

## **8.17. Young Street - Permanent Road Closure**

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### **ATTACHMENTS:**

1. Young Street Trial Plaza and Road Closure - Feedback Summary [8.17.1 - 55 pages]
2. GTA Traffic Study - Young Street Closure, Neutral Bay- Final B [8.17.2 - 250 pages]
3. URBIS - Young Street Human Movement Data Analysis - April 2021- Final [8.17.3 - 29 pages]
4. Group GSA - Design for Final Closure of Young St - June 2021 [8.17.4 - 16 pages]

### **PURPOSE:**

The purpose of this report is to outline the results of the community consultation, traffic and pedestrian studies that have been undertaken from November 2020 to April 2021 on the Young Street trial plaza and road closure.

This report is now seeking Council endorsement to proceed with detailed design and construction of the permanent public plaza and closure of Young Street, between Military Road and Grosvenor Lane in Neutral Bay.

### **EXECUTIVE SUMMARY:**

The Young Street trial plaza and road closure commenced in December 2020. Community consultation on the Trial closure was undertaken from November 2020 to April 2021.

This report outlines that Council received a total of 353 submissions, comprising 31 written submissions and 295 online submissions (summarised in Attachments). The majority (56%) of submissions support the proposal, 10% did not express support/opposition, or were neutral to the proposal, while 34% oppose the permanent plaza and road closure.

Traffic counts were also undertaken during the trial road closure period and a traffic impact assessment was prepared by Council's traffic consultant (GTA). In summary this report found that traffic has been wholly redistributed within the surrounding network. SIDRA modelling found the network generally performs acceptably with minor increases in overall time delays at some intersections in the immediate local network.

Additionally, Council commissioned a Human Movement Data Study - (also known as a Heat Map) – prepared by Urbis Consultants. The purpose of this study was to measure and analyse visitation to and from the plaza during the trial period.

The results of this study found that visitation during the activation (Road Closure) period was 27% higher than the historical period (12 months before the Road Closure) with higher levels of visitation observed in the afternoon and evening and also on weekends.

The community feedback, traffic and pedestrian studies were then used to inform the design that has now been developed for the permanent closure of this end of Young Street and to transform this roadway into a new public plaza. The design prepared by Councils Landscape and Urban Design Consultants (Group GSA) has been presented to Council at a Briefing on 15 June 2021.

**FINANCIAL IMPLICATIONS:**

Both the trial and permanent closure of Young Street, Neutral Bay is funded through the B-Line funding deed that Council entered into in October 2018.

**RECOMMENDATION:**

- 1. THAT** Council notes the community feedback received during the trial pedestrian plaza and road closure in Young Street Neutral Bay.
- 2. THAT** Council notes the results of the Traffic Study as well as the Human Movement Data Study that was undertaken during the trial pedestrian plaza and road closure in Young Street Neutral Bay.
- 3. THAT** Council proceeds with the detailed design and construction of the permanent road closure and new public plaza in Young Street, Neutral Bay as per the concept design attached to this report
- 4. THAT** the current Young Street Road closure and public plaza remain in place until the commencement of the permanent construction works in late 2021.

## **LINK TO COMMUNITY STRATEGIC PLAN**

The relationship with the Community Strategic Plan is as follows:

### 1. Our Living Environment

1.4 Public open space and recreation facilities and services meet community needs.

### 2. Our Built Infrastructure

2.1 Infrastructure and assets meet community needs.

2.2 Vibrant centres, public domain, villages and streetscapes

2.3 Sustainable transport is encouraged

### 3. Our Future Planning

3.1 Prosperous and vibrant economy

## **BACKGROUND**

### **TfNSW Funding Deed**

The closure of Young Street was originally identified as part of the B-Line Project to assist bus movements down Military Road. The closure of Young Street was seen as a preferred alternative to the State Government's original proposal to impose a left turn ban onto Ben Boyd Road.

