street
- Henry Parry Drive/ Donnison Street
- Mann Street/ Donnison Street.

Site visits confirm some congestion on Henry Parry Drive (particularly for northbound vehicles in the AM peak), with the traffic signals at Donnison Street key to understanding the reasons for such delay. We will receive the data shortly and will naturally complete SIDRA modelling. The modelling will include details as per your comments in the SEARs and include growth to a 10 year horizon (2029). We have previously applied a one per cent annual growth rate as per advice at the time (circa 2016) from RMS and Council.

Any comments including your thoughts as to existing traffic related constraints, previous traffic related studies in the area that we may not be aware of, or other significant development that needs to be considered would be appreciated.

Regards

Rhys Hazell
Associate Director
GTA Consultants
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Rhys.Hazell@gta.com.au
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## Ingrid Bissaker

**From:** Billy Yung <Billy.Yung@transport.nsw.gov.au>
**Sent:** Monday, 27 May 2019 8:09 AM
**To:** Rhys Hazell; Mark Ozinga
**Cc:** Ingrid Bissaker; Ashish Modessa
**Subject:** RE: Gosford Kibbleplex site redevelopment - 136 Donnison Street (SSD 9813) - Transport and Accessibility CRM:0102756

Hi Rhys

Thanks for contacting us in regards to the subject matter.

Refer to the current work outlined in your email, we encourage you to also consult with RMS in relation to the modelling and traffic data. In addition, as raised in our input to the SEARs, your transport study should provide necessary assessment to the PT accessibility and pedestrian connectivity in relation to the site as well as assessing the implications of displacing the existing parking demand during construction and post-development. It is also envisaged that a draft CTMP will be prepared and identified any potential impacts and outline how these impacts would be mitigated.

It is understood that the transport assessment is underway as part of the EIS preparation. We would welcome earlier consultation should your assessment identify any major issues. Alternatively we would provide our formal response during the EIS exhibition process.

Kind regards,

Billy Yung
Senior Transport Planner | Land Use Planning & Development
Customer Strategy & Technology
**Transport for NSW**

**T** 02 8922 1052 | **M** 0481 905 670
Level 26, 477 Pitt Street, Haymarket, NSW, 2008




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**From:** Rhys Hazell [mailto:Rhys.Hazell@gta.com.au]
**Sent:** Friday, 24 May 2019 12:51 PM
**To:** Billy Yung
**Cc:** Ingrid Bissaker; Ashish Modessa
**Subject:** Gosford Kibbleplex site redevelopment - 136 Donnison Street (SSD 9813) - Transport and Accessibility CRM:0102756

Hi Billy,

Thanks for the discussion earlier this week in relation to the Gosford Kibbleplex project.

As discussed, the site (SSD9813) is currently subject to a SSDA and following submission of the SEARs (Section 8. Transport and Accessibility being relevant), we seek any further comments and/ or specifics that TfNSW may wish to raise prior to submission.

We are continuing to progress our scope as part of the transport assessment. This includes updating our traffic survey data at key intersections in Gosford CBD, including the Henry Parry Drive signalised intersections at Donnison Street and William Street. There is select existing congestion around Donnison Street (supported by site observations) and having recently received the traffic survey data, we will naturally run SIDRA modelling to accurately reflect existing conditions prior to assigning future development traffic. Travel mode choice together with on-site car parking, loading facilities and pedestrian and bicycle facilities will all form part of our assessment. An overview sustainable travel plan will also be detailed. We are also working with the project team to further develop the architectural plans.

Please respond (via email) as you require and happy to discuss should you have any further queries.

Regards

Rhys Hazell
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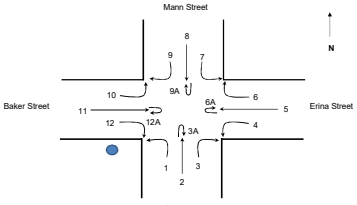
# B. SURVEY RESULTS

B

austraffic

Client : GTA Consultants
Job : Gosford IC Survey
Day/Date : Thursday, 16 May 2019
Survey Location : Mann Street/ Erina Street
Weather : Fine





AM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
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| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 7:30 - 7:45 | 11 | 0 | 11 | 88 | 6 | 94 | 33 | 0 | 33 | 0 | 0 | 0 | 8 | 0 | 8 | 4 | 1 | 5 | 12 | 1 | 13 | 0 | 0 | 0 | 13 | 0 | 13 | 74 | 4 | 78 | 29 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284 | 7:30 - 8:30 | 1306 |
| 7:45 - 8:00 | 6 | 0 | 6 | 117 | 7 | 124 | 53 | 0 | 53 | 0 | 0 | 0 | 5 | 0 | 5 | 5 | 0 | 5 | 22 | 0 | 22 | 0 | 0 | 0 | 13 | 0 | 13 | 73 | 13 | 86 | 29 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 343 | 7:45 - 8:45 | 1406 |
| 8:00 - 8:15 | 11 | 0 | 11 | 98 | 8 | 106 | 42 | 0 | 42 | 0 | 0 | 0 | 4 | 0 | 4 | 9 | 0 | 9 | 14 | 1 | 15 | 0 | 0 | 0 | 22 | 0 | 22 | 67 | 8 | 75 | 45 | 1 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 8:00 - 9:00 | 1483 |
| 8:15 - 8:30 | 11 | 0 | 11 | 107 | 14 | 121 | 49 | 0 | 49 | 0 | 0 | 0 | 5 | 0 | 5 | 5 | 0 | 5 | 14 | 0 | 14 | 0 | 0 | 0 | 21 | 0 | 21 | 79 | 9 | 88 | 35 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 349 | 8:15 - 9:15 | 1533 |
| 8:30 - 8:45 | 15 | 0 | 15 | 93 | 11 | 104 | 46 | 0 | 46 | 0 | 0 | 0 | 5 | 0 | 5 | 8 | 0 | 8 | 15 | 3 | 18 | 0 | 0 | 0 | 31 | 0 | 31 | 97 | 8 | 105 | 52 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 384 | 8:30 - 9:30 | 1527 |
| 8:45 - 9:00 | 17 | 0 | 17 | 103 | 8 | 111 | 57 | 0 | 57 | 0 | 0 | 0 | 7 | 1 | 8 | 15 | 1 | 16 | 10 | 4 | 14 | 0 | 0 | 0 | 50 | 0 | 50 | 94 | 12 | 106 | 41 | 0 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 420 | AM Peak | 1533 |
| 9:00 - 9:15 | 20 | 0 | 20 | 88 | 10 | 98 | 53 | 0 | 53 | 0 | 0 | 0 | 11 | 0 | 11 | 6 | 0 | 6 | 19 | 4 | 23 | 0 | 0 | 0 | 42 | 0 | 42 | 86 | 11 | 97 | 29 | 0 | 29 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 380 | | |
| 9:15 - 9:30 | 19 | 0 | 19 | 70 | 7 | 77 | 44 | 0 | 44 | 0 | 0 | 0 | 14 | 1 | 15 | 9 | 0 | 9 | 23 | 5 | 28 | 0 | 0 | 0 | 36 | 0 | 36 | 81 | 9 | 90 | 24 | 1 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 343 | | |
| Total | 110 | 0 | 110 | 764 | 71 | 835 | 377 | 0 | 377 | 0 | 0 | 0 | 59 | 2 | 61 | 61 | 2 | 63 | 129 | 18 | 147 | 0 | 0 | 0 | 228 | 0 | 228 | 651 | 74 | 725 | 284 | 2 | 286 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2833 | | |
| AM Peak | 63 | 0 | 63 | 391 | 43 | 434 | 205 | 0 | 205 | 0 | 0 | 0 | 28 | 1 | 29 | 34 | 1 | 35 | 58 | 11 | 69 | 0 | 0 | 0 | 144 | 0 | 144 | 356 | 40 | 396 | 157 | 0 | 157 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1533 | | |

PM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 16:15 - 16:30 | 8 | 0 | 8 | 110 | 8 | 118 | 35 | 0 | 35 | 0 | 0 | 0 | 28 | 1 | 29 | 21 | 0 | 21 | 19 | 6 | 25 | 0 | 0 | 0 | 26 | 0 | 26 | 95 | 6 | 101 | 22 | 1 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 386 | 16:15 - 17:15 | 1533 |
| 16:30 - 16:45 | 11 | 0 | 11 | 115 | 5 | 120 | 24 | 0 | 24 | 0 | 0 | 0 | 17 | 0 | 17 | 13 | 0 | 13 | 21 | 4 | 25 | 0 | 0 | 0 | 20 | 0 | 20 | 100 | 5 | 105 | 32 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 367 | 16:30 - 17:30 | 1504 |
| 16:45 - 17:00 | 9 | 0 | 9 | 114 | 4 | 118 | 28 | 1 | 29 | 0 | 0 | 0 | 15 | 1 | 16 | 15 | 0 | 15 | 20 | 7 | 27 | 0 | 0 | 0 | 27 | 0 | 27 | 121 | 4 | 125 | 29 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 395 | 16:45 - 17:45 | 1437 |
| 17:00 - 17:15 | 14 | 0 | 14 | 119 | 3 | 122 | 35 | 0 | 35 | 0 | 0 | 0 | 25 | 0 | 25 | 11 | 0 | 11 | 12 | 2 | 14 | 0 | 0 | 0 | 24 | 0 | 24 | 111 | 9 | 120 | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 385 | 17:00 - 18:00 | 1315 |
| 17:15 - 17:30 | 10 | 0 | 10 | 112 | 5 | 117 | 32 | 0 | 32 | 0 | 0 | 0 | 16 | 1 | 17 | 5 | 0 | 5 | 22 | 5 | 27 | 0 | 0 | 0 | 21 | 0 | 21 | 101 | 2 | 103 | 25 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 357 | 17:15 - 18:15 | 1208 |
| 17:30 - 17:45 | 6 | 0 | 6 | 95 | 2 | 97 | 18 | 0 | 18 | 0 | 0 | 0 | 13 | 1 | 14 | 11 | 0 | 11 | 15 | 4 | 19 | 0 | 0 | 0 | 27 | 0 | 27 | 77 | 6 | 83 | 25 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 300 | PM Peak | 1533 |
| 17:45 - 18:00 | 3 | 0 | 3 | 77 | 3 | 80 | 23 | 0 | 23 | 0 | 0 | 0 | 12 | 0 | 12 | 4 | 0 | 4 | 16 | 4 | 20 | 0 | 0 | 0 | 25 | 0 | 25 | 75 | 4 | 79 | 27 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 273 | | |
| 18:00 - 18:15 | 6 | 0 | 6 | 89 | 6 | 95 | 21 | 0 | 21 | 0 | 0 | 0 | 6 | 0 | 6 | 9 | 0 | 9 | 16 | 5 | 21 | 0 | 0 | 0 | 22 | 0 | 22 | 78 | 3 | 81 | 17 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 278 | | |
| Total | 67 | 0 | 67 | 831 | 36 | 867 | 216 | 1 | 217 | 0 | 0 | 0 | 132 | 4 | 136 | 89 | 0 | 89 | 141 | 37 | 178 | 0 | 0 | 0 | 192 | 0 | 192 | 758 | 39 | 797 | 197 | 1 | 198 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2741 | | |
| PM Peak | 42 | 0 | 42 | 458 | 20 | 478 | 122 | 1 | 123 | 0 | 0 | 0 | 85 | 2 | 87 | 60 | 0 | 60 | 72 | 19 | 91 | 0 | 0 | 0 | 97 | 0 | 97 | 427 | 24 | 451 | 103 | 1 | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1533 | | |

HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 7:30 - 8:30 | 39 | 0 | 39 | 410 | 35 | 445 | 177 | 0 | 177 | 0 | 0 | 0 | 22 | 0 | 22 | 23 | 1 | 24 | 62 | 2 | 64 | 0 | 0 | 0 | 69 | 0 | 69 | 293 | 34 | 327 | 138 | 1 | 139 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1233 | 73 | 1306 |
| 7:45 - 8:45 | 43 | 0 | 43 | 415 | 40 | 455 | 190 | 0 | 190 | 0 | 0 | 0 | 19 | 0 | 19 | 27 | 0 | 27 | 65 | 4 | 69 | 0 | 0 | 0 | 87 | 0 | 87 | 316 | 38 | 354 | 161 | 1 | 162 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1323 | 83 | 1406 |
| 8:00 - 9:00 | 54 | 0 | 54 | 401 | 41 | 442 | 194 | 0 | 194 | 0 | 0 | 0 | 21 | 1 | 22 | 37 | 1 | 38 | 53 | 8 | 61 | 0 | 0 | 0 | 124 | 0 | 124 | 337 | 37 | 374 | 173 | 1 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1394 | 89 | 1483 |
| 8:15 - 9:15 | 63 | 0 | 63 | 391 | 43 | 434 | 205 | 0 | 205 | 0 | 0 | 0 | 28 | 1 | 29 | 34 | 1 | 35 | 58 | 11 | 69 | 0 | 0 | 0 | 144 | 0 | 144 | 356 | 40 | 396 | 157 | 0 | 157 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1437 | 96 | 1533 |
| 8:30 - 9:30 | 71 | 0 | 71 | 354 | 36 | 390 | 200 | 0 | 200 | 0 | 0 | 0 | 37 | 2 | 39 | 38 | 1 | 39 | 67 | 16 | 83 | 0 | 0 | 0 | 159 | 0 | 159 | 358 | 40 | 398 | 146 | 1 | 147 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1431 | 96 | 1527 |

HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 16:15 - 17:15 | 42 | 0 | 42 | 458 | 20 | 478 | 122 | 1 | 123 | 0 | 0 | 0 | 85 | 2 | 87 | 60 | 0 | 60 | 72 | 19 | 91 | 0 | 0 | 0 | 97 | 0 | 97 | 427 | 24 | 451 | 103 | 1 | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1466 | 67 | 1533 |
| 16:30 - 17:30 | 44 | 0 | 44 | 460 | 17 | 477 | 119 | 1 | 120 | 0 | 0 | 0 | 73 | 2 | 75 | 44 | 0 | 44 | 75 | 18 | 93 | 0 | 0 | 0 | 92 | 0 | 92 | 433 | 20 | 453 | 106 | 0 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1446 | 58 | 1504 |
| 16:45 - 17:45 | 39 | 0 | 39 | 440 | 14 | 454 | 113 | 1 | 114 | 0 | 0 | 0 | 69 | 3 | 72 | 42 | 0 | 42 | 69 | 18 | 87 | 0 | 0 | 0 | 99 | 0 | 99 | 410 | 21 | 431 | 99 | 0 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1380 | 57 | 1437 |
| 17:00 - 18:00 | 33 | 0 | 33 | 403 | 13 | 416 | 108 | 0 | 108 | 0 | 0 | 0 | 66 | 2 | 68 | 31 | 0 | 31 | 65 | 15 | 80 | 0 | 0 | 0 | 97 | 0 | 97 | 364 | 21 | 385 | 97 | 0 | 97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1264 | 51 | 1315 |
| 17:15 - 18:15 | 25 | 0 | 25 | 373 | 16 | 389 | 94 | 0 | 94 | 0 | 0 | 0 | 47 | 2 | 49 | 29 | 0 | 29 | 69 | 18 | 87 | 0 | 0 | 0 | 95 | 0 | 95 | 331 | 15 | 346 | 94 | 0 | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1157 | 51 | 1208 |

austraffic

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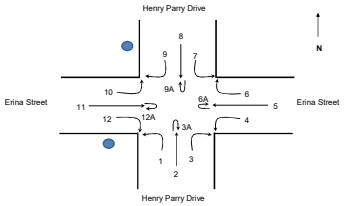
| Client | : GTA Consultants |
| Job | : Gosford IC Survey |
| Day/Date | : Thursday, 16 May 2019 |
| Survey Location | : Henry Parry Drive/ Erina Street |
| Weather | : Fine |




**AM**

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 7:30 - 7:45 | 46 | 1 | 47 | 105 | 3 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 0 | 7 | 9 | 0 | 9 | 0 | 0 | 0 | 28 | 0 | 28 | 90 | 4 | 94 | 8 | 0 | 8 | 0 | 0 | 0 | 4 | 0 | 4 | 16 | 0 | 16 | 20 | 0 | 20 | 0 | 0 | 0 | 342 | 7:30 - 8:30 | 1661 |
| 7:45 - 8:00 | 59 | 0 | 59 | 118 | 4 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 7 | 0 | 7 | 0 | 0 | 0 | 36 | 0 | 36 | 128 | 4 | 132 | 16 | 0 | 16 | 0 | 0 | 0 | 7 | 0 | 7 | 9 | 0 | 9 | 22 | 0 | 22 | 0 | 0 | 0 | 418 | 7:45 - 8:45 | 1794 |
| 8:00 - 8:15 | 62 | 0 | 62 | 113 | 1 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 0 | 10 | 4 | 0 | 4 | 0 | 0 | 0 | 44 | 0 | 44 | 149 | 4 | 153 | 10 | 0 | 10 | 0 | 0 | 0 | 10 | 0 | 10 | 17 | 0 | 17 | 37 | 0 | 37 | 0 | 0 | 0 | 462 | 8:00 - 9:00 | 1834 |
| 8:15 - 8:30 | 49 | 0 | 49 | 110 | 3 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 8 | 0 | 8 | 0 | 0 | 0 | 29 | 0 | 29 | 174 | 5 | 179 | 7 | 0 | 7 | 0 | 0 | 0 | 12 | 0 | 12 | 16 | 0 | 16 | 20 | 0 | 20 | 0 | 0 | 0 | 439 | 8:15 - 9:15 | 1833 |
| 8:30 - 8:45 | 63 | 1 | 64 | 105 | 4 | 109 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 11 | 6 | 0 | 6 | 0 | 0 | 0 | 26 | 0 | 26 | 166 | 3 | 169 | 21 | 0 | 21 | 0 | 0 | 0 | 11 | 0 | 11 | 16 | 0 | 16 | 42 | 0 | 42 | 0 | 0 | 0 | 475 | 8:30 - 9:30 | 1837 |
| 8:45 - 9:00 | 68 | 1 | 69 | 97 | 3 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 10 | 0 | 10 | 8 | 0 | 8 | 0 | 0 | 0 | 24 | 0 | 24 | 158 | 5 | 163 | 14 | 0 | 14 | 0 | 0 | 0 | 10 | 0 | 10 | 21 | 0 | 21 | 37 | 0 | 37 | 0 | 0 | 0 | 458 | AM Peak | 1837 |
| 9:00 - 9:15 | 75 | 1 | 76 | 113 | 1 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 8 | 5 | 0 | 5 | 0 | 0 | 0 | 13 | 0 | 13 | 139 | 5 | 144 | 17 | 1 | 18 | 0 | 0 | 0 | 10 | 0 | 10 | 20 | 0 | 20 | 53 | 0 | 53 | 0 | 0 | 0 | 461 | | |
| 9:15 - 9:30 | 73 | 2 | 75 | 136 | 1 | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 7 | 0 | 7 | 4 | 0 | 4 | 0 | 0 | 0 | 18 | 0 | 18 | 124 | 1 | 125 | 21 | 0 | 21 | 0 | 0 | 0 | 10 | 0 | 10 | 16 | 0 | 16 | 27 | 0 | 27 | 0 | 0 | 0 | 443 | | |
| Total | 495 | 6 | 501 | 897 | 20 | 917 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 66 | 1 | 67 | 51 | 0 | 51 | 0 | 0 | 0 | 218 | 0 | 218 | 1128 | 31 | 1159 | 114 | 1 | 115 | 0 | 0 | 0 | 74 | 0 | 74 | 131 | 0 | 131 | 258 | 0 | 258 | 0 | 0 | 0 | 3498 | | |
| AM Peak | 279 | 5 | 284 | 451 | 9 | 460 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 35 | 1 | 36 | 23 | 0 | 23 | 0 | 0 | 0 | 81 | 0 | 81 | 587 | 14 | 601 | 73 | 1 | 74 | 0 | 0 | 0 | 41 | 0 | 41 | 73 | 0 | 73 | 159 | 0 | 159 | 0 | 0 | 0 | 1837 | | |

**PM**

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 16:15 - 16:30 | 47 | 1 | 48 | 151 | 2 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 10 | 1 | 11 | 17 | 0 | 17 | 0 | 0 | 0 | 9 | 1 | 10 | 154 | 3 | 157 | 10 | 0 | 10 | 0 | 0 | 0 | 7 | 0 | 7 | 9 | 0 | 9 | 67 | 0 | 67 | 0 | 0 | 0 | 494 | 16:15 - 17:15 | 1943 |
| 16:30 - 16:45 | 50 | 0 | 50 | 115 | 3 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 13 | 0 | 13 | 23 | 0 | 23 | 0 | 0 | 0 | 8 | 0 | 8 | 169 | 1 | 170 | 10 | 0 | 10 | 0 | 0 | 0 | 8 | 0 | 8 | 13 | 0 | 13 | 71 | 0 | 71 | 0 | 0 | 0 | 487 | 16:30 - 17:30 | 1903 |
| 16:45 - 17:00 | 49 | 1 | 50 | 142 | 2 | 144 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 0 | 10 | 16 | 0 | 16 | 0 | 0 | 0 | 12 | 0 | 12 | 162 | 2 | 164 | 7 | 0 | 7 | 0 | 0 | 0 | 8 | 0 | 8 | 7 | 0 | 7 | 58 | 0 | 58 | 0 | 0 | 0 | 477 | 16:45 - 17:45 | 1874 |
| 17:00 - 17:15 | 42 | 1 | 43 | 144 | 0 | 144 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 25 | 0 | 25 | 0 | 0 | 0 | 10 | 0 | 10 | 153 | 1 | 154 | 10 | 0 | 10 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 0 | 6 | 84 | 0 | 84 | 0 | 0 | 0 | 485 | 17:00 - 18:00 | 1836 |
| 17:15 - 17:30 | 45 | 0 | 45 | 120 | 2 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 5 | 0 | 5 | 17 | 0 | 17 | 0 | 0 | 0 | 11 | 0 | 11 | 136 | 1 | 137 | 9 | 0 | 9 | 0 | 0 | 0 | 7 | 0 | 7 | 10 | 0 | 10 | 88 | 0 | 88 | 0 | 0 | 0 | 454 | 17:15 - 18:15 | 1713 |
| 17:30 - 17:45 | 36 | 2 | 38 | 125 | 3 | 128 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 12 | 0 | 12 | 18 | 0 | 18 | 0 | 0 | 0 | 2 | 0 | 2 | 165 | 0 | 165 | 11 | 0 | 11 | 0 | 0 | 0 | 12 | 0 | 12 | 8 | 0 | 8 | 61 | 0 | 61 | 0 | 0 | 0 | 458 | PM Peak | 1943 |
| 17:45 - 18:00 | 41 | 0 | 41 | 127 | 1 | 128 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 0 | 6 | 10 | 0 | 10 | 0 | 0 | 0 | 5 | 0 | 5 | 168 | 0 | 168 | 8 | 0 | 8 | 0 | 0 | 0 | 8 | 0 | 8 | 6 | 0 | 6 | 57 | 0 | 57 | 0 | 0 | 0 | 439 | | |
| 18:00 - 18:15 | 34 | 0 | 34 | 108 | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 10 | 1 | 11 | 11 | 0 | 11 | 0 | 0 | 0 | 6 | 0 | 6 | 127 | 0 | 127 | 4 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 4 | 4 | 0 | 4 | 51 | 0 | 51 | 0 | 0 | 0 | 362 | | |
| Total | 344 | 5 | 349 | 1032 | 13 | 1045 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 | 73 | 2 | 75 | 137 | 0 | 137 | 0 | 0 | 0 | 63 | 1 | 64 | 1234 | 8 | 1242 | 69 | 0 | 69 | 0 | 0 | 0 | 56 | 0 | 56 | 63 | 0 | 63 | 537 | 0 | 537 | 0 | 0 | 0 | 3656 | | |
| PM Peak | 188 | 3 | 191 | 552 | 7 | 559 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 40 | 1 | 41 | 81 | 0 | 81 | 0 | 0 | 0 | 39 | 1 | 40 | 638 | 7 | 645 | 37 | 0 | 37 | 0 | 0 | 0 | 25 | 0 | 25 | 35 | 0 | 35 | 280 | 0 | 280 | 0 | 0 | 0 | 1943 | | |

**HOURLY FLOW**

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 7:30 - 8:30 | 216 | 1 | 217 | 446 | 11 | 457 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 31 | 0 | 31 | 28 | 0 | 28 | 0 | 0 | 0 | 137 | 0 | 137 | 541 | 17 | 558 | 41 | 0 | 41 | 0 | 0 | 0 | 33 | 0 | 33 | 58 | 0 | 58 | 99 | 0 | 99 | 0 | 0 | 0 | 1632 | 29 | 1661 |
| 7:45 - 8:45 | 233 | 1 | 234 | 446 | 12 | 458 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 35 | 0 | 35 | 25 | 0 | 25 | 0 | 0 | 0 | 135 | 0 | 135 | 617 | 16 | 633 | 54 | 0 | 54 | 0 | 0 | 0 | 40 | 0 | 40 | 58 | 0 | 58 | 121 | 0 | 121 | 0 | 0 | 0 | 1765 | 29 | 1794 |
| 8:00 - 9:00 | 242 | 2 | 244 | 425 | 11 | 436 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 37 | 0 | 37 | 26 | 0 | 26 | 0 | 0 | 0 | 123 | 0 | 123 | 647 | 17 | 664 | 52 | 0 | 52 | 0 | 0 | 0 | 43 | 0 | 43 | 70 | 0 | 70 | 136 | 0 | 136 | 0 | 0 | 0 | 1804 | 30 | 1834 |
| 8:15 - 9:15 | 255 | 3 | 258 | 425 | 11 | 436 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 34 | 1 | 35 | 27 | 0 | 27 | 0 | 0 | 0 | 92 | 0 | 92 | 637 | 18 | 655 | 59 | 1 | 60 | 0 | 0 | 0 | 43 | 0 | 43 | 73 | 0 | 73 | 152 | 0 | 152 | 0 | 0 | 0 | 1799 | 34 | 1833 |
| 8:30 - 9:30 | 279 | 5 | 284 | 451 | 9 | 460 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 35 | 1 | 36 | 23 | 0 | 23 | 0 | 0 | 0 | 81 | 0 | 81 | 587 | 14 | 601 | 73 | 1 | 74 | 0 | 0 | 0 | 41 | 0 | 41 | 73 | 0 | 73 | 159 | 0 | 159 | 0 | 0 | 0 | 1807 | 30 | 1837 |

**HOURLY FLOW**

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 16:15 - 17:15 | 188 | 3 | 191 | 552 | 7 | 559 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 40 | 1 | 41 | 81 | 0 | 81 | 0 | 0 | 0 | 39 | 1 | 40 | 638 | 7 | 645 | 37 | 0 | 37 | 0 | 0 | 0 | 25 | 0 | 25 | 35 | 0 | 35 | 280 | 0 | 280 | 0 | 0 | 0 | 1924 | 19 | 1943 |
| 16:30 - 17:30 | 186 | 2 | 188 | 521 | 7 | 528 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 35 | 0 | 35 | 81 | 0 | 81 | 0 | 0 | 0 | 41 | 0 | 41 | 620 | 5 | 625 | 36 | 0 | 36 | 0 | 0 | 0 | 25 | 0 | 25 | 36 | 0 | 36 | 301 | 0 | 301 | 0 | 0 | 0 | 1889 | 14 | 1903 |
| 16:45 - 17:45 | 172 | 4 | 176 | 531 | 7 | 538 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 34 | 0 | 34 | 76 | 0 | 76 | 0 | 0 | 0 | 35 | 0 | 35 | 616 | 4 | 620 | 37 | 0 | 37 | 0 | 0 | 0 | 29 | 0 | 29 | 31 | 0 | 31 | 291 | 0 | 291 | 0 | 0 | 0 | 1859 | 15 | 1874 |
| 17:00 - 18:00 | 164 | 3 | 167 | 516 | 6 | 522 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 30 | 0 | 30 | 70 | 0 | 70 | 0 | 0 | 0 | 28 | 0 | 28 | 622 | 2 | 624 | 38 | 0 | 38 | 0 | 0 | 0 | 29 | 0 | 29 | 30 | 0 | 30 | 290 | 0 | 290 | 0 | 0 | 0 | 1825 | 11 | 1836 |
| 17:15 - 18:15 | 156 | 2 | 158 | 480 | 6 | 486 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 33 | 1 | 34 | 56 | 0 | 56 | 0 | 0 | 0 | 24 | 0 | 24 | 596 | 1 | 597 | 32 | 0 | 32 | 0 | 0 | 0 | 31 | 0 | 31 | 28 | 0 | 28 | 257 | 0 | 257 | 0 | 0 | 0 | 1703 | 10 | 1713 |

austraffic

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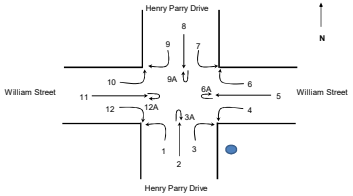
| Client | : GTA Consultants |
| Job | : Gosford IC Survey |
| Day/Date | : Thursday, 16 May 2019 |
| Survey Location | : Henry Parry Drive/ William Street |
| Weather | : Fine |





AM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 7:30 - 7:45 | 7 | 0 | 7 | 151 | 3 | 154 | 29 | 2 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 7 | 0 | 7 | 107 | 4 | 111 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 8 | 1 | 0 | 1 | 10 | 0 | 10 | 0 | 0 | 0 | 331 | 7:30 - 8:30 | 1542 |
| 7:45 - 8:00 | 6 | 0 | 6 | 164 | 4 | 168 | 32 | 0 | 32 | 0 | 0 | 0 | 4 | 0 | 4 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 8 | 139 | 4 | 143 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 4 | 0 | 4 | 1 | 0 | 1 | 371 | 7:45 - 8:45 | 1649 |
| 8:00 - 8:15 | 6 | 0 | 6 | 161 | 2 | 163 | 36 | 0 | 36 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 8 | 0 | 8 | 186 | 1 | 187 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 1 | 0 | 1 | 7 | 0 | 7 | 0 | 0 | 0 | 426 | 8:00 - 9:00 | 1722 |
| 8:15 - 8:30 | 9 | 0 | 9 | 156 | 2 | 158 | 39 | 0 | 39 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 3 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 4 | 181 | 5 | 186 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 3 | 0 | 3 | 1 | 1 | 2 | 0 | 0 | 0 | 414 | 8:15 - 9:15 | 1718 |
| 8:30 - 8:45 | 8 | 1 | 9 | 155 | 5 | 160 | 25 | 0 | 25 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 7 | 204 | 2 | 206 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 438 | 8:30 - 9:30 | 1742 |
| 8:45 - 9:00 | 9 | 0 | 9 | 149 | 2 | 151 | 29 | 0 | 29 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 7 | 1 | 8 | 0 | 0 | 0 | 18 | 0 | 18 | 184 | 8 | 192 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 11 | 4 | 0 | 4 | 16 | 0 | 16 | 0 | 0 | 0 | 444 | AM Peak | 1742 |
| 9:00 - 9:15 | 10 | 0 | 10 | 158 | 2 | 160 | 25 | 0 | 25 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 7 | 0 | 7 | 0 | 0 | 0 | 13 | 0 | 13 | 169 | 6 | 175 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 2 | 0 | 2 | 12 | 1 | 13 | 0 | 0 | 0 | 422 | | |
| 9:15 - 9:30 | 9 | 1 | 10 | 183 | 3 | 186 | 23 | 1 | 24 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 8 | 0 | 8 | 153 | 1 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 18 | 2 | 0 | 2 | 18 | 2 | 20 | 0 | 0 | 0 | 438 | | |
| Total | 64 | 2 | 66 | 1277 | 23 | 1300 | 238 | 3 | 241 | 0 | 0 | 0 | 30 | 0 | 30 | 2 | 1 | 3 | 39 | 1 | 40 | 0 | 0 | 0 | 73 | 0 | 73 | 1323 | 31 | 1354 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 2 | 81 | 14 | 0 | 14 | 77 | 4 | 81 | 1 | 0 | 1 | 3284 | | |
| AM Peak | 36 | 2 | 38 | 645 | 12 | 657 | 102 | 1 | 103 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 1 | 1 | 26 | 1 | 27 | 0 | 0 | 0 | 46 | 0 | 46 | 710 | 17 | 727 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 1 | 57 | 8 | 0 | 8 | 55 | 3 | 58 | 0 | 0 | 0 | 1742 | | |

PM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 16:15 - 16:30 | 10 | 0 | 10 | 148 | 3 | 151 | 8 | 0 | 8 | 0 | 0 | 0 | 26 | 0 | 26 | 0 | 0 | 0 | 22 | 0 | 22 | 0 | 0 | 0 | 5 | 0 | 5 | 224 | 3 | 227 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 | 2 | 0 | 2 | 35 | 0 | 35 | 0 | 0 | 0 | 508 | 16:15 - 17:15 | 1976 |
| 16:30 - 16:45 | 8 | 0 | 8 | 118 | 3 | 121 | 3 | 0 | 3 | 0 | 0 | 0 | 34 | 0 | 34 | 0 | 0 | 0 | 23 | 0 | 23 | 0 | 0 | 0 | 7 | 0 | 7 | 227 | 1 | 228 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 25 | 2 | 0 | 2 | 24 | 0 | 24 | 0 | 0 | 0 | 475 | 16:30 - 17:30 | 1934 |
| 16:45 - 17:00 | 7 | 0 | 7 | 151 | 3 | 154 | 6 | 0 | 6 | 0 | 0 | 0 | 29 | 0 | 29 | 0 | 0 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 2 | 0 | 2 | 223 | 2 | 225 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 27 | 3 | 0 | 3 | 29 | 0 | 29 | 0 | 0 | 0 | 495 | 16:45 - 17:45 | 1906 |
| 17:00 - 17:15 | 6 | 0 | 6 | 141 | 1 | 142 | 8 | 0 | 8 | 0 | 0 | 0 | 24 | 0 | 24 | 0 | 1 | 1 | 26 | 0 | 26 | 0 | 0 | 0 | 5 | 0 | 5 | 232 | 1 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 | 1 | 0 | 1 | 33 | 0 | 33 | 0 | 0 | 0 | 498 | 17:00 - 18:00 | 1866 |
| 17:15 - 17:30 | 4 | 0 | 4 | 114 | 2 | 116 | 7 | 0 | 7 | 0 | 0 | 0 | 26 | 0 | 26 | 0 | 0 | 0 | 28 | 0 | 28 | 0 | 0 | 0 | 3 | 0 | 3 | 220 | 1 | 221 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 25 | 2 | 0 | 2 | 34 | 0 | 34 | 0 | 0 | 0 | 466 | 17:15 - 18:15 | 1726 |
| 17:30 - 17:45 | 6 | 0 | 6 | 123 | 5 | 128 | 5 | 0 | 5 | 0 | 0 | 0 | 16 | 0 | 16 | 0 | 0 | 0 | 11 | 0 | 11 | 0 | 0 | 0 | 3 | 0 | 3 | 223 | 0 | 223 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 26 | 3 | 0 | 3 | 26 | 0 | 26 | 0 | 0 | 0 | 447 | PM Peak | 1976 |
| 17:45 - 18:00 | 6 | 0 | 6 | 140 | 1 | 141 | 2 | 0 | 2 | 0 | 0 | 0 | 10 | 0 | 10 | 1 | 0 | 1 | 10 | 0 | 10 | 0 | 0 | 0 | 6 | 0 | 6 | 229 | 0 | 229 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 | 3 | 0 | 3 | 28 | 0 | 28 | 0 | 0 | 0 | 455 | | |
| 18:00 - 18:15 | 1 | 0 | 1 | 122 | 0 | 122 | 2 | 0 | 2 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 2 | 0 | 2 | 181 | 1 | 182 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 18 | 1 | 19 | 0 | 0 | 0 | 358 | | |
| Total | 48 | 0 | 48 | 1057 | 18 | 1075 | 41 | 0 | 41 | 0 | 0 | 0 | 172 | 0 | 172 | 1 | 1 | 2 | 141 | 0 | 141 | 0 | 0 | 0 | 33 | 0 | 33 | 1759 | 9 | 1768 | 0 | 0 | 0 | 0 | 0 | 0 | 178 | 0 | 178 | 16 | 0 | 16 | 227 | 1 | 228 | 0 | 0 | 0 | 3702 | | |
| PM Peak | 31 | 0 | 31 | 558 | 10 | 568 | 25 | 0 | 25 | 0 | 0 | 0 | 113 | 0 | 113 | 0 | 1 | 1 | 84 | 0 | 84 | 0 | 0 | 0 | 19 | 0 | 19 | 906 | 7 | 913 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 93 | 8 | 0 | 8 | 121 | 0 | 121 | 0 | 0 | 0 | 1976 | | |

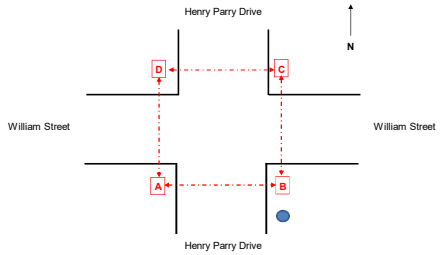
HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 7:30 - 8:30 | 28 | 0 | 28 | 632 | 11 | 643 | 136 | 2 | 138 | 0 | 0 | 0 | 10 | 0 | 10 | 2 | 0 | 2 | 13 | 0 | 13 | 0 | 0 | 0 | 27 | 0 | 27 | 613 | 14 | 627 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 1 | 24 | 6 | 0 | 6 | 22 | 1 | 23 | 1 | 0 | 1 | 1513 | 29 | 1542 |
| 7:45 - 8:45 | 29 | 1 | 30 | 636 | 13 | 649 | 132 | 0 | 132 | 0 | 0 | 0 | 14 | 0 | 14 | 2 | 0 | 2 | 16 | 0 | 16 | 0 | 0 | 0 | 27 | 0 | 27 | 710 | 12 | 722 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 29 | 5 | 0 | 5 | 21 | 1 | 22 | 1 | 0 | 1 | 1622 | 27 | 1649 |
| 8:00 - 9:00 | 32 | 1 | 33 | 621 | 11 | 632 | 129 | 0 | 129 | 0 | 0 | 0 | 16 | 0 | 16 | 1 | 0 | 1 | 22 | 1 | 23 | 0 | 0 | 0 | 37 | 0 | 37 | 755 | 16 | 771 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 1 | 38 | 8 | 0 | 8 | 33 | 1 | 34 | 0 | 0 | 0 | 1691 | 31 | 1722 |
| 8:15 - 9:15 | 36 | 1 | 37 | 618 | 11 | 629 | 118 | 0 | 118 | 0 | 0 | 0 | 12 | 0 | 12 | 1 | 1 | 2 | 22 | 1 | 23 | 0 | 0 | 0 | 42 | 0 | 42 | 738 | 21 | 759 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 1 | 47 | 9 | 0 | 9 | 38 | 2 | 40 | 0 | 0 | 0 | 1680 | 38 | 1718 |
| 8:30 - 9:30 | 36 | 2 | 38 | 645 | 12 | 657 | 102 | 1 | 103 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 1 | 1 | 26 | 1 | 27 | 0 | 0 | 0 | 46 | 0 | 46 | 710 | 17 | 727 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 1 | 57 | 8 | 0 | 8 | 55 | 3 | 58 | 0 | 0 | 0 | 1704 | 38 | 1742 |

HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 16:15 - 17:15 | 31 | 0 | 31 | 558 | 10 | 568 | 25 | 0 | 25 | 0 | 0 | 0 | 113 | 0 | 113 | 0 | 1 | 1 | 84 | 0 | 84 | 0 | 0 | 0 | 19 | 0 | 19 | 906 | 7 | 913 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 93 | 8 | 0 | 8 | 121 | 0 | 121 | 0 | 0 | 0 | 1958 | 18 | 1976 |
| 16:30 - 17:30 | 25 | 0 | 25 | 524 | 9 | 533 | 24 | 0 | 24 | 0 | 0 | 0 | 113 | 0 | 113 | 0 | 1 | 1 | 90 | 0 | 90 | 0 | 0 | 0 | 17 | 0 | 17 | 902 | 5 | 907 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 0 | 96 | 8 | 0 | 8 | 120 | 0 | 120 | 0 | 0 | 0 | 1919 | 15 | 1934 |
| 16:45 - 17:45 | 23 | 0 | 23 | 529 | 11 | 540 | 26 | 0 | 26 | 0 | 0 | 0 | 95 | 0 | 95 | 0 | 1 | 1 | 78 | 0 | 78 | 0 | 0 | 0 | 13 | 0 | 13 | 898 | 4 | 902 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 0 | 97 | 9 | 0 | 9 | 122 | 0 | 122 | 0 | 0 | 0 | 1890 | 16 | 1906 |
| 17:00 - 18:00 | 22 | 0 | 22 | 518 | 9 | 527 | 22 | 0 | 22 | 0 | 0 | 0 | 76 | 0 | 76 | 1 | 1 | 2 | 75 | 0 | 75 | 0 | 0 | 0 | 17 | 0 | 17 | 904 | 2 | 906 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 0 | 89 | 9 | 0 | 9 | 121 | 0 | 121 | 0 | 0 | 0 | 1854 | 12 | 1866 |
| 17:15 - 18:15 | 17 | 0 | 17 | 499 | 8 | 507 | 16 | 0 | 16 | 0 | 0 | 0 | 59 | 0 | 59 | 1 | 0 | 1 | 57 | 0 | 57 | 0 | 0 | 0 | 14 | 0 | 14 | 853 | 2 | 855 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 0 | 85 | 8 | 0 | 8 | 106 | 1 | 107 | 0 | 0 | 0 | 1715 | 11 | 1726 |

| | |
|---|---|
| **Client** | **: GTA Consultants** |
| **Job** | **: Gosford IC Survey** |
| **Day/Date** | **: Thursday, 16 May 2019** |
| **Survey Location** | **: Henry Parry Drive/ William Street** |
| **Weather** | **: Fine** |





**AM**

| Time Period | PEDESTRIAN MOVEMENTS | | | | | | | | Total of all Movements |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| 7:30 - 7:45 | 2 | 24 | 0 | 0 | 2 | 0 | 1 | 1 | 30 |
| 7:45 - 8:00 | 5 | 44 | 0 | 0 | 2 | 0 | 0 | 3 | 54 |
| 8:00 - 8:15 | 2 | 31 | 0 | 0 | 5 | 1 | 0 | 1 | 40 |
| 8:15 - 8:30 | 2 | 45 | 0 | 0 | 6 | 7 | 0 | 2 | 62 |
| 8:30 - 8:45 | 2 | 39 | 0 | 1 | 5 | 3 | 1 | 0 | 51 |
| 8:45 - 9:00 | 2 | 10 | 0 | 1 | 8 | 6 | 1 | 0 | 28 |
| 9:00 - 9:15 | 0 | 10 | 0 | 4 | 10 | 4 | 0 | 1 | 29 |
| 9:15 - 9:30 | 5 | 7 | 1 | 1 | 10 | 10 | 0 | 0 | 34 |
| Total | 20 | 210 | 1 | 7 | 48 | 31 | 3 | 8 | 328 |
| AM Peak | 11 | 159 | 0 | 1 | 18 | 11 | 1 | 6 | 207 |

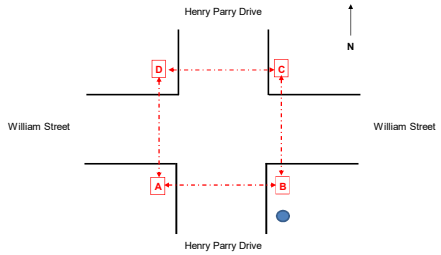
| Peak Hour Volume Determination | |
|---|---|
| 7:30 - 8:30 | 186 |
| 7:45 - 8:45 | 207 |
| 8:00 - 9:00 | 181 |
| 8:15 - 9:15 | 170 |
| 8:30 - 9:30 | 142 |
| AM Peak | 207 |

**PM**

| Time Period | PEDESTRIAN MOVEMENTS | | | | | | | | Total of all Movements |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| 16:15 - 16:30 | 19 | 3 | 0 | 0 | 4 | 5 | 1 | 3 | 35 |
| 16:30 - 16:45 | 15 | 0 | 0 | 1 | 5 | 13 | 0 | 1 | 35 |
| 16:45 - 17:00 | 12 | 3 | 0 | 1 | 8 | 4 | 0 | 1 | 29 |
| 17:00 - 17:15 | 34 | 1 | 0 | 0 | 7 | 4 | 0 | 0 | 46 |
| 17:15 - 17:30 | 32 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 37 |
| 17:30 - 17:45 | 13 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 18 |
| 17:45 - 18:00 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 18:00 - 18:15 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9 |
| Total | 141 | 7 | 0 | 2 | 25 | 33 | 3 | 6 | 217 |
| PM Peak | 93 | 4 | 0 | 2 | 21 | 23 | 1 | 3 | 147 |

| Peak Hour Volume Determination | |
|---|---|
| 16:15 - 17:15 | 145 |
| 16:30 - 17:30 | 147 |
| 16:45 - 17:45 | 130 |
| 17:00 - 18:00 | 109 |
| 17:15 - 18:15 | 72 |
| PM Peak | 147 |

| | |
|---|---|
| **Client** | **: GTA Consultants** |
| **Job** | **: Gosford IC Survey** |
| **Day/Date** | **: Thursday, 16 May 2019** |
| **Survey Location** | **: Henry Parry Drive/ William Street** |
| **Weather** | **: Fine** |





**HOURLY FLOW**

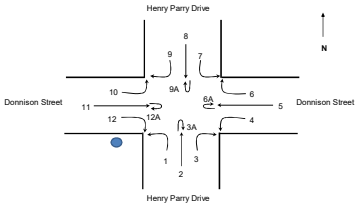
| TIME PERIOD | PEDESTRIAN MOVEMENTS | | | | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| **7:30 - 8:30** | 11 | 144 | 0 | 0 | 15 | 8 | 1 | 7 | **186** |
| **7:45 - 8:45** | 11 | 159 | 0 | 1 | 18 | 11 | 1 | 6 | **207** |
| **8:00 - 9:00** | 8 | 125 | 0 | 2 | 24 | 17 | 2 | 3 | **181** |
| **8:15 - 9:15** | 6 | 104 | 0 | 6 | 29 | 20 | 2 | 3 | **170** |
| **8:30 - 9:30** | 9 | 66 | 1 | 7 | 33 | 23 | 2 | 1 | **142** |

**HOURLY FLOW**

| TIME PERIOD | PEDESTRIAN MOVEMENTS | | | | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| **16:15 - 17:15** | 80 | 7 | 0 | 2 | 24 | 26 | 1 | 5 | **145** |
| **16:30 - 17:30** | 93 | 4 | 0 | 2 | 21 | 23 | 1 | 3 | **147** |
| **16:45 - 17:45** | 91 | 4 | 0 | 1 | 16 | 15 | 1 | 2 | **130** |
| **17:00 - 18:00** | 87 | 1 | 0 | 0 | 8 | 11 | 1 | 1 | **109** |
| **17:15 - 18:15** | 61 | 0 | 0 | 0 | 1 | 7 | 2 | 1 | **72** |

austraffic

Client : GTA Consultants
Job : Gosford IC Survey
Day/Date : Thursday, 16 May 2019
Survey Location : Henry Parry Drive/ Donnison Street
Weather : Fine




AM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 7:30 - 7:45 | 35 | 0 | 35 | 184 | 2 | 186 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 100 | 3 | 103 | 11 | 0 | 11 | 0 | 0 | 0 | 11 | 2 | 13 | 19 | 0 | 19 | 18 | 0 | 18 | 0 | 0 | 0 | 402 | 7:30 - 8:30 | 1901 |
| 7:45 - 8:00 | 23 | 0 | 23 | 187 | 4 | 191 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 141 | 5 | 146 | 9 | 0 | 9 | 0 | 0 | 0 | 10 | 0 | 10 | 47 | 0 | 47 | 24 | 0 | 24 | 0 | 0 | 0 | 466 | 7:45 - 8:45 | 2039 |
| 8:00 - 8:15 | 20 | 0 | 20 | 189 | 1 | 190 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 173 | 1 | 174 | 15 | 0 | 15 | 0 | 0 | 0 | 10 | 1 | 11 | 42 | 0 | 42 | 34 | 0 | 34 | 0 | 0 | 0 | 500 | 8:00 - 9:00 | 2065 |
| 8:15 - 8:30 | 18 | 0 | 18 | 190 | 2 | 192 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 175 | 5 | 180 | 14 | 1 | 15 | 0 | 0 | 0 | 21 | 0 | 21 | 44 | 0 | 44 | 30 | 0 | 30 | 0 | 0 | 0 | 533 | 8:15 - 9:15 | 2069 |
| 8:30 - 8:45 | 18 | 0 | 18 | 166 | 4 | 170 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 24 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 190 | 2 | 192 | 23 | 0 | 23 | 0 | 0 | 0 | 19 | 3 | 22 | 37 | 1 | 38 | 41 | 0 | 41 | 0 | 0 | 0 | 540 | 8:30 - 9:30 | 2042 |
| 8:45 - 9:00 | 25 | 0 | 25 | 164 | 1 | 165 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 14 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 168 | 8 | 176 | 29 | 0 | 29 | 0 | 0 | 0 | 22 | 0 | 22 | 21 | 1 | 22 | 26 | 0 | 26 | 0 | 0 | 0 | 492 | AM Peak | 2069 |
| 9:00 - 9:15 | 20 | 0 | 20 | 170 | 1 | 171 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 156 | 6 | 162 | 26 | 1 | 27 | 0 | 0 | 0 | 23 | 2 | 25 | 33 | 2 | 35 | 34 | 1 | 35 | 0 | 0 | 0 | 504 | | |
| 9:15 - 9:30 | 25 | 2 | 27 | 184 | 3 | 187 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 16 | 1 | 17 | 0 | 1 | 1 | 0 | 0 | 0 | 5 | 0 | 5 | 151 | 3 | 154 | 24 | 0 | 24 | 0 | 0 | 0 | 27 | 1 | 28 | 26 | 1 | 27 | 32 | 0 | 32 | 0 | 0 | 0 | 506 | | |
| Total | 184 | 2 | 186 | 1434 | 18 | 1452 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 1 | 49 | 124 | 1 | 125 | 0 | 1 | 1 | 0 | 0 | 0 | 24 | 0 | 24 | 1254 | 33 | 1287 | 151 | 2 | 153 | 0 | 0 | 0 | 143 | 9 | 152 | 269 | 5 | 274 | 239 | 1 | 240 | 0 | 0 | 0 | 3943 | | |
| AM Peak | 81 | 0 | 81 | 690 | 8 | 698 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 36 | 74 | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 689 | 21 | 710 | 92 | 2 | 94 | 0 | 0 | 0 | 85 | 5 | 90 | 135 | 4 | 139 | 131 | 1 | 132 | 0 | 0 | 0 | 2069 | | |

PM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 16:15 - 16:30 | 23 | 0 | 23 | 139 | 3 | 142 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 30 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 259 | 3 | 262 | 32 | 0 | 32 | 0 | 0 | 0 | 26 | 0 | 26 | 13 | 1 | 14 | 58 | 1 | 59 | 0 | 0 | 0 | 610 | 16:15 - 17:15 | 2495 |
| 16:30 - 16:45 | 21 | 0 | 21 | 107 | 3 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 31 | 35 | 1 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 248 | 1 | 249 | 24 | 0 | 24 | 0 | 0 | 0 | 24 | 0 | 24 | 11 | 0 | 11 | 79 | 0 | 79 | 0 | 0 | 0 | 586 | 16:30 - 17:30 | 2496 |
| 16:45 - 17:00 | 32 | 0 | 32 | 152 | 2 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 | 24 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 263 | 2 | 265 | 22 | 0 | 22 | 0 | 0 | 0 | 18 | 1 | 19 | 11 | 1 | 12 | 98 | 0 | 98 | 0 | 0 | 0 | 649 | 16:45 - 17:45 | 2516 |
| 17:00 - 17:15 | 31 | 0 | 31 | 136 | 0 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 40 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 260 | 1 | 261 | 29 | 0 | 29 | 0 | 0 | 0 | 16 | 1 | 17 | 10 | 0 | 10 | 100 | 1 | 101 | 0 | 0 | 0 | 650 | 17:00 - 18:00 | 2439 |
| 17:15 - 17:30 | 17 | 0 | 17 | 117 | 1 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 0 | 48 | 32 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 245 | 1 | 246 | 32 | 0 | 32 | 0 | 0 | 0 | 10 | 1 | 11 | 18 | 0 | 18 | 88 | 1 | 89 | 0 | 0 | 0 | 611 | 17:15 - 18:15 | 2239 |
| 17:30 - 17:45 | 20 | 0 | 20 | 130 | 4 | 134 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 | 22 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 242 | 0 | 242 | 20 | 0 | 20 | 0 | 0 | 0 | 8 | 1 | 9 | 18 | 0 | 18 | 118 | 0 | 118 | 0 | 0 | 0 | 606 | PM Peak | 2516 |
| 17:45 - 18:00 | 17 | 0 | 17 | 147 | 1 | 148 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 9 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 253 | 0 | 253 | 12 | 0 | 12 | 0 | 0 | 0 | 3 | 0 | 3 | 9 | 0 | 9 | 107 | 0 | 107 | 0 | 0 | 0 | 572 | | |
| 18:00 - 18:15 | 22 | 0 | 22 | 121 | 0 | 121 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 189 | 1 | 190 | 18 | 1 | 19 | 0 | 0 | 0 | 8 | 0 | 8 | 9 | 1 | 10 | 55 | 0 | 55 | 0 | 0 | 0 | 450 | | |
| Total | 183 | 0 | 183 | 1049 | 14 | 1063 | 0 | 0 | 0 | 0 | 0 | 0 | 185 | 0 | 185 | 204 | 1 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 1959 | 9 | 1968 | 189 | 1 | 190 | 0 | 0 | 0 | 113 | 4 | 117 | 99 | 3 | 102 | 703 | 3 | 706 | 0 | 0 | 0 | 4734 | | |
| PM Peak | 100 | 0 | 100 | 535 | 7 | 542 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 0 | 112 | 118 | 0 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 1010 | 4 | 1014 | 103 | 0 | 103 | 0 | 0 | 0 | 52 | 4 | 56 | 57 | 1 | 58 | 404 | 2 | 406 | 0 | 0 | 0 | 2516 | | |

HOURLY FLOW

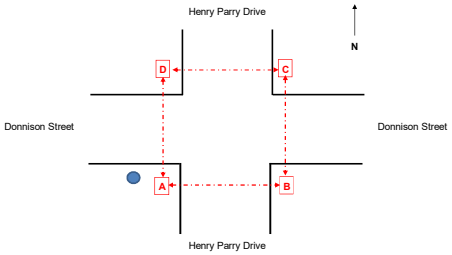
| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 7:30 - 8:30 | 96 | 0 | 96 | 750 | 9 | 759 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 1 | 18 | 54 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 589 | 14 | 603 | 49 | 1 | 50 | 0 | 0 | 0 | 52 | 3 | 55 | 152 | 0 | 152 | 106 | 0 | 106 | 0 | 0 | 0 | 1873 | 28 | 1901 |
| 7:45 - 8:45 | 79 | 0 | 79 | 732 | 11 | 743 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 1 | 25 | 65 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 679 | 13 | 692 | 61 | 1 | 62 | 0 | 0 | 0 | 60 | 4 | 64 | 170 | 1 | 171 | 129 | 0 | 129 | 0 | 0 | 0 | 2008 | 31 | 2039 |
| 8:00 - 9:00 | 81 | 0 | 81 | 709 | 8 | 717 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 31 | 66 | 0 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 706 | 16 | 722 | 81 | 1 | 82 | 0 | 0 | 0 | 72 | 4 | 76 | 144 | 2 | 146 | 131 | 0 | 131 | 0 | 0 | 0 | 2034 | 31 | 2065 |
| 8:15 - 9:15 | 81 | 0 | 81 | 690 | 8 | 698 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 36 | 74 | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 689 | 21 | 710 | 92 | 2 | 94 | 0 | 0 | 0 | 85 | 5 | 90 | 135 | 4 | 139 | 131 | 1 | 132 | 0 | 0 | 0 | 2028 | 41 | 2069 |
| 8:30 - 9:30 | 88 | 2 | 90 | 684 | 9 | 693 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 31 | 70 | 1 | 71 | 0 | 1 | 1 | 0 | 0 | 0 | 16 | 0 | 16 | 665 | 19 | 684 | 102 | 1 | 103 | 0 | 0 | 0 | 91 | 6 | 97 | 117 | 5 | 122 | 133 | 1 | 134 | 0 | 0 | 0 | 1997 | 45 | 2042 |

HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 16:15 - 17:15 | 107 | 0 | 107 | 534 | 8 | 542 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 93 | 129 | 1 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 1030 | 7 | 1037 | 107 | 0 | 107 | 0 | 0 | 0 | 84 | 2 | 86 | 45 | 2 | 47 | 335 | 2 | 337 | 0 | 0 | 0 | 2473 | 22 | 2495 |
| 16:30 - 17:30 | 101 | 0 | 101 | 512 | 6 | 518 | 0 | 0 | 0 | 0 | 0 | 0 | 121 | 0 | 121 | 131 | 1 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 1016 | 5 | 1021 | 107 | 0 | 107 | 0 | 0 | 0 | 68 | 3 | 71 | 50 | 1 | 51 | 365 | 2 | 367 | 0 | 0 | 0 | 2478 | 18 | 2496 |
| 16:45 - 17:45 | 100 | 0 | 100 | 535 | 7 | 542 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 0 | 112 | 118 | 0 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 1010 | 4 | 1014 | 103 | 0 | 103 | 0 | 0 | 0 | 52 | 4 | 56 | 57 | 1 | 58 | 404 | 2 | 406 | 0 | 0 | 0 | 2498 | 18 | 2516 |
| 17:00 - 18:00 | 85 | 0 | 85 | 530 | 6 | 536 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 0 | 103 | 103 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 1000 | 2 | 1002 | 93 | 0 | 93 | 0 | 0 | 0 | 37 | 3 | 40 | 55 | 0 | 55 | 413 | 2 | 415 | 0 | 0 | 0 | 2426 | 13 | 2439 |
| 17:15 - 18:15 | 76 | 0 | 76 | 515 | 6 | 521 | 0 | 0 | 0 | 0 | 0 | 0 | 92 | 0 | 92 | 75 | 0 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 929 | 2 | 931 | 82 | 1 | 83 | 0 | 0 | 0 | 29 | 2 | 31 | 54 | 1 | 55 | 368 | 1 | 369 | 0 | 0 | 0 | 2226 | 13 | 2239 |

austraffic

| | |
|---|---|
| Client | : GTA Consultants |
| Job | : Gosford IC Survey |
| Day/Date | : Thursday, 16 May 2019 |
| Survey Location | : Henry Parry Drive/ Donnison Street |
| Weather | : Fine |




AM

| Time Period | PEDESTRIAN MOVEMENTS | | | | | | | | Total of all Movements |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| 7:30 - 7:45 | 2 | 17 | 0 | 13 | 18 | 0 | 6 | 1 | 57 |
| 7:45 - 8:00 | 2 | 11 | 0 | 13 | 17 | 1 | 1 | 1 | 46 |
| 8:00 - 8:15 | 3 | 18 | 2 | 9 | 28 | 0 | 3 | 1 | 64 |
| 8:15 - 8:30 | 5 | 24 | 0 | 30 | 37 | 20 | 12 | 5 | 133 |
| 8:30 - 8:45 | 9 | 16 | 0 | 20 | 16 | 11 | 10 | 5 | 87 |
| 8:45 - 9:00 | 11 | 12 | 2 | 28 | 10 | 15 | 3 | 0 | 81 |
| 9:00 - 9:15 | 8 | 4 | 1 | 20 | 7 | 17 | 6 | 2 | 65 |
| 9:15 - 9:30 | 22 | 8 | 3 | 13 | 7 | 9 | 8 | 0 | 70 |
| Total | 62 | 110 | 8 | 146 | 140 | 73 | 49 | 15 | 603 |
| AM Peak | 33 | 56 | 3 | 98 | 70 | 63 | 31 | 12 | 366 |

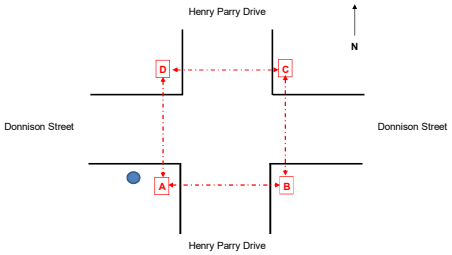
| Peak Hour Volume Determination | |
|---|---|
| 7:30 - 8:30 | 300 |
| 7:45 - 8:45 | 330 |
| 8:00 - 9:00 | 365 |
| 8:15 - 9:15 | 366 |
| 8:30 - 9:30 | 303 |
| AM Peak | 366 |

PM

| Time Period | PEDESTRIAN MOVEMENTS | | | | | | | | Total of all Movements |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| 16:15 - 16:30 | 15 | 6 | 16 | 0 | 8 | 18 | 1 | 4 | 68 |
| 16:30 - 16:45 | 11 | 3 | 8 | 1 | 2 | 22 | 1 | 8 | 56 |
| 16:45 - 17:00 | 20 | 0 | 19 | 1 | 1 | 10 | 0 | 7 | 58 |
| 17:00 - 17:15 | 17 | 5 | 9 | 1 | 3 | 31 | 1 | 15 | 82 |
| 17:15 - 17:30 | 12 | 3 | 9 | 1 | 2 | 4 | 2 | 5 | 38 |
| 17:30 - 17:45 | 2 | 1 | 2 | 0 | 0 | 6 | 1 | 1 | 13 |
| 17:45 - 18:00 | 4 | 0 | 1 | 1 | 1 | 7 | 0 | 1 | 15 |
| 18:00 - 18:15 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | 3 | 9 |
| Total | 82 | 18 | 64 | 5 | 17 | 102 | 7 | 44 | 339 |
| PM Peak | 63 | 14 | 52 | 3 | 14 | 81 | 3 | 34 | 264 |

| Peak Hour Volume Determination | |
|---|---|
| 16:15 - 17:15 | 264 |
| 16:30 - 17:30 | 234 |
| 16:45 - 17:45 | 191 |
| 17:00 - 18:00 | 148 |
| 17:15 - 18:15 | 75 |
| PM Peak | 264 |

| | |
|---|---|
| **Client** | **: GTA Consultants** |
| **Job** | **: Gosford IC Survey** |
| **Day/Date** | **: Thursday, 16 May 2019** |
| **Survey Location** | **: Henry Parry Drive/ Donnison Street** |
| **Weather** | **: Fine** |




**HOURLY FLOW**

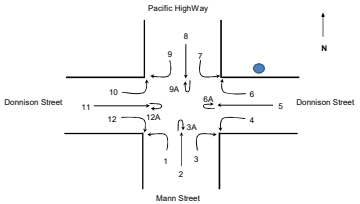
| TIME PERIOD | PEDESTRIAN MOVEMENTS | | | | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| **7:30 - 8:30** | 12 | 70 | 2 | 65 | 100 | 21 | 22 | 8 | **300** |
| **7:45 - 8:45** | 19 | 69 | 2 | 72 | 98 | 32 | 26 | 12 | **330** |
| **8:00 - 9:00** | 28 | 70 | 4 | 87 | 91 | 46 | 28 | 11 | **365** |
| **8:15 - 9:15** | 33 | 56 | 3 | 98 | 70 | 63 | 31 | 12 | **366** |
| **8:30 - 9:30** | 50 | 40 | 6 | 81 | 40 | 52 | 27 | 7 | **303** |

**HOURLY FLOW**

| TIME PERIOD | PEDESTRIAN MOVEMENTS | | | | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| **16:15 - 17:15** | 63 | 14 | 52 | 3 | 14 | 81 | 3 | 34 | **264** |
| **16:30 - 17:30** | 60 | 11 | 45 | 4 | 8 | 67 | 4 | 35 | **234** |
| **16:45 - 17:45** | 51 | 9 | 39 | 3 | 6 | 51 | 4 | 28 | **191** |
| **17:00 - 18:00** | 35 | 9 | 21 | 3 | 6 | 48 | 4 | 22 | **148** |
| **17:15 - 18:15** | 19 | 4 | 12 | 2 | 3 | 21 | 4 | 10 | **75** |

austraffic

| | |
|---|---|
| Client | : GTA Consultants |
| Job | : Gosford IC Survey |
| Day/Date | : Thursday, 16 May 2019 |
| Survey Location | : Mann Street / Donnison Street |
| Weather | : Fine |




AM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 7:30 - 7:45 | 4 | 0 | 4 | 70 | 7 | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 44 | 0 | 44 | 6 | 0 | 6 | 0 | 0 | 0 | 10 | 0 | 10 | 55 | 3 | 58 | 9 | 1 | 10 | 0 | 0 | 0 | 40 | 2 | 42 | 46 | 3 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 304 | 7:30 - 8:30 | 1465 |
| 7:45 - 8:00 | 11 | 0 | 11 | 103 | 6 | 109 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 29 | 0 | 29 | 5 | 0 | 5 | 0 | 0 | 0 | 19 | 2 | 21 | 49 | 7 | 56 | 12 | 2 | 14 | 0 | 0 | 0 | 54 | 1 | 55 | 89 | 0 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 392 | 7:45 - 8:45 | 1625 |
| 8:00 - 8:15 | 7 | 1 | 8 | 113 | 7 | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 26 | 0 | 26 | 4 | 0 | 4 | 0 | 0 | 0 | 11 | 0 | 11 | 47 | 7 | 54 | 17 | 1 | 18 | 0 | 0 | 0 | 40 | 0 | 40 | 91 | 0 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 380 | 8:00 - 9:00 | 1687 |
| 8:15 - 8:30 | 5 | 1 | 6 | 106 | 8 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 31 | 1 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 39 | 9 | 48 | 16 | 0 | 16 | 0 | 0 | 0 | 54 | 4 | 58 | 101 | 0 | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 389 | 8:15 - 9:15 | 1746 |
| 8:30 - 8:45 | 13 | 0 | 13 | 127 | 8 | 135 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 9 | 39 | 0 | 39 | 4 | 0 | 4 | 0 | 0 | 0 | 18 | 1 | 19 | 60 | 3 | 63 | 21 | 2 | 23 | 0 | 0 | 0 | 43 | 3 | 46 | 108 | 3 | 111 | 1 | 0 | 1 | 0 | 0 | 0 | 464 | 8:30 - 9:30 | 1761 |
| 8:45 - 9:00 | 7 | 0 | 7 | 110 | 7 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 12 | 36 | 0 | 36 | 3 | 0 | 3 | 0 | 0 | 0 | 16 | 0 | 16 | 56 | 11 | 67 | 32 | 2 | 34 | 0 | 0 | 0 | 55 | 0 | 55 | 105 | 2 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 454 | AM Peak | 1761 |
| 9:00 - 9:15 | 13 | 0 | 13 | 100 | 10 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 8 | 50 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 2 | 30 | 53 | 9 | 62 | 17 | 2 | 19 | 0 | 0 | 0 | 49 | 3 | 52 | 92 | 3 | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 439 | | |
| 9:15 - 9:30 | 15 | 0 | 15 | 73 | 7 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 34 | 1 | 35 | 6 | 0 | 6 | 0 | 0 | 0 | 19 | 1 | 20 | 45 | 7 | 52 | 24 | 1 | 25 | 0 | 0 | 0 | 63 | 1 | 64 | 91 | 4 | 95 | 2 | 0 | 2 | 0 | 0 | 0 | 404 | | |
| Total | 75 | 2 | 77 | 802 | 60 | 862 | 1 | 0 | 1 | 0 | 0 | 0 | 58 | 2 | 60 | 289 | 2 | 291 | 28 | 0 | 28 | 0 | 0 | 0 | 129 | 6 | 135 | 404 | 56 | 460 | 148 | 11 | 159 | 0 | 0 | 0 | 398 | 14 | 412 | 723 | 15 | 738 | 3 | 0 | 3 | 0 | 0 | 0 | 3226 | | |
| AM Peak | 48 | 0 | 48 | 410 | 32 | 442 | 1 | 0 | 1 | 0 | 0 | 0 | 37 | 2 | 39 | 159 | 1 | 160 | 13 | 0 | 13 | 0 | 0 | 0 | 81 | 4 | 85 | 214 | 30 | 244 | 94 | 7 | 101 | 0 | 0 | 0 | 210 | 7 | 217 | 396 | 12 | 408 | 3 | 0 | 3 | 0 | 0 | 0 | 1761 | | |

PM

| Time | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 16:15 - 16:30 | 17 | 0 | 17 | 79 | 4 | 83 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 71 | 0 | 71 | 6 | 0 | 6 | 0 | 0 | 0 | 29 | 0 | 29 | 56 | 5 | 61 | 30 | 0 | 30 | 0 | 0 | 0 | 80 | 3 | 83 | 77 | 2 | 79 | 0 | 0 | 0 | 0 | 0 | 0 | 465 | 16:15 - 17:15 | 1974 |
| 16:30 - 16:45 | 13 | 0 | 13 | 72 | 5 | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 60 | 1 | 61 | 3 | 0 | 3 | 0 | 0 | 0 | 23 | 0 | 23 | 68 | 3 | 71 | 27 | 2 | 29 | 0 | 0 | 0 | 84 | 2 | 86 | 109 | 0 | 109 | 0 | 0 | 0 | 0 | 0 | 0 | 477 | 16:30 - 17:30 | 2007 |
| 16:45 - 17:00 | 13 | 0 | 13 | 66 | 4 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 62 | 0 | 62 | 5 | 0 | 5 | 0 | 0 | 0 | 30 | 0 | 30 | 67 | 5 | 72 | 16 | 1 | 17 | 0 | 0 | 0 | 68 | 0 | 68 | 125 | 1 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 478 | 16:45 - 17:45 | 1985 |
| 17:00 - 17:15 | 12 | 0 | 12 | 91 | 4 | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 | 86 | 0 | 86 | 4 | 0 | 4 | 0 | 0 | 0 | 38 | 2 | 40 | 86 | 4 | 90 | 12 | 1 | 13 | 0 | 0 | 0 | 76 | 1 | 77 | 116 | 2 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 554 | 17:00 - 18:00 | 1864 |
| 17:15 - 17:30 | 9 | 0 | 9 | 77 | 5 | 82 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 16 | 61 | 0 | 61 | 3 | 0 | 3 | 0 | 0 | 0 | 18 | 0 | 18 | 85 | 5 | 90 | 31 | 0 | 31 | 0 | 0 | 0 | 73 | 1 | 74 | 114 | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 498 | 17:15 - 18:15 | 1630 |
| 17:30 - 17:45 | 8 | 0 | 8 | 80 | 1 | 81 | 1 | 0 | 1 | 0 | 0 | 0 | 12 | 0 | 12 | 52 | 0 | 52 | 2 | 0 | 2 | 0 | 0 | 0 | 20 | 0 | 20 | 65 | 3 | 68 | 23 | 1 | 24 | 0 | 0 | 0 | 51 | 0 | 51 | 135 | 1 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 455 | PM Peak | 2007 |
| 17:45 - 18:00 | 6 | 0 | 6 | 63 | 3 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 29 | 0 | 29 | 1 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 8 | 52 | 9 | 61 | 21 | 0 | 21 | 0 | 0 | 0 | 44 | 0 | 44 | 115 | 0 | 115 | 0 | 0 | 0 | 0 | 0 | 0 | 357 | | |
| 18:00 - 18:15 | 8 | 0 | 8 | 46 | 3 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 44 | 1 | 45 | 4 | 0 | 4 | 0 | 0 | 0 | 13 | 0 | 13 | 51 | 2 | 53 | 16 | 1 | 17 | 0 | 0 | 0 | 51 | 1 | 52 | 72 | 1 | 73 | 0 | 0 | 0 | 0 | 0 | 0 | 320 | | |
| Total | 86 | 0 | 86 | 574 | 29 | 603 | 1 | 0 | 1 | 0 | 0 | 0 | 85 | 0 | 85 | 465 | 2 | 467 | 28 | 0 | 28 | 0 | 0 | 0 | 179 | 2 | 181 | 530 | 36 | 566 | 176 | 6 | 182 | 0 | 0 | 0 | 527 | 8 | 535 | 863 | 7 | 870 | 0 | 0 | 0 | 0 | 0 | 0 | 3604 | | |
| PM Peak | 47 | 0 | 47 | 306 | 18 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 55 | 269 | 1 | 270 | 15 | 0 | 15 | 0 | 0 | 0 | 109 | 2 | 111 | 306 | 17 | 323 | 86 | 4 | 90 | 0 | 0 | 0 | 301 | 4 | 305 | 464 | 3 | 467 | 0 | 0 | 0 | 0 | 0 | 0 | 2007 | | |

HOURLY FLOW

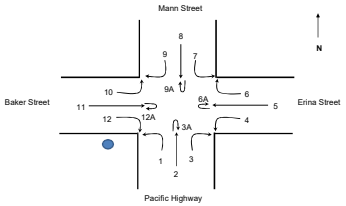
| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 7:30 - 8:30 | 27 | 2 | 29 | 392 | 28 | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 21 | 130 | 1 | 131 | 15 | 0 | 15 | 0 | 0 | 0 | 48 | 2 | 50 | 190 | 26 | 216 | 54 | 4 | 58 | 0 | 0 | 0 | 188 | 7 | 195 | 327 | 3 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 1392 | 73 | 1465 |
| 7:45 - 8:45 | 36 | 2 | 38 | 449 | 29 | 478 | 1 | 0 | 1 | 0 | 0 | 0 | 26 | 0 | 26 | 125 | 1 | 126 | 13 | 0 | 13 | 0 | 0 | 0 | 56 | 3 | 59 | 195 | 26 | 221 | 66 | 5 | 71 | 0 | 0 | 0 | 191 | 8 | 199 | 389 | 3 | 392 | 1 | 0 | 1 | 0 | 0 | 0 | 1548 | 77 | 1625 |
| 8:00 - 9:00 | 32 | 2 | 34 | 456 | 30 | 486 | 1 | 0 | 1 | 0 | 0 | 0 | 34 | 1 | 35 | 132 | 1 | 133 | 11 | 0 | 11 | 0 | 0 | 0 | 53 | 1 | 54 | 202 | 30 | 232 | 86 | 5 | 91 | 0 | 0 | 0 | 192 | 7 | 199 | 405 | 5 | 410 | 1 | 0 | 1 | 0 | 0 | 0 | 1605 | 82 | 1687 |
| 8:15 - 9:15 | 38 | 1 | 39 | 443 | 33 | 476 | 1 | 0 | 1 | 0 | 0 | 0 | 33 | 2 | 35 | 156 | 1 | 157 | 7 | 0 | 7 | 0 | 0 | 0 | 70 | 3 | 73 | 208 | 32 | 240 | 86 | 6 | 92 | 0 | 0 | 0 | 201 | 10 | 211 | 406 | 8 | 414 | 1 | 0 | 1 | 0 | 0 | 0 | 1650 | 96 | 1746 |
| 8:30 - 9:30 | 48 | 0 | 48 | 410 | 32 | 442 | 1 | 0 | 1 | 0 | 0 | 0 | 37 | 2 | 39 | 159 | 1 | 160 | 13 | 0 | 13 | 0 | 0 | 0 | 81 | 4 | 85 | 214 | 30 | 244 | 94 | 7 | 101 | 0 | 0 | 0 | 210 | 7 | 217 | 396 | 12 | 408 | 3 | 0 | 3 | 0 | 0 | 0 | 1666 | 95 | 1761 |

HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 16:15 - 17:15 | 55 | 0 | 55 | 308 | 17 | 325 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 45 | 279 | 1 | 280 | 18 | 0 | 18 | 0 | 0 | 0 | 120 | 2 | 122 | 277 | 17 | 294 | 85 | 4 | 89 | 0 | 0 | 0 | 308 | 6 | 314 | 427 | 5 | 432 | 0 | 0 | 0 | 0 | 0 | 0 | 1922 | 52 | 1974 |
| 16:30 - 17:30 | 47 | 0 | 47 | 306 | 18 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 55 | 269 | 1 | 270 | 15 | 0 | 15 | 0 | 0 | 0 | 109 | 2 | 111 | 306 | 17 | 323 | 86 | 4 | 90 | 0 | 0 | 0 | 301 | 4 | 305 | 464 | 3 | 467 | 0 | 0 | 0 | 0 | 0 | 0 | 1958 | 49 | 2007 |
| 16:45 - 17:45 | 42 | 0 | 42 | 314 | 14 | 328 | 1 | 0 | 1 | 0 | 0 | 0 | 62 | 0 | 62 | 261 | 0 | 261 | 14 | 0 | 14 | 0 | 0 | 0 | 106 | 2 | 108 | 303 | 17 | 320 | 82 | 3 | 85 | 0 | 0 | 0 | 268 | 2 | 270 | 490 | 4 | 494 | 0 | 0 | 0 | 0 | 0 | 0 | 1943 | 42 | 1985 |
| 17:00 - 18:00 | 35 | 0 | 35 | 311 | 13 | 324 | 1 | 0 | 1 | 0 | 0 | 0 | 53 | 0 | 53 | 228 | 0 | 228 | 10 | 0 | 10 | 0 | 0 | 0 | 84 | 2 | 86 | 288 | 21 | 309 | 87 | 2 | 89 | 0 | 0 | 0 | 244 | 2 | 246 | 480 | 3 | 483 | 0 | 0 | 0 | 0 | 0 | 0 | 1821 | 43 | 1864 |
| 17:15 - 18:15 | 31 | 0 | 31 | 266 | 12 | 278 | 1 | 0 | 1 | 0 | 0 | 0 | 40 | 0 | 40 | 186 | 1 | 187 | 10 | 0 | 10 | 0 | 0 | 0 | 59 | 0 | 59 | 253 | 19 | 272 | 91 | 2 | 93 | 0 | 0 | 0 | 219 | 2 | 221 | 436 | 2 | 438 | 0 | 0 | 0 | 0 | 0 | 0 | 1592 | 38 | 1630 |

austraffic

**Client** : GTA Consultants
**Job** : Gosford IC Survey
**Day/Date** : Saturday, 18 May 2019
**Survey Location** : Mann Street/ Erina Street
**Weather** : Fine





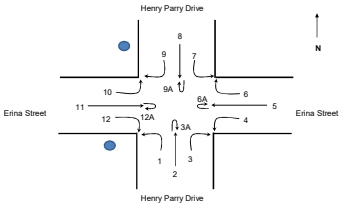
| Time Period | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 10:00 - 10:15 | 9 | 0 | 9 | 71 | 5 | 76 | 23 | 0 | 23 | 0 | 0 | 0 | 14 | 0 | 14 | 7 | 0 | 7 | 16 | 0 | 16 | 0 | 0 | 0 | 30 | 0 | 30 | 68 | 1 | 69 | 11 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 10:00 - 11:00 | 1049 |
| 10:15 - 10:30 | 13 | 0 | 13 | 68 | 6 | 74 | 28 | 1 | 29 | 0 | 0 | 0 | 6 | 0 | 6 | 8 | 0 | 8 | 7 | 5 | 12 | 0 | 0 | 0 | 24 | 0 | 24 | 58 | 6 | 64 | 14 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 244 | 10:15 - 11:15 | 1075 |
| 10:30 - 10:45 | 13 | 0 | 13 | 76 | 1 | 77 | 32 | 0 | 32 | 0 | 0 | 0 | 13 | 0 | 13 | 11 | 0 | 11 | 16 | 1 | 17 | 0 | 0 | 0 | 24 | 0 | 24 | 72 | 4 | 76 | 23 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 286 | 10:30 - 11:30 | 1101 |
| 10:45 - 11:00 | 8 | 0 | 8 | 75 | 6 | 81 | 26 | 0 | 26 | 0 | 0 | 0 | 8 | 0 | 8 | 8 | 0 | 8 | 15 | 3 | 18 | 0 | 0 | 0 | 26 | 0 | 26 | 67 | 4 | 71 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 264 | 10:45 - 11:45 | 1132 |
| 11:00 - 11:15 | 9 | 0 | 9 | 73 | 5 | 78 | 42 | 0 | 42 | 0 | 0 | 0 | 12 | 0 | 12 | 8 | 0 | 8 | 18 | 2 | 20 | 0 | 0 | 0 | 22 | 0 | 22 | 74 | 3 | 77 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 281 | 11:00 - 12:00 | 1137 |
| 11:15 - 11:30 | 11 | 0 | 11 | 75 | 2 | 77 | 22 | 0 | 22 | 0 | 0 | 0 | 13 | 0 | 13 | 8 | 1 | 9 | 20 | 6 | 26 | 0 | 0 | 0 | 26 | 0 | 26 | 62 | 6 | 68 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 270 | 11:15 - 12:15 | 1157 |
| 11:30 - 11:45 | 19 | 0 | 19 | 72 | 2 | 74 | 35 | 0 | 35 | 0 | 0 | 0 | 20 | 0 | 20 | 9 | 0 | 9 | 19 | 4 | 23 | 0 | 0 | 0 | 20 | 0 | 20 | 94 | 5 | 99 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 317 | 11:30 - 12:30 | 1171 |
| 11:45 - 12:00 | 7 | 0 | 7 | 79 | 6 | 85 | 29 | 0 | 29 | 0 | 0 | 0 | 16 | 0 | 16 | 6 | 0 | 6 | 11 | 4 | 15 | 0 | 0 | 0 | 20 | 1 | 21 | 72 | 5 | 77 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 11:45 - 12:45 | 1125 |
| 12:00 - 12:15 | 6 | 0 | 6 | 74 | 2 | 76 | 30 | 0 | 30 | 0 | 0 | 0 | 25 | 0 | 25 | 10 | 0 | 10 | 24 | 0 | 24 | 0 | 0 | 0 | 15 | 0 | 15 | 94 | 4 | 98 | 17 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 301 | 12:00 - 13:00 | 1133 |
| 12:15 - 12:30 | 13 | 0 | 13 | 85 | 4 | 89 | 25 | 0 | 25 | 0 | 0 | 0 | 18 | 0 | 18 | 13 | 0 | 13 | 13 | 4 | 17 | 0 | 0 | 0 | 18 | 0 | 18 | 70 | 4 | 74 | 17 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284 | Peak | 1171 |
| 12:30 - 12:45 | 15 | 1 | 16 | 62 | 2 | 64 | 22 | 0 | 22 | 0 | 0 | 0 | 22 | 0 | 22 | 7 | 0 | 7 | 30 | 1 | 31 | 0 | 0 | 0 | 12 | 0 | 12 | 75 | 6 | 81 | 15 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 271 | | |
| 12:45 - 13:00 | 9 | 0 | 9 | 82 | 6 | 88 | 42 | 0 | 42 | 0 | 0 | 0 | 16 | 0 | 16 | 10 | 0 | 10 | 16 | 3 | 19 | 0 | 0 | 0 | 16 | 0 | 16 | 63 | 4 | 67 | 9 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 277 | | |
| Total | 132 | 1 | 133 | 892 | 47 | 939 | 356 | 1 | 357 | 0 | 0 | 0 | 183 | 0 | 183 | 105 | 1 | 106 | 205 | 33 | 238 | 0 | 0 | 0 | 253 | 1 | 254 | 869 | 52 | 921 | 186 | 1 | 187 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3319 | | |
| Peak | 45 | 0 | 45 | 310 | 14 | 324 | 119 | 0 | 119 | 0 | 0 | 0 | 79 | 0 | 79 | 38 | 0 | 38 | 67 | 12 | 79 | 0 | 0 | 0 | 73 | 1 | 74 | 330 | 18 | 348 | 65 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1171 | | |

**HOURLY FLOW**

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 10:00 - 11:00 | 43 | 0 | 43 | 290 | 18 | 308 | 109 | 1 | 110 | 0 | 0 | 0 | 41 | 0 | 41 | 34 | 0 | 34 | 54 | 9 | 63 | 0 | 0 | 0 | 104 | 0 | 104 | 265 | 15 | 280 | 66 | 0 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1006 | 43 | 1049 |
| 10:15 - 11:15 | 43 | 0 | 43 | 292 | 18 | 310 | 128 | 1 | 129 | 0 | 0 | 0 | 39 | 0 | 39 | 35 | 0 | 35 | 56 | 11 | 67 | 0 | 0 | 0 | 96 | 0 | 96 | 271 | 17 | 288 | 68 | 0 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1028 | 47 | 1075 |
| 10:30 - 11:30 | 41 | 0 | 41 | 299 | 14 | 313 | 122 | 0 | 122 | 0 | 0 | 0 | 46 | 0 | 46 | 35 | 1 | 36 | 69 | 12 | 81 | 0 | 0 | 0 | 98 | 0 | 98 | 275 | 17 | 292 | 72 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1057 | 44 | 1101 |
| 10:45 - 11:45 | 47 | 0 | 47 | 295 | 15 | 310 | 125 | 0 | 125 | 0 | 0 | 0 | 53 | 0 | 53 | 33 | 1 | 34 | 72 | 15 | 87 | 0 | 0 | 0 | 94 | 0 | 94 | 297 | 18 | 315 | 67 | 0 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1083 | 49 | 1132 |
| 11:00 - 12:00 | 46 | 0 | 46 | 299 | 15 | 314 | 128 | 0 | 128 | 0 | 0 | 0 | 61 | 0 | 61 | 31 | 1 | 32 | 68 | 16 | 84 | 0 | 0 | 0 | 88 | 1 | 89 | 302 | 19 | 321 | 62 | 0 | 62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1085 | 52 | 1137 |
| 11:15 - 12:15 | 43 | 0 | 43 | 300 | 12 | 312 | 116 | 0 | 116 | 0 | 0 | 0 | 74 | 0 | 74 | 33 | 1 | 34 | 74 | 14 | 88 | 0 | 0 | 0 | 81 | 1 | 82 | 322 | 20 | 342 | 66 | 0 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1109 | 48 | 1157 |
| 11:30 - 12:30 | 45 | 0 | 45 | 310 | 14 | 324 | 119 | 0 | 119 | 0 | 0 | 0 | 79 | 0 | 79 | 38 | 0 | 38 | 67 | 12 | 79 | 0 | 0 | 0 | 73 | 1 | 74 | 330 | 18 | 348 | 65 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1126 | 45 | 1171 |
| 11:45 - 12:45 | 41 | 1 | 42 | 300 | 14 | 314 | 106 | 0 | 106 | 0 | 0 | 0 | 81 | 0 | 81 | 36 | 0 | 36 | 78 | 9 | 87 | 0 | 0 | 0 | 65 | 1 | 66 | 311 | 19 | 330 | 62 | 1 | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1080 | 45 | 1125 |
| 12:00 - 13:00 | 43 | 1 | 44 | 303 | 14 | 317 | 119 | 0 | 119 | 0 | 0 | 0 | 81 | 0 | 81 | 40 | 0 | 40 | 83 | 8 | 91 | 0 | 0 | 0 | 61 | 0 | 61 | 302 | 18 | 320 | 58 | 1 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1091 | 42 | 1133 |

austraffic

**Client** : GTA Consultants
**Job** : Gosford IC Survey
**Day/Date** : Saturday, 18 May 2019
**Survey Location** : Henry Parry Drive/ Erina Street
**Weather** : Fine



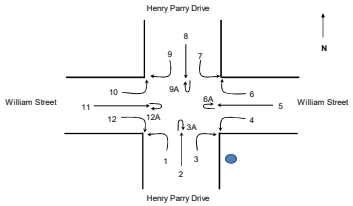

| Time Period | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 10:00 - 10:15 | 37 | 0 | 37 | 96 | 0 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 1 | 11 | 0 | 0 | 0 | 3 | 0 | 3 | 128 | 0 | 128 | 10 | 0 | 10 | 0 | 0 | 0 | 7 | 0 | 7 | 1 | 0 | 1 | 30 | 0 | 30 | 0 | 0 | 0 | 324 | 10:00 - 11:00 | 1458 |
| 10:15 - 10:30 | 32 | 1 | 33 | 123 | 2 | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 8 | 0 | 8 | 6 | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 6 | 147 | 0 | 147 | 8 | 0 | 8 | 0 | 0 | 0 | 8 | 0 | 8 | 3 | 0 | 3 | 31 | 0 | 31 | 0 | 0 | 0 | 377 | 10:15 - 11:15 | 1502 |
| 10:30 - 10:45 | 35 | 0 | 35 | 139 | 1 | 140 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 0 | 4 | 6 | 0 | 6 | 0 | 0 | 0 | 3 | 0 | 3 | 113 | 1 | 114 | 12 | 0 | 12 | 0 | 0 | 0 | 6 | 0 | 6 | 8 | 0 | 8 | 27 | 0 | 27 | 0 | 0 | 0 | 356 | 10:30 - 11:30 | 1486 |
| 10:45 - 11:00 | 34 | 0 | 34 | 127 | 2 | 129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 6 | 0 | 6 | 0 | 0 | 0 | 9 | 0 | 9 | 155 | 1 | 156 | 11 | 0 | 11 | 0 | 0 | 0 | 8 | 0 | 8 | 4 | 0 | 4 | 36 | 0 | 36 | 0 | 0 | 0 | 401 | 10:45 - 11:45 | 1526 |
| 11:00 - 11:15 | 40 | 0 | 40 | 113 | 1 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 12 | 11 | 1 | 12 | 0 | 0 | 0 | 5 | 0 | 5 | 127 | 1 | 128 | 12 | 0 | 12 | 0 | 0 | 0 | 4 | 0 | 4 | 6 | 0 | 6 | 35 | 0 | 35 | 0 | 0 | 0 | 368 | 11:00 - 12:00 | 1487 |
| 11:15 - 11:30 | 45 | 1 | 46 | 107 | 0 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 8 | 0 | 8 | 0 | 0 | 0 | 5 | 0 | 5 | 126 | 2 | 128 | 17 | 0 | 17 | 0 | 0 | 0 | 10 | 0 | 10 | 4 | 0 | 4 | 30 | 0 | 30 | 0 | 0 | 0 | 361 | 11:15 - 12:15 | 1499 |
| 11:30 - 11:45 | 43 | 1 | 44 | 154 | 1 | 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 6 | 5 | 0 | 5 | 0 | 0 | 0 | 6 | 1 | 7 | 131 | 1 | 132 | 12 | 0 | 12 | 0 | 0 | 0 | 3 | 0 | 3 | 5 | 0 | 5 | 27 | 0 | 27 | 0 | 0 | 0 | 396 | 11:30 - 12:30 | 1513 |
| 11:45 - 12:00 | 37 | 1 | 38 | 135 | 0 | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 7 | 0 | 7 | 0 | 0 | 0 | 6 | 0 | 6 | 124 | 0 | 124 | 7 | 0 | 7 | 0 | 0 | 0 | 4 | 0 | 4 | 3 | 0 | 3 | 32 | 1 | 33 | 0 | 0 | 0 | 362 | 11:45 - 12:45 | 1479 |
| 12:00 - 12:15 | 39 | 0 | 39 | 133 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 0 | 6 | 6 | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 6 | 133 | 2 | 135 | 13 | 0 | 13 | 0 | 0 | 0 | 3 | 0 | 3 | 3 | 0 | 3 | 35 | 0 | 35 | 0 | 0 | 0 | 380 | 12:00 - 13:00 | 1487 |
| 12:15 - 12:30 | 38 | 0 | 38 | 131 | 0 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0 | 3 | 6 | 0 | 6 | 0 | 0 | 0 | 4 | 0 | 4 | 130 | 0 | 130 | 17 | 0 | 17 | 0 | 0 | 0 | 6 | 0 | 6 | 3 | 0 | 3 | 36 | 0 | 36 | 0 | 0 | 0 | 375 | Peak | 1526 |
| 12:30 - 12:45 | 55 | 0 | 55 | 133 | 1 | 134 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 2 | 7 | 0 | 7 | 0 | 0 | 0 | 3 | 0 | 3 | 123 | 3 | 126 | 13 | 0 | 13 | 0 | 0 | 0 | 5 | 0 | 5 | 2 | 0 | 2 | 14 | 0 | 14 | 0 | 0 | 0 | 362 | | |
| 12:45 - 13:00 | 38 | 0 | 38 | 148 | 0 | 148 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 6 | 0 | 6 | 0 | 0 | 0 | 3 | 0 | 3 | 127 | 0 | 127 | 11 | 0 | 11 | 0 | 0 | 0 | 4 | 0 | 4 | 4 | 0 | 4 | 26 | 0 | 26 | 0 | 0 | 0 | 370 | | |
| Total | 473 | 4 | 477 | 1539 | 8 | 1547 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 62 | 2 | 64 | 84 | 2 | 86 | 0 | 0 | 0 | 59 | 1 | 60 | 1564 | 11 | 1575 | 143 | 0 | 143 | 0 | 0 | 0 | 68 | 0 | 68 | 46 | 0 | 46 | 359 | 1 | 360 | 0 | 0 | 0 | 4432 | | |
| Peak | 162 | 2 | 164 | 501 | 4 | 505 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 2 | 32 | 30 | 1 | 31 | 0 | 0 | 0 | 25 | 1 | 26 | 539 | 5 | 544 | 52 | 0 | 52 | 0 | 0 | 0 | 25 | 0 | 25 | 19 | 0 | 19 | 128 | 0 | 128 | 0 | 0 | 0 | 1526 | | |

HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 10:00 - 11:00 | 138 | 1 | 139 | 485 | 5 | 490 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 21 | 0 | 21 | 28 | 1 | 29 | 0 | 0 | 0 | 21 | 0 | 21 | 543 | 2 | 545 | 41 | 0 | 41 | 0 | 0 | 0 | 29 | 0 | 29 | 16 | 0 | 16 | 124 | 0 | 124 | 0 | 0 | 0 | 1449 | 9 | 1458 |
| 10:15 - 11:15 | 141 | 1 | 142 | 502 | 6 | 508 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 32 | 0 | 32 | 29 | 1 | 30 | 0 | 0 | 0 | 23 | 0 | 23 | 542 | 3 | 545 | 43 | 0 | 43 | 0 | 0 | 0 | 26 | 0 | 26 | 21 | 0 | 21 | 129 | 0 | 129 | 0 | 0 | 0 | 1491 | 11 | 1502 |
| 10:30 - 11:30 | 154 | 1 | 155 | 486 | 4 | 490 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 30 | 0 | 30 | 31 | 1 | 32 | 0 | 0 | 0 | 22 | 0 | 22 | 521 | 5 | 526 | 52 | 0 | 52 | 0 | 0 | 0 | 28 | 0 | 28 | 22 | 0 | 22 | 128 | 0 | 128 | 0 | 0 | 0 | 1475 | 11 | 1486 |
| 10:45 - 11:45 | 162 | 2 | 164 | 501 | 4 | 505 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 2 | 32 | 30 | 1 | 31 | 0 | 0 | 0 | 25 | 1 | 26 | 539 | 5 | 544 | 52 | 0 | 52 | 0 | 0 | 0 | 25 | 0 | 25 | 19 | 0 | 19 | 128 | 0 | 128 | 0 | 0 | 0 | 1511 | 15 | 1526 |
| 11:00 - 12:00 | 165 | 3 | 168 | 509 | 2 | 511 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 2 | 29 | 31 | 1 | 32 | 0 | 0 | 0 | 22 | 1 | 23 | 508 | 4 | 512 | 48 | 0 | 48 | 0 | 0 | 0 | 21 | 0 | 21 | 18 | 0 | 18 | 124 | 1 | 125 | 0 | 0 | 0 | 1473 | 14 | 1487 |
| 11:15 - 12:15 | 164 | 3 | 167 | 529 | 1 | 530 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 21 | 2 | 23 | 26 | 0 | 26 | 0 | 0 | 0 | 23 | 1 | 24 | 514 | 5 | 519 | 49 | 0 | 49 | 0 | 0 | 0 | 20 | 0 | 20 | 15 | 0 | 15 | 124 | 1 | 125 | 0 | 0 | 0 | 1486 | 13 | 1499 |
| 11:30 - 12:30 | 157 | 2 | 159 | 553 | 1 | 554 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 18 | 2 | 20 | 24 | 0 | 24 | 0 | 0 | 0 | 22 | 1 | 23 | 518 | 3 | 521 | 49 | 0 | 49 | 0 | 0 | 0 | 16 | 0 | 16 | 14 | 0 | 14 | 130 | 1 | 131 | 0 | 0 | 0 | 1503 | 10 | 1513 |
| 11:45 - 12:45 | 169 | 1 | 170 | 532 | 1 | 533 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 16 | 0 | 16 | 26 | 0 | 26 | 0 | 0 | 0 | 19 | 0 | 19 | 510 | 5 | 515 | 50 | 0 | 50 | 0 | 0 | 0 | 18 | 0 | 18 | 11 | 0 | 11 | 117 | 1 | 118 | 0 | 0 | 0 | 1471 | 8 | 1479 |
| 12:00 - 13:00 | 170 | 0 | 170 | 545 | 1 | 546 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 14 | 0 | 14 | 25 | 0 | 25 | 0 | 0 | 0 | 16 | 0 | 16 | 513 | 5 | 518 | 54 | 0 | 54 | 0 | 0 | 0 | 18 | 0 | 18 | 12 | 0 | 12 | 111 | 0 | 111 | 0 | 0 | 0 | 1481 | 6 | 1487 |

austraffic

**Client** : GTA Consultants
**Job** : Gosford IC Survey
**Day/Date** : Saturday, 18 May 2019
**Survey Location** : Henry Parry Drive/ William Street
**Weather** : Fine





| Time Period | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 10:00 - 10:15 | 7 | 0 | 7 | 108 | 0 | 108 | 6 | 0 | 6 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 1 | 1 | 4 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 4 | 152 | 0 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 1 | 0 | 1 | 23 | 1 | 24 | 0 | 0 | 0 | 327 | 10:00 - 11:00 | 1452 |
| 10:15 - 10:30 | 12 | 0 | 12 | 134 | 3 | 137 | 8 | 0 | 8 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 9 | 0 | 9 | 176 | 0 | 176 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 11 | 1 | 0 | 1 | 17 | 0 | 17 | 0 | 0 | 0 | 377 | 10:15 - 11:15 | 1491 |
| 10:30 - 10:45 | 7 | 0 | 7 | 156 | 0 | 156 | 6 | 0 | 6 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 8 | 0 | 8 | 136 | 1 | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 1 | 23 | 1 | 0 | 1 | 19 | 0 | 19 | 0 | 0 | 0 | 363 | 10:30 - 11:30 | 1470 |
| 10:45 - 11:00 | 4 | 0 | 4 | 135 | 2 | 137 | 7 | 0 | 7 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 5 | 0 | 5 | 0 | 0 | 0 | 12 | 0 | 12 | 179 | 1 | 180 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 3 | 0 | 3 | 21 | 0 | 21 | 0 | 0 | 0 | 385 | 10:45 - 11:45 | 1509 |
| 11:00 - 11:15 | 13 | 0 | 13 | 128 | 1 | 129 | 7 | 0 | 7 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 8 | 0 | 8 | 153 | 1 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 21 | 0 | 0 | 0 | 28 | 0 | 28 | 0 | 0 | 0 | 366 | 11:00 - 12:00 | 1497 |
| 11:15 - 11:30 | 8 | 0 | 8 | 134 | 1 | 135 | 4 | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 6 | 0 | 6 | 0 | 0 | 0 | 4 | 0 | 4 | 153 | 2 | 155 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 17 | 1 | 0 | 1 | 23 | 0 | 23 | 0 | 0 | 0 | 356 | 11:15 - 12:15 | 1514 |
| 11:30 - 11:45 | 8 | 0 | 8 | 164 | 2 | 166 | 7 | 0 | 7 | 0 | 0 | 0 | 8 | 1 | 9 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 6 | 0 | 6 | 152 | 1 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 28 | 2 | 0 | 2 | 21 | 0 | 21 | 0 | 0 | 0 | 402 | 11:30 - 12:30 | 1546 |
| 11:45 - 12:00 | 2 | 0 | 2 | 149 | 1 | 150 | 2 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 5 | 0 | 5 | 152 | 1 | 153 | 1 | 0 | 1 | 0 | 0 | 0 | 20 | 0 | 20 | 1 | 0 | 1 | 31 | 0 | 31 | 0 | 0 | 0 | 373 | 11:45 - 12:45 | 1523 |
| 12:00 - 12:15 | 6 | 0 | 6 | 147 | 0 | 147 | 3 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 12 | 0 | 12 | 157 | 2 | 159 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 21 | 1 | 0 | 1 | 30 | 0 | 30 | 0 | 0 | 0 | 383 | 12:00 - 13:00 | 1523 |
| 12:15 - 12:30 | 7 | 0 | 7 | 151 | 0 | 151 | 8 | 0 | 8 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 4 | 162 | 0 | 162 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 16 | 1 | 0 | 1 | 35 | 0 | 35 | 0 | 0 | 0 | 388 | Peak | 1546 |
| 12:30 - 12:45 | 3 | 0 | 3 | 171 | 1 | 172 | 3 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 138 | 3 | 141 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 23 | 0 | 0 | 0 | 32 | 0 | 32 | 0 | 0 | 0 | 379 | | |
| 12:45 - 13:00 | 7 | 0 | 7 | 154 | 0 | 154 | 5 | 0 | 5 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 152 | 0 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 21 | 0 | 0 | 0 | 29 | 0 | 29 | 0 | 0 | 0 | 373 | | |
| Total | 84 | 0 | 84 | 1731 | 11 | 1742 | 66 | 0 | 66 | 0 | 0 | 0 | 39 | 1 | 40 | 2 | 1 | 3 | 36 | 0 | 36 | 0 | 0 | 0 | 75 | 0 | 75 | 1862 | 12 | 1874 | 1 | 0 | 1 | 0 | 0 | 0 | 228 | 1 | 229 | 12 | 0 | 12 | 309 | 1 | 310 | 0 | 0 | 0 | 4472 | | |
| Peak | 23 | 0 | 23 | 611 | 3 | 614 | 20 | 0 | 20 | 0 | 0 | 0 | 17 | 1 | 18 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 27 | 0 | 27 | 623 | 4 | 627 | 1 | 0 | 1 | 0 | 0 | 0 | 85 | 0 | 85 | 5 | 0 | 5 | 117 | 0 | 117 | 0 | 0 | 0 | 1546 | | |

HOURLY FLOW

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 10:00 - 11:00 | 30 | 0 | 30 | 533 | 5 | 538 | 27 | 0 | 27 | 0 | 0 | 0 | 13 | 0 | 13 | 1 | 1 | 2 | 15 | 0 | 15 | 0 | 0 | 0 | 33 | 0 | 33 | 643 | 2 | 645 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 1 | 62 | 6 | 0 | 6 | 80 | 1 | 81 | 0 | 0 | 0 | 1442 | 10 | 1452 |
| 10:15 - 11:15 | 36 | 0 | 36 | 553 | 6 | 559 | 28 | 0 | 28 | 0 | 0 | 0 | 11 | 0 | 11 | 1 | 0 | 1 | 14 | 0 | 14 | 0 | 0 | 0 | 37 | 0 | 37 | 644 | 3 | 647 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 1 | 68 | 5 | 0 | 5 | 85 | 0 | 85 | 0 | 0 | 0 | 1481 | 10 | 1491 |
| 10:30 - 11:30 | 32 | 0 | 32 | 553 | 4 | 557 | 24 | 0 | 24 | 0 | 0 | 0 | 9 | 0 | 9 | 2 | 0 | 2 | 18 | 0 | 18 | 0 | 0 | 0 | 32 | 0 | 32 | 621 | 5 | 626 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 1 | 74 | 5 | 0 | 5 | 91 | 0 | 91 | 0 | 0 | 0 | 1460 | 10 | 1470 |
| 10:45 - 11:45 | 33 | 0 | 33 | 561 | 6 | 567 | 25 | 0 | 25 | 0 | 0 | 0 | 15 | 1 | 16 | 2 | 0 | 2 | 16 | 0 | 16 | 0 | 0 | 0 | 30 | 0 | 30 | 637 | 5 | 642 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 0 | 79 | 6 | 0 | 6 | 93 | 0 | 93 | 0 | 0 | 0 | 1497 | 12 | 1509 |
| 11:00 - 12:00 | 31 | 0 | 31 | 575 | 5 | 580 | 20 | 0 | 20 | 0 | 0 | 0 | 17 | 1 | 18 | 1 | 0 | 1 | 15 | 0 | 15 | 0 | 0 | 0 | 23 | 0 | 23 | 610 | 5 | 615 | 1 | 0 | 1 | 0 | 0 | 0 | 86 | 0 | 86 | 4 | 0 | 4 | 103 | 0 | 103 | 0 | 0 | 0 | 1486 | 11 | 1497 |
| 11:15 - 12:15 | 24 | 0 | 24 | 594 | 4 | 598 | 16 | 0 | 16 | 0 | 0 | 0 | 17 | 1 | 18 | 1 | 0 | 1 | 13 | 0 | 13 | 0 | 0 | 0 | 27 | 0 | 27 | 614 | 6 | 620 | 1 | 0 | 1 | 0 | 0 | 0 | 86 | 0 | 86 | 5 | 0 | 5 | 105 | 0 | 105 | 0 | 0 | 0 | 1503 | 11 | 1514 |
| 11:30 - 12:30 | 23 | 0 | 23 | 611 | 3 | 614 | 20 | 0 | 20 | 0 | 0 | 0 | 17 | 1 | 18 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 27 | 0 | 27 | 623 | 4 | 627 | 1 | 0 | 1 | 0 | 0 | 0 | 85 | 0 | 85 | 5 | 0 | 5 | 117 | 0 | 117 | 0 | 0 | 0 | 1538 | 8 | 1546 |
| 11:45 - 12:45 | 18 | 0 | 18 | 618 | 2 | 620 | 16 | 0 | 16 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 23 | 0 | 23 | 609 | 6 | 615 | 1 | 0 | 1 | 0 | 0 | 0 | 80 | 0 | 80 | 3 | 0 | 3 | 128 | 0 | 128 | 0 | 0 | 0 | 1515 | 8 | 1523 |
| 12:00 - 13:00 | 23 | 0 | 23 | 623 | 1 | 624 | 19 | 0 | 19 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 19 | 0 | 19 | 609 | 5 | 614 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 0 | 81 | 2 | 0 | 2 | 126 | 0 | 126 | 0 | 0 | 0 | 1517 | 6 | 1523 |

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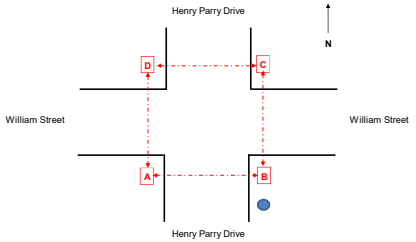
|---|---|
| **Client** | **: GTA Consultants** |
| **Job** | **: Gosford IC Survey** |
| **Day/Date** | **: Saturday, 18 May 2019** |
| **Survey Location** | **: Henry Parry Drive/ William Street** |
| **Weather** | **: Fine** |





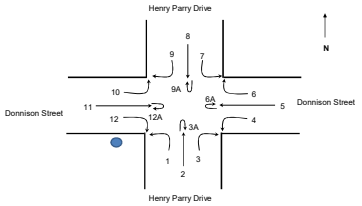
| Time Period | PEDESTRIAN MOVEMENTS | | | | | | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | | | |
| 10:00 - 10:15 | 0 | 0 | 0 | 0 | 4 | 7 | 2 | 1 | 14 | 10:00 - 11:00 | 41 |
| 10:15 - 10:30 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 2 | 13 | 10:15 - 11:15 | 46 |
| 10:30 - 10:45 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 10:30 - 11:30 | 40 |
| 10:45 - 11:00 | 0 | 2 | 0 | 3 | 5 | 1 | 0 | 0 | 11 | 10:45 - 11:45 | 44 |
| 11:00 - 11:15 | 0 | 0 | 0 | 0 | 10 | 6 | 0 | 3 | 19 | 11:00 - 12:00 | 41 |
| 11:15 - 11:30 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 7 | 11:15 - 12:15 | 25 |
| 11:30 - 11:45 | 0 | 0 | 0 | 3 | 3 | 1 | 0 | 0 | 7 | 11:30 - 12:30 | 22 |
| 11:45 - 12:00 | 0 | 0 | 0 | 0 | 4 | 2 | 1 | 1 | 8 | 11:45 - 12:45 | 19 |
| 12:00 - 12:15 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 12:00 - 13:00 | 17 |
| 12:15 - 12:30 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 4 | Peak | 46 |
| 12:30 - 12:45 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 4 | | |
| 12:45 - 13:00 | 0 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 6 | | |
| **Total** | **0** | **4** | **0** | **6** | **43** | **36** | **3** | **7** | **99** | | |
| **Peak** | **0** | **2** | **0** | **3** | **23** | **13** | **0** | **5** | **46** | | |

HOURLY FLOW

| TIME PERIOD | PEDESTRIAN MOVEMENTS | | | | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| 10:00 - 11:00 | 0 | 2 | 0 | 3 | 17 | 14 | 2 | 3 | 41 |
| 10:15 - 11:15 | 0 | 2 | 0 | 3 | 23 | 13 | 0 | 5 | 46 |
| 10:30 - 11:30 | 0 | 2 | 0 | 3 | 20 | 12 | 0 | 3 | 40 |
| 10:45 - 11:45 | 0 | 2 | 0 | 6 | 20 | 13 | 0 | 3 | 44 |
| 11:00 - 12:00 | 0 | 0 | 0 | 3 | 19 | 14 | 1 | 4 | 41 |
| 11:15 - 12:15 | 0 | 0 | 0 | 3 | 10 | 10 | 1 | 1 | 25 |
| 11:30 - 12:30 | 0 | 0 | 0 | 3 | 9 | 8 | 1 | 1 | 22 |
| 11:45 - 12:45 | 0 | 0 | 0 | 0 | 9 | 8 | 1 | 1 | 19 |
| 12:00 - 13:00 | 0 | 2 | 0 | 0 | 7 | 8 | 0 | 0 | 17 |

austraffic

**Client** : GTA Consultants
**Job** : Gosford IC Survey
**Day/Date** : Saturday, 18 May 2019
**Survey Location** : Henry Parry Drive/ Donnison Street
**Weather** : Fine



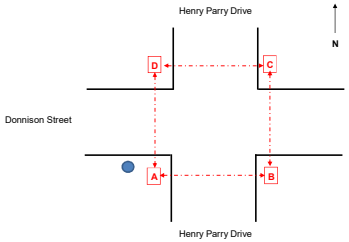

| Time Period | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 10:00 - 10:15 | 17 | 0 | 17 | 109 | 0 | 109 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 | 0 | 164 | 24 | 1 | 25 | 0 | 0 | 0 | 12 | 0 | 12 | 4 | 1 | 5 | 18 | 0 | 18 | 0 | 0 | 0 | 361 | 10:00 - 11:00 | 1595 |
| 10:15 - 10:30 | 34 | 0 | 34 | 150 | 3 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 14 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 170 | 0 | 170 | 25 | 0 | 25 | 0 | 0 | 0 | 10 | 0 | 10 | 9 | 0 | 9 | 20 | 1 | 21 | 0 | 0 | 0 | 439 | 10:15 - 11:15 | 1655 |
| 10:30 - 10:45 | 19 | 1 | 20 | 152 | 0 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 1 | 138 | 19 | 0 | 19 | 0 | 0 | 0 | 11 | 0 | 11 | 4 | 0 | 4 | 18 | 1 | 19 | 0 | 0 | 0 | 374 | 10:30 - 11:30 | 1622 |
| 10:45 - 11:00 | 21 | 1 | 22 | 136 | 2 | 138 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 174 | 0 | 174 | 23 | 0 | 23 | 0 | 0 | 0 | 11 | 0 | 11 | 4 | 1 | 5 | 27 | 0 | 27 | 0 | 0 | 0 | 421 | 10:45 - 11:45 | 1682 |
| 11:00 - 11:15 | 32 | 2 | 34 | 136 | 1 | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 153 | 2 | 155 | 27 | 0 | 27 | 0 | 0 | 0 | 12 | 0 | 12 | 11 | 1 | 12 | 23 | 0 | 23 | 0 | 0 | 0 | 421 | 11:00 - 12:00 | 1681 |
| 11:15 - 11:30 | 30 | 0 | 30 | 133 | 1 | 134 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 156 | 2 | 158 | 22 | 0 | 22 | 0 | 0 | 0 | 8 | 0 | 8 | 5 | 1 | 6 | 30 | 0 | 30 | 0 | 0 | 0 | 406 | 11:15 - 12:15 | 1689 |
| 11:30 - 11:45 | 22 | 0 | 22 | 159 | 1 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 11 | 0 | 11 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 3 | 163 | 2 | 165 | 10 | 0 | 10 | 0 | 0 | 0 | 18 | 1 | 19 | 7 | 0 | 7 | 26 | 1 | 27 | 0 | 0 | 0 | 434 | 11:30 - 12:30 | 1709 |
| 11:45 - 12:00 | 28 | 1 | 29 | 141 | 1 | 142 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 144 | 1 | 145 | 36 | 0 | 36 | 0 | 0 | 0 | 12 | 0 | 12 | 4 | 0 | 4 | 29 | 0 | 29 | 0 | 0 | 0 | 420 | 11:45 - 12:45 | 1694 |
| 12:00 - 12:15 | 31 | 0 | 31 | 153 | 0 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 11 | 1 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 168 | 2 | 170 | 20 | 0 | 20 | 0 | 0 | 0 | 11 | 0 | 11 | 3 | 0 | 3 | 20 | 0 | 20 | 0 | 0 | 0 | 429 | 12:00 - 13:00 | 1695 |
| 12:15 - 12:30 | 25 | 0 | 25 | 148 | 0 | 148 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 172 | 0 | 172 | 26 | 0 | 26 | 0 | 0 | 0 | 11 | 0 | 11 | 3 | 0 | 3 | 22 | 0 | 22 | 0 | 0 | 0 | 426 | Peak | 1709 |
| 12:30 - 12:45 | 26 | 1 | 27 | 152 | 1 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 10 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 143 | 3 | 146 | 21 | 0 | 21 | 0 | 0 | 0 | 22 | 0 | 22 | 5 | 0 | 5 | 29 | 0 | 29 | 0 | 0 | 0 | 419 | | |
| 12:45 - 13:00 | 16 | 0 | 16 | 150 | 0 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 10 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 157 | 0 | 157 | 28 | 0 | 28 | 0 | 0 | 0 | 17 | 0 | 17 | 9 | 0 | 9 | 24 | 1 | 25 | 0 | 0 | 0 | 421 | | |
| Total | 301 | 6 | 307 | 1719 | 10 | 1729 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 0 | 71 | 131 | 1 | 132 | 1 | 0 | 1 | 0 | 0 | 0 | 17 | 0 | 17 | 1901 | 13 | 1914 | 281 | 1 | 282 | 0 | 0 | 0 | 155 | 1 | 156 | 68 | 4 | 72 | 286 | 4 | 290 | 0 | 0 | 0 | 4971 | | |
| Peak | 106 | 1 | 107 | 601 | 2 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 30 | 48 | 1 | 49 | 1 | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 7 | 647 | 5 | 652 | 92 | 0 | 92 | 0 | 0 | 0 | 52 | 1 | 53 | 17 | 0 | 17 | 97 | 1 | 98 | 0 | 0 | 0 | 1709 | | |

**HOURLY FLOW**

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 10:00 - 11:00 | 91 | 2 | 93 | 547 | 5 | 552 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 42 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 645 | 1 | 646 | 91 | 1 | 92 | 0 | 0 | 0 | 44 | 0 | 44 | 21 | 2 | 23 | 83 | 2 | 85 | 0 | 0 | 0 | 1582 | 13 | 1595 |
| 10:15 - 11:15 | 106 | 4 | 110 | 574 | 6 | 580 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 16 | 48 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 634 | 3 | 637 | 94 | 0 | 94 | 0 | 0 | 0 | 44 | 0 | 44 | 28 | 2 | 30 | 88 | 2 | 90 | 0 | 0 | 0 | 1638 | 17 | 1655 |
| 10:30 - 11:30 | 102 | 4 | 106 | 557 | 4 | 561 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 21 | 42 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 620 | 5 | 625 | 91 | 0 | 91 | 0 | 0 | 0 | 42 | 0 | 42 | 24 | 3 | 27 | 98 | 1 | 99 | 0 | 0 | 0 | 1605 | 17 | 1622 |
| 10:45 - 11:45 | 105 | 3 | 108 | 564 | 5 | 569 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 25 | 47 | 0 | 47 | 1 | 0 | 1 | 0 | 0 | 0 | 11 | 0 | 11 | 646 | 6 | 652 | 82 | 0 | 82 | 0 | 0 | 0 | 49 | 1 | 50 | 27 | 3 | 30 | 106 | 1 | 107 | 0 | 0 | 0 | 1663 | 19 | 1682 |
| 11:00 - 12:00 | 112 | 3 | 115 | 569 | 4 | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 30 | 45 | 0 | 45 | 1 | 0 | 1 | 0 | 0 | 0 | 10 | 0 | 10 | 616 | 7 | 623 | 95 | 0 | 95 | 0 | 0 | 0 | 50 | 1 | 51 | 27 | 2 | 29 | 108 | 1 | 109 | 0 | 0 | 0 | 1663 | 18 | 1681 |
| 11:15 - 12:15 | 111 | 1 | 112 | 586 | 3 | 589 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 32 | 43 | 1 | 44 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 9 | 631 | 7 | 638 | 88 | 0 | 88 | 0 | 0 | 0 | 49 | 1 | 50 | 19 | 1 | 20 | 105 | 1 | 106 | 0 | 0 | 0 | 1674 | 15 | 1689 |
| 11:30 - 12:30 | 106 | 1 | 107 | 601 | 2 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 30 | 48 | 1 | 49 | 1 | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 7 | 647 | 5 | 652 | 92 | 0 | 92 | 0 | 0 | 0 | 52 | 1 | 53 | 17 | 0 | 17 | 97 | 1 | 98 | 0 | 0 | 0 | 1698 | 11 | 1709 |
| 11:45 - 12:45 | 110 | 2 | 112 | 594 | 2 | 596 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 27 | 47 | 1 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 627 | 6 | 633 | 103 | 0 | 103 | 0 | 0 | 0 | 56 | 0 | 56 | 15 | 0 | 15 | 100 | 0 | 100 | 0 | 0 | 0 | 1683 | 11 | 1694 |
| 12:00 - 13:00 | 98 | 1 | 99 | 603 | 1 | 604 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 26 | 44 | 1 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 640 | 5 | 645 | 95 | 0 | 95 | 0 | 0 | 0 | 61 | 0 | 61 | 20 | 0 | 20 | 95 | 1 | 96 | 0 | 0 | 0 | 1686 | 9 | 1695 |

austraffic

**Client** : GTA Consultants
**Job** : Gosford IC Survey
**Day/Date** : Saturday, 18 May 2019
**Survey Location** : Henry Parry Drive/ Donnison Street
**Weather** : Fine



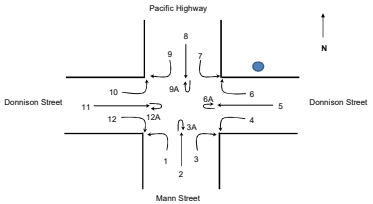

| Time Period | PEDESTRIAN MOVEMENTS | | | | | | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | | | |
| 10:00 - 10:15 | 0 | 6 | 0 | 1 | 1 | 1 | 0 | 3 | 12 | 10:00 - 11:00 | 73 |
| 10:15 - 10:30 | 4 | 1 | 0 | 0 | 2 | 0 | 5 | 4 | 16 | 10:15 - 11:15 | 82 |
| 10:30 - 10:45 | 3 | 4 | 1 | 0 | 2 | 0 | 2 | 4 | 16 | 10:30 - 11:30 | 91 |
| 10:45 - 11:00 | 4 | 3 | 2 | 4 | 2 | 0 | 3 | 11 | 29 | 10:45 - 11:45 | 96 |
| 11:00 - 11:15 | 5 | 3 | 2 | 2 | 3 | 3 | 2 | 1 | 21 | 11:00 - 12:00 | 88 |
| 11:15 - 11:30 | 0 | 0 | 5 | 4 | 8 | 7 | 1 | 0 | 25 | 11:15 - 12:15 | 74 |
| 11:30 - 11:45 | 2 | 3 | 2 | 1 | 0 | 4 | 7 | 2 | 21 | 11:30 - 12:30 | 57 |
| 11:45 - 12:00 | 2 | 4 | 1 | 1 | 4 | 2 | 3 | 4 | 21 | 11:45 - 12:45 | 54 |
| 12:00 - 12:15 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 1 | 7 | 12:00 - 13:00 | 39 |
| 12:15 - 12:30 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 4 | 8 | Peak | 96 |
| 12:30 - 12:45 | 2 | 1 | 1 | 5 | 1 | 6 | 1 | 1 | 18 | | |
| 12:45 - 13:00 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 1 | 6 | | |
| Total | 22 | 32 | 18 | 18 | 23 | 27 | 24 | 36 | 200 | | |
| Peak | 11 | 9 | 11 | 11 | 13 | 14 | 13 | 14 | 96 | | |

HOURLY FLOW

| TIME PERIOD | PEDESTRIAN MOVEMENTS | | | | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|
| | A - B | B - A | B - C | C - B | C - D | D - C | D - A | A - D | |
| 10:00 - 11:00 | 11 | 14 | 3 | 5 | 7 | 1 | 10 | 22 | 73 |
| 10:15 - 11:15 | 16 | 11 | 5 | 6 | 9 | 3 | 12 | 20 | 82 |
| 10:30 - 11:30 | 12 | 10 | 10 | 10 | 15 | 10 | 8 | 16 | 91 |
| 10:45 - 11:45 | 11 | 9 | 11 | 11 | 13 | 14 | 13 | 14 | 96 |
| 11:00 - 12:00 | 9 | 10 | 10 | 8 | 15 | 16 | 13 | 7 | 88 |
| 11:15 - 12:15 | 4 | 9 | 8 | 6 | 12 | 17 | 11 | 7 | 74 |
| 11:30 - 12:30 | 4 | 12 | 4 | 2 | 4 | 10 | 10 | 11 | 57 |
| 11:45 - 12:45 | 4 | 10 | 3 | 6 | 5 | 12 | 4 | 10 | 54 |
| 12:00 - 13:00 | 2 | 8 | 5 | 5 | 1 | 10 | 1 | 7 | 39 |

austraffic

**Client** : GTA Consultants
**Job** : Gosford IC Survey
**Day/Date** : Saturday, 18 May 2019
**Survey Location** : Mann Street / Donnison Street
**Weather** : Fine




| Time Period | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Total of all Movements | Peak Hour Volume Determination | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | | | |
| 10:00 - 10:15 | 3 | 1 | 4 | 69 | 0 | 69 | 1 | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 7 | 36 | 1 | 37 | 3 | 0 | 3 | 0 | 0 | 0 | 17 | 0 | 17 | 56 | 2 | 58 | 12 | 1 | 13 | 0 | 0 | 0 | 44 | 0 | 44 | 44 | 1 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 298 | 10:00 - 11:00 | 1166 |
| 10:15 - 10:30 | 4 | 0 | 4 | 44 | 8 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 49 | 1 | 50 | 4 | 0 | 4 | 0 | 0 | 0 | 15 | 0 | 15 | 27 | 2 | 29 | 12 | 1 | 13 | 0 | 0 | 0 | 52 | 2 | 54 | 44 | 1 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 274 | 10:15 - 11:15 | 1198 |
| 10:30 - 10:45 | 4 | 0 | 4 | 66 | 3 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 35 | 1 | 36 | 5 | 0 | 5 | 0 | 0 | 0 | 22 | 1 | 23 | 47 | 3 | 50 | 20 | 0 | 20 | 0 | 0 | 0 | 47 | 0 | 47 | 38 | 1 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 303 | 10:30 - 11:30 | 1218 |
| 10:45 - 11:00 | 3 | 0 | 3 | 57 | 4 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 8 | 34 | 1 | 35 | 6 | 0 | 6 | 0 | 0 | 0 | 18 | 1 | 19 | 48 | 4 | 52 | 16 | 1 | 17 | 0 | 0 | 0 | 43 | 2 | 45 | 44 | 1 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 10:45 - 11:45 | 1231 |
| 11:00 - 11:15 | 6 | 0 | 6 | 65 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 50 | 1 | 51 | 10 | 1 | 11 | 0 | 0 | 0 | 17 | 0 | 17 | 44 | 1 | 45 | 19 | 1 | 20 | 0 | 0 | 0 | 51 | 0 | 51 | 56 | 1 | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 11:00 - 12:00 | 1286 |
| 11:15 - 11:30 | 3 | 0 | 3 | 53 | 4 | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 41 | 0 | 41 | 6 | 0 | 6 | 0 | 0 | 0 | 13 | 0 | 13 | 41 | 3 | 44 | 27 | 1 | 28 | 0 | 0 | 0 | 53 | 1 | 54 | 39 | 1 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 294 | 11:15 - 12:15 | 1258 |
| 11:30 - 11:45 | 7 | 0 | 7 | 61 | 1 | 62 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 36 | 0 | 36 | 4 | 0 | 4 | 0 | 0 | 0 | 22 | 1 | 23 | 53 | 5 | 58 | 14 | 1 | 15 | 0 | 0 | 0 | 48 | 0 | 48 | 52 | 1 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 316 | 11:30 - 12:30 | 1295 |
| 11:45 - 12:00 | 4 | 0 | 4 | 65 | 6 | 71 | 1 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 8 | 55 | 0 | 55 | 3 | 0 | 3 | 0 | 0 | 0 | 16 | 0 | 16 | 48 | 4 | 52 | 25 | 1 | 26 | 0 | 0 | 0 | 54 | 2 | 56 | 54 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 346 | 11:45 - 12:45 | 1317 |
| 12:00 - 12:15 | 6 | 0 | 6 | 58 | 0 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 37 | 1 | 38 | 4 | 0 | 4 | 0 | 0 | 0 | 23 | 0 | 23 | 54 | 3 | 57 | 28 | 1 | 29 | 0 | 0 | 0 | 51 | 0 | 51 | 29 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 302 | 12:00 - 13:00 | 1292 |
| 12:15 - 12:30 | 6 | 0 | 6 | 66 | 4 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 46 | 0 | 46 | 6 | 0 | 6 | 0 | 0 | 0 | 19 | 0 | 19 | 62 | 3 | 65 | 28 | 1 | 29 | 0 | 0 | 0 | 41 | 1 | 42 | 40 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 331 | Peak | 1317 |
| 12:30 - 12:45 | 11 | 0 | 11 | 67 | 2 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 38 | 0 | 38 | 9 | 0 | 9 | 0 | 0 | 0 | 20 | 0 | 20 | 59 | 3 | 62 | 17 | 0 | 17 | 0 | 0 | 0 | 45 | 0 | 45 | 59 | 0 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | | |
| 12:45 - 13:00 | 2 | 0 | 2 | 67 | 3 | 70 | 2 | 0 | 2 | 0 | 0 | 0 | 13 | 0 | 13 | 33 | 0 | 33 | 5 | 0 | 5 | 0 | 0 | 0 | 16 | 0 | 16 | 62 | 5 | 67 | 17 | 1 | 18 | 0 | 0 | 0 | 44 | 3 | 47 | 47 | 1 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 321 | | |
| Total | 59 | 1 | 60 | 738 | 35 | 773 | 4 | 0 | 4 | 0 | 0 | 0 | 101 | 1 | 102 | 490 | 6 | 496 | 65 | 1 | 66 | 0 | 0 | 0 | 218 | 3 | 221 | 601 | 38 | 639 | 235 | 10 | 245 | 0 | 0 | 0 | 573 | 11 | 584 | 546 | 8 | 554 | 0 | 0 | 0 | 0 | 0 | 0 | 3744 | | |
| Peak | 27 | 0 | 27 | 256 | 12 | 268 | 1 | 0 | 1 | 0 | 0 | 0 | 31 | 0 | 31 | 176 | 1 | 177 | 22 | 0 | 22 | 0 | 0 | 0 | 78 | 0 | 78 | 223 | 13 | 236 | 98 | 3 | 101 | 0 | 0 | 0 | 191 | 3 | 194 | 182 | 0 | 182 | 0 | 0 | 0 | 0 | 0 | 0 | 1317 | | |

**HOURLY FLOW**

| TIME PERIOD | Movement 1 | | | Movement 2 | | | Movement 3 | | | Movement 3A | | | Movement 4 | | | Movement 5 | | | Movement 6 | | | Movement 6A | | | Movement 7 | | | Movement 8 | | | Movement 9 | | | Movement 9A | | | Movement 10 | | | Movement 11 | | | Movement 12 | | | Movement 12A | | | Grand Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total | Light | Heavy | Total |
| 10:00 - 11:00 | 14 | 1 | 15 | 236 | 15 | 251 | 1 | 0 | 1 | 0 | 0 | 0 | 32 | 1 | 33 | 154 | 4 | 158 | 18 | 0 | 18 | 0 | 0 | 0 | 72 | 2 | 74 | 178 | 11 | 189 | 60 | 3 | 63 | 0 | 0 | 0 | 186 | 4 | 190 | 170 | 4 | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 1121 | 45 | 1166 |
| 10:15 - 11:15 | 17 | 0 | 17 | 232 | 15 | 247 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 1 | 33 | 168 | 4 | 172 | 25 | 1 | 26 | 0 | 0 | 0 | 72 | 2 | 74 | 166 | 10 | 176 | 67 | 3 | 70 | 0 | 0 | 0 | 193 | 4 | 197 | 182 | 4 | 186 | 0 | 0 | 0 | 0 | 0 | 0 | 1154 | 44 | 1198 |
| 10:30 - 11:30 | 16 | 0 | 16 | 241 | 11 | 252 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 1 | 33 | 160 | 3 | 163 | 27 | 1 | 28 | 0 | 0 | 0 | 70 | 2 | 72 | 180 | 11 | 191 | 82 | 3 | 85 | 0 | 0 | 0 | 194 | 3 | 197 | 177 | 4 | 181 | 0 | 0 | 0 | 0 | 0 | 0 | 1179 | 39 | 1218 |
| 10:45 - 11:45 | 19 | 0 | 19 | 236 | 9 | 245 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 1 | 33 | 161 | 2 | 163 | 26 | 1 | 27 | 0 | 0 | 0 | 70 | 2 | 72 | 186 | 13 | 199 | 76 | 4 | 80 | 0 | 0 | 0 | 195 | 3 | 198 | 191 | 4 | 195 | 0 | 0 | 0 | 0 | 0 | 0 | 1192 | 39 | 1231 |
| 11:00 - 12:00 | 20 | 0 | 20 | 244 | 11 | 255 | 1 | 0 | 1 | 0 | 0 | 0 | 33 | 0 | 33 | 182 | 1 | 183 | 23 | 1 | 24 | 0 | 0 | 0 | 68 | 1 | 69 | 186 | 13 | 199 | 85 | 4 | 89 | 0 | 0 | 0 | 206 | 3 | 209 | 201 | 3 | 204 | 0 | 0 | 0 | 0 | 0 | 0 | 1249 | 37 | 1286 |
| 11:15 - 12:15 | 20 | 0 | 20 | 237 | 11 | 248 | 1 | 0 | 1 | 0 | 0 | 0 | 33 | 0 | 33 | 169 | 1 | 170 | 17 | 0 | 17 | 0 | 0 | 0 | 74 | 1 | 75 | 196 | 15 | 211 | 94 | 4 | 98 | 0 | 0 | 0 | 206 | 3 | 209 | 174 | 2 | 176 | 0 | 0 | 0 | 0 | 0 | 0 | 1221 | 37 | 1258 |
| 11:30 - 12:30 | 23 | 0 | 23 | 250 | 11 | 261 | 1 | 0 | 1 | 0 | 0 | 0 | 33 | 0 | 33 | 174 | 1 | 175 | 17 | 0 | 17 | 0 | 0 | 0 | 80 | 1 | 81 | 217 | 15 | 232 | 95 | 4 | 99 | 0 | 0 | 0 | 194 | 3 | 197 | 175 | 1 | 176 | 0 | 0 | 0 | 0 | 0 | 0 | 1259 | 36 | 1295 |
| 11:45 - 12:45 | 27 | 0 | 27 | 256 | 12 | 268 | 1 | 0 | 1 | 0 | 0 | 0 | 31 | 0 | 31 | 176 | 1 | 177 | 22 | 0 | 22 | 0 | 0 | 0 | 78 | 0 | 78 | 223 | 13 | 236 | 98 | 3 | 101 | 0 | 0 | 0 | 191 | 3 | 194 | 182 | 0 | 182 | 0 | 0 | 0 | 0 | 0 | 0 | 1285 | 32 | 1317 |
| 12:00 - 13:00 | 25 | 0 | 25 | 258 | 9 | 267 | 2 | 0 | 2 | 0 | 0 | 0 | 36 | 0 | 36 | 154 | 1 | 155 | 24 | 0 | 24 | 0 | 0 | 0 | 78 | 0 | 78 | 237 | 14 | 251 | 90 | 3 | 93 | 0 | 0 | 0 | 181 | 4 | 185 | 175 | 1 | 176 | 0 | 0 | 0 | 0 | 0 | 0 | 1260 | 32 | 1292 |

# R.O.A.R. DATA

***Reliable, Original & Authentic Results***

Ph.88196847, Fax 88196849, Mob.0418-239019

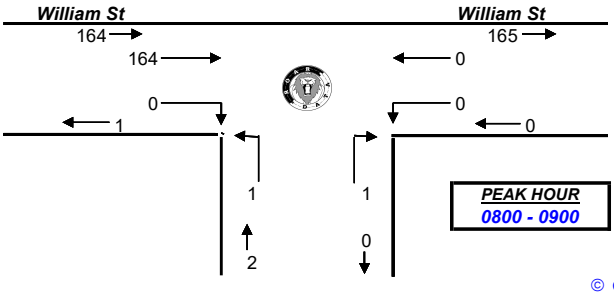
Client : GTA Consultants
Job No/Name : 5956 GOSFORD Access Counts
Day/Date : Thursday 3rd March 2016

**All Vehicles**

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 0730 - 0745 | 36 | | 0 | 0 | | | **36** |
| 0745 - 0800 | 37 | | 0 | 0 | | | **37** |
| 0800 - 0815 | 45 | | 0 | 0 | | | **45** |
| 0815 - 0830 | 40 | | 1 | 0 | | | **41** |
| 0830 - 0845 | 38 | | 0 | 1 | | | **39** |
| 0845 - 0900 | 41 | | 0 | 0 | | | **41** |
| 0900 - 0915 | 27 | | 0 | 1 | | | **28** |
| 0915 - 0930 | 36 | | 0 | 1 | | | **37** |
| **Period End** | **300** | **0** | **1** | **3** | **0** | **0** | **304** |

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 0730 - 0830 | 158 | 0 | 1 | 0 | 0 | 0 | **159** |
| 0745 - 0845 | 160 | 0 | 1 | 1 | 0 | 0 | **162** |
| **0800 - 0900** | 164 | 0 | 1 | 1 | 0 | 0 | **166** |
| 0815 - 0915 | 146 | 0 | 1 | 2 | 0 | 0 | **149** |
| 0830 - 0930 | 142 | 0 | 0 | 3 | 0 | 0 | **145** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PEAK HR** | **164** | | **1** | **1** | | | **166** |



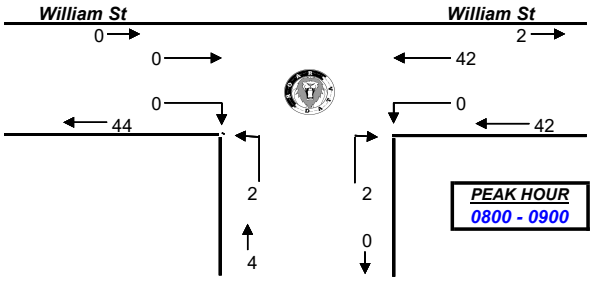

***Western Access***

**All Vehicles**

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Eastern* | | *William St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 0730 - 0745 | | | 0 | 0 | | 4 | **4** |
| 0745 - 0800 | | | 0 | 0 | | 7 | **7** |
| 0800 - 0815 | | | 0 | 1 | | 10 | **11** |
| 0815 - 0830 | | | 1 | 1 | | 10 | **12** |
| 0830 - 0845 | | | 1 | 0 | | 10 | **11** |
| 0845 - 0900 | | | 0 | 0 | | 12 | **12** |
| 0900 - 0915 | | | 1 | 0 | | 8 | **9** |
| 0915 - 0930 | | | 1 | 0 | | 10 | **11** |
| **Period End** | **0** | **0** | **4** | **2** | **0** | **71** | **77** |

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Eastern* | | *William St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 0730 - 0830 | 0 | 0 | 1 | 2 | 0 | 31 | **34** |
| 0745 - 0845 | 0 | 0 | 2 | 2 | 0 | 37 | **41** |
| **0800 - 0900** | 0 | 0 | 2 | 2 | 0 | 42 | **46** |
| 0815 - 0915 | 0 | 0 | 3 | 1 | 0 | 40 | **44** |
| 0830 - 0930 | 0 | 0 | 3 | 0 | 0 | 40 | **43** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PEAK HR** | | | **2** | **2** | | **42** | **46** |




***Eastern Access***

# R.O.A.R. DATA

***Reliable, Original & Authentic Results***

Ph.88196847, Fax 88196849, Mob.0418-239019

Client : GTA Consultants

Job No/Name : 5956 GOSFORD Access Counts

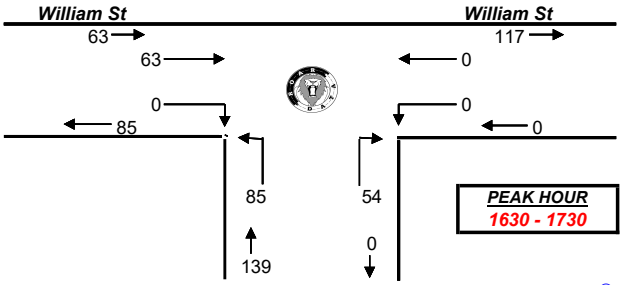
Day/Date : Thursday 3rd March 2016

**All Vehicles**

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1600 - 1615 | 14 | | 11 | 4 | | | **29** |
| 1615 - 1630 | 29 | | 10 | 9 | | | **48** |
| 1630 - 1645 | 13 | | 16 | 15 | | | **44** |
| 1645 - 1700 | 12 | | 17 | 6 | | | **35** |
| 1700 - 1715 | 20 | | 26 | 14 | | | **60** |
| 1715 - 1730 | 18 | | 26 | 19 | | | **63** |
| 1730 - 1745 | 16 | | 9 | 3 | | | **28** |
| 1745 - 1800 | 12 | | 7 | 3 | | | **22** |
| **Period End** | **134** | **0** | **122** | **73** | **0** | **0** | **329** |

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1600 - 1700 | 68 | 0 | 54 | 34 | 0 | 0 | **156** |
| 1615 - 1715 | 74 | 0 | 69 | 44 | 0 | 0 | **187** |
| **1630 - 1730** | 63 | 0 | 85 | 54 | 0 | 0 | **202** |
| 1645 - 1745 | 66 | 0 | 78 | 42 | 0 | 0 | **186** |
| 1700 - 1800 | 66 | 0 | 68 | 39 | 0 | 0 | **173** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PEAK HR** | **63** | | **85** | **54** | | | **202** |



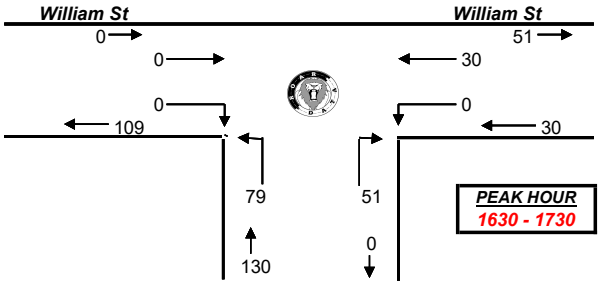

*Western Access*

**All Vehicles**

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Eastern* | | *William St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1600 - 1615 | | | 7 | 3 | | 8 | **18** |
| 1615 - 1630 | | | 10 | 6 | | 5 | **21** |
| 1630 - 1645 | | | 14 | 4 | | 9 | **27** |
| 1645 - 1700 | | | 16 | 3 | | 7 | **26** |
| 1700 - 1715 | | | 19 | 22 | | 5 | **46** |
| 1715 - 1730 | | | 30 | 22 | | 9 | **61** |
| 1730 - 1745 | | | 15 | 8 | | 4 | **27** |
| 1745 - 1800 | | | 6 | 4 | | 4 | **14** |
| **Period End** | **0** | **0** | **117** | **72** | **0** | **51** | **240** |

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Eastern* | | *William St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1600 - 1700 | 0 | 0 | 47 | 16 | 0 | 29 | **92** |
| 1615 - 1715 | 0 | 0 | 59 | 35 | 0 | 26 | **120** |
| **1630 - 1730** | 0 | 0 | 79 | 51 | 0 | 30 | **160** |
| 1645 - 1745 | 0 | 0 | 80 | 55 | 0 | 25 | **160** |
| 1700 - 1800 | 0 | 0 | 70 | 56 | 0 | 22 | **148** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PEAK HR** | | | **79** | **51** | | **30** | **160** |




*Eastern Access*

**R.O.A.R. DATA**
***Reliable, Original & Authentic Results***
Ph.88196847, Fax 88196849, Mob.0418-239019

Client : GTA Consultants
Job No/Name : 5956 GOSFORD Access Counts
Day/Date : Saturday 5th March 2016

| All Vehicles | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1000 - 1015 | 18 | | 0 | 0 | | | **18** |
| 1015 - 1030 | 14 | | 1 | 0 | | | **15** |
| 1030 - 1045 | 21 | | 0 | 0 | | | **21** |
| 1045 - 1100 | 15 | | 1 | 0 | | | **16** |
| 1100 - 1115 | 22 | | 0 | 1 | | | **23** |
| 1115 - 1130 | 18 | | 0 | 0 | | | **18** |
| 1130 - 1145 | 10 | | 1 | 0 | | | **11** |
| 1145 - 1200 | 15 | | 0 | 0 | | | **15** |
| 1200 - 1215 | 11 | | 2 | 0 | | | **13** |
| 1215 - 1230 | 11 | | 1 | 0 | | | **12** |
| 1230 - 1245 | 7 | | 1 | 0 | | | **8** |
| 1245 - 1300 | 10 | | 3 | 0 | | | **13** |
| 1300 - 1315 | 11 | | 0 | 0 | | | **11** |
| 1315 - 1330 | 12 | | 0 | 0 | | | **12** |
| **Period End** | **195** | **0** | **10** | **1** | **0** | **0** | **206** |

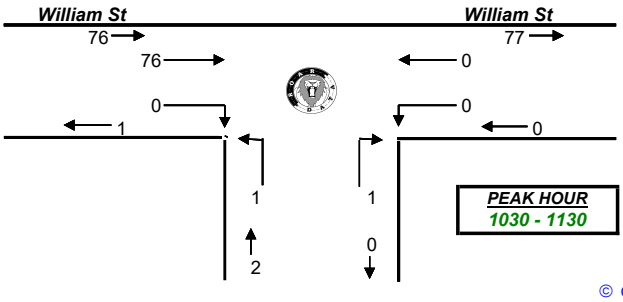
| All Vehicles | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1000 - 1015 | | | 0 | 0 | | 3 | **3** |
| 1015 - 1030 | | | 1 | 0 | | 4 | **5** |
| 1030 - 1045 | | | 0 | 0 | | 5 | **5** |
| 1045 - 1100 | | | 0 | 0 | | 5 | **5** |
| 1100 - 1115 | | | 0 | 0 | | 4 | **4** |
| 1115 - 1130 | | | 0 | 0 | | 4 | **4** |
| 1130 - 1145 | | | 0 | 0 | | 7 | **7** |
| 1145 - 1200 | | | 1 | 0 | | 5 | **6** |
| 1200 - 1215 | | | 0 | 0 | | 2 | **2** |
| 1215 - 1230 | | | 0 | 0 | | 3 | **3** |
| 1230 - 1245 | | | 0 | 0 | | 2 | **2** |
| 1245 - 1300 | | | 0 | 0 | | 2 | **2** |
| 1300 - 1315 | | | 2 | 0 | | 6 | **8** |
| 1315 - 1330 | | | 0 | 0 | | 1 | **1** |
| **Period End** | **0** | **0** | **4** | **0** | **0** | **53** | **57** |

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1000 - 1100 | 68 | 0 | 2 | 0 | 0 | 0 | **70** |
| 1015 - 1115 | 72 | 0 | 2 | 1 | 0 | 0 | **75** |
| **1030 - 1130** | 76 | 0 | 1 | 1 | 0 | 0 | **78** |
| 1045 - 1145 | 65 | 0 | 2 | 1 | 0 | 0 | **68** |
| 1100 - 1200 | 65 | 0 | 1 | 1 | 0 | 0 | **67** |
| 1115 - 1215 | 54 | 0 | 3 | 0 | 0 | 0 | **57** |
| 1130 - 1230 | 47 | 0 | 4 | 0 | 0 | 0 | **51** |
| 1145 - 1245 | 44 | 0 | 4 | 0 | 0 | 0 | **48** |
| 1200 - 1300 | 39 | 0 | 7 | 0 | 0 | 0 | **46** |
| 1215 - 1315 | 39 | 0 | 5 | 0 | 0 | 0 | **44** |
| 1230 - 1330 | 40 | 0 | 4 | 0 | 0 | 0 | **44** |
| **PEAK HR** | **76** | | **1** | **1** | | **0** | **78** |

| | WEST | | SOUTH | | EAST | | |
|---|---|---|---|---|---|---|---|
| | *William St* | | *Western* | | *William St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1000 - 1100 | 0 | 0 | 1 | 0 | 0 | 17 | **18** |
| 1015 - 1115 | 0 | 0 | 1 | 0 | 0 | 18 | **19** |
| **1030 - 1130** | 0 | 0 | 0 | 0 | 0 | 18 | **18** |
| 1045 - 1145 | 0 | 0 | 0 | 0 | 0 | 20 | **20** |
| 1100 - 1200 | 0 | 0 | 1 | 0 | 0 | 20 | **21** |
| 1115 - 1215 | 0 | 0 | 1 | 0 | 0 | 18 | **19** |
| 1130 - 1230 | 0 | 0 | 1 | 0 | 0 | 17 | **18** |
| 1145 - 1245 | 0 | 0 | 1 | 0 | 0 | 12 | **13** |
| 1200 - 1300 | 0 | 0 | 0 | 0 | 0 | 9 | **9** |
| 1215 - 1315 | 0 | 0 | 2 | 0 | 0 | 13 | **15** |
| 1230 - 1330 | 0 | 0 | 2 | 0 | 0 | 11 | **13** |
| **PEAK HR** | | | **0** | **0** | | **18** | **18** |

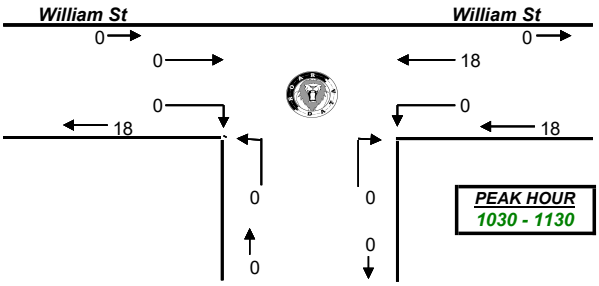
**R.O.A.R. DATA**
***Reliable, Original & Authentic Results***
Ph.88196847, Fax 88196849, Mob.0418-239019

Client : GTA Consultants
Job No/Name : 5956 GOSFORD Access Counts
Day/Date : Saturday 5th March 2016






***Western Access***




***Western Access***

# R.O.A.R. DATA

***Reliable, Original & Authentic Results***

Ph.88196847, Fax 88196849, Mob.0418-239019

| | |
|---|---|
| Client | : GTA Consultants |
| Job No/Name | : 5956 GOSFORD Access Counts |
| Day/Date | : Thursday 3rd March 2016 |

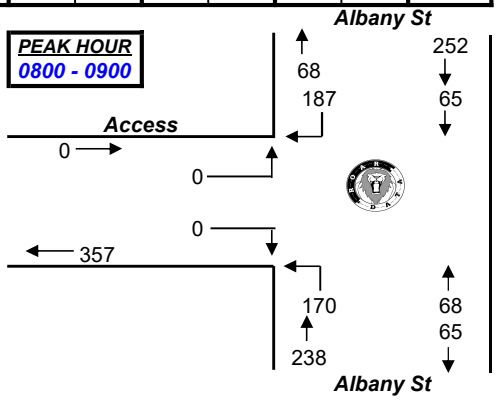
**All Vehicles**

| | NORTH | | WEST | | SOUTH | | |
|---|---|---|---|---|---|---|---|
| | *Albany St* | | *Access* | | *Albany St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 0730 - 0745 | 11 | 28 | 0 | 0 | 13 | 18 | **70** |
| 0745 - 0800 | 14 | 40 | 0 | 0 | 35 | 22 | **111** |
| 0800 - 0815 | 11 | 40 | 0 | 0 | 48 | 11 | **110** |
| 0815 - 0830 | 22 | 59 | 0 | 0 | 54 | 22 | **157** |
| 0830 - 0845 | 16 | 41 | 0 | 0 | 36 | 17 | **110** |
| 0845 - 0900 | 16 | 47 | 0 | 0 | 32 | 18 | **113** |
| 0900 - 0915 | 15 | 28 | 0 | 0 | 18 | 18 | **79** |
| 0915 - 0930 | 20 | 12 | 0 | 0 | 3 | 22 | **57** |
| **Period End** | **125** | **295** | **0** | **0** | **239** | **148** | **807** |

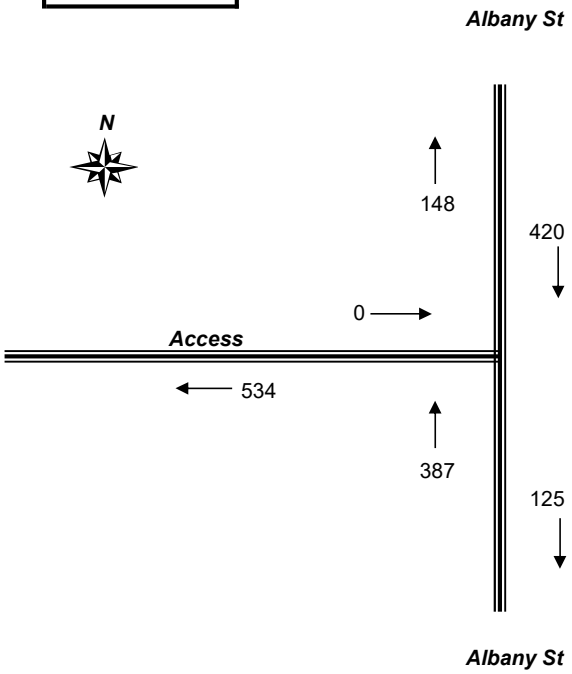
| | NORTH | | WEST | | SOUTH | | |
|---|---|---|---|---|---|---|---|
| | *Albany St* | | *Access* | | *Albany St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 0730 - 0830 | 58 | 167 | 0 | 0 | 150 | 73 | **448** |
| 0745 - 0845 | 63 | 180 | 0 | 0 | 173 | 72 | **488** |
| **0800 - 0900** | 65 | 187 | 0 | 0 | 170 | 68 | **490** |
| 0815 - 0915 | 69 | 175 | 0 | 0 | 140 | 75 | **459** |
| 0830 - 0930 | 67 | 128 | 0 | 0 | 89 | 75 | **359** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PEAK HR** | **65** | **187** | **0** | **0** | **170** | **68** | **490** |

***PEAK HOUR***
***0800 - 0900***




**TOTAL VOLUMES FOR COUNT PERIODS**



**R.O.A.R. DATA**
***Reliable, Original & Authentic Results***
Ph.88196847, Fax 88196849, Mob.0418-239019

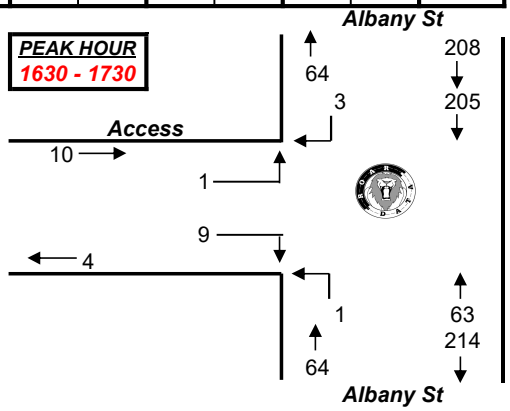
| | |
|---|---|
| Client | : GTA Consultants |
| Job No/Name | : 5956 GOSFORD Access Counts |
| Day/Date | : Thursday 3rd March 2016 |