Council resolved at the 29 October 2018 meeting (Min No 405) to execute the funding deed it had been offered by TfNSW. The closure of Young Street was one of the key projects identified in the Funding Deed that was reported up to Council.

Council received approval from TfNSW to undertake a trial closure of Young Street on 28 November 2019. Between November 2019 and June 2020 Council developed the temporary closure designs and Councillors were briefed on the temporary designs in February 2020.

At its meeting of 28 September 2020, Council awarded the construction works of the Young Street, Neutral Bay trial plaza to Regal Innovations.

Council undertook notifications of the closure of Young Street for the trial public Plaza in October 2020. Notifications were sent to all property owners in Young Street and construction work commenced in late October through to December 2020.

On 2 November 2020, Council commenced community consultation on the Your Say North Sydney site, welcoming feedback via an online feedback form (survey) and written submission until 30 April 2021 (original deadline 1 April 2021).

Implementation of the Street closure was completed on 23 December 2020.

In March 2021 Councils Traffic Committee resolved to extend the trial period until June 2021.

North Sydney Council submitted a Traffic Management Plan (TMP) for the permanent closure of Young Street between Military Road and Grosvenor Lane in May 2021. Council received confirmation from TfNSW on 17 June that the plan had been approved.

### Preliminary Community Consultation and Engagement Phase

Between 31 May to 5 July 2019, Council consulted on a concept design for the proposed public plaza in Young Street, Neutral Bay (between Military Road and Grosvenor Lane).

The results of that community consultation undertaken in 2019 are as follows:

- 82 survey responses - 51% of survey respondents supported the proposal, 17% supported the proposal subject to amendments (total 68% support), while 32% opposed the proposal.
- 27 written submissions from individuals and businesses - 9 in support, 4 suggested amendments, 2 offered comments/queries, and 12 opposed the proposal.
- 3 submissions from Precinct Committees; and
- 1 petition was received from the Residents Committee at “Bougainvillea” in Waters Road.

## ORIGINAL CONCEPT - PLAN

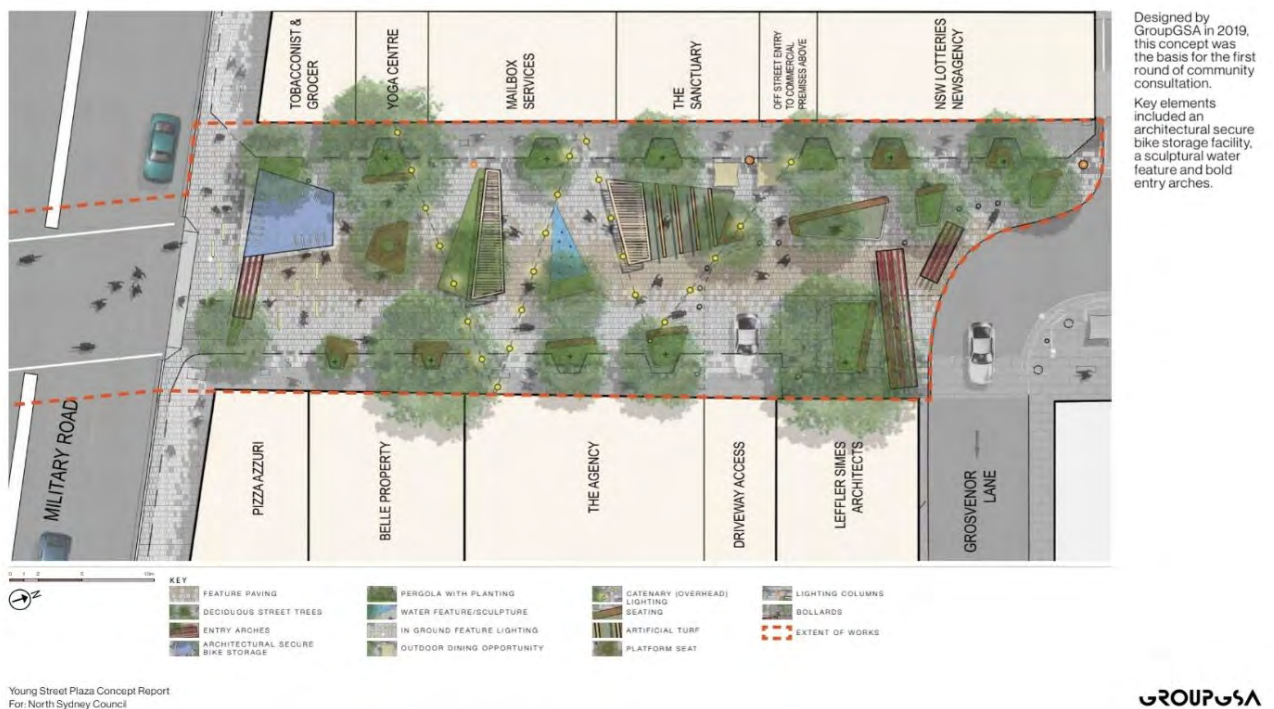


Figure 1. Original Concept Design – Young Street closure – Consultation May to July 2019

## ORIGINAL CONCEPT - MONTAGES

PHOTOMONTAGE - LOOKING SOUTH



EXISTING VIEW 2 - YOUNG STREET VIEW LOOKING SOUTH TOWARDS MILITARY ROAD

Young Street Plaza Concept Report  
For: North Sydney Council



GROUPUSA

Figure 2. Original Concept Design – Young Street closure – Artists Impressions

After considering the preliminary consultation phase feedback, Council resolved on 26 August 2019 (Min. No. 24):

1. THAT Council undertake further design development and conduct a traffic impact assessment for the proposed Young Street Plaza, which responds to the matters raised during the consultation period.
2. THAT a temporary or trial closure of Young Street for a period of three months take place early in 2020 (subject to necessary approvals) and the outcomes of community feedback during the trial are reported to Council.
3. THAT this report be forwarded to the RMS/TfNSW to confirm that community consultation on the closure for Young Street has been undertaken in accordance with the requirements of the funding deed that has been executed between TfNSW and Council.
4. THAT the results of the traffic impact assessment be taken into consideration when looking at the improvements to the existing pedestrian crossing on Waters Road and at the intersection between Waters Road and Military Road be considered as part of Council's LATM Plans for this area.

In response to the preliminary consultation undertaken between 31 May to 5 July 2019, the concept designs for the trial closure were modified to take on board the feedback that had been received.

Councillors were briefed on the Concept Designs for the trial closure of Young Street on 10 February 2020. The concept designs were then developed into tender and construction documentation and the project went to tender in July – August 2020.



*Figure 3. Artists Impressions of the Temporary “Trial” Closure of Young Street – Feb 2020*



*Figure 4. Artists Impressions of the Temporary “Trial” Closure of Young Street – Feb 2020*

At its meeting of 28 September 2020, Council awarded the construction works of the trial plaza to Regal Innovations. Young Street, between Military Road and Grosvenor Lane, has been temporarily closed since 2 November 2020. The trial plaza opened to the public on 23 December 2020.

In March 2021 Councils Traffic Committee resolved to extend the trial period until June 2021.

The outcomes of the community feedback, traffic and pedestrian studies that have been prepared for this project have been used to inform the design for the permanent closure of Young Street. The designs for the permanent closure have been presented to Council at a briefing on 15 June 2021 and are included as an attachment to this report.

## **CONSULTATION REQUIREMENTS**

Community engagement has been undertaken in accordance with Council's Community Engagement Protocol.

## **DETAIL**

In response to the Council resolution of 26 August 2019, this report outlines the results of the community consultation and traffic impact assessment undertaken during the trial of the Young Street public/pedestrian plaza and road closure.

The trial provided the community with the opportunity to see how the road closure would work in practice before considering a permanent closure and transformation into a public plaza.