**All Vehicles**

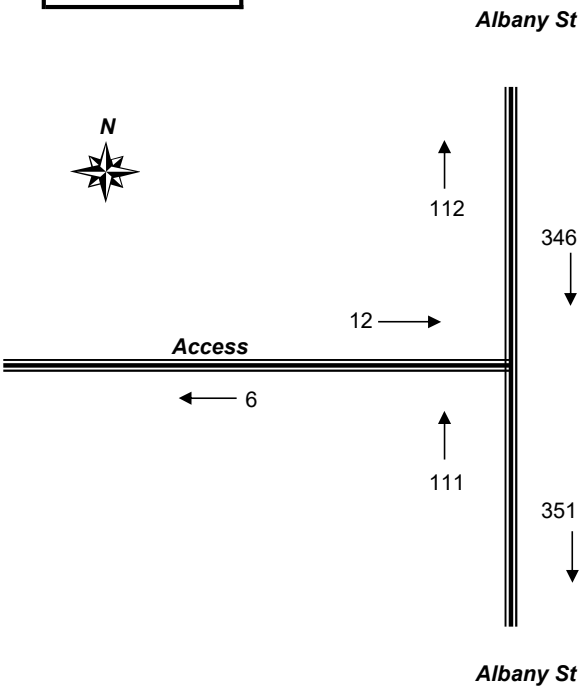
| | NORTH | | WEST | | SOUTH | | |
|---|---|---|---|---|---|---|---|
| | *Albany St* | | *Access* | | *Albany St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1600 - 1615 | 30 | 1 | 0 | 0 | 0 | 14 | **45** |
| 1615 - 1630 | 38 | 0 | 0 | 0 | 0 | 12 | **50** |
| 1630 - 1645 | 46 | 1 | 0 | 0 | 0 | 15 | **62** |
| 1645 - 1700 | 25 | 0 | 0 | 2 | 0 | 6 | **33** |
| 1700 - 1715 | 70 | 2 | 1 | 5 | 0 | 25 | **103** |
| 1715 - 1730 | 64 | 0 | 0 | 2 | 1 | 17 | **84** |
| 1730 - 1745 | 43 | 1 | 0 | 0 | 0 | 11 | **55** |
| 1745 - 1800 | 25 | 0 | 1 | 1 | 0 | 10 | **37** |
| **Period End** | **341** | **5** | **2** | **10** | **1** | **110** | **469** |

| | NORTH | | WEST | | SOUTH | | |
|---|---|---|---|---|---|---|---|
| | *Albany St* | | *Access* | | *Albany St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1600 - 1700 | 139 | 2 | 0 | 2 | 0 | 47 | **190** |
| 1615 - 1715 | 179 | 3 | 1 | 7 | 0 | 58 | **248** |
| **1630 - 1730** | 205 | 3 | 1 | 9 | 1 | 63 | **282** |
| 1645 - 1745 | 202 | 3 | 1 | 9 | 1 | 59 | **275** |
| 1700 - 1800 | 202 | 3 | 2 | 8 | 1 | 63 | **279** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PEAK HR** | **205** | **3** | **1** | **9** | **1** | **63** | **282** |




**TOTAL VOLUMES FOR COUNT PERIODS**



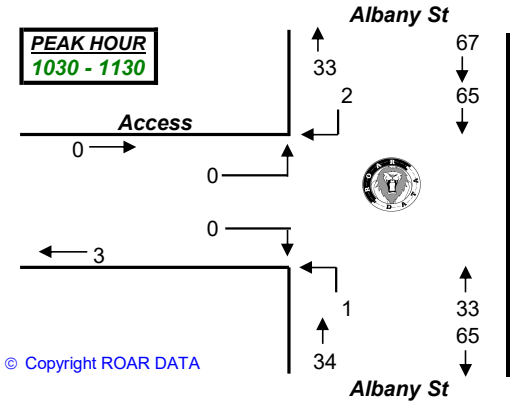
**R.O.A.R. DATA**
***Reliable, Original & Authentic Results***
Ph.88196847, Fax 88196849, Mob.0418-239019

Client : GTA Consultants
Job No/Name : 5956 GOSFORD Access Counts
Day/Date : Saturday 5th March 2016

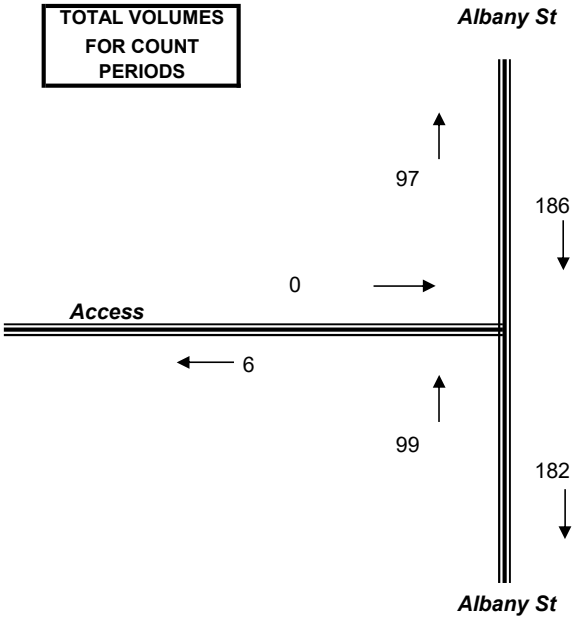
| All Vehicles | NORTH | | WEST | | SOUTH | | |
|---|---|---|---|---|---|---|---|
| | *Albany St* | | *Access* | | *Albany St* | | |
| **Time Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1000 - 1015 | 7 | 0 | 0 | 0 | 0 | 4 | **11** |
| 1015 - 1030 | 9 | 0 | 0 | 0 | 0 | 9 | **18** |
| 1030 - 1045 | 17 | 1 | 0 | 0 | 0 | 11 | **29** |
| 1045 - 1100 | 9 | 1 | 0 | 0 | 1 | 8 | **19** |
| 1100 - 1115 | 21 | 0 | 0 | 0 | 0 | 10 | **31** |
| 1115 - 1130 | 18 | 0 | 0 | 0 | 0 | 4 | **22** |
| 1130 - 1145 | 14 | 0 | 0 | 0 | 0 | 6 | **20** |
| 1145 - 1200 | 11 | 1 | 0 | 0 | 1 | 6 | **19** |
| 1200 - 1215 | 12 | 1 | 0 | 0 | 0 | 10 | **23** |
| 1215 - 1230 | 13 | 0 | 0 | 0 | 0 | 3 | **16** |
| 1230 - 1245 | 9 | 0 | 0 | 0 | 0 | 6 | **15** |
| 1245 - 1300 | 10 | 0 | 0 | 0 | 0 | 2 | **12** |
| 1300 - 1315 | 15 | 0 | 0 | 0 | 0 | 9 | **24** |
| 1315 - 1330 | 17 | 0 | 0 | 0 | 0 | 9 | **26** |
| **Period End** | **182** | **4** | **0** | **0** | **2** | **97** | **285** |

| All Vehicles | NORTH | | WEST | | SOUTH | | |
|---|---|---|---|---|---|---|---|
| | *Albany St* | | *Access* | | *Albany St* | | |
| **Peak Per** | **T** | **R** | **L** | **R** | **L** | **T** | **TOTAL** |
| 1000 - 1100 | 42 | 2 | 0 | 0 | 1 | 32 | **77** |
| 1015 - 1115 | 56 | 2 | 0 | 0 | 1 | 38 | **97** |
| 1030 - 1130 | 65 | 2 | 0 | 0 | 1 | 33 | **101** |
| 1045 - 1145 | 62 | 1 | 0 | 0 | 1 | 28 | **92** |
| 1100 - 1200 | 64 | 1 | 0 | 0 | 1 | 26 | **92** |
| 1115 - 1215 | 55 | 2 | 0 | 0 | 1 | 26 | **84** |
| 1130 - 1230 | 50 | 2 | 0 | 0 | 1 | 25 | **78** |
| 1145 - 1245 | 45 | 2 | 0 | 0 | 1 | 25 | **73** |
| 1200 - 1300 | 44 | 1 | 0 | 0 | 0 | 21 | **66** |
| 1215 - 1315 | 47 | 0 | 0 | 0 | 0 | 20 | **67** |
| 1230 - 1330 | 51 | 0 | 0 | 0 | 0 | 26 | **77** |

| **PEAK HR** | **65** | **2** | **0** | **0** | **1** | **33** | **101** |
|---|---|---|---|---|---|---|---|







# C. SIDRA OUTPUTS

C

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East AM]

## Network: N101 [AM Network]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 100 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 75 | 0.0 | 75 | 0.0 | 0.594 | 10.3 | LOS A | 9.8 | 73.5 | 0.45 | 0.44 | 0.45 | 34.2 |
| 2 | T1 | 411 | 9.2 | 411 | 9.2 | 0.594 | 6.9 | LOS A | 9.8 | 73.5 | 0.45 | 0.44 | 0.45 | 33.3 |
| 3 | R2 | 211 | 0.0 | 211 | 0.0 | 0.347 | 8.4 | LOS A | 3.1 | 21.8 | 0.45 | 0.64 | 0.45 | 27.8 |
| Approach | | 696 | 5.4 | 696 | 5.4 | 0.594 | 7.8 | LOS A | 9.8 | 73.5 | 0.45 | 0.50 | 0.45 | 32.3 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 41 | 5.1 | 41 | 5.1 | 0.108 | 37.2 | LOS C | 1.6 | 11.8 | 0.83 | 0.70 | 0.83 | 13.7 |
| 5 | T1 | 41 | 2.6 | 41 | 2.6 | 0.648 | 47.6 | LOS D | 6.4 | 57.0 | 1.00 | 0.85 | 1.07 | 18.4 |
| 6 | R2 | 87 | 47.0 | 87 | 47.0 | 0.648 | 51.1 | LOS D | 6.4 | 57.0 | 1.00 | 0.85 | 1.07 | 17.4 |
| Approach | | 169 | 26.1 | 169 | 26.1 | 0.648 | 46.9 | LOS D | 6.4 | 57.0 | 0.96 | 0.81 | 1.01 | 17.0 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 167 | 0.0 | 167 | 0.0 | 0.110 | 5.3 | LOS A | 1.6 | 11.0 | 0.21 | 0.54 | 0.21 | 31.5 |
| 8 | T1 | 419 | 10.1 | 419 | 10.1 | 0.384 | 7.9 | LOS A | 8.9 | 67.5 | 0.47 | 0.42 | 0.47 | 28.4 |
| 9 | R2 | 155 | 0.7 | 155 | 0.7 | 0.273 | 9.4 | LOS A | 2.4 | 16.9 | 0.47 | 0.66 | 0.47 | 32.2 |
| Approach | | 741 | 5.8 | 741 | 5.8 | 0.384 | 7.6 | LOS A | 8.9 | 67.5 | 0.41 | 0.50 | 0.41 | 30.2 |
| All Vehicles | | 1606 | 7.8 | 1606 | 7.8 | 0.648 | 11.8 | LOS A | 9.8 | 73.5 | 0.49 | 0.53 | 0.49 | 28.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P2 | East Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P4 | West Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| All Pedestrians | | 158 | 44.3 | LOS E | | | 0.94 | 0.94 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East PM]

## Network: N101 [PM Network]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 44 | 0.0 | 44 | 0.0 | 0.699 | 15.7 | LOS B | 13.5 | 97.7 | 0.68 | 0.61 | 0.68 | 31.0 |
| 2 | T1 | 503 | 4.2 | 503 | 4.2 | 0.699 | 12.2 | LOS A | 13.5 | 97.7 | 0.68 | 0.61 | 0.68 | 30.0 |
| 3 | R2 | 129 | 0.0 | 129 | 0.0 | 0.259 | 10.8 | LOS A | 1.9 | 13.0 | 0.61 | 0.68 | 0.61 | 25.6 |
| Approach | | 677 | 3.1 | 677 | 3.1 | 0.699 | 12.2 | LOS A | 13.5 | 97.7 | 0.67 | 0.63 | 0.67 | 29.5 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 92 | 2.3 | 92 | 2.3 | 0.209 | 29.4 | LOS C | 2.9 | 20.5 | 0.83 | 0.73 | 0.83 | 15.9 |
| 5 | T1 | 63 | 0.0 | 63 | 0.0 | 0.564 | 34.8 | LOS C | 6.0 | 46.4 | 0.97 | 0.79 | 0.97 | 21.4 |
| 6 | R2 | 96 | 20.9 | 96 | 20.9 | 0.564 | 38.2 | LOS C | 6.0 | 46.4 | 0.97 | 0.79 | 0.97 | 20.4 |
| Approach | | 251 | 8.8 | 251 | 8.8 | 0.564 | 34.1 | LOS C | 6.0 | 46.4 | 0.92 | 0.77 | 0.92 | 19.5 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 102 | 0.0 | 102 | 0.0 | 0.072 | 5.9 | LOS A | 1.0 | 6.9 | 0.27 | 0.55 | 0.27 | 30.7 |
| 8 | T1 | 475 | 5.3 | 475 | 5.3 | 0.542 | 11.6 | LOS A | 11.1 | 81.3 | 0.65 | 0.57 | 0.65 | 25.1 |
| 9 | R2 | 109 | 1.0 | 109 | 1.0 | 0.230 | 11.6 | LOS A | 1.5 | 10.9 | 0.63 | 0.70 | 0.63 | 30.9 |
| Approach | | 686 | 3.8 | 686 | 3.8 | 0.542 | 10.8 | LOS A | 11.1 | 81.3 | 0.59 | 0.59 | 0.59 | 27.2 |
| All Vehicles | | 1614 | 4.3 | 1614 | 4.3 | 0.699 | 15.0 | LOS B | 13.5 | 97.7 | 0.67 | 0.63 | 0.67 | 26.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 158 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East Sat]

## Network: N101 [Sat Network]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 47 | 0.0 | 47 | 0.0 | 0.329 | 9.5 | LOS A | 6.4 | 46.1 | 0.46 | 0.43 | 0.46 | 34.8 |
| 2 | T1 | 341 | 4.3 | 341 | 4.3 | 0.329 | 6.1 | LOS A | 6.4 | 46.1 | 0.46 | 0.43 | 0.46 | 34.1 |
| 3 | R2 | 125 | 0.0 | 125 | 0.0 | 0.203 | 9.1 | LOS A | 1.8 | 12.7 | 0.49 | 0.63 | 0.49 | 27.1 |
| Approach | | 514 | 2.9 | 514 | 2.9 | 0.329 | 7.2 | LOS A | 6.4 | 46.1 | 0.46 | 0.48 | 0.46 | 33.0 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 83 | 0.0 | 83 | 0.0 | 0.196 | 30.1 | LOS C | 2.6 | 18.5 | 0.84 | 0.73 | 0.84 | 15.7 |
| 5 | T1 | 40 | 0.0 | 40 | 0.0 | 0.432 | 33.8 | LOS C | 4.5 | 34.4 | 0.95 | 0.77 | 0.95 | 21.6 |
| 6 | R2 | 83 | 15.2 | 83 | 15.2 | 0.432 | 37.3 | LOS C | 4.5 | 34.4 | 0.95 | 0.77 | 0.95 | 20.6 |
| Approach | | 206 | 6.1 | 206 | 6.1 | 0.432 | 33.7 | LOS C | 4.5 | 34.4 | 0.90 | 0.75 | 0.90 | 19.3 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 78 | 1.4 | 78 | 1.4 | 0.052 | 5.0 | LOS A | 0.6 | 4.1 | 0.21 | 0.53 | 0.21 | 31.9 |
| 8 | T1 | 366 | 5.2 | 366 | 5.2 | 0.324 | 8.5 | LOS A | 7.0 | 51.5 | 0.53 | 0.46 | 0.53 | 27.9 |
| 9 | R2 | 68 | 0.0 | 68 | 0.0 | 0.112 | 10.0 | LOS A | 1.1 | 7.9 | 0.45 | 0.63 | 0.45 | 31.8 |
| Approach | | 513 | 3.9 | 513 | 3.9 | 0.324 | 8.1 | LOS A | 7.0 | 51.5 | 0.47 | 0.49 | 0.47 | 29.3 |
| All Vehicles | | 1233 | 3.8 | 1233 | 3.8 | 0.432 | 12.0 | LOS A | 7.0 | 51.5 | 0.54 | 0.53 | 0.54 | 28.1 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 158 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East AM]

## Network: N101 [AM Network]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 299 | 1.8 | 299 | 1.8 | 0.402 | 11.9 | LOS A | 5.8 | 41.4 | 0.33 | 0.56 | 0.33 | 20.7 |
| 2 | T1 | 484 | 2.0 | 484 | 2.0 | 0.402 | 11.3 | LOS A | 8.3 | 59.3 | 0.45 | 0.44 | 0.45 | 44.7 |
| Approach | | 783 | 1.9 | 783 | 1.9 | 0.402 | 11.5 | LOS A | 8.3 | 59.3 | 0.40 | 0.49 | 0.40 | 40.2 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 5 | 0.0 | 5 | 0.0 | 0.166 | 47.3 | LOS D | 1.8 | 12.6 | 0.92 | 0.71 | 0.92 | 16.9 |
| 5 | T1 | 38 | 2.8 | 38 | 2.8 | 0.166 | 44.3 | LOS D | 1.8 | 12.6 | 0.93 | 0.71 | 0.93 | 16.8 |
| 6 | R2 | 24 | 0.0 | 24 | 0.0 | 0.166 | 49.9 | LOS D | 1.3 | 9.0 | 0.94 | 0.72 | 0.94 | 28.2 |
| Approach | | 67 | 1.6 | 67 | 1.6 | 0.166 | 46.6 | LOS D | 1.8 | 12.6 | 0.93 | 0.71 | 0.93 | 22.1 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 85 | 0.0 | 85 | 0.0 | 0.409 | 14.3 | LOS A | 11.8 | 84.0 | 0.54 | 0.52 | 0.54 | 41.9 |
| 8 | T1 | 633 | 2.3 | 633 | 2.3 | 0.409 | 10.3 | LOS A | 11.8 | 84.0 | 0.56 | 0.55 | 0.58 | 38.4 |
| 9 | R2 | 78 | 1.4 | 78 | 1.4 | 0.409 | 15.8 | LOS B | 7.0 | 50.0 | 0.61 | 0.59 | 0.66 | 37.5 |
| Approach | | 796 | 2.0 | 796 | 2.0 | 0.409 | 11.2 | LOS A | 11.8 | 84.0 | 0.56 | 0.55 | 0.59 | 38.9 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 43 | 0.0 | 43 | 0.0 | 0.136 | 31.6 | LOS C | 2.6 | 18.2 | 0.77 | 0.67 | 0.77 | 31.7 |
| 11 | T1 | 77 | 0.0 | 77 | 0.0 | 0.682 | 34.7 | LOS C | 9.5 | 66.2 | 0.90 | 0.82 | 1.02 | 24.1 |
| 12 | R2 | 167 | 0.0 | 167 | 0.0 | 0.682 | 42.0 | LOS C | 9.5 | 66.2 | 0.97 | 0.91 | 1.17 | 12.8 |
| Approach | | 287 | 0.0 | 287 | 0.0 | 0.682 | 38.5 | LOS C | 9.5 | 66.2 | 0.92 | 0.85 | 1.07 | 19.6 |
| All Vehicles | | 1934 | 1.6 | 1934 | 1.6 | 0.682 | 16.6 | LOS B | 11.8 | 84.0 | 0.56 | 0.57 | 0.59 | 34.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P2 | East Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P3 | North Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P4 | West Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| All Pedestrians | | 211 | 44.3 | LOS E | | | 0.94 | 0.94 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East PM]

## Network: N101 [PM Network]

Site Category: -
Signals - Fixed Time Coordinated Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 201 | 1.6 | 201 | 1.6 | 0.577 | 20.2 | LOS B | 11.3 | 80.4 | 0.58 | 0.62 | 0.58 | 14.9 |
| 2 | T1 | 588 | 1.3 | 588 | 1.3 | 0.577 | 17.4 | LOS B | 12.7 | 90.1 | 0.62 | 0.58 | 0.62 | 39.6 |
| Approach | | 789 | 1.3 | 789 | 1.3 | 0.577 | 18.1 | LOS B | 12.7 | 90.1 | 0.61 | 0.59 | 0.61 | 36.2 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 9 | 0.0 | 9 | 0.0 | 0.246 | 53.4 | LOS D | 2.6 | 18.8 | 0.95 | 0.73 | 0.95 | 15.5 |
| 5 | T1 | 43 | 2.4 | 43 | 2.4 | 0.246 | 50.2 | LOS D | 2.6 | 18.8 | 0.95 | 0.73 | 0.95 | 15.5 |
| 6 | R2 | 85 | 0.0 | 85 | 0.0 | 0.560 | 59.1 | LOS E | 4.6 | 32.5 | 1.00 | 0.78 | 1.01 | 25.9 |
| Approach | | 138 | 0.8 | 138 | 0.8 | 0.560 | 55.9 | LOS D | 4.6 | 32.5 | 0.98 | 0.76 | 0.99 | 22.9 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 42 | 2.5 | 42 | 2.5 | 0.566 | 23.8 | LOS B | 24.4 | 172.6 | 0.74 | 0.67 | 0.74 | 37.2 |
| 8 | T1 | 679 | 1.1 | 679 | 1.1 | 0.566 | 19.0 | LOS B | 24.4 | 172.6 | 0.73 | 0.67 | 0.73 | 32.9 |
| 9 | R2 | 39 | 0.0 | 39 | 0.0 | 0.170 | 21.1 | LOS B | 2.3 | 16.1 | 0.70 | 0.62 | 0.70 | 33.3 |
| Approach | | 760 | 1.1 | 760 | 1.1 | 0.566 | 19.3 | LOS B | 24.4 | 172.6 | 0.73 | 0.66 | 0.73 | 33.2 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 26 | 0.0 | 26 | 0.0 | 0.086 | 25.2 | LOS B | 2.1 | 14.5 | 0.65 | 0.58 | 0.65 | 34.7 |
| 11 | T1 | 37 | 0.0 | 37 | 0.0 | 0.086 | 21.7 | LOS B | 2.1 | 14.5 | 0.65 | 0.58 | 0.65 | 29.4 |
| 12 | R2 | 295 | 0.0 | 295 | 0.0 | 0.608 | 31.5 | LOS C | 11.9 | 83.5 | 0.89 | 0.80 | 0.89 | 15.2 |
| Approach | | 358 | 0.0 | 358 | 0.0 | 0.608 | 30.1 | LOS C | 11.9 | 83.5 | 0.85 | 0.76 | 0.85 | 18.9 |
| All Vehicles | | 2045 | 1.0 | 2045 | 1.0 | 0.608 | 23.2 | LOS B | 24.4 | 172.6 | 0.72 | 0.66 | 0.72 | 30.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P2 | East Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P3 | North Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P4 | West Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| All Pedestrians | | 211 | 49.3 | LOS E | | | 0.95 | 0.95 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East Sat]

## Network: N101 [Sat Network]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 167 | 1.3 | 167 | 1.3 | 0.415 | 14.4 | LOS A | 6.4 | 45.3 | 0.47 | 0.54 | 0.47 | 19.6 |
| 2 | T1 | 583 | 0.2 | 583 | 0.2 | 0.415 | 12.1 | LOS A | 8.0 | 55.9 | 0.54 | 0.51 | 0.54 | 44.0 |
| Approach | | 751 | 0.4 | 751 | 0.4 | 0.415 | 12.6 | LOS A | 8.0 | 55.9 | 0.53 | 0.52 | 0.53 | 41.5 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 2 | 0.0 | 2 | 0.0 | 0.086 | 36.9 | LOS C | 0.8 | 6.0 | 0.89 | 0.67 | 0.89 | 20.1 |
| 5 | T1 | 21 | 10.0 | 21 | 10.0 | 0.086 | 33.7 | LOS C | 0.8 | 6.0 | 0.89 | 0.67 | 0.89 | 20.1 |
| 6 | R2 | 25 | 0.0 | 25 | 0.0 | 0.119 | 39.4 | LOS C | 0.9 | 6.4 | 0.92 | 0.71 | 0.92 | 31.3 |
| Approach | | 48 | 4.3 | 48 | 4.3 | 0.119 | 36.8 | LOS C | 0.9 | 6.4 | 0.91 | 0.69 | 0.91 | 27.3 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 24 | 4.3 | 24 | 4.3 | 0.298 | 11.7 | LOS A | 6.3 | 44.7 | 0.48 | 0.44 | 0.48 | 44.0 |
| 8 | T1 | 548 | 0.6 | 548 | 0.6 | 0.298 | 7.1 | LOS A | 6.3 | 44.7 | 0.51 | 0.46 | 0.51 | 41.5 |
| 9 | R2 | 52 | 0.0 | 52 | 0.0 | 0.298 | 12.0 | LOS A | 4.5 | 31.8 | 0.55 | 0.50 | 0.55 | 40.7 |
| Approach | | 624 | 0.7 | 624 | 0.7 | 0.298 | 7.7 | LOS A | 6.3 | 44.7 | 0.51 | 0.46 | 0.51 | 41.5 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 17 | 0.0 | 17 | 0.0 | 0.068 | 27.4 | LOS B | 0.9 | 6.5 | 0.78 | 0.63 | 0.78 | 33.5 |
| 11 | T1 | 15 | 0.0 | 15 | 0.0 | 0.068 | 24.0 | LOS B | 0.9 | 6.5 | 0.78 | 0.63 | 0.78 | 28.2 |
| 12 | R2 | 138 | 0.8 | 138 | 0.8 | 0.482 | 36.2 | LOS C | 5.0 | 35.4 | 0.94 | 0.84 | 1.11 | 14.0 |
| Approach | | 169 | 0.6 | 169 | 0.6 | 0.482 | 34.2 | LOS C | 5.0 | 35.4 | 0.91 | 0.80 | 1.05 | 17.9 |
| All Vehicles | | 1593 | 0.7 | 1593 | 0.7 | 0.482 | 13.7 | LOS A | 8.0 | 55.9 | 0.57 | 0.53 | 0.59 | 37.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street AM]

## Network: N101 [AM Network]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 40 | 5.3 | 40 | 5.3 | 0.517 | 9.0 | LOS A | 6.5 | 46.5 | 0.25 | 0.25 | 0.25 | 35.5 |
| 2 | T1 | 692 | 1.8 | 692 | 1.8 | 0.517 | 4.7 | LOS A | 6.5 | 46.5 | 0.25 | 0.28 | 0.25 | 28.3 |
| 3 | R2 | 108 | 1.0 | 108 | 1.0 | 0.517 | 10.2 | LOS A | 3.2 | 22.5 | 0.29 | 0.41 | 0.29 | 35.8 |
| Approach | | 840 | 1.9 | 840 | 1.9 | 0.517 | 5.6 | LOS A | 6.5 | 46.5 | 0.26 | 0.30 | 0.26 | 30.8 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 21 | 0.0 | 21 | 0.0 | 0.094 | 43.9 | LOS D | 0.9 | 6.4 | 0.92 | 0.68 | 0.92 | 13.1 |
| 6 | R2 | 28 | 3.7 | 28 | 3.7 | 0.131 | 48.2 | LOS D | 1.3 | 9.2 | 0.93 | 0.71 | 0.93 | 12.2 |
| Approach | | 49 | 2.1 | 49 | 2.1 | 0.131 | 46.4 | LOS D | 1.3 | 9.2 | 0.92 | 0.70 | 0.92 | 12.5 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 48 | 0.0 | 48 | 0.0 | 0.566 | 13.1 | LOS A | 10.6 | 75.7 | 0.44 | 0.42 | 0.44 | 34.8 |
| 8 | T1 | 765 | 2.3 | 765 | 2.3 | 0.566 | 12.3 | LOS A | 10.6 | 75.7 | 0.55 | 0.50 | 0.55 | 19.0 |
| Approach | | 814 | 2.2 | 814 | 2.2 | 0.566 | 12.3 | LOS A | 10.6 | 75.7 | 0.54 | 0.50 | 0.54 | 20.4 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 60 | 1.8 | 60 | 1.8 | 0.329 | 48.6 | LOS D | 3.2 | 22.6 | 0.96 | 0.75 | 0.96 | 9.0 |
| 11 | T1 | 8 | 0.0 | 8 | 0.0 | 0.329 | 45.2 | LOS D | 3.2 | 22.6 | 0.96 | 0.75 | 0.96 | 16.9 |
| 12 | R2 | 61 | 5.2 | 61 | 5.2 | 0.487 | 49.6 | LOS D | 3.0 | 21.7 | 0.97 | 0.77 | 0.97 | 8.8 |
| Approach | | 129 | 3.3 | 129 | 3.3 | 0.487 | 48.9 | LOS D | 3.2 | 22.6 | 0.96 | 0.76 | 0.96 | 9.5 |
| All Vehicles | | 1833 | 2.1 | 1833 | 2.1 | 0.566 | 12.7 | LOS A | 10.6 | 75.7 | 0.45 | 0.43 | 0.45 | 20.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 79 | 30.5 | LOS D | 0.2 | 0.2 | 0.78 | 0.78 |
| P2 | East Full Crossing | 8 | 18.6 | LOS B | 0.0 | 0.0 | 0.61 | 0.61 |
| P3 | North Full Crossing | 59 | 44.3 | LOS E | 0.2 | 0.2 | 0.94 | 0.94 |
| P4 | West Full Crossing | 3 | 12.5 | LOS B | 0.0 | 0.0 | 0.50 | 0.50 |
| All Pedestrians | | 149 | 34.9 | LOS D | | | 0.83 | 0.83 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street PM]

## Network: N101 [PM Network]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 33 | 0.0 | 33 | 0.0 | 0.308 | 9.6 | LOS A | 4.4 | 31.3 | 0.24 | 0.25 | 0.24 | 34.6 |
| 2 | T1 | 598 | 1.8 | 598 | 1.8 | 0.308 | 3.7 | LOS A | 4.4 | 31.3 | 0.18 | 0.20 | 0.18 | 31.3 |
| 3 | R2 | 26 | 0.0 | 26 | 0.0 | 0.308 | 6.6 | LOS A | 1.5 | 10.8 | 0.11 | 0.14 | 0.11 | 43.5 |
| Approach | | 657 | 1.6 | 657 | 1.6 | 0.308 | 4.1 | LOS A | 4.4 | 31.3 | 0.18 | 0.20 | 0.18 | 32.6 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 119 | 0.0 | 119 | 0.0 | 0.640 | 49.4 | LOS D | 5.9 | 41.6 | 1.00 | 0.81 | 1.06 | 12.0 |
| 6 | R2 | 88 | 1.2 | 88 | 1.2 | 0.618 | 60.8 | LOS E | 4.9 | 34.7 | 1.00 | 0.80 | 1.06 | 10.2 |
| Approach | | 207 | 0.5 | 207 | 0.5 | 0.640 | 54.3 | LOS D | 5.9 | 41.6 | 1.00 | 0.81 | 1.06 | 11.1 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 20 | 0.0 | 20 | 0.0 | 0.651 | 5.4 | LOS A | 2.3 | 16.1 | 0.06 | 0.07 | 0.06 | 46.5 |
| 8 | T1 | 961 | 0.8 | 961 | 0.8 | 0.651 | 6.2 | LOS A | 9.3 | 65.2 | 0.24 | 0.22 | 0.24 | 27.4 |
| Approach | | 981 | 0.8 | 981 | 0.8 | 0.651 | 6.2 | LOS A | 9.3 | 65.2 | 0.24 | 0.21 | 0.24 | 28.1 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 98 | 0.0 | 98 | 0.0 | 0.562 | 55.8 | LOS D | 5.7 | 39.7 | 0.99 | 0.79 | 0.99 | 8.1 |
| 11 | T1 | 8 | 0.0 | 8 | 0.0 | 0.562 | 52.4 | LOS D | 5.7 | 39.7 | 0.99 | 0.79 | 0.99 | 15.4 |
| 12 | R2 | 127 | 0.0 | 127 | 0.0 | 0.840 | 64.7 | LOS E | 7.7 | 54.2 | 1.00 | 1.02 | 1.37 | 7.1 |
| Approach | | 234 | 0.0 | 234 | 0.0 | 0.840 | 60.5 | LOS E | 7.7 | 54.2 | 1.00 | 0.91 | 1.20 | 7.8 |
| All Vehicles | | 2079 | 0.9 | 2079 | 0.9 | 0.840 | 16.4 | LOS B | 9.3 | 65.2 | 0.38 | 0.35 | 0.41 | 17.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 92 | 37.8 | LOS D | 0.2 | 0.2 | 0.83 | 0.83 |
| P2 | East Full Crossing | 2 | 18.6 | LOS B | 0.0 | 0.0 | 0.58 | 0.58 |
| P3 | North Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P4 | West Full Crossing | 6 | 11.4 | LOS B | 0.0 | 0.0 | 0.45 | 0.45 |
| All Pedestrians | | 153 | 40.4 | LOS E | | | 0.85 | 0.85 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street Sat]

## Network: N101 [Sat Network]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 24 | 0.0 | 24 | 0.0 | 0.314 | 8.1 | LOS A | 2.8 | 19.6 | 0.21 | 0.21 | 0.21 | 37.0 |
| 2 | T1 | 646 | 0.5 | 646 | 0.5 | 0.314 | 2.0 | LOS A | 2.8 | 19.6 | 0.13 | 0.14 | 0.13 | 37.4 |
| 3 | R2 | 21 | 0.0 | 21 | 0.0 | 0.314 | 5.0 | LOS A | 0.4 | 2.6 | 0.03 | 0.06 | 0.03 | 46.8 |
| Approach | | 692 | 0.5 | 692 | 0.5 | 0.314 | 2.3 | LOS A | 2.8 | 19.6 | 0.13 | 0.14 | 0.13 | 38.0 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 19 | 5.6 | 19 | 5.6 | 0.141 | 44.3 | LOS D | 0.7 | 5.4 | 0.96 | 0.69 | 0.96 | 13.0 |
| 6 | R2 | 9 | 0.0 | 9 | 0.0 | 0.068 | 43.6 | LOS D | 0.4 | 2.5 | 0.96 | 0.66 | 0.96 | 13.1 |
| Approach | | 28 | 3.7 | 28 | 3.7 | 0.141 | 44.1 | LOS D | 0.7 | 5.4 | 0.96 | 0.68 | 0.96 | 13.0 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 28 | 0.0 | 28 | 0.0 | 0.296 | 6.6 | LOS A | 1.8 | 12.7 | 0.14 | 0.16 | 0.14 | 43.7 |
| 8 | T1 | 660 | 0.6 | 660 | 0.6 | 0.296 | 5.7 | LOS A | 7.4 | 51.8 | 0.38 | 0.35 | 0.38 | 28.4 |
| Approach | | 688 | 0.6 | 688 | 0.6 | 0.296 | 5.7 | LOS A | 7.4 | 51.8 | 0.37 | 0.34 | 0.37 | 29.5 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 89 | 0.0 | 89 | 0.0 | 0.403 | 39.0 | LOS C | 3.5 | 24.8 | 0.96 | 0.77 | 0.96 | 10.6 |
| 11 | T1 | 5 | 0.0 | 5 | 0.0 | 0.403 | 35.6 | LOS C | 3.5 | 24.8 | 0.96 | 0.77 | 0.96 | 19.3 |
| 12 | R2 | 123 | 0.0 | 123 | 0.0 | 0.482 | 39.4 | LOS C | 4.7 | 32.6 | 0.97 | 0.78 | 0.97 | 10.5 |
| Approach | | 218 | 0.0 | 218 | 0.0 | 0.482 | 39.1 | LOS C | 4.7 | 32.6 | 0.96 | 0.77 | 0.96 | 10.8 |
| All Vehicles | | 1626 | 0.5 | 1626 | 0.5 | 0.482 | 9.4 | LOS A | 7.4 | 51.8 | 0.36 | 0.32 | 0.36 | 23.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 1 | 28.9 | LOS C | 0.0 | 0.0 | 0.85 | 0.85 |
| P2 | East Full Crossing | 3 | 11.6 | LOS B | 0.0 | 0.0 | 0.54 | 0.54 |
| P3 | North Full Crossing | 18 | 34.3 | LOS D | 0.0 | 0.0 | 0.93 | 0.93 |
| P4 | West Full Crossing | 2 | 11.0 | LOS B | 0.0 | 0.0 | 0.53 | 0.53 |
| All Pedestrians | | 24 | 29.0 | LOS C | | | 0.84 | 0.84 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street AM]

## Network: N101 [AM Network]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 95 | 2.2 | 95 | 2.2 | 0.888 | 44.2 | LOS D | 38.1 | 269.7 | 0.99 | 1.03 | 1.17 | 24.0 |
| 2 | T1 | 729 | 1.3 | 729 | 1.3 | 0.888 | 36.5 | LOS C | 38.1 | 269.7 | 0.94 | 0.95 | 1.09 | 25.1 |
| Approach | | 824 | 1.4 | 824 | 1.4 | 0.888 | 37.4 | LOS C | 38.1 | 269.7 | 0.94 | 0.96 | 1.10 | 24.9 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 33 | 0.0 | 33 | 0.0 | 0.160 | 49.4 | LOS D | 1.5 | 10.4 | 0.94 | 0.72 | 0.94 | 25.3 |
| 5 | T1 | 75 | 1.4 | 75 | 1.4 | 0.276 | 43.8 | LOS D | 3.4 | 23.7 | 0.93 | 0.74 | 0.93 | 13.1 |
| Approach | | 107 | 1.0 | 107 | 1.0 | 0.276 | 45.5 | LOS D | 3.4 | 23.7 | 0.94 | 0.73 | 0.94 | 18.4 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 17 | 0.0 | 17 | 0.0 | 0.356 | 6.7 | LOS A | 2.2 | 15.7 | 0.12 | 0.13 | 0.12 | 43.7 |
| 8 | T1 | 720 | 2.8 | 720 | 2.8 | 0.774 | 22.0 | LOS B | 18.3 | 130.6 | 0.52 | 0.54 | 0.65 | 32.8 |
| 9 | R2 | 108 | 1.0 | 108 | 1.0 | 0.774 | 50.2 | LOS D | 18.3 | 130.6 | 1.00 | 1.04 | 1.29 | 6.4 |
| Approach | | 845 | 2.5 | 845 | 2.5 | 0.774 | 25.3 | LOS B | 18.3 | 130.6 | 0.57 | 0.60 | 0.72 | 30.0 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 102 | 6.2 | 102 | 6.2 | 0.167 | 24.1 | LOS B | 3.5 | 26.1 | 0.68 | 0.68 | 0.68 | 18.0 |
| 11 | T1 | 128 | 4.1 | 128 | 4.1 | 0.723 | 39.3 | LOS C | 12.1 | 86.0 | 0.96 | 0.95 | 1.17 | 20.2 |
| 12 | R2 | 141 | 0.7 | 141 | 0.7 | 0.723 | 44.6 | LOS D | 12.1 | 86.0 | 0.99 | 0.98 | 1.22 | 26.0 |
| Approach | | 372 | 3.4 | 372 | 3.4 | 0.723 | 37.1 | LOS C | 12.1 | 86.0 | 0.89 | 0.89 | 1.06 | 22.7 |
| All Vehicles | | 2148 | 2.2 | 2148 | 2.2 | 0.888 | 33.0 | LOS C | 38.1 | 269.7 | 0.79 | 0.79 | 0.93 | 26.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 95 | 44.4 | LOS E | 0.3 | 0.3 | 0.94 | 0.94 |
| P2 | East Full Crossing | 92 | 11.1 | LOS B | 0.1 | 0.1 | 0.47 | 0.47 |
| P3 | North Full Crossing | 97 | 34.6 | LOS D | 0.2 | 0.2 | 0.83 | 0.83 |
| P4 | West Full Crossing | 36 | 23.2 | LOS C | 0.1 | 0.1 | 0.68 | 0.68 |
| All Pedestrians | | 319 | 29.5 | LOS C | | | 0.75 | 0.75 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street PM]

## Network: N101 [PM Network]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 113 | 0.0 | 113 | 0.0 | 0.837 | 46.7 | LOS D | 28.3 | 200.2 | 0.99 | 0.95 | 1.10 | 23.1 |
| 2 | T1 | 571 | 1.5 | 571 | 1.5 | 0.837 | 38.5 | LOS C | 28.3 | 200.2 | 0.93 | 0.87 | 1.01 | 24.3 |
| Approach | | 683 | 1.2 | 683 | 1.2 | 0.837 | 39.8 | LOS C | 28.3 | 200.2 | 0.94 | 0.88 | 1.02 | 24.1 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 98 | 0.0 | 98 | 0.0 | 0.446 | 54.9 | LOS D | 5.1 | 35.5 | 0.97 | 0.78 | 0.97 | 24.0 |
| 5 | T1 | 137 | 0.8 | 137 | 0.8 | 0.456 | 47.9 | LOS D | 6.8 | 48.2 | 0.96 | 0.78 | 0.96 | 12.3 |
| Approach | | 235 | 0.4 | 235 | 0.4 | 0.456 | 50.8 | LOS D | 6.8 | 48.2 | 0.96 | 0.78 | 0.96 | 18.7 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 9 | 0.0 | 9 | 0.0 | 0.919 | 18.4 | LOS B | 18.5 | 130.6 | 0.72 | 0.72 | 0.79 | 29.7 |
| 8 | T1 | 1092 | 0.7 | 1092 | 0.7 | 0.919 | 13.8 | LOS A | 18.5 | 130.6 | 0.72 | 0.72 | 0.79 | 37.8 |
| 9 | R2 | 113 | 0.0 | 113 | 0.0 | 0.296 | 50.5 | LOS D | 6.2 | 43.1 | 1.00 | 0.80 | 1.00 | 6.0 |
| Approach | | 1214 | 0.6 | 1214 | 0.6 | 0.919 | 17.3 | LOS B | 18.5 | 130.6 | 0.74 | 0.73 | 0.81 | 34.8 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 91 | 2.3 | 91 | 2.3 | 0.202 | 27.1 | LOS B | 4.9 | 35.4 | 0.70 | 0.66 | 0.70 | 17.2 |
| 11 | T1 | 49 | 4.3 | 49 | 4.3 | 0.202 | 23.7 | LOS B | 4.9 | 35.4 | 0.70 | 0.66 | 0.70 | 25.5 |
| 12 | R2 | 355 | 0.6 | 355 | 0.6 | 0.917 | 67.4 | LOS E | 20.7 | 145.6 | 1.00 | 1.31 | 1.84 | 20.8 |
| Approach | | 495 | 1.3 | 495 | 1.3 | 0.917 | 55.7 | LOS D | 20.7 | 145.6 | 0.91 | 1.13 | 1.51 | 20.8 |
| All Vehicles | | 2626 | 0.9 | 2626 | 0.9 | 0.919 | 33.4 | LOS C | 28.3 | 200.2 | 0.85 | 0.85 | 1.01 | 26.5 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 81 | 48.4 | LOS E | 0.2 | 0.2 | 0.94 | 0.94 |
| P2 | East Full Crossing | 58 | 17.0 | LOS B | 0.1 | 0.1 | 0.56 | 0.56 |
| P3 | North Full Crossing | 100 | 29.9 | LOS C | 0.2 | 0.2 | 0.74 | 0.74 |
| P4 | West Full Crossing | 39 | 32.1 | LOS D | 0.1 | 0.1 | 0.76 | 0.76 |
| All Pedestrians | | 278 | 32.9 | LOS D | | | 0.76 | 0.76 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street Sat]

## Network: N101 [Sat Network]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 113 | 0.9 | 113 | 0.9 | 0.443 | 21.4 | LOS B | 10.1 | 70.7 | 0.74 | 0.68 | 0.74 | 33.6 |
| 2 | T1 | 635 | 0.3 | 635 | 0.3 | 0.443 | 16.9 | LOS B | 10.3 | 72.1 | 0.74 | 0.66 | 0.74 | 34.0 |
| Approach | | 747 | 0.4 | 747 | 0.4 | 0.443 | 17.6 | LOS B | 10.3 | 72.1 | 0.74 | 0.66 | 0.74 | 34.0 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 32 | 0.0 | 32 | 0.0 | 0.124 | 38.2 | LOS C | 1.1 | 7.8 | 0.91 | 0.71 | 0.91 | 28.5 |
| 5 | T1 | 52 | 2.0 | 52 | 2.0 | 0.179 | 34.2 | LOS C | 1.8 | 12.9 | 0.91 | 0.70 | 0.91 | 15.6 |
| Approach | | 83 | 1.3 | 83 | 1.3 | 0.179 | 35.8 | LOS C | 1.8 | 12.9 | 0.91 | 0.71 | 0.91 | 22.4 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 7 | 0.0 | 7 | 0.0 | 0.561 | 10.5 | LOS A | 8.9 | 62.7 | 0.39 | 0.36 | 0.39 | 38.0 |
| 8 | T1 | 686 | 0.8 | 686 | 0.8 | 0.561 | 6.7 | LOS A | 8.9 | 62.7 | 0.42 | 0.39 | 0.42 | 43.0 |
| 9 | R2 | 97 | 0.0 | 97 | 0.0 | 0.306 | 17.6 | LOS B | 3.9 | 27.1 | 0.67 | 0.66 | 0.67 | 15.1 |
| Approach | | 791 | 0.7 | 791 | 0.7 | 0.561 | 8.1 | LOS A | 8.9 | 62.7 | 0.45 | 0.42 | 0.45 | 41.3 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 56 | 1.9 | 56 | 1.9 | 0.077 | 18.0 | LOS B | 1.3 | 9.4 | 0.62 | 0.65 | 0.62 | 20.8 |
| 11 | T1 | 18 | 0.0 | 18 | 0.0 | 0.334 | 25.8 | LOS B | 4.0 | 27.9 | 0.86 | 0.73 | 0.86 | 24.2 |
| 12 | R2 | 103 | 1.0 | 103 | 1.0 | 0.334 | 30.5 | LOS C | 4.0 | 27.9 | 0.88 | 0.74 | 0.88 | 29.9 |
| Approach | | 177 | 1.2 | 177 | 1.2 | 0.334 | 26.1 | LOS B | 4.0 | 27.9 | 0.80 | 0.71 | 0.80 | 27.8 |
| All Vehicles | | 1798 | 0.6 | 1798 | 0.6 | 0.561 | 15.1 | LOS B | 10.3 | 72.1 | 0.63 | 0.56 | 0.63 | 35.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 17 | 34.2 | LOS D | 0.0 | 0.0 | 0.93 | 0.93 |
| P2 | East Full Crossing | 6 | 11.0 | LOS B | 0.0 | 0.0 | 0.53 | 0.53 |
| P3 | North Full Crossing | 15 | 28.9 | LOS C | 0.0 | 0.0 | 0.85 | 0.85 |
| P4 | West Full Crossing | 53 | 18.9 | LOS B | 0.1 | 0.1 | 0.69 | 0.69 |
| All Pedestrians | | 91 | 22.9 | LOS C | | | 0.75 | 0.75 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street AM]

## Network: N101 [AM Network]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 51 | 0.0 | 51 | 0.0 | 0.062 | 18.4 | LOS B | 1.1 | 7.9 | 0.60 | 0.67 | 0.60 | 26.7 |
| 2 | T1 | 465 | 7.2 | 465 | 7.2 | 0.540 | 16.6 | LOS B | 13.1 | 97.0 | 0.77 | 0.67 | 0.77 | 24.2 |
| Approach | | 516 | 6.5 | 516 | 6.5 | 0.540 | 16.8 | LOS B | 13.1 | 97.0 | 0.75 | 0.67 | 0.75 | 24.5 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 41 | 5.1 | 41 | 5.1 | 0.115 | 26.6 | LOS B | 1.8 | 12.9 | 0.76 | 0.67 | 0.76 | 26.9 |
| 5 | T1 | 168 | 0.6 | 168 | 0.6 | 0.570 | 31.0 | LOS C | 6.9 | 48.3 | 0.93 | 0.77 | 0.93 | 20.3 |
| 6 | R2 | 41 | 0.0 | 41 | 0.0 | 0.570 | 36.9 | LOS C | 6.9 | 48.3 | 0.95 | 0.79 | 0.95 | 15.9 |
| Approach | | 251 | 1.3 | 251 | 1.3 | 0.570 | 31.2 | LOS C | 6.9 | 48.3 | 0.90 | 0.76 | 0.90 | 20.8 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 89 | 4.7 | 89 | 4.7 | 0.120 | 17.7 | LOS B | 2.1 | 15.4 | 0.60 | 0.68 | 0.60 | 23.6 |
| 8 | T1 | 257 | 12.3 | 257 | 12.3 | 0.592 | 16.5 | LOS B | 10.2 | 77.6 | 0.80 | 0.71 | 0.80 | 31.2 |
| 9 | R2 | 106 | 6.9 | 106 | 6.9 | 0.592 | 21.2 | LOS B | 10.2 | 77.6 | 0.81 | 0.71 | 0.81 | 26.5 |
| Approach | | 453 | 9.5 | 453 | 9.5 | 0.592 | 17.8 | LOS B | 10.2 | 77.6 | 0.76 | 0.71 | 0.76 | 29.0 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 228 | 3.2 | 228 | 3.2 | 0.325 | 23.2 | LOS B | 6.3 | 45.2 | 0.74 | 0.76 | 0.74 | 12.4 |
| 11 | T1 | 429 | 2.9 | 429 | 2.9 | 0.725 | 27.7 | LOS B | 15.5 | 111.4 | 0.95 | 0.85 | 0.99 | 10.8 |
| Approach | | 658 | 3.0 | 658 | 3.0 | 0.725 | 26.1 | LOS B | 15.5 | 111.4 | 0.88 | 0.82 | 0.90 | 11.3 |
| All Vehicles | | 1877 | 5.3 | 1877 | 5.3 | 0.725 | 22.2 | LOS B | 15.5 | 111.4 | 0.82 | 0.74 | 0.83 | 21.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street PM]

## Network: N101 [PM Network]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 58 | 0.0 | 58 | 0.0 | 0.080 | 21.1 | LOS B | 1.4 | 9.9 | 0.66 | 0.69 | 0.66 | 25.1 |
| 2 | T1 | 342 | 5.2 | 342 | 5.2 | 0.440 | 18.2 | LOS B | 9.6 | 70.4 | 0.77 | 0.66 | 0.77 | 23.0 |
| Approach | | 400 | 4.5 | 400 | 4.5 | 0.440 | 18.7 | LOS B | 9.6 | 70.4 | 0.75 | 0.66 | 0.75 | 23.4 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 47 | 0.0 | 47 | 0.0 | 0.099 | 22.0 | LOS B | 1.7 | 12.2 | 0.68 | 0.65 | 0.68 | 29.2 |
| 5 | T1 | 295 | 0.4 | 295 | 0.4 | 0.487 | 21.7 | LOS B | 9.0 | 63.1 | 0.82 | 0.71 | 0.82 | 24.9 |
| 6 | R2 | 19 | 0.0 | 19 | 0.0 | 0.487 | 26.6 | LOS B | 9.0 | 63.1 | 0.83 | 0.71 | 0.83 | 20.5 |
| Approach | | 361 | 0.3 | 361 | 0.3 | 0.487 | 22.0 | LOS B | 9.0 | 63.1 | 0.80 | 0.70 | 0.80 | 25.4 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 128 | 1.6 | 128 | 1.6 | 0.181 | 22.0 | LOS B | 3.3 | 23.5 | 0.69 | 0.72 | 0.69 | 20.7 |
| 8 | T1 | 309 | 5.8 | 309 | 5.8 | 0.654 | 17.9 | LOS B | 11.9 | 87.1 | 0.83 | 0.72 | 0.83 | 30.5 |
| 9 | R2 | 94 | 4.5 | 94 | 4.5 | 0.654 | 22.5 | LOS B | 11.9 | 87.1 | 0.83 | 0.72 | 0.83 | 26.0 |
| Approach | | 532 | 4.6 | 532 | 4.6 | 0.654 | 19.7 | LOS B | 11.9 | 87.1 | 0.79 | 0.72 | 0.79 | 27.8 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 331 | 1.9 | 331 | 1.9 | 0.412 | 21.3 | LOS B | 8.9 | 63.2 | 0.73 | 0.77 | 0.73 | 13.2 |
| 11 | T1 | 455 | 1.2 | 455 | 1.2 | 0.606 | 21.3 | LOS B | 14.3 | 101.3 | 0.86 | 0.75 | 0.86 | 13.2 |
| Approach | | 785 | 1.5 | 785 | 1.5 | 0.606 | 21.3 | LOS B | 14.3 | 101.3 | 0.80 | 0.76 | 0.80 | 13.2 |
| All Vehicles | | 2078 | 2.6 | 2078 | 2.6 | 0.654 | 20.5 | LOS B | 14.3 | 101.3 | 0.79 | 0.72 | 0.79 | 22.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street Sat]

## Network: N101 [Sat Network]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 24 | 0.0 | 24 | 0.0 | 0.025 | 13.4 | LOS A | 0.4 | 2.8 | 0.51 | 0.63 | 0.51 | 30.4 |
| 2 | T1 | 275 | 4.2 | 275 | 4.2 | 0.267 | 9.2 | LOS A | 5.0 | 36.3 | 0.57 | 0.48 | 0.57 | 31.5 |
| Approach | | 299 | 3.9 | 299 | 3.9 | 0.267 | 9.5 | LOS A | 5.0 | 36.3 | 0.56 | 0.50 | 0.56 | 31.3 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 35 | 0.0 | 35 | 0.0 | 0.083 | 25.3 | LOS B | 1.0 | 7.3 | 0.78 | 0.68 | 0.78 | 27.1 |
| 5 | T1 | 184 | 0.6 | 184 | 0.6 | 0.409 | 23.0 | LOS B | 5.6 | 39.7 | 0.86 | 0.72 | 0.86 | 24.2 |
| 6 | R2 | 18 | 0.0 | 18 | 0.0 | 0.409 | 27.7 | LOS B | 5.6 | 39.7 | 0.87 | 0.72 | 0.87 | 19.9 |
| Approach | | 237 | 0.4 | 237 | 0.4 | 0.409 | 23.7 | LOS B | 5.6 | 39.7 | 0.85 | 0.71 | 0.85 | 24.4 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 85 | 1.2 | 85 | 1.2 | 0.091 | 13.3 | LOS A | 1.4 | 10.2 | 0.52 | 0.67 | 0.52 | 27.0 |
| 8 | T1 | 244 | 6.5 | 244 | 6.5 | 0.447 | 11.6 | LOS A | 7.6 | 55.5 | 0.67 | 0.64 | 0.67 | 34.8 |
| 9 | R2 | 104 | 4.0 | 104 | 4.0 | 0.447 | 16.2 | LOS B | 7.6 | 55.5 | 0.67 | 0.64 | 0.67 | 30.3 |
| Approach | | 434 | 4.9 | 434 | 4.9 | 0.447 | 13.1 | LOS A | 7.6 | 55.5 | 0.64 | 0.64 | 0.64 | 32.7 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 207 | 1.5 | 207 | 1.5 | 0.439 | 28.7 | LOS C | 6.1 | 43.2 | 0.88 | 0.79 | 0.88 | 10.5 |
| 11 | T1 | 185 | 0.6 | 185 | 0.6 | 0.334 | 21.6 | LOS B | 5.1 | 35.8 | 0.83 | 0.68 | 0.83 | 13.1 |
| Approach | | 393 | 1.1 | 393 | 1.1 | 0.439 | 25.3 | LOS B | 6.1 | 43.2 | 0.86 | 0.74 | 0.86 | 11.6 |
| All Vehicles | | 1362 | 2.8 | 1362 | 2.8 | 0.447 | 17.7 | LOS B | 7.6 | 55.5 | 0.72 | 0.65 | 0.72 | 24.9 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P2 | East Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P3 | North Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P4 | West Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| All Pedestrians | | 211 | 29.3 | LOS C | | | 0.92 | 0.92 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East AM w Dev]

## Network: N101 [AM Network w Dev]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 100 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 75 | 0.0 | 75 | 0.0 | 0.596 | 10.4 | LOS A | 9.9 | 74.1 | 0.46 | 0.44 | 0.46 | 34.2 |
| 2 | T1 | 414 | 9.2 | 414 | 9.2 | 0.596 | 6.9 | LOS A | 9.9 | 74.1 | 0.46 | 0.44 | 0.46 | 33.3 |
| 3 | R2 | 211 | 0.0 | 211 | 0.0 | 0.341 | 8.3 | LOS A | 3.1 | 21.8 | 0.44 | 0.63 | 0.44 | 27.9 |
| Approach | | 699 | 5.4 | 699 | 5.4 | 0.596 | 7.7 | LOS A | 9.9 | 74.1 | 0.45 | 0.50 | 0.45 | 32.3 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 41 | 5.1 | 41 | 5.1 | 0.108 | 37.2 | LOS C | 1.6 | 11.8 | 0.83 | 0.70 | 0.83 | 13.7 |
| 5 | T1 | 53 | 2.0 | 53 | 2.0 | 0.798 | 52.0 | LOS D | 8.7 | 74.5 | 1.00 | 0.97 | 1.24 | 17.5 |
| 6 | R2 | 113 | 36.4 | 113 | 36.4 | 0.798 | 55.5 | LOS D | 8.7 | 74.5 | 1.00 | 0.97 | 1.24 | 16.5 |
| Approach | | 206 | 21.4 | 206 | 21.4 | 0.798 | 51.0 | LOS D | 8.7 | 74.5 | 0.97 | 0.92 | 1.16 | 16.4 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 160 | 0.0 | 160 | 0.0 | 0.105 | 5.3 | LOS A | 1.5 | 10.5 | 0.21 | 0.53 | 0.21 | 31.5 |
| 8 | T1 | 411 | 10.3 | 411 | 10.3 | 0.373 | 7.9 | LOS A | 8.6 | 65.8 | 0.47 | 0.41 | 0.47 | 28.5 |
| 9 | R2 | 155 | 0.7 | 155 | 0.7 | 0.275 | 9.4 | LOS A | 2.4 | 16.9 | 0.47 | 0.66 | 0.47 | 32.2 |
| Approach | | 725 | 6.0 | 725 | 6.0 | 0.373 | 7.6 | LOS A | 8.6 | 65.8 | 0.41 | 0.49 | 0.41 | 30.3 |
| All Vehicles | | 1631 | 7.7 | 1631 | 7.7 | 0.798 | 13.2 | LOS A | 9.9 | 74.5 | 0.50 | 0.55 | 0.52 | 27.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P2 | East Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P4 | West Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| All Pedestrians | | 158 | 44.3 | LOS E | | | 0.94 | 0.94 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East PM w Dev]

## Network: N101 [PM Network w Dev]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 44 | 0.0 | 44 | 0.0 | 0.710 | 15.8 | LOS B | 13.5 | 97.9 | 0.68 | 0.62 | 0.68 | 30.9 |
| 2 | T1 | 502 | 4.2 | 502 | 4.2 | 0.710 | 12.4 | LOS A | 13.5 | 97.9 | 0.68 | 0.62 | 0.68 | 29.9 |
| 3 | R2 | 129 | 0.0 | 129 | 0.0 | 0.270 | 10.8 | LOS A | 1.9 | 13.0 | 0.62 | 0.68 | 0.62 | 25.6 |
| Approach | | 676 | 3.1 | 676 | 3.1 | 0.710 | 12.3 | LOS A | 13.5 | 97.9 | 0.67 | 0.63 | 0.67 | 29.5 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 92 | 2.3 | 92 | 2.3 | 0.209 | 29.4 | LOS C | 2.9 | 20.5 | 0.83 | 0.73 | 0.83 | 15.9 |
| 5 | T1 | 60 | 0.0 | 60 | 0.0 | 0.540 | 34.6 | LOS C | 5.7 | 44.3 | 0.97 | 0.79 | 0.97 | 21.4 |
| 6 | R2 | 92 | 21.8 | 92 | 21.8 | 0.540 | 38.1 | LOS C | 5.7 | 44.3 | 0.97 | 0.79 | 0.97 | 20.5 |
| Approach | | 243 | 9.1 | 243 | 9.1 | 0.540 | 34.0 | LOS C | 5.7 | 44.3 | 0.91 | 0.77 | 0.91 | 19.5 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 137 | 0.0 | 137 | 0.0 | 0.097 | 6.0 | LOS A | 1.3 | 9.4 | 0.27 | 0.56 | 0.27 | 30.6 |
| 8 | T1 | 492 | 5.1 | 492 | 5.1 | 0.569 | 11.8 | LOS A | 11.6 | 85.1 | 0.65 | 0.58 | 0.65 | 25.0 |
| 9 | R2 | 109 | 1.0 | 109 | 1.0 | 0.230 | 11.6 | LOS A | 1.5 | 10.9 | 0.63 | 0.70 | 0.63 | 30.9 |
| Approach | | 738 | 3.6 | 738 | 3.6 | 0.569 | 10.7 | LOS A | 11.6 | 85.1 | 0.58 | 0.59 | 0.58 | 27.2 |
| All Vehicles | | 1657 | 4.2 | 1657 | 4.2 | 0.710 | 14.7 | LOS B | 13.5 | 97.9 | 0.66 | 0.63 | 0.67 | 26.5 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 158 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East Sat w Dev]

## Network: N101 [Sat Network w Dev]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 47 | 0.0 | 47 | 0.0 | 0.337 | 9.5 | LOS A | 6.5 | 46.7 | 0.46 | 0.43 | 0.46 | 34.8 |
| 2 | T1 | 345 | 4.3 | 345 | 4.3 | 0.337 | 6.1 | LOS A | 6.5 | 46.7 | 0.46 | 0.43 | 0.46 | 34.0 |
| 3 | R2 | 125 | 0.0 | 125 | 0.0 | 0.212 | 9.2 | LOS A | 1.8 | 12.7 | 0.50 | 0.64 | 0.50 | 27.0 |
| Approach | | 518 | 2.8 | 518 | 2.8 | 0.337 | 7.2 | LOS A | 6.5 | 46.7 | 0.47 | 0.48 | 0.47 | 32.9 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 83 | 0.0 | 83 | 0.0 | 0.196 | 30.1 | LOS C | 2.6 | 18.5 | 0.84 | 0.73 | 0.84 | 15.7 |
| 5 | T1 | 47 | 0.0 | 47 | 0.0 | 0.504 | 34.3 | LOS C | 5.4 | 40.6 | 0.96 | 0.78 | 0.96 | 21.4 |
| 6 | R2 | 98 | 12.9 | 98 | 12.9 | 0.504 | 37.7 | LOS C | 5.4 | 40.6 | 0.96 | 0.78 | 0.96 | 20.5 |
| Approach | | 228 | 5.5 | 228 | 5.5 | 0.504 | 34.3 | LOS C | 5.4 | 40.6 | 0.91 | 0.76 | 0.91 | 19.4 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 109 | 1.0 | 109 | 1.0 | 0.073 | 5.0 | LOS A | 0.8 | 5.9 | 0.21 | 0.53 | 0.21 | 31.8 |
| 8 | T1 | 384 | 4.9 | 384 | 4.9 | 0.344 | 8.6 | LOS A | 7.5 | 54.5 | 0.54 | 0.47 | 0.54 | 27.8 |
| 9 | R2 | 68 | 0.0 | 68 | 0.0 | 0.112 | 10.0 | LOS A | 1.1 | 7.9 | 0.45 | 0.63 | 0.45 | 31.8 |
| Approach | | 562 | 3.6 | 562 | 3.6 | 0.344 | 8.0 | LOS A | 7.5 | 54.5 | 0.46 | 0.50 | 0.46 | 29.3 |
| All Vehicles | | 1308 | 3.6 | 1308 | 3.6 | 0.504 | 12.3 | LOS A | 7.5 | 54.5 | 0.54 | 0.54 | 0.54 | 27.9 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 158 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East AM w Dev]

## Network: N101 [AM Network w Dev]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 325 | 1.6 | 325 | 1.6 | 0.437 | 11.3 | LOS A | 5.9 | 42.2 | 0.31 | 0.55 | 0.31 | 21.5 |
| 2 | T1 | 526 | 1.8 | 526 | 1.8 | 0.437 | 14.4 | LOS A | 11.5 | 81.8 | 0.55 | 0.54 | 0.55 | 42.0 |
| Approach | | 852 | 1.7 | 852 | 1.7 | 0.437 | 13.2 | LOS A | 11.5 | 81.8 | 0.45 | 0.54 | 0.45 | 38.4 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 5 | 0.0 | 5 | 0.0 | 0.211 | 47.7 | LOS D | 2.3 | 16.3 | 0.93 | 0.72 | 0.93 | 16.9 |
| 5 | T1 | 49 | 2.1 | 49 | 2.1 | 0.211 | 44.6 | LOS D | 2.3 | 16.3 | 0.93 | 0.72 | 0.93 | 16.8 |
| 6 | R2 | 32 | 0.0 | 32 | 0.0 | 0.211 | 50.3 | LOS D | 1.6 | 11.5 | 0.95 | 0.73 | 0.95 | 28.1 |
| Approach | | 86 | 1.2 | 86 | 1.2 | 0.211 | 46.9 | LOS D | 2.3 | 16.3 | 0.94 | 0.72 | 0.94 | 22.1 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 82 | 0.0 | 82 | 0.0 | 0.418 | 14.4 | LOS A | 12.1 | 86.3 | 0.54 | 0.52 | 0.54 | 41.9 |
| 8 | T1 | 619 | 2.4 | 619 | 2.4 | 0.418 | 10.2 | LOS A | 12.1 | 86.3 | 0.57 | 0.55 | 0.58 | 38.5 |
| 9 | R2 | 78 | 1.4 | 78 | 1.4 | 0.418 | 15.6 | LOS B | 6.4 | 45.5 | 0.64 | 0.60 | 0.66 | 37.6 |
| Approach | | 779 | 2.0 | 779 | 2.0 | 0.418 | 11.2 | LOS A | 12.1 | 86.3 | 0.57 | 0.55 | 0.58 | 38.9 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 43 | 0.0 | 43 | 0.0 | 0.135 | 31.6 | LOS C | 2.6 | 18.0 | 0.77 | 0.67 | 0.77 | 31.7 |
| 11 | T1 | 74 | 0.0 | 74 | 0.0 | 0.673 | 34.3 | LOS C | 9.2 | 64.3 | 0.89 | 0.81 | 1.00 | 24.2 |
| 12 | R2 | 164 | 0.0 | 164 | 0.0 | 0.673 | 41.6 | LOS C | 9.2 | 64.3 | 0.97 | 0.90 | 1.14 | 12.9 |
| Approach | | 281 | 0.0 | 281 | 0.0 | 0.673 | 38.1 | LOS C | 9.2 | 64.3 | 0.92 | 0.84 | 1.05 | 19.7 |
| All Vehicles | | 1998 | 1.6 | 1998 | 1.6 | 0.673 | 17.4 | LOS B | 12.1 | 86.3 | 0.59 | 0.59 | 0.61 | 33.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P2 | East Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P3 | North Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P4 | West Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| All Pedestrians | | 211 | 44.3 | LOS E | | | 0.94 | 0.94 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East PM w Dev]

## Network: N101 [PM Network w Dev]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 196 | 1.6 | 196 | 1.6 | 0.569 | 20.1 | LOS B | 11.1 | 78.7 | 0.57 | 0.62 | 0.57 | 15.0 |
| 2 | T1 | 583 | 1.3 | 583 | 1.3 | 0.569 | 22.0 | LOS B | 14.0 | 99.1 | 0.67 | 0.62 | 0.67 | 36.6 |
| Approach | | 779 | 1.4 | 779 | 1.4 | 0.569 | 21.5 | LOS B | 14.0 | 99.1 | 0.64 | 0.62 | 0.64 | 33.9 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 9 | 0.0 | 9 | 0.0 | 0.237 | 53.4 | LOS D | 2.5 | 18.1 | 0.94 | 0.73 | 0.94 | 15.5 |
| 5 | T1 | 41 | 2.6 | 41 | 2.6 | 0.237 | 50.1 | LOS D | 2.5 | 18.1 | 0.94 | 0.73 | 0.94 | 15.5 |
| 6 | R2 | 81 | 0.0 | 81 | 0.0 | 0.533 | 58.9 | LOS E | 4.4 | 30.7 | 1.00 | 0.77 | 1.00 | 25.9 |
| Approach | | 132 | 0.8 | 132 | 0.8 | 0.533 | 55.7 | LOS D | 4.4 | 30.7 | 0.98 | 0.76 | 0.98 | 22.9 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 56 | 1.9 | 56 | 1.9 | 0.614 | 24.5 | LOS B | 27.5 | 193.9 | 0.76 | 0.70 | 0.76 | 36.9 |
| 8 | T1 | 732 | 1.0 | 732 | 1.0 | 0.614 | 19.6 | LOS B | 27.5 | 193.9 | 0.76 | 0.69 | 0.76 | 32.5 |
| 9 | R2 | 39 | 0.0 | 39 | 0.0 | 0.184 | 21.4 | LOS B | 2.6 | 18.0 | 0.72 | 0.63 | 0.72 | 33.2 |
| Approach | | 826 | 1.0 | 826 | 1.0 | 0.614 | 20.0 | LOS B | 27.5 | 193.9 | 0.76 | 0.69 | 0.76 | 32.9 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 26 | 0.0 | 26 | 0.0 | 0.103 | 25.3 | LOS B | 2.5 | 17.3 | 0.66 | 0.58 | 0.66 | 34.7 |
| 11 | T1 | 48 | 0.0 | 48 | 0.0 | 0.103 | 21.9 | LOS B | 2.5 | 17.3 | 0.66 | 0.58 | 0.66 | 29.4 |
| 12 | R2 | 318 | 0.0 | 318 | 0.0 | 0.663 | 32.0 | LOS C | 13.1 | 91.6 | 0.91 | 0.81 | 0.91 | 15.1 |
| Approach | | 393 | 0.0 | 393 | 0.0 | 0.663 | 30.3 | LOS C | 13.1 | 91.6 | 0.86 | 0.77 | 0.86 | 18.9 |
| All Vehicles | | 2129 | 0.9 | 2129 | 0.9 | 0.663 | 24.7 | LOS B | 27.5 | 193.9 | 0.75 | 0.68 | 0.75 | 29.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P2 | East Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P3 | North Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P4 | West Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| All Pedestrians | | 211 | 49.3 | LOS E | | | 0.95 | 0.95 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East Sat w Dev]

## Network: N101 [Sat Network w Dev]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 178 | 1.2 | 178 | 1.2 | 0.441 | 11.1 | LOS A | 5.5 | 38.8 | 0.38 | 0.48 | 0.38 | 23.6 |
| 2 | T1 | 621 | 0.2 | 621 | 0.2 | 0.441 | 8.4 | LOS A | 6.6 | 46.0 | 0.42 | 0.42 | 0.42 | 47.5 |
| Approach | | 799 | 0.4 | 799 | 0.4 | 0.441 | 9.0 | LOS A | 6.6 | 46.0 | 0.41 | 0.44 | 0.41 | 45.3 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 2 | 0.0 | 2 | 0.0 | 0.125 | 37.2 | LOS C | 1.2 | 8.9 | 0.90 | 0.69 | 0.90 | 20.0 |
| 5 | T1 | 33 | 6.5 | 33 | 6.5 | 0.125 | 33.9 | LOS C | 1.2 | 8.9 | 0.90 | 0.69 | 0.90 | 20.0 |
| 6 | R2 | 39 | 0.0 | 39 | 0.0 | 0.183 | 39.9 | LOS C | 1.4 | 10.0 | 0.93 | 0.73 | 0.93 | 31.1 |
| Approach | | 74 | 2.9 | 74 | 2.9 | 0.183 | 37.2 | LOS C | 1.4 | 10.0 | 0.92 | 0.71 | 0.92 | 27.2 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 40 | 2.6 | 40 | 2.6 | 0.342 | 11.8 | LOS A | 7.6 | 53.2 | 0.50 | 0.46 | 0.50 | 43.8 |
| 8 | T1 | 635 | 0.5 | 635 | 0.5 | 0.342 | 7.3 | LOS A | 7.6 | 53.2 | 0.51 | 0.47 | 0.51 | 41.2 |
| 9 | R2 | 52 | 0.0 | 52 | 0.0 | 0.342 | 12.1 | LOS A | 5.6 | 39.0 | 0.54 | 0.47 | 0.54 | 40.8 |
| Approach | | 726 | 0.6 | 726 | 0.6 | 0.342 | 7.9 | LOS A | 7.6 | 53.2 | 0.52 | 0.47 | 0.52 | 41.4 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 17 | 0.0 | 17 | 0.0 | 0.092 | 28.4 | LOS B | 1.2 | 8.7 | 0.80 | 0.64 | 0.80 | 33.2 |
| 11 | T1 | 24 | 0.0 | 24 | 0.0 | 0.092 | 25.0 | LOS B | 1.2 | 8.7 | 0.80 | 0.64 | 0.80 | 27.9 |
| 12 | R2 | 160 | 0.7 | 160 | 0.7 | 0.551 | 37.4 | LOS C | 5.9 | 41.3 | 0.95 | 0.90 | 1.23 | 13.7 |
| Approach | | 201 | 0.5 | 201 | 0.5 | 0.551 | 35.1 | LOS C | 5.9 | 41.3 | 0.92 | 0.85 | 1.14 | 17.7 |
| All Vehicles | | 1800 | 0.6 | 1800 | 0.6 | 0.551 | 12.6 | LOS A | 7.6 | 53.2 | 0.53 | 0.50 | 0.56 | 38.5 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street AM w Dev]

## Network: N101 [AM Network w Dev]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 40 | 5.3 | 40 | 5.3 | 0.471 | 8.8 | LOS A | 5.5 | 39.4 | 0.23 | 0.24 | 0.23 | 35.7 |
| 2 | T1 | 692 | 1.8 | 692 | 1.8 | 0.471 | 4.4 | LOS A | 5.5 | 39.4 | 0.23 | 0.26 | 0.23 | 28.9 |
| 3 | R2 | 83 | 1.3 | 83 | 1.3 | 0.471 | 9.5 | LOS A | 3.0 | 21.5 | 0.25 | 0.33 | 0.25 | 37.5 |
| Approach | | 815 | 1.9 | 815 | 1.9 | 0.471 | 5.2 | LOS A | 5.5 | 39.4 | 0.24 | 0.27 | 0.24 | 31.2 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 72 | 0.0 | 72 | 0.0 | 0.321 | 45.8 | LOS D | 3.3 | 23.0 | 0.95 | 0.74 | 0.95 | 12.7 |
| 6 | R2 | 97 | 1.1 | 97 | 1.1 | 0.438 | 50.4 | LOS D | 4.6 | 32.3 | 0.97 | 0.77 | 0.97 | 11.8 |
| Approach | | 168 | 0.6 | 168 | 0.6 | 0.438 | 48.4 | LOS D | 4.6 | 32.3 | 0.96 | 0.76 | 0.96 | 12.1 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 37 | 0.0 | 37 | 0.0 | 0.553 | 12.6 | LOS A | 9.9 | 70.3 | 0.41 | 0.39 | 0.41 | 35.4 |
| 8 | T1 | 759 | 2.4 | 759 | 2.4 | 0.553 | 11.9 | LOS A | 9.9 | 70.3 | 0.53 | 0.48 | 0.53 | 19.4 |
| Approach | | 796 | 2.2 | 796 | 2.2 | 0.553 | 11.9 | LOS A | 9.9 | 70.3 | 0.52 | 0.48 | 0.52 | 20.6 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 60 | 1.8 | 60 | 1.8 | 0.329 | 48.6 | LOS D | 3.2 | 22.6 | 0.96 | 0.75 | 0.96 | 9.0 |
| 11 | T1 | 8 | 0.0 | 8 | 0.0 | 0.329 | 45.2 | LOS D | 3.2 | 22.6 | 0.96 | 0.75 | 0.96 | 16.9 |
| 12 | R2 | 61 | 5.2 | 61 | 5.2 | 0.487 | 49.6 | LOS D | 3.0 | 21.7 | 0.97 | 0.77 | 0.97 | 8.8 |
| Approach | | 129 | 3.3 | 129 | 3.3 | 0.487 | 48.9 | LOS D | 3.2 | 22.6 | 0.96 | 0.76 | 0.96 | 9.5 |
| All Vehicles | | 1908 | 2.0 | 1908 | 2.0 | 0.553 | 14.8 | LOS B | 9.9 | 70.3 | 0.47 | 0.43 | 0.47 | 19.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 79 | 30.5 | LOS D | 0.2 | 0.2 | 0.78 | 0.78 |
| P2 | East Full Crossing | 8 | 18.6 | LOS B | 0.0 | 0.0 | 0.61 | 0.61 |
| P3 | North Full Crossing | 59 | 44.3 | LOS E | 0.2 | 0.2 | 0.94 | 0.94 |
| P4 | West Full Crossing | 3 | 12.5 | LOS B | 0.0 | 0.0 | 0.50 | 0.50 |
| All Pedestrians | | 149 | 34.9 | LOS D | | | 0.83 | 0.83 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street PM w Dev]

## Network: N101 [PM Network w Dev]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 33 | 0.0 | 33 | 0.0 | 0.452 | 10.2 | LOS A | 7.7 | 54.9 | 0.29 | 0.28 | 0.29 | 33.9 |
| 2 | T1 | 598 | 1.8 | 598 | 1.8 | 0.452 | 5.0 | LOS A | 7.7 | 54.9 | 0.25 | 0.29 | 0.25 | 27.7 |
| 3 | R2 | 111 | 0.0 | 111 | 0.0 | 0.452 | 5.3 | LOS A | 0.4 | 2.6 | 0.04 | 0.34 | 0.04 | 41.8 |
| Approach | | 741 | 1.4 | 741 | 1.4 | 0.452 | 5.3 | LOS A | 7.7 | 54.9 | 0.22 | 0.29 | 0.22 | 31.7 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 91 | 0.0 | 91 | 0.0 | 0.487 | 48.0 | LOS D | 4.4 | 30.7 | 0.99 | 0.77 | 0.99 | 12.2 |
| 6 | R2 | 67 | 1.6 | 67 | 1.6 | 0.520 | 60.1 | LOS E | 3.7 | 26.2 | 1.00 | 0.77 | 1.00 | 10.3 |
| Approach | | 158 | 0.7 | 158 | 0.7 | 0.520 | 53.2 | LOS D | 4.4 | 30.7 | 0.99 | 0.77 | 0.99 | 11.3 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 84 | 0.0 | 84 | 0.0 | 0.704 | 5.4 | LOS A | 2.9 | 20.3 | 0.07 | 0.11 | 0.07 | 45.7 |
| 8 | T1 | 974 | 0.8 | 974 | 0.8 | 0.704 | 6.6 | LOS A | 9.9 | 69.8 | 0.26 | 0.26 | 0.26 | 26.2 |
| Approach | | 1058 | 0.7 | 1058 | 0.7 | 0.704 | 6.5 | LOS A | 9.9 | 69.8 | 0.24 | 0.25 | 0.24 | 28.7 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 98 | 0.0 | 98 | 0.0 | 0.562 | 55.8 | LOS D | 5.7 | 39.7 | 0.99 | 0.79 | 0.99 | 8.1 |
| 11 | T1 | 8 | 0.0 | 8 | 0.0 | 0.562 | 52.4 | LOS D | 5.7 | 39.7 | 0.99 | 0.79 | 0.99 | 15.4 |
| 12 | R2 | 127 | 0.0 | 127 | 0.0 | 0.840 | 64.7 | LOS E | 7.7 | 54.2 | 1.00 | 1.02 | 1.37 | 7.1 |
| Approach | | 234 | 0.0 | 234 | 0.0 | 0.840 | 60.5 | LOS E | 7.7 | 54.2 | 1.00 | 0.91 | 1.20 | 7.8 |
| All Vehicles | | 2191 | 0.9 | 2191 | 0.9 | 0.840 | 15.2 | LOS B | 9.9 | 69.8 | 0.37 | 0.37 | 0.39 | 19.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 92 | 37.8 | LOS D | 0.2 | 0.2 | 0.83 | 0.83 |
| P2 | East Full Crossing | 2 | 18.6 | LOS B | 0.0 | 0.0 | 0.58 | 0.58 |
| P3 | North Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P4 | West Full Crossing | 6 | 11.4 | LOS B | 0.0 | 0.0 | 0.45 | 0.45 |
| All Pedestrians | | 153 | 40.4 | LOS E | | | 0.85 | 0.85 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street Sat w Dev]

## Network: N101 [Sat Network w Dev]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 24 | 0.0 | 24 | 0.0 | 0.428 | 22.3 | LOS B | 16.5 | 116.0 | 0.92 | 0.82 | 0.92 | 22.9 |
| 2 | T1 | 646 | 0.5 | 646 | 0.5 | 0.428 | 19.9 | LOS B | 16.5 | 116.0 | 0.94 | 0.83 | 0.94 | 12.7 |
| 3 | R2 | 84 | 0.0 | 84 | 0.0 | 0.428 | 30.2 | LOS C | 9.6 | 67.6 | 1.00 | 0.86 | 1.00 | 21.7 |
| Approach | | 755 | 0.4 | 755 | 0.4 | 0.428 | 21.1 | LOS B | 16.5 | 116.0 | 0.95 | 0.83 | 0.95 | 14.7 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 117 | 0.9 | 117 | 0.9 | 0.844 | 51.9 | LOS D | 5.2 | 37.0 | 1.00 | 0.98 | 1.47 | 11.5 |
| 6 | R2 | 58 | 0.0 | 58 | 0.0 | 0.416 | 45.6 | LOS D | 2.3 | 16.3 | 0.99 | 0.75 | 0.99 | 12.7 |
| Approach | | 175 | 0.6 | 175 | 0.6 | 0.844 | 49.8 | LOS D | 5.2 | 37.0 | 1.00 | 0.90 | 1.31 | 11.9 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 115 | 0.0 | 115 | 0.0 | 0.425 | 11.1 | LOS A | 4.2 | 29.8 | 0.38 | 0.46 | 0.38 | 35.5 |
| 8 | T1 | 682 | 0.6 | 682 | 0.6 | 0.425 | 9.9 | LOS A | 12.6 | 88.7 | 0.62 | 0.58 | 0.62 | 21.2 |
| Approach | | 797 | 0.5 | 797 | 0.5 | 0.425 | 10.1 | LOS A | 12.6 | 88.7 | 0.58 | 0.56 | 0.58 | 24.5 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 89 | 0.0 | 89 | 0.0 | 0.403 | 39.0 | LOS C | 3.5 | 24.8 | 0.96 | 0.77 | 0.96 | 10.6 |
| 11 | T1 | 5 | 0.0 | 5 | 0.0 | 0.403 | 35.6 | LOS C | 3.5 | 24.8 | 0.96 | 0.77 | 0.96 | 19.3 |
| 12 | R2 | 123 | 0.0 | 123 | 0.0 | 0.723 | 44.1 | LOS D | 5.2 | 36.3 | 1.00 | 0.92 | 1.21 | 9.6 |
| Approach | | 218 | 0.0 | 218 | 0.0 | 0.723 | 41.8 | LOS C | 5.2 | 36.3 | 0.98 | 0.86 | 1.10 | 10.3 |
| All Vehicles | | 1944 | 0.4 | 1944 | 0.4 | 0.844 | 21.5 | LOS B | 16.5 | 116.0 | 0.81 | 0.73 | 0.85 | 15.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 1 | 28.9 | LOS C | 0.0 | 0.0 | 0.85 | 0.85 |
| P2 | East Full Crossing | 3 | 11.6 | LOS B | 0.0 | 0.0 | 0.54 | 0.54 |
| P3 | North Full Crossing | 18 | 34.3 | LOS D | 0.0 | 0.0 | 0.93 | 0.93 |
| P4 | West Full Crossing | 2 | 11.0 | LOS B | 0.0 | 0.0 | 0.53 | 0.53 |
| All Pedestrians | | 24 | 29.0 | LOS C | | | 0.84 | 0.84 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street AM w Dev]

## Network: N101 [AM Network w Dev]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 95 | 2.2 | 95 | 2.2 | 0.865 | 40.5 | LOS C | 35.0 | 248.0 | 0.97 | 0.98 | 1.11 | 25.2 |
| 2 | T1 | 707 | 1.3 | 707 | 1.3 | 0.865 | 33.3 | LOS C | 35.0 | 248.0 | 0.92 | 0.91 | 1.04 | 26.2 |
| Approach | | 802 | 1.4 | 802 | 1.4 | 0.865 | 34.2 | LOS C | 35.0 | 248.0 | 0.93 | 0.92 | 1.05 | 26.1 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 51 | 0.0 | 51 | 0.0 | 0.247 | 50.0 | LOS D | 2.3 | 16.4 | 0.95 | 0.74 | 0.95 | 25.2 |
| 5 | T1 | 116 | 0.9 | 116 | 0.9 | 0.427 | 44.9 | LOS D | 5.3 | 37.6 | 0.96 | 0.77 | 0.96 | 12.9 |
| Approach | | 166 | 0.6 | 166 | 0.6 | 0.427 | 46.5 | LOS D | 5.3 | 37.6 | 0.96 | 0.76 | 0.96 | 18.1 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 11 | 0.0 | 11 | 0.0 | 0.368 | 7.1 | LOS A | 2.7 | 19.0 | 0.14 | 0.14 | 0.14 | 43.2 |
| 8 | T1 | 764 | 2.6 | 764 | 2.6 | 0.802 | 22.2 | LOS B | 18.3 | 130.6 | 0.53 | 0.56 | 0.67 | 32.7 |
| 9 | R2 | 115 | 0.9 | 115 | 0.9 | 0.802 | 50.2 | LOS D | 18.3 | 130.6 | 1.00 | 1.06 | 1.30 | 6.5 |
| Approach | | 889 | 2.4 | 889 | 2.4 | 0.802 | 25.7 | LOS B | 18.3 | 130.6 | 0.59 | 0.62 | 0.75 | 29.9 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 99 | 6.4 | 99 | 6.4 | 0.153 | 23.3 | LOS B | 3.3 | 24.1 | 0.66 | 0.68 | 0.66 | 18.3 |
| 11 | T1 | 80 | 6.6 | 80 | 6.6 | 0.660 | 38.7 | LOS C | 9.8 | 70.2 | 0.95 | 0.88 | 1.09 | 20.2 |
| 12 | R2 | 141 | 0.7 | 141 | 0.7 | 0.660 | 44.3 | LOS D | 9.8 | 70.2 | 0.98 | 0.91 | 1.14 | 25.9 |
| Approach | | 320 | 3.9 | 320 | 3.9 | 0.660 | 36.4 | LOS C | 9.8 | 70.2 | 0.88 | 0.83 | 0.98 | 23.2 |
| All Vehicles | | 2178 | 2.1 | 2178 | 2.1 | 0.865 | 32.0 | LOS C | 35.0 | 248.0 | 0.78 | 0.77 | 0.91 | 26.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 95 | 44.4 | LOS E | 0.3 | 0.3 | 0.94 | 0.94 |
| P2 | East Full Crossing | 92 | 11.1 | LOS B | 0.1 | 0.1 | 0.47 | 0.47 |
| P3 | North Full Crossing | 97 | 34.6 | LOS D | 0.2 | 0.2 | 0.83 | 0.83 |
| P4 | West Full Crossing | 36 | 23.2 | LOS C | 0.1 | 0.1 | 0.68 | 0.68 |
| All Pedestrians | | 319 | 29.5 | LOS C | | | 0.75 | 0.75 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street PM w Dev]

## Network: N101 [PM Network w Dev]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 113 | 0.0 | 113 | 0.0 | 0.924 | 61.2 | LOS E | 37.4 | 264.3 | 1.00 | 1.10 | 1.29 | 19.6 |
| 2 | T1 | 643 | 1.3 | 643 | 1.3 | 0.924 | 49.2 | LOS D | 37.4 | 264.3 | 0.94 | 0.98 | 1.15 | 21.4 |
| Approach | | 756 | 1.1 | 756 | 1.1 | 0.924 | 51.0 | LOS D | 37.4 | 264.3 | 0.95 | 1.00 | 1.17 | 21.1 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 86 | 0.0 | 86 | 0.0 | 0.393 | 54.5 | LOS D | 4.4 | 31.0 | 0.97 | 0.77 | 0.97 | 24.1 |
| 5 | T1 | 121 | 0.9 | 121 | 0.9 | 0.404 | 47.4 | LOS D | 6.0 | 42.2 | 0.95 | 0.77 | 0.95 | 12.4 |
| Approach | | 207 | 0.5 | 207 | 0.5 | 0.404 | 50.4 | LOS D | 6.0 | 42.2 | 0.96 | 0.77 | 0.96 | 18.8 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 22 | 0.0 | 22 | 0.0 | 0.872 | 10.5 | LOS A | 18.5 | 130.6 | 0.43 | 0.43 | 0.46 | 38.0 |
| 8 | T1 | 1065 | 0.7 | 1065 | 0.7 | 0.872 | 5.9 | LOS A | 18.5 | 130.6 | 0.43 | 0.43 | 0.46 | 43.9 |
| 9 | R2 | 109 | 0.0 | 109 | 0.0 | 0.298 | 52.9 | LOS D | 6.0 | 41.8 | 1.00 | 0.80 | 1.05 | 5.8 |
| Approach | | 1197 | 0.6 | 1197 | 0.6 | 0.872 | 10.3 | LOS A | 18.5 | 130.6 | 0.49 | 0.46 | 0.51 | 39.6 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 102 | 2.1 | 102 | 2.1 | 0.320 | 29.7 | LOS C | 8.2 | 58.1 | 0.76 | 0.69 | 0.76 | 16.4 |
| 11 | T1 | 113 | 1.9 | 113 | 1.9 | 0.320 | 26.3 | LOS B | 8.2 | 58.1 | 0.76 | 0.69 | 0.76 | 24.6 |
| 12 | R2 | 355 | 0.6 | 355 | 0.6 | 0.898 | 63.2 | LOS E | 20.0 | 140.6 | 1.00 | 1.28 | 1.76 | 21.6 |
| Approach | | 569 | 1.1 | 569 | 1.1 | 0.898 | 49.9 | LOS D | 20.0 | 140.6 | 0.91 | 1.05 | 1.38 | 21.5 |
| All Vehicles | | 2729 | 0.8 | 2729 | 0.8 | 0.924 | 32.9 | LOS C | 37.4 | 264.3 | 0.74 | 0.76 | 0.91 | 26.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 81 | 48.4 | LOS E | 0.2 | 0.2 | 0.94 | 0.94 |
| P2 | East Full Crossing | 58 | 17.0 | LOS B | 0.1 | 0.1 | 0.56 | 0.56 |
| P3 | North Full Crossing | 100 | 29.9 | LOS C | 0.2 | 0.2 | 0.74 | 0.74 |
| P4 | West Full Crossing | 39 | 32.1 | LOS D | 0.1 | 0.1 | 0.76 | 0.76 |
| All Pedestrians | | 278 | 32.9 | LOS D | | | 0.76 | 0.76 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street Sat w Dev]

## Network: N101 [Sat Network w Dev]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 113 | 0.9 | 113 | 0.9 | 0.588 | 23.1 | LOS B | 10.3 | 72.4 | 0.80 | 0.74 | 0.80 | 32.5 |
| 2 | T1 | 693 | 0.3 | 693 | 0.3 | 0.588 | 18.1 | LOS B | 13.3 | 93.3 | 0.79 | 0.71 | 0.79 | 33.3 |
| Approach | | 805 | 0.4 | 805 | 0.4 | 0.588 | 18.8 | LOS B | 13.3 | 93.3 | 0.80 | 0.71 | 0.80 | 33.2 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 60 | 0.0 | 60 | 0.0 | 0.235 | 39.0 | LOS C | 2.2 | 15.2 | 0.93 | 0.74 | 0.93 | 28.2 |
| 5 | T1 | 99 | 1.1 | 99 | 1.1 | 0.341 | 35.3 | LOS C | 3.6 | 25.4 | 0.94 | 0.75 | 0.94 | 15.3 |
| Approach | | 159 | 0.7 | 159 | 0.7 | 0.341 | 36.7 | LOS C | 3.6 | 25.4 | 0.93 | 0.74 | 0.93 | 22.1 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 29 | 0.0 | 29 | 0.0 | 0.670 | 21.3 | LOS B | 18.5 | 130.6 | 0.90 | 0.82 | 0.90 | 27.4 |
| 8 | T1 | 772 | 0.7 | 772 | 0.7 | 0.670 | 17.0 | LOS B | 18.5 | 130.6 | 0.90 | 0.82 | 0.90 | 35.6 |
| 9 | R2 | 109 | 0.0 | 109 | 0.0 | 0.365 | 24.8 | LOS B | 5.2 | 36.8 | 0.91 | 0.78 | 0.91 | 11.4 |
| Approach | | 911 | 0.6 | 911 | 0.6 | 0.670 | 18.0 | LOS B | 18.5 | 130.6 | 0.90 | 0.82 | 0.90 | 33.9 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 61 | 1.7 | 61 | 1.7 | 0.129 | 18.1 | LOS B | 1.4 | 10.2 | 0.63 | 0.67 | 0.63 | 20.7 |
| 11 | T1 | 71 | 0.0 | 71 | 0.0 | 0.470 | 29.0 | LOS C | 6.1 | 42.8 | 0.93 | 0.76 | 0.93 | 23.4 |
| 12 | R2 | 103 | 1.0 | 103 | 1.0 | 0.470 | 32.4 | LOS C | 6.1 | 42.8 | 0.93 | 0.76 | 0.93 | 29.5 |
| Approach | | 235 | 0.9 | 235 | 0.9 | 0.470 | 27.7 | LOS B | 6.1 | 42.8 | 0.85 | 0.74 | 0.85 | 26.5 |
| All Vehicles | | 2109 | 0.5 | 2109 | 0.5 | 0.670 | 20.8 | LOS B | 18.5 | 130.6 | 0.86 | 0.76 | 0.86 | 31.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 17 | 34.2 | LOS D | 0.0 | 0.0 | 0.93 | 0.93 |
| P2 | East Full Crossing | 6 | 11.0 | LOS B | 0.0 | 0.0 | 0.53 | 0.53 |
| P3 | North Full Crossing | 15 | 28.9 | LOS C | 0.0 | 0.0 | 0.85 | 0.85 |
| P4 | West Full Crossing | 53 | 18.9 | LOS B | 0.1 | 0.1 | 0.69 | 0.69 |
| All Pedestrians | | 91 | 22.9 | LOS C | | | 0.75 | 0.75 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street AM w Dev]

## Network: N101 [AM Network w Dev]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 51 | 0.0 | 51 | 0.0 | 0.062 | 18.4 | LOS B | 1.1 | 7.9 | 0.60 | 0.67 | 0.60 | 26.7 |
| 2 | T1 | 465 | 7.2 | 465 | 7.2 | 0.540 | 16.6 | LOS B | 13.1 | 97.0 | 0.77 | 0.67 | 0.77 | 24.2 |
| Approach | | 516 | 6.5 | 516 | 6.5 | 0.540 | 16.8 | LOS B | 13.1 | 97.0 | 0.75 | 0.67 | 0.75 | 24.5 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 49 | 4.3 | 49 | 4.3 | 0.095 | 27.2 | LOS B | 1.4 | 10.3 | 0.76 | 0.71 | 0.76 | 25.8 |
| 5 | T1 | 204 | 0.5 | 204 | 0.5 | 0.446 | 26.3 | LOS B | 7.3 | 51.1 | 0.87 | 0.73 | 0.87 | 22.6 |
| 6 | R2 | 17 | 0.0 | 17 | 0.0 | 0.446 | 30.9 | LOS C | 7.3 | 51.1 | 0.87 | 0.73 | 0.87 | 18.4 |
| Approach | | 271 | 1.2 | 271 | 1.2 | 0.446 | 26.8 | LOS B | 7.3 | 51.1 | 0.85 | 0.73 | 0.85 | 23.1 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 81 | 5.2 | 81 | 5.2 | 0.118 | 17.7 | LOS B | 2.1 | 15.3 | 0.60 | 0.66 | 0.60 | 23.8 |
| 8 | T1 | 257 | 12.3 | 257 | 12.3 | 0.583 | 16.3 | LOS B | 9.9 | 75.6 | 0.79 | 0.71 | 0.79 | 31.2 |
| 9 | R2 | 106 | 6.9 | 106 | 6.9 | 0.583 | 21.1 | LOS B | 9.9 | 75.6 | 0.80 | 0.71 | 0.80 | 26.6 |
| Approach | | 444 | 9.7 | 444 | 9.7 | 0.583 | 17.7 | LOS B | 9.9 | 75.6 | 0.76 | 0.70 | 0.76 | 29.2 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 228 | 3.2 | 228 | 3.2 | 0.325 | 23.2 | LOS B | 6.3 | 45.2 | 0.74 | 0.76 | 0.74 | 12.4 |
| 11 | T1 | 387 | 3.3 | 387 | 3.3 | 0.649 | 25.9 | LOS B | 13.3 | 95.3 | 0.92 | 0.79 | 0.92 | 11.4 |
| Approach | | 616 | 3.2 | 616 | 3.2 | 0.649 | 24.9 | LOS B | 13.3 | 95.3 | 0.85 | 0.78 | 0.85 | 11.7 |
| All Vehicles | | 1846 | 5.4 | 1846 | 5.4 | 0.649 | 21.2 | LOS B | 13.3 | 97.0 | 0.80 | 0.72 | 0.80 | 21.9 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street PM w Dev]

## Network: N101 [PM Network w Dev]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 58 | 0.0 | 58 | 0.0 | 0.080 | 21.1 | LOS B | 1.4 | 9.9 | 0.66 | 0.69 | 0.66 | 25.1 |
| 2 | T1 | 342 | 5.2 | 342 | 5.2 | 0.440 | 18.2 | LOS B | 9.6 | 70.4 | 0.77 | 0.66 | 0.77 | 23.0 |
| Approach | | 400 | 4.5 | 400 | 4.5 | 0.440 | 18.7 | LOS B | 9.6 | 70.4 | 0.75 | 0.66 | 0.75 | 23.4 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 45 | 0.0 | 45 | 0.0 | 0.096 | 21.9 | LOS B | 1.7 | 11.8 | 0.68 | 0.65 | 0.68 | 29.3 |
| 5 | T1 | 280 | 0.4 | 280 | 0.4 | 0.472 | 22.3 | LOS B | 8.6 | 60.2 | 0.82 | 0.71 | 0.82 | 24.6 |
| 6 | R2 | 18 | 0.0 | 18 | 0.0 | 0.472 | 27.2 | LOS B | 8.6 | 60.2 | 0.83 | 0.71 | 0.83 | 20.2 |
| Approach | | 343 | 0.3 | 343 | 0.3 | 0.472 | 22.5 | LOS B | 8.6 | 60.2 | 0.80 | 0.70 | 0.80 | 25.1 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 145 | 1.4 | 145 | 1.4 | 0.204 | 22.1 | LOS B | 3.8 | 26.8 | 0.70 | 0.73 | 0.70 | 20.6 |
| 8 | T1 | 309 | 5.8 | 309 | 5.8 | 0.661 | 17.9 | LOS B | 11.9 | 87.1 | 0.83 | 0.72 | 0.83 | 30.5 |
| 9 | R2 | 94 | 4.5 | 94 | 4.5 | 0.661 | 22.5 | LOS B | 11.9 | 87.1 | 0.83 | 0.72 | 0.83 | 26.0 |
| Approach | | 548 | 4.4 | 548 | 4.4 | 0.661 | 19.8 | LOS B | 11.9 | 87.1 | 0.79 | 0.72 | 0.79 | 27.6 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 331 | 1.9 | 331 | 1.9 | 0.412 | 21.3 | LOS B | 8.9 | 63.2 | 0.73 | 0.77 | 0.73 | 13.2 |
| 11 | T1 | 513 | 1.0 | 513 | 1.0 | 0.750 | 23.7 | LOS B | 17.5 | 123.9 | 0.89 | 0.82 | 0.94 | 12.2 |
| Approach | | 843 | 1.4 | 843 | 1.4 | 0.750 | 22.8 | LOS B | 17.5 | 123.9 | 0.83 | 0.80 | 0.86 | 12.6 |
| All Vehicles | | 2135 | 2.6 | 2135 | 2.6 | 0.750 | 21.2 | LOS B | 17.5 | 123.9 | 0.80 | 0.74 | 0.81 | 21.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street Sat w Dev]

## Network: N101 [Sat Network w Dev]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 24 | 0.0 | 24 | 0.0 | 0.027 | 14.5 | LOS B | 0.4 | 3.0 | 0.54 | 0.64 | 0.54 | 29.5 |
| 2 | T1 | 275 | 4.2 | 275 | 4.2 | 0.281 | 10.4 | LOS A | 5.3 | 38.6 | 0.60 | 0.51 | 0.60 | 30.0 |
| Approach | | 299 | 3.9 | 299 | 3.9 | 0.281 | 10.7 | LOS A | 5.3 | 38.6 | 0.60 | 0.52 | 0.60 | 30.0 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 43 | 0.0 | 43 | 0.0 | 0.094 | 23.7 | LOS B | 1.3 | 8.8 | 0.75 | 0.68 | 0.75 | 27.9 |
| 5 | T1 | 231 | 0.5 | 231 | 0.5 | 0.462 | 21.9 | LOS B | 7.0 | 48.9 | 0.86 | 0.73 | 0.86 | 24.8 |
| 6 | R2 | 22 | 0.0 | 22 | 0.0 | 0.462 | 26.5 | LOS B | 7.0 | 48.9 | 0.86 | 0.73 | 0.86 | 20.5 |
| Approach | | 296 | 0.4 | 296 | 0.4 | 0.462 | 22.5 | LOS B | 7.0 | 48.9 | 0.84 | 0.72 | 0.84 | 25.1 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 103 | 1.0 | 103 | 1.0 | 0.115 | 15.1 | LOS B | 1.9 | 13.5 | 0.57 | 0.68 | 0.57 | 25.4 |
| 8 | T1 | 244 | 6.5 | 244 | 6.5 | 0.483 | 13.1 | LOS A | 8.0 | 59.1 | 0.71 | 0.67 | 0.71 | 33.7 |
| 9 | R2 | 104 | 4.0 | 104 | 4.0 | 0.483 | 17.7 | LOS B | 8.0 | 59.1 | 0.71 | 0.67 | 0.71 | 29.2 |
| Approach | | 452 | 4.7 | 452 | 4.7 | 0.483 | 14.6 | LOS B | 8.0 | 59.1 | 0.68 | 0.67 | 0.68 | 31.2 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 207 | 1.5 | 207 | 1.5 | 0.395 | 26.7 | LOS B | 5.8 | 41.4 | 0.85 | 0.78 | 0.85 | 11.1 |
| 11 | T1 | 225 | 0.5 | 225 | 0.5 | 0.369 | 20.4 | LOS B | 6.1 | 42.6 | 0.82 | 0.68 | 0.82 | 13.7 |
| Approach | | 433 | 1.0 | 433 | 1.0 | 0.395 | 23.4 | LOS B | 6.1 | 42.6 | 0.84 | 0.73 | 0.84 | 12.3 |
| All Vehicles | | 1479 | 2.6 | 1479 | 2.6 | 0.483 | 18.0 | LOS B | 8.0 | 59.1 | 0.74 | 0.67 | 0.74 | 24.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P2 | East Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P3 | North Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P4 | West Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| All Pedestrians | | 211 | 29.3 | LOS C | | | 0.92 | 0.92 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East AM w Dev]

## Network: N101 [AM Network 2029 w Dev]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 100 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 86 | 0.0 | 86 | 0.0 | 0.801 | 16.1 | LOS B | 14.8 | 110.5 | 0.48 | 0.52 | 0.56 | 30.6 |
| 2 | T1 | 479 | 9.2 | 479 | 9.2 | 0.801 | 12.7 | LOS A | 14.8 | 110.5 | 0.48 | 0.52 | 0.56 | 29.6 |
| 3 | R2 | 244 | 0.0 | 244 | 0.0 | 0.437 | 8.8 | LOS A | 3.7 | 25.9 | 0.49 | 0.66 | 0.49 | 27.4 |
| Approach | | 809 | 5.5 | 809 | 5.5 | 0.801 | 11.9 | LOS A | 14.8 | 110.5 | 0.49 | 0.56 | 0.54 | 29.3 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 47 | 4.4 | 47 | 4.5 | 0.123 | 37.4 | LOS C | 1.8 | 13.4 | 0.84 | 0.71 | 0.84 | 13.7 |
| 5 | T1 | 60 | 1.8 | 59 | 1.8 | 0.816 | 52.4 | LOS D | 9.8 | 75.5 | 1.00 | 0.99 | 1.26 | 17.4 |
| 6 | R2 | 127 | 15.7 | 126 | 15.8 | 0.816 | 55.8 | LOS D | 9.8 | 75.5 | 1.00 | 0.99 | 1.26 | 16.4 |
| Approach | | 235 | 9.9 | 232 N1 | 10.0 | 0.816 | 51.2 | LOS D | 9.8 | 75.5 | 0.97 | 0.93 | 1.17 | 16.3 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 184 | 0.0 | 184 | 0.0 | 0.121 | 5.3 | LOS A | 1.8 | 12.3 | 0.21 | 0.54 | 0.21 | 31.4 |
| 8 | T1 | 475 | 10.2 | 475 | 10.2 | 0.511 | 8.3 | LOS A | 10.5 | 79.8 | 0.49 | 0.44 | 0.49 | 28.1 |
| 9 | R2 | 180 | 0.6 | 180 | 0.6 | 0.361 | 10.0 | LOS A | 2.8 | 20.0 | 0.51 | 0.68 | 0.51 | 31.8 |
| Approach | | 839 | 5.9 | 839 | 5.9 | 0.511 | 8.0 | LOS A | 10.5 | 79.8 | 0.44 | 0.51 | 0.44 | 29.9 |
| All Vehicles | | 1883 | 6.2 | 1880 N1 | 6.2 | 0.816 | 15.0 | LOS B | 14.8 | 110.5 | 0.52 | 0.59 | 0.57 | 26.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P2 | East Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P4 | West Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| All Pedestrians | | 158 | 44.3 | LOS E | | | 0.94 | 0.94 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East PM w Dev]

## Network: N101 [PM Network 2029 w Dev]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 52 | 0.0 | 52 | 0.0 | 0.881 | 31.1 | LOS C | 23.6 | 170.3 | 0.73 | 0.86 | 0.99 | 24.1 |
| 2 | T1 | 582 | 4.2 | 582 | 4.2 | 0.881 | 27.6 | LOS B | 23.6 | 170.3 | 0.73 | 0.86 | 0.99 | 22.9 |
| 3 | R2 | 151 | 0.7 | 151 | 0.7 | 0.353 | 12.0 | LOS A | 2.2 | 15.4 | 0.68 | 0.71 | 0.68 | 24.6 |
| Approach | | 784 | 3.2 | 784 | 3.2 | 0.881 | 24.9 | LOS B | 23.6 | 170.3 | 0.72 | 0.83 | 0.93 | 23.2 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 106 | 2.0 | 106 | 2.0 | 0.241 | 29.7 | LOS C | 3.4 | 24.0 | 0.84 | 0.74 | 0.84 | 15.8 |
| 5 | T1 | 68 | 0.0 | 68 | 0.0 | 0.615 | 35.4 | LOS C | 6.6 | 51.5 | 0.98 | 0.82 | 1.01 | 21.2 |
| 6 | R2 | 104 | 22.2 | 104 | 22.2 | 0.615 | 38.9 | LOS C | 6.6 | 51.5 | 0.98 | 0.82 | 1.01 | 20.2 |
| Approach | | 279 | 9.1 | 278 N1 | 9.1 | 0.615 | 34.5 | LOS C | 6.6 | 51.5 | 0.93 | 0.79 | 0.94 | 19.3 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 154 | 0.0 | 154 | 0.0 | 0.109 | 6.0 | LOS A | 1.5 | 10.7 | 0.27 | 0.56 | 0.27 | 30.6 |
| 8 | T1 | 567 | 5.2 | 567 | 5.2 | 0.724 | 12.9 | LOS A | 14.5 | 106.0 | 0.69 | 0.62 | 0.70 | 24.0 |
| 9 | R2 | 127 | 0.8 | 127 | 0.8 | 0.304 | 13.2 | LOS A | 1.8 | 12.8 | 0.71 | 0.73 | 0.71 | 30.0 |
| Approach | | 848 | 3.6 | 848 | 3.6 | 0.724 | 11.7 | LOS A | 14.5 | 106.0 | 0.62 | 0.63 | 0.63 | 26.3 |
| All Vehicles | | 1912 | 4.2 | 1911 N1 | 4.2 | 0.881 | 20.4 | LOS B | 23.6 | 170.3 | 0.71 | 0.73 | 0.80 | 23.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 158 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 1 [1 - Mann Street/ Erina Street East Sat w Dev]

## Network: N101 [Sat Network 2029 w Dev]

Bus stop ID: 225087

AM peak 10 buses stop
Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 55 | 0.0 | 55 | 0.0 | 0.458 | 9.8 | LOS A | 7.8 | 56.5 | 0.48 | 0.45 | 0.48 | 34.6 |
| 2 | T1 | 400 | 4.2 | 400 | 4.2 | 0.458 | 6.4 | LOS A | 7.8 | 56.5 | 0.48 | 0.45 | 0.48 | 33.8 |
| 3 | R2 | 145 | 0.0 | 145 | 0.0 | 0.268 | 9.5 | LOS A | 2.1 | 14.9 | 0.53 | 0.65 | 0.53 | 26.7 |
| Approach | | 600 | 2.8 | 600 | 2.8 | 0.458 | 7.5 | LOS A | 7.8 | 56.5 | 0.49 | 0.50 | 0.49 | 32.7 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 97 | 0.0 | 97 | 0.0 | 0.229 | 30.4 | LOS C | 3.1 | 21.8 | 0.85 | 0.74 | 0.85 | 15.6 |
| 5 | T1 | 54 | 0.0 | 54 | 0.0 | 0.574 | 34.8 | LOS C | 6.2 | 46.9 | 0.97 | 0.80 | 0.97 | 21.3 |
| 6 | R2 | 112 | 13.2 | 112 | 13.2 | 0.574 | 38.2 | LOS C | 6.2 | 46.9 | 0.97 | 0.80 | 0.97 | 20.3 |
| Approach | | 262 | 5.6 | 262 | 5.6 | 0.574 | 34.6 | LOS C | 6.2 | 46.9 | 0.93 | 0.77 | 0.93 | 19.3 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 121 | 0.9 | 121 | 0.9 | 0.081 | 5.0 | LOS A | 0.9 | 6.5 | 0.21 | 0.53 | 0.21 | 31.8 |
| 8 | T1 | 443 | 5.0 | 443 | 5.0 | 0.417 | 8.9 | LOS A | 9.0 | 65.5 | 0.56 | 0.49 | 0.56 | 27.4 |
| 9 | R2 | 79 | 0.0 | 79 | 0.0 | 0.142 | 10.5 | LOS A | 1.3 | 9.2 | 0.47 | 0.65 | 0.50 | 31.5 |
| Approach | | 643 | 3.6 | 643 | 3.6 | 0.417 | 8.4 | LOS A | 9.0 | 65.5 | 0.48 | 0.52 | 0.49 | 28.9 |
| All Vehicles | | 1505 | 3.6 | 1505 | 3.6 | 0.574 | 12.6 | LOS A | 9.0 | 65.5 | 0.56 | 0.56 | 0.56 | 27.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 158 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East AM w Dev]

## Network: N101 [AM Network 2029 w Dev]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 373 | 1.7 | 367 | 1.7 | 0.494 | 14.4 | LOS A | 9.6 | 68.0 | 0.44 | 0.62 | 0.44 | 18.3 |
| 2 | T1 | 604 | 1.7 | 596 | 1.7 | 0.494 | 15.7 | LOS B | 14.0 | 99.5 | 0.61 | 0.58 | 0.61 | 41.0 |
| Approach | | 977 | 1.7 | 963 N1 | 1.7 | 0.494 | 15.2 | LOS B | 14.0 | 99.5 | 0.54 | 0.60 | 0.54 | 36.6 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 6 | 0.0 | 6 | 0.0 | 0.236 | 47.9 | LOS D | 2.6 | 18.2 | 0.94 | 0.73 | 0.94 | 16.8 |
| 5 | T1 | 56 | 1.9 | 56 | 1.9 | 0.236 | 44.8 | LOS D | 2.6 | 18.2 | 0.94 | 0.73 | 0.94 | 16.7 |
| 6 | R2 | 36 | 0.0 | 36 | 0.0 | 0.236 | 50.4 | LOS D | 1.9 | 13.4 | 0.95 | 0.73 | 0.95 | 28.1 |
| Approach | | 98 | 1.1 | 98 | 1.1 | 0.236 | 47.0 | LOS D | 2.6 | 18.2 | 0.94 | 0.73 | 0.94 | 22.1 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 94 | 0.0 | 94 | 0.0 | 0.525 | 15.4 | LOS B | 16.8 | 119.8 | 0.60 | 0.57 | 0.60 | 41.4 |
| 8 | T1 | 715 | 2.4 | 715 | 2.4 | 0.525 | 11.4 | LOS A | 16.8 | 119.8 | 0.63 | 0.60 | 0.64 | 37.6 |
| 9 | R2 | 91 | 1.2 | 91 | 1.2 | 0.525 | 17.5 | LOS B | 6.2 | 44.2 | 0.72 | 0.67 | 0.76 | 36.0 |
| Approach | | 899 | 2.0 | 899 | 2.0 | 0.525 | 12.4 | LOS A | 16.8 | 119.8 | 0.63 | 0.60 | 0.64 | 38.0 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 51 | 0.0 | 51 | 0.0 | 0.169 | 32.0 | LOS C | 3.2 | 22.6 | 0.78 | 0.68 | 0.78 | 31.6 |
| 11 | T1 | 84 | 0.0 | 84 | 0.0 | 0.845 | 39.5 | LOS C | 11.6 | 81.1 | 0.90 | 0.93 | 1.21 | 22.7 |
| 12 | R2 | 189 | 0.0 | 189 | 0.0 | 0.845 | 51.9 | LOS D | 11.6 | 81.1 | 1.00 | 1.14 | 1.55 | 11.0 |
| Approach | | 324 | 0.0 | 324 | 0.0 | 0.845 | 45.6 | LOS D | 11.6 | 81.1 | 0.94 | 1.01 | 1.34 | 17.8 |
| All Vehicles | | 2298 | 1.6 | 2284 N1 | 1.6 | 0.845 | 19.8 | LOS B | 16.8 | 119.8 | 0.65 | 0.66 | 0.71 | 32.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P2 | East Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P3 | North Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| P4 | West Full Crossing | 53 | 44.3 | LOS E | 0.1 | 0.1 | 0.94 | 0.94 |
| All Pedestrians | | 211 | 44.3 | LOS E | | | 0.94 | 0.94 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East PM w Dev]

## Network: N101 [PM Network 2029 w Dev]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | 95% Back of Queue Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 225 | 1.4 | 225 | 1.4 | 0.645 | 20.2 | LOS B | 13.4 | 94.9 | 0.61 | 0.65 | 0.61 | 14.9 |
| 2 | T1 | 660 | 1.3 | 658 | 1.3 | 0.645 | 22.6 | LOS B | 16.8 | 119.0 | 0.71 | 0.66 | 0.71 | 36.3 |
| Approach | | 885 | 1.3 | 883 N1 | 1.3 | 0.645 | 21.9 | LOS B | 16.8 | 119.0 | 0.68 | 0.65 | 0.68 | 33.6 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 11 | 0.0 | 11 | 0.0 | 0.266 | 53.6 | LOS D | 2.9 | 20.4 | 0.95 | 0.73 | 0.95 | 15.4 |
| 5 | T1 | 46 | 2.3 | 46 | 2.3 | 0.266 | 50.3 | LOS D | 2.9 | 20.4 | 0.95 | 0.73 | 0.95 | 15.4 |
| 6 | R2 | 93 | 0.0 | 93 | 0.0 | 0.609 | 59.7 | LOS E | 5.1 | 35.7 | 1.00 | 0.80 | 1.05 | 25.7 |
| Approach | | 149 | 0.7 | 149 | 0.7 | 0.609 | 56.4 | LOS D | 5.1 | 35.7 | 0.98 | 0.78 | 1.01 | 22.8 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 62 | 1.7 | 62 | 1.7 | 0.714 | 26.1 | LOS B | 34.6 | 244.4 | 0.83 | 0.76 | 0.83 | 36.1 |
| 8 | T1 | 841 | 1.0 | 841 | 1.0 | 0.714 | 21.3 | LOS B | 34.6 | 244.4 | 0.82 | 0.76 | 0.82 | 31.6 |
| 9 | R2 | 45 | 0.0 | 45 | 0.0 | 0.214 | 22.3 | LOS B | 2.6 | 18.4 | 0.76 | 0.66 | 0.76 | 32.5 |
| Approach | | 948 | 1.0 | 948 | 1.0 | 0.714 | 21.6 | LOS B | 34.6 | 244.4 | 0.82 | 0.75 | 0.82 | 32.0 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 31 | 0.0 | 31 | 0.0 | 0.117 | 25.5 | LOS B | 2.8 | 19.9 | 0.66 | 0.58 | 0.66 | 34.6 |
| 11 | T1 | 55 | 0.0 | 55 | 0.0 | 0.117 | 22.1 | LOS B | 2.8 | 19.9 | 0.66 | 0.58 | 0.66 | 29.3 |
| 12 | R2 | 365 | 0.0 | 365 | 0.0 | 0.755 | 34.9 | LOS C | 16.2 | 113.3 | 0.94 | 0.86 | 0.99 | 14.3 |
| Approach | | 451 | 0.0 | 451 | 0.0 | 0.755 | 32.7 | LOS C | 16.2 | 113.3 | 0.88 | 0.81 | 0.93 | 18.1 |
| All Vehicles | | 2434 | 0.9 | 2431 N1 | 0.9 | 0.755 | 25.9 | LOS B | 34.6 | 244.4 | 0.79 | 0.73 | 0.80 | 29.1 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Average Back of Queue Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P2 | East Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P3 | North Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P4 | West Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| All Pedestrians | | 211 | 49.3 | LOS E | | | 0.95 | 0.95 |

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

# MOVEMENT SUMMARY

## Site: 2 [2 - Henry Parry Drive/ Erina Street East Sat w Dev]

## Network: N101 [Sat Network 2029 w Dev]

Site Category: -
Signals - Fixed Time Coordinated  Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive | | | | | | | | | | | | | | |
| 1 | L2 | 205 | 1.0 | 205 | 1.0 | 0.507 | 13.9 | LOS A | 7.9 | 55.8 | 0.48 | 0.55 | 0.48 | 20.1 |
| 2 | T1 | 714 | 0.1 | 714 | 0.1 | 0.507 | 11.6 | LOS A | 9.8 | 68.9 | 0.55 | 0.52 | 0.55 | 44.4 |
| Approach | | 919 | 0.3 | 919 | 0.3 | 0.507 | 12.1 | LOS A | 9.8 | 68.9 | 0.53 | 0.53 | 0.53 | 42.0 |
| East: Erina Street East | | | | | | | | | | | | | | |
| 4 | L2 | 2 | 0.0 | 2 | 0.0 | 0.136 | 37.3 | LOS C | 1.3 | 9.7 | 0.90 | 0.69 | 0.90 | 20.0 |
| 5 | T1 | 36 | 5.9 | 36 | 5.9 | 0.136 | 34.0 | LOS C | 1.3 | 9.7 | 0.90 | 0.69 | 0.90 | 20.0 |
| 6 | R2 | 43 | 0.0 | 43 | 0.0 | 0.203 | 40.0 | LOS C | 1.6 | 11.1 | 0.93 | 0.73 | 0.93 | 31.1 |
| Approach | | 81 | 2.6 | 81 | 2.6 | 0.203 | 37.3 | LOS C | 1.6 | 11.1 | 0.92 | 0.71 | 0.92 | 27.3 |
| North: Henry Parry Drive | | | | | | | | | | | | | | |
| 7 | L2 | 44 | 2.4 | 44 | 2.4 | 0.401 | 12.2 | LOS A | 9.3 | 65.5 | 0.52 | 0.49 | 0.52 | 43.5 |
| 8 | T1 | 723 | 0.4 | 723 | 0.4 | 0.401 | 7.7 | LOS A | 9.3 | 65.5 | 0.55 | 0.51 | 0.55 | 40.9 |
| 9 | R2 | 60 | 0.0 | 60 | 0.0 | 0.401 | 12.5 | LOS A | 6.1 | 43.2 | 0.60 | 0.55 | 0.60 | 40.4 |
| Approach | | 827 | 0.5 | 827 | 0.5 | 0.401 | 8.3 | LOS A | 9.3 | 65.5 | 0.55 | 0.51 | 0.55 | 41.1 |
| West: Erina Street East | | | | | | | | | | | | | | |
| 10 | L2 | 20 | 0.0 | 20 | 0.0 | 0.103 | 28.5 | LOS C | 1.4 | 9.8 | 0.80 | 0.65 | 0.80 | 33.2 |
| 11 | T1 | 26 | 0.0 | 26 | 0.0 | 0.103 | 25.1 | LOS B | 1.4 | 9.8 | 0.80 | 0.65 | 0.80 | 27.9 |
| 12 | R2 | 181 | 0.6 | 181 | 0.6 | 0.615 | 38.3 | LOS C | 6.7 | 47.0 | 0.97 | 0.94 | 1.32 | 13.5 |
| Approach | | 227 | 0.5 | 227 | 0.5 | 0.615 | 35.9 | LOS C | 6.7 | 47.0 | 0.93 | 0.88 | 1.22 | 17.5 |
| All Vehicles | | 2055 | 0.5 | 2055 | 0.5 | 0.615 | 14.2 | LOS A | 9.8 | 68.9 | 0.60 | 0.57 | 0.63 | 37.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street AM w Dev]

## Network: N101 [AM Network 2029 w Dev]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 46 | 4.5 | 46 | 4.6 | 0.593 | 10.1 | LOS A | 9.7 | 69.2 | 0.32 | 0.31 | 0.32 | 34.0 |
| 2 | T1 | 802 | 1.8 | 792 | 1.8 | 0.593 | 9.2 | LOS A | 9.7 | 69.2 | 0.41 | 0.39 | 0.41 | 20.8 |
| 3 | R2 | 88 | 1.2 | 87 | 1.2 | 0.593 | 28.7 | LOS C | 8.5 | 60.3 | 0.77 | 0.69 | 0.77 | 22.2 |
| Approach | | 937 | 1.9 | 925[N1] | 1.9 | 0.593 | 11.1 | LOS A | 9.7 | 69.2 | 0.44 | 0.41 | 0.44 | 21.9 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 75 | 0.0 | 75 | 0.0 | 0.335 | 45.9 | LOS D | 3.4 | 24.1 | 0.95 | 0.74 | 0.95 | 12.6 |
| 6 | R2 | 101 | 1.0 | 101 | 1.0 | 0.532 | 51.4 | LOS D | 4.9 | 34.4 | 0.98 | 0.78 | 0.98 | 11.6 |
| Approach | | 176 | 0.6 | 176 | 0.6 | 0.532 | 49.1 | LOS D | 4.9 | 34.4 | 0.97 | 0.77 | 0.97 | 12.0 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 39 | 0.0 | 39 | 0.0 | 0.639 | 12.2 | LOS A | 11.9 | 84.7 | 0.43 | 0.41 | 0.43 | 35.9 |
| 8 | T1 | 880 | 2.4 | 880 | 2.4 | 0.639 | 12.5 | LOS A | 12.1 | 86.2 | 0.58 | 0.53 | 0.58 | 18.8 |
| Approach | | 919 | 2.3 | 919 | 2.3 | 0.639 | 12.5 | LOS A | 12.1 | 86.2 | 0.57 | 0.52 | 0.57 | 19.9 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 69 | 1.5 | 69 | 1.5 | 0.379 | 48.9 | LOS D | 3.7 | 26.2 | 0.96 | 0.76 | 0.96 | 9.0 |
| 11 | T1 | 9 | 0.0 | 9 | 0.0 | 0.379 | 45.5 | LOS D | 3.7 | 26.2 | 0.96 | 0.76 | 0.96 | 16.9 |
| 12 | R2 | 102 | 3.1 | 102 | 3.1 | 0.803 | 58.6 | LOS E | 5.7 | 40.9 | 1.00 | 1.01 | 1.36 | 7.7 |
| Approach | | 181 | 2.3 | 181 | 2.3 | 0.803 | 54.2 | LOS D | 5.7 | 40.9 | 0.98 | 0.90 | 1.19 | 8.7 |
| All Vehicles | | 2213 | 2.0 | 2200[N1] | 2.0 | 0.803 | 18.3 | LOS B | 12.1 | 86.2 | 0.58 | 0.53 | 0.60 | 16.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 79 | 30.5 | LOS D | 0.2 | 0.2 | 0.78 | 0.78 |
| P2 | East Full Crossing | 8 | 18.6 | LOS B | 0.0 | 0.0 | 0.61 | 0.61 |
| P3 | North Full Crossing | 59 | 44.3 | LOS E | 0.2 | 0.2 | 0.94 | 0.94 |
| P4 | West Full Crossing | 3 | 12.5 | LOS B | 0.0 | 0.0 | 0.50 | 0.50 |
| All Pedestrians | | 149 | 34.9 | LOS D | | | 0.83 | 0.83 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street PM w Dev]

## Network: N101 [PM Network 2029 w Dev]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 38 | 0.0 | 38 | 0.0 | 0.587 | 10.8 | LOS A | 10.9 | 77.2 | 0.34 | 0.33 | 0.34 | 33.1 |
| 2 | T1 | 694 | 1.8 | 691 | 1.8 | 0.587 | 5.6 | LOS A | 10.9 | 77.2 | 0.31 | 0.33 | 0.31 | 26.5 |
| 3 | R2 | 115 | 0.0 | 114 | 0.0 | 0.587 | 5.4 | LOS A | 0.6 | 3.9 | 0.06 | 0.35 | 0.06 | 41.5 |
| Approach | | 846 | 1.5 | 843[N1] | 1.5 | 0.587 | 5.8 | LOS A | 10.9 | 77.2 | 0.28 | 0.34 | 0.28 | 30.4 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 97 | 0.0 | 97 | 0.0 | 0.521 | 48.2 | LOS D | 4.7 | 33.0 | 0.99 | 0.77 | 0.99 | 12.2 |
| 6 | R2 | 72 | 1.5 | 72 | 1.5 | 0.684 | 63.4 | LOS E | 4.1 | 29.3 | 1.00 | 0.85 | 1.17 | 9.8 |
| Approach | | 168 | 0.6 | 168 | 0.6 | 0.684 | 54.7 | LOS D | 4.7 | 33.0 | 0.99 | 0.80 | 1.07 | 11.1 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 87 | 0.0 | 87 | 0.0 | 0.808 | 5.5 | LOS A | 4.9 | 34.7 | 0.10 | 0.14 | 0.10 | 45.7 |
| 8 | T1 | 1127 | 0.7 | 1127 | 0.7 | 0.808 | 6.9 | LOS A | 11.7 | 82.5 | 0.29 | 0.29 | 0.29 | 25.8 |
| Approach | | 1215 | 0.7 | 1215 | 0.7 | 0.808 | 6.8 | LOS A | 11.7 | 82.5 | 0.28 | 0.28 | 0.28 | 28.0 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 114 | 0.0 | 114 | 0.0 | 0.742 | 59.5 | LOS E | 7.0 | 48.7 | 1.00 | 0.90 | 1.18 | 7.7 |
| 11 | T1 | 9 | 0.0 | 9 | 0.0 | 0.742 | 56.1 | LOS D | 7.0 | 48.7 | 1.00 | 0.90 | 1.18 | 14.8 |
| 12 | R2 | 147 | 0.0 | 147 | 0.0 | 1.042 | 128.8 | LOS F | 13.4 | 94.0 | 1.00 | 1.44 | 2.10 | 3.9 |
| Approach | | 271 | 0.0 | 271 | 0.0 | 1.042 | 97.2 | LOS F | 13.4 | 94.0 | 1.00 | 1.19 | 1.68 | 5.2 |
| All Vehicles | | 2500 | 0.9 | 2497[N1] | 0.9 | 1.042 | 19.5 | LOS B | 13.4 | 94.0 | 0.40 | 0.43 | 0.48 | 16.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 92 | 37.8 | LOS D | 0.2 | 0.2 | 0.83 | 0.83 |
| P2 | East Full Crossing | 2 | 18.6 | LOS B | 0.0 | 0.0 | 0.58 | 0.58 |
| P3 | North Full Crossing | 53 | 49.3 | LOS E | 0.2 | 0.2 | 0.95 | 0.95 |
| P4 | West Full Crossing | 6 | 11.4 | LOS B | 0.0 | 0.0 | 0.45 | 0.45 |
| All Pedestrians | | 153 | 40.4 | LOS E | | | 0.85 | 0.85 |

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

# MOVEMENT SUMMARY

## Site: 3 [3 - Henry Parry Drive/ William Street Sat w Dev]

## Network: N101 [Sat Network 2029 w Dev]

Henry Parry Drive / William Street
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 28 | 0.0 | 28 | 0.0 | 0.504 | 8.3 | LOS A | 5.1 | 35.9 | 0.25 | 0.24 | 0.25 | 36.8 |
| 2 | T1 | 751 | 0.4 | 751 | 0.4 | 0.504 | 2.9 | LOS A | 5.1 | 35.9 | 0.19 | 0.23 | 0.19 | 33.4 |
| 3 | R2 | 87 | 0.0 | 87 | 0.0 | 0.504 | 5.4 | LOS A | 0.6 | 4.2 | 0.05 | 0.20 | 0.05 | 44.0 |
| Approach | | 866 | 0.4 | 866 | 0.4 | 0.504 | 3.3 | LOS A | 5.1 | 35.9 | 0.18 | 0.23 | 0.18 | 35.7 |
| East: William Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 119 | 0.9 | 119 | 0.9 | 0.859 | 52.7 | LOS D | 5.4 | 38.0 | 1.00 | 1.00 | 1.51 | 11.4 |
| 6 | R2 | 59 | 0.0 | 59 | 0.0 | 0.423 | 45.6 | LOS D | 2.4 | 16.6 | 0.99 | 0.75 | 0.99 | 12.7 |
| Approach | | 178 | 0.6 | 178 | 0.6 | 0.859 | 50.4 | LOS D | 5.4 | 38.0 | 1.00 | 0.92 | 1.34 | 11.8 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 119 | 0.0 | 119 | 0.0 | 0.498 | 7.1 | LOS A | 2.4 | 16.9 | 0.19 | 0.32 | 0.19 | 41.0 |
| 8 | T1 | 787 | 0.7 | 787 | 0.7 | 0.498 | 7.7 | LOS A | 12.3 | 86.8 | 0.49 | 0.48 | 0.49 | 24.2 |
| Approach | | 906 | 0.6 | 906 | 0.6 | 0.498 | 7.6 | LOS A | 12.3 | 86.8 | 0.45 | 0.46 | 0.45 | 27.6 |
| West: William Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 104 | 0.0 | 104 | 0.0 | 0.470 | 39.5 | LOS C | 4.2 | 29.3 | 0.97 | 0.78 | 0.97 | 10.5 |
| 11 | T1 | 6 | 0.0 | 6 | 0.0 | 0.470 | 36.0 | LOS C | 4.2 | 29.3 | 0.97 | 0.78 | 0.97 | 19.2 |
| 12 | R2 | 143 | 0.0 | 143 | 0.0 | 0.841 | 49.6 | LOS D | 6.6 | 45.9 | 1.00 | 1.06 | 1.45 | 8.8 |
| Approach | | 254 | 0.0 | 254 | 0.0 | 0.841 | 45.1 | LOS D | 6.6 | 45.9 | 0.99 | 0.94 | 1.24 | 9.7 |
| All Vehicles | | 2204 | 0.4 | 2204 | 0.4 | 0.859 | 13.7 | LOS A | 12.3 | 86.8 | 0.45 | 0.46 | 0.51 | 20.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 1 | 28.1 | LOS C | 0.0 | 0.0 | 0.84 | 0.84 |
| P2 | East Full Crossing | 3 | 12.1 | LOS B | 0.0 | 0.0 | 0.55 | 0.55 |
| P3 | North Full Crossing | 18 | 34.3 | LOS D | 0.0 | 0.0 | 0.93 | 0.93 |
| P4 | West Full Crossing | 2 | 11.6 | LOS B | 0.0 | 0.0 | 0.54 | 0.54 |
| All Pedestrians | | 24 | 29.1 | LOS C | | | 0.84 | 0.84 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street AM w Dev]

## Network: N101 [AM Network 2029 w Dev]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 100 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 109 | 1.9 | 109 | 1.9 | 0.995 | 81.9 | LOS F | 60.2 | 426.6 | 1.00 | 1.32 | 1.55 | 16.2 |
| 2 | T1 | 814 | 1.3 | 814 | 1.3 | 0.995 | 68.6 | LOS E | 60.2 | 426.6 | 0.95 | 1.21 | 1.42 | 17.5 |
| Approach | | 923 | 1.4 | 923 | 1.4 | 0.995 | 70.2 | LOS E | 60.2 | 426.6 | 0.95 | 1.22 | 1.43 | 17.3 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 56 | 0.0 | 56 | 0.0 | 0.273 | 50.2 | LOS D | 2.6 | 18.2 | 0.96 | 0.74 | 0.96 | 25.1 |
| 5 | T1 | 127 | 0.8 | 127 | 0.8 | 0.469 | 45.2 | LOS D | 5.9 | 41.6 | 0.97 | 0.78 | 0.97 | 12.8 |
| Approach | | 183 | 0.6 | 183 | 0.6 | 0.469 | 46.8 | LOS D | 5.9 | 41.6 | 0.96 | 0.77 | 0.96 | 18.0 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 12 | 0.0 | 12 | 0.0 | 0.476 | 7.0 | LOS A | 3.6 | 25.9 | 0.15 | 0.14 | 0.15 | 43.3 |
| 8 | T1 | 879 | 2.6 | 879 | 2.6 | 1.037 | 27.1 | LOS B | 18.3 | 130.6 | 0.48 | 0.54 | 0.71 | 25.1 |
| 9 | R2 | 133 | 0.8 | 133 | 0.8 | 1.037 | 70.6 | LOS F | 18.3 | 130.6 | 1.00 | 1.16 | 1.60 | 3.1 |
| Approach | | 1023 | 2.4 | 1023 | 2.4 | 1.037 | 32.5 | LOS C | 18.3 | 130.6 | 0.54 | 0.61 | 0.82 | 21.5 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 114 | 6.5 | 114 | 6.5 | 0.180 | 23.6 | LOS B | 3.8 | 28.4 | 0.67 | 0.69 | 0.67 | 18.2 |
| 11 | T1 | 87 | 7.2 | 87 | 7.2 | 0.777 | 43.0 | LOS D | 11.7 | 83.6 | 0.96 | 1.02 | 1.32 | 19.1 |
| 12 | R2 | 164 | 0.6 | 164 | 0.6 | 0.777 | 49.6 | LOS D | 11.7 | 83.6 | 1.00 | 1.07 | 1.41 | 24.6 |
| Approach | | 365 | 4.0 | 365 | 4.0 | 0.777 | 39.9 | LOS C | 11.7 | 83.6 | 0.89 | 0.94 | 1.16 | 22.2 |
| All Vehicles | | 2495 | 2.1 | 2495 | 2.1 | 1.037 | 48.6 | LOS D | 60.2 | 426.6 | 0.78 | 0.90 | 1.11 | 19.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 95 | 44.4 | LOS E | 0.3 | 0.3 | 0.94 | 0.94 |
| P2 | East Full Crossing | 92 | 11.1 | LOS B | 0.1 | 0.1 | 0.47 | 0.47 |
| P3 | North Full Crossing | 97 | 34.6 | LOS D | 0.2 | 0.2 | 0.83 | 0.83 |
| P4 | West Full Crossing | 36 | 23.2 | LOS C | 0.1 | 0.1 | 0.68 | 0.68 |
| All Pedestrians | | 319 | 29.5 | LOS C | | | 0.75 | 0.75 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street PM w Dev]

## Network: N101 [PM Network 2029 w Dev]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated  Cycle Time = 110 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 131 | 0.0 | 131 | 0.0 | 0.927 | 62.3 | LOS E | 37.4 | 264.0 | 1.00 | 1.11 | 1.30 | 19.4 |
| 2 | T1 | 735 | 1.3 | 735 | 1.3 | 0.927 | 47.3 | LOS D | 37.4 | 264.0 | 0.94 | 0.95 | 1.12 | 21.8 |
| Approach | | 865 | 1.1 | 865 | 1.1 | 0.927 | 49.6 | LOS D | 37.4 | 264.0 | 0.95 | 0.98 | 1.15 | 21.4 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 98 | 0.0 | 98 | 0.0 | 0.446 | 54.9 | LOS D | 5.1 | 35.5 | 0.97 | 0.78 | 0.97 | 24.0 |
| 5 | T1 | 137 | 0.8 | 137 | 0.8 | 0.456 | 47.9 | LOS D | 6.8 | 48.2 | 0.96 | 0.78 | 0.96 | 12.3 |
| Approach | | 235 | 0.4 | 235 | 0.4 | 0.456 | 50.8 | LOS D | 6.8 | 48.2 | 0.96 | 0.78 | 0.96 | 18.7 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 23 | 0.0 | 23 | 0.0 | 1.046 | 74.5 | LOS F | 18.5 | 130.6 | 1.00 | 1.37 | 1.55 | 11.6 |
| 8 | T1 | 1229 | 0.7 | 1229 | 0.7 | 1.046 | 69.9 | LOS E | 18.5 | 130.6 | 1.00 | 1.37 | 1.55 | 19.0 |
| 9 | R2 | 127 | 0.0 | 127 | 0.0 | 0.359 | 54.6 | LOS D | 6.9 | 48.2 | 1.00 | 0.85 | 1.17 | 5.6 |
| Approach | | 1380 | 0.6 | 1380 | 0.6 | 1.046 | 68.6 | LOS E | 18.5 | 130.6 | 1.00 | 1.32 | 1.52 | 18.2 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 117 | 1.8 | 114 | 1.8 | 0.346 | 30.1 | LOS C | 8.9 | 63.4 | 0.77 | 0.70 | 0.77 | 16.3 |
| 11 | T1 | 121 | 1.7 | 118 | 1.7 | 0.346 | 26.6 | LOS B | 8.9 | 63.4 | 0.77 | 0.70 | 0.77 | 24.5 |
| 12 | R2 | 412 | 0.5 | 401 | 0.5 | 1.035 | 87.7 | LOS F | 32.3 | 227.1 | 1.00 | 1.32 | 1.85 | 14.5 |
| Approach | | 649 | 1.0 | 632[N1] | 1.0 | 1.035 | 65.9 | LOS E | 32.3 | 227.1 | 0.91 | 1.09 | 1.45 | 15.5 |
| All Vehicles | | 3129 | 0.8 | 3112[N1] | 0.8 | 1.046 | 61.4 | LOS E | 37.4 | 264.0 | 0.97 | 1.14 | 1.36 | 18.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 81 | 48.4 | LOS E | 0.2 | 0.2 | 0.94 | 0.94 |
| P2 | East Full Crossing | 58 | 17.0 | LOS B | 0.1 | 0.1 | 0.56 | 0.56 |
| P3 | North Full Crossing | 100 | 29.9 | LOS C | 0.2 | 0.2 | 0.74 | 0.74 |
| P4 | West Full Crossing | 39 | 32.1 | LOS D | 0.1 | 0.1 | 0.76 | 0.76 |
| All Pedestrians | | 278 | 32.9 | LOS D | | | 0.76 | 0.76 |

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

# MOVEMENT SUMMARY

## Site: 4 [4 - Henry Parry Drive/ Donnison Street Sat w Dev]

## Network: N101 [Sat Network 2029 w Dev]

Henry Parry Drive / Donnison Street
Bus stop ID: 2250356

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 80 seconds (Network Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Henry Parry Drive (S) | | | | | | | | | | | | | | |
| 1 | L2 | 131 | 0.8 | 131 | 0.8 | 0.562 | 22.6 | LOS B | 13.7 | 96.2 | 0.79 | 0.73 | 0.79 | 32.9 |
| 2 | T1 | 795 | 0.3 | 795 | 0.3 | 0.562 | 17.9 | LOS B | 13.7 | 96.2 | 0.79 | 0.70 | 0.79 | 33.4 |
| Approach | | 925 | 0.3 | 925 | 0.3 | 0.562 | 18.6 | LOS B | 13.7 | 96.2 | 0.79 | 0.71 | 0.79 | 33.4 |
| East: Donnison Street (E) | | | | | | | | | | | | | | |
| 4 | L2 | 65 | 0.0 | 65 | 0.0 | 0.256 | 39.1 | LOS C | 2.4 | 16.6 | 0.93 | 0.75 | 0.93 | 28.2 |
| 5 | T1 | 106 | 1.0 | 106 | 1.0 | 0.366 | 35.5 | LOS C | 3.9 | 27.4 | 0.94 | 0.75 | 0.94 | 15.3 |
| Approach | | 172 | 0.6 | 172 | 0.6 | 0.366 | 36.8 | LOS C | 3.9 | 27.4 | 0.94 | 0.75 | 0.94 | 22.0 |
| North: Henry Parry Drive (N) | | | | | | | | | | | | | | |
| 7 | L2 | 31 | 0.0 | 31 | 0.0 | 0.768 | 14.1 | LOS A | 18.5 | 130.6 | 0.64 | 0.60 | 0.65 | 33.6 |
| 8 | T1 | 882 | 0.7 | 882 | 0.7 | 0.768 | 10.1 | LOS A | 18.5 | 130.6 | 0.66 | 0.61 | 0.66 | 40.2 |
| 9 | R2 | 124 | 0.0 | 124 | 0.0 | 0.418 | 22.8 | LOS B | 5.4 | 38.0 | 0.85 | 0.76 | 0.85 | 12.2 |
| Approach | | 1037 | 0.6 | 1037 | 0.6 | 0.768 | 11.7 | LOS A | 18.5 | 130.6 | 0.68 | 0.63 | 0.68 | 38.2 |
| West: Donnison Street (W) | | | | | | | | | | | | | | |
| 10 | L2 | 69 | 1.5 | 69 | 1.5 | 0.119 | 20.3 | LOS B | 2.0 | 14.1 | 0.67 | 0.66 | 0.67 | 19.8 |
| 11 | T1 | 74 | 0.0 | 74 | 0.0 | 0.514 | 27.7 | LOS B | 6.5 | 45.9 | 0.90 | 0.76 | 0.90 | 23.7 |
| 12 | R2 | 120 | 0.9 | 120 | 0.9 | 0.514 | 32.9 | LOS C | 6.5 | 45.9 | 0.94 | 0.77 | 0.94 | 29.3 |
| Approach | | 263 | 0.8 | 263 | 0.8 | 0.514 | 28.1 | LOS B | 6.5 | 45.9 | 0.86 | 0.74 | 0.86 | 26.4 |
| All Vehicles | | 2397 | 0.5 | 2397 | 0.5 | 0.768 | 18.0 | LOS B | 18.5 | 130.6 | 0.76 | 0.68 | 0.76 | 33.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 17 | 34.2 | LOS D | 0.0 | 0.0 | 0.93 | 0.93 |
| P2 | East Full Crossing | 6 | 11.0 | LOS B | 0.0 | 0.0 | 0.53 | 0.53 |
| P3 | North Full Crossing | 15 | 28.9 | LOS C | 0.0 | 0.0 | 0.85 | 0.85 |
| P4 | West Full Crossing | 53 | 18.9 | LOS B | 0.1 | 0.1 | 0.69 | 0.69 |
| All Pedestrians | | 91 | 22.9 | LOS C | | | 0.75 | 0.75 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street AM w Dev]

## Network: N101 [AM Network 2029 w Dev]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 59 | 0.0 | 59 | 0.0 | 0.073 | 18.5 | LOS B | 1.3 | 9.3 | 0.61 | 0.68 | 0.61 | 26.7 |
| 2 | T1 | 540 | 7.2 | 540 | 7.2 | 0.630 | 17.6 | LOS B | 16.0 | 119.1 | 0.81 | 0.72 | 0.81 | 23.5 |
| Approach | | 599 | 6.5 | 599 | 6.5 | 0.630 | 17.7 | LOS B | 16.0 | 119.1 | 0.79 | 0.72 | 0.79 | 23.9 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 57 | 3.7 | 56 | 3.7 | 0.109 | 26.6 | LOS B | 1.6 | 11.7 | 0.76 | 0.71 | 0.76 | 26.2 |
| 5 | T1 | 232 | 0.5 | 229 | 0.5 | 0.539 | 27.8 | LOS B | 8.4 | 59.3 | 0.91 | 0.76 | 0.91 | 22.0 |
| 6 | R2 | 19 | 0.0 | 19 | 0.0 | 0.539 | 32.4 | LOS C | 8.4 | 59.3 | 0.91 | 0.76 | 0.91 | 17.8 |
| Approach | | 307 | 1.0 | 304[N1] | 1.0 | 0.539 | 27.8 | LOS B | 8.4 | 59.3 | 0.88 | 0.75 | 0.88 | 22.6 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 93 | 5.7 | 92 | 5.7 | 0.152 | 17.9 | LOS B | 2.8 | 20.6 | 0.61 | 0.65 | 0.61 | 24.0 |
| 8 | T1 | 298 | 12.4 | 297 | 12.4 | 0.750 | 21.9 | LOS B | 13.5 | 103.3 | 0.87 | 0.84 | 0.95 | 27.9 |
| 9 | R2 | 123 | 6.8 | 123 | 6.8 | 0.750 | 27.5 | LOS B | 13.5 | 103.3 | 0.90 | 0.86 | 0.99 | 23.0 |
| Approach | | 514 | 9.8 | 513[N1] | 9.8 | 0.750 | 22.5 | LOS B | 13.5 | 103.3 | 0.83 | 0.81 | 0.90 | 26.3 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 265 | 3.2 | 265 | 3.2 | 0.377 | 23.6 | LOS B | 7.5 | 53.8 | 0.76 | 0.77 | 0.76 | 12.2 |
| 11 | T1 | 444 | 3.3 | 444 | 3.3 | 0.782 | 30.0 | LOS C | 16.9 | 122.0 | 0.96 | 0.92 | 1.07 | 10.2 |
| Approach | | 709 | 3.3 | 709 | 3.3 | 0.782 | 27.6 | LOS B | 16.9 | 122.0 | 0.88 | 0.86 | 0.95 | 10.8 |
| All Vehicles | | 2129 | 5.4 | 2125[N1] | 5.4 | 0.782 | 23.6 | LOS B | 16.9 | 122.0 | 0.85 | 0.79 | 0.88 | 20.5 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street PM w Dev]

## Network: N101 [PM Network 2029 w Dev]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 80 seconds (Site User-Given Phase Times)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 67 | 0.0 | 67 | 0.0 | 0.094 | 21.3 | LOS B | 1.7 | 11.6 | 0.67 | 0.70 | 0.67 | 25.0 |
| 2 | T1 | 397 | 5.3 | 397 | 5.3 | 0.510 | 18.9 | LOS B | 11.6 | 84.8 | 0.79 | 0.69 | 0.79 | 22.6 |
| Approach | | 464 | 4.5 | 464 | 4.5 | 0.510 | 19.3 | LOS B | 11.6 | 84.8 | 0.78 | 0.69 | 0.78 | 23.0 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 52 | 0.0 | 52 | 0.0 | 0.141 | 22.3 | LOS B | 2.6 | 18.1 | 0.69 | 0.64 | 0.69 | 29.5 |
| 5 | T1 | 321 | 0.3 | 321 | 0.3 | 0.694 | 28.5 | LOS C | 10.7 | 75.3 | 0.91 | 0.81 | 0.95 | 21.5 |
| 6 | R2 | 21 | 0.0 | 21 | 0.0 | 0.694 | 35.0 | LOS C | 10.7 | 75.3 | 0.95 | 0.84 | 1.00 | 16.8 |
| Approach | | 394 | 0.3 | 394 | 0.3 | 0.694 | 28.1 | LOS B | 10.7 | 75.3 | 0.88 | 0.79 | 0.92 | 22.3 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 165 | 1.3 | 165 | 1.3 | 0.232 | 22.4 | LOS B | 4.4 | 30.8 | 0.71 | 0.74 | 0.71 | 20.5 |
| 8 | T1 | 359 | 5.9 | 359 | 5.9 | 0.832 | 27.9 | LOS B | 18.0 | 132.2 | 0.91 | 0.94 | 1.10 | 25.4 |
| 9 | R2 | 108 | 4.9 | 108 | 4.9 | 0.832 | 32.5 | LOS C | 18.0 | 132.2 | 0.91 | 0.94 | 1.10 | 21.1 |
| Approach | | 633 | 4.5 | 632 N1 | 4.5 | 0.832 | 27.3 | LOS B | 18.0 | 132.2 | 0.86 | 0.89 | 1.00 | 23.7 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 383 | 1.9 | 383 | 1.9 | 0.478 | 21.9 | LOS B | 10.7 | 76.0 | 0.76 | 0.79 | 0.76 | 12.9 |
| 11 | T1 | 586 | 1.1 | 586 | 1.1 | 1.034 | 99.3 | LOS F | 45.0 | 317.9 | 1.00 | 1.70 | 2.05 | 3.6 |
| Approach | | 969 | 1.4 | 969 | 1.4 | 1.034 | 68.7 | LOS E | 45.0 | 317.9 | 0.91 | 1.34 | 1.54 | 5.0 |
| All Vehicles | | 2460 | 2.6 | 2460 | 2.6 | 1.034 | 42.2 | LOS C | 45.0 | 317.9 | 0.86 | 1.01 | 1.16 | 13.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P2 | East Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P3 | North Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| P4 | West Full Crossing | 53 | 34.3 | LOS D | 0.1 | 0.1 | 0.93 | 0.93 |
| All Pedestrians | | 211 | 34.3 | LOS D | | | 0.93 | 0.93 |

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

# MOVEMENT SUMMARY

## Site: 5 [5 - Mann Street/ Donnison Street Sat w Dev]

## Network: N101 [Sat Network 2029 w Dev]

Site Category: -
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Site User-Given Cycle Time)

**Movement Performance - Vehicles**

| Mov ID | Turn | Demand Flows Total veh/h | HV % | Arrival Flows Total veh/h | HV % | Deg. Satn v/c | Average Delay sec | Level of Service | 95% Back of Queue Vehicles veh | Distance m | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mann Street | | | | | | | | | | | | | | |
| 1 | L2 | 28 | 0.0 | 28 | 0.0 | 0.031 | 14.0 | LOS A | 0.5 | 3.4 | 0.53 | 0.64 | 0.53 | 30.0 |
| 2 | T1 | 319 | 4.3 | 319 | 4.3 | 0.318 | 10.1 | LOS A | 6.2 | 44.8 | 0.60 | 0.52 | 0.60 | 30.4 |
| Approach | | 347 | 3.9 | 347 | 3.9 | 0.318 | 10.4 | LOS A | 6.2 | 44.8 | 0.60 | 0.53 | 0.60 | 30.3 |
| East: Donnison Street | | | | | | | | | | | | | | |
| 4 | L2 | 49 | 0.0 | 49 | 0.0 | 0.115 | 24.7 | LOS B | 1.5 | 10.6 | 0.77 | 0.69 | 0.77 | 27.4 |
| 5 | T1 | 260 | 0.4 | 260 | 0.4 | 0.568 | 24.1 | LOS B | 8.3 | 58.3 | 0.91 | 0.77 | 0.91 | 23.6 |
| 6 | R2 | 25 | 0.0 | 25 | 0.0 | 0.568 | 28.8 | LOS C | 8.3 | 58.3 | 0.91 | 0.77 | 0.91 | 19.4 |
| Approach | | 335 | 0.3 | 335 | 0.3 | 0.568 | 24.5 | LOS B | 8.3 | 58.3 | 0.89 | 0.76 | 0.89 | 24.0 |
| North: Mann Street | | | | | | | | | | | | | | |
| 7 | L2 | 117 | 0.9 | 117 | 0.9 | 0.127 | 14.6 | LOS B | 2.1 | 15.0 | 0.56 | 0.69 | 0.56 | 25.8 |
| 8 | T1 | 283 | 6.3 | 283 | 6.3 | 0.584 | 13.2 | LOS A | 9.7 | 71.0 | 0.74 | 0.69 | 0.74 | 33.6 |
| 9 | R2 | 121 | 4.3 | 121 | 4.3 | 0.584 | 17.8 | LOS B | 9.7 | 71.0 | 0.74 | 0.69 | 0.74 | 29.1 |
| Approach | | 521 | 4.6 | 521 | 4.6 | 0.584 | 14.6 | LOS B | 9.7 | 71.0 | 0.70 | 0.69 | 0.70 | 31.3 |
| West: Pacific Highway | | | | | | | | | | | | | | |
| 10 | L2 | 241 | 1.3 | 241 | 1.3 | 0.483 | 28.2 | LOS B | 7.1 | 50.2 | 0.89 | 0.80 | 0.89 | 10.6 |
| 11 | T1 | 255 | 0.4 | 255 | 0.4 | 0.437 | 21.6 | LOS B | 7.1 | 50.2 | 0.85 | 0.71 | 0.85 | 13.1 |
| Approach | | 496 | 0.8 | 496 | 0.8 | 0.483 | 24.8 | LOS B | 7.1 | 50.2 | 0.87 | 0.76 | 0.87 | 11.8 |
| All Vehicles | | 1699 | 2.5 | 1699 | 2.5 | 0.584 | 18.7 | LOS B | 9.7 | 71.0 | 0.77 | 0.69 | 0.77 | 24.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

**Movement Performance - Pedestrians**

| Mov ID | Description | Demand Flow ped/h | Average Delay sec | Level of Service | Average Back of Queue Pedestrian ped | Distance m | Prop. Queued | Effective Stop Rate |
|---|---|---|---|---|---|---|---|---|
| P1 | South Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P2 | East Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P3 | North Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| P4 | West Full Crossing | 53 | 29.3 | LOS C | 0.1 | 0.1 | 0.92 | 0.92 |
| All Pedestrians | | 211 | 29.3 | LOS C | | | 0.92 | 0.92 |

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

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