### **1. Trial Plaza and Road Closure - Project Overview**

The North Sydney Local Government area has less open space per person than any other council in the Northern Sydney (NSROC) region. The Young Street public plaza and required road closure concept provides an opportunity to increase public space that the community can use.

Since its opening, the trial plaza has been used by the community at different times of the day. Additionally, to activate the space Council ran a program of entertainment events including acoustic music performances (coordinated by the Communications & Events Department) and Storytime sessions for children (coordinated by Stanton Library).

As part of the activation Council also invited interested businesses located in Young Street, between Military Road and Grosvenor Street, to submit an Expression of Interest (EOI) to utilise/activate the multi-purpose Pavilion that had been installed in the public plaza. As an incentive to activate the space Council waived its normal fees that it would charge for outdoor dining activities on a public road or footpath.

One EOI was received from the Neutral Bay Newsagency and Council approved a three-month occupancy for a pop-up newsagency/ food and beverage outlet including an espresso bar. On 11 May 2021 Council wrote to the Neutral Bay Newsagency offering an extension to their current occupancy of this space. Council in the letter of offer requested a response in writing and also outlined that the current licence agreement which expires on 30 June could then continue on a month-to-month basis after that date. Council outlined in the letter that it was the intention to create a permanent public plaza in this end of Young Street and that any future Kiosk or Pavillion that may be incorporated into the permanent plaza would again be subject to a Public Expression of Interest (EOI) for its occupation and operation.

To date Council has not received a response from the Newsagency.



*Figure 5. Photo of the Temporary “Trial” Closure of Young Street – March 2021*



*Figure 6. Photo of the Temporary “Trial” Closure of Young Street – March 2021*





*Figure 7. Photo of the Temporary “Trial” Closure of Young Street – March 2021*



*Figure 8. Photo of the Temporary “Trial” Closure of Young Street – March 2021*



*Figure 9. Photo of the Temporary “Trial” Closure of Young Street – March 2021*



*Figure 10. Photo of the Temporary “Trial” Closure of Young Street – March 2021*

## 2. Engagement Overview

A project specific Engagement Strategy was prepared to guide promotion/notification of the trial plaza and road closure and to seek stakeholder feedback during the trial period.

The following provides a summary of the methods that were used to generate widespread awareness of the trial project and the level of participation/reach:

- web page - over 1.5K page views during the trial period (this compares with 524 views during the 2019 pre-engagement phase), including:
  - 97 downloads of the concept design layout.
  - 57 downloads of the traffic management plan; and
  - 52 downloads of the detour map.
- direct letter 1 - 4,000 quantity, distributed to all residential and business properties within Neutral Bay north of Military Road and selected properties south of Military Road in proximity to the street closure notifying of the road closure/detours with link to the project webpage. The notification zone was extended compared to the preliminary engagement phase, which only notified 1,694 properties.
- direct letter 2 - 300 quantity, distributed to properties in proximity to the construction works: detailing the construction schedule with link to the project webpage.
- article published in the Mosman Daily, Thursday 29 October 2020 - advising about road closure and detour options.
- onsite signage with QR code promoting webpage - installed in key throughfares within the plaza encouraging users to provide feedback;
- memorandum to Precinct Committees - Notice of Road Closure and Commencement of Construction works:
- 5 Precinct Committees promoted the project (opportunity to have a say) via their invite flyers, distributed to a collective total of 7,680 residents.
- presentation to the Neutral Bay Streetscape Committee on 9 February 2021.
- Council's E-newsletters including monthly Council E-news, weekly Precincts E-news and monthly Business E-news.
- posts on Council's social media accounts - in summary the eight Facebook posts reached over 25K with 4,306 engagements, the seven Twitter posts just over 9K with 240 engagements (times people interacted with the Tweet), while Instagram reached over 14K. Collectively there were 70 comments received via social media.

The above statistics demonstrate a high level of stakeholder awareness of the trial plaza/road closure.

## 3. Feedback/Submissions

Feedback was invited via three methods:

- a. Online Feedback Form - Trial Plaza (Survey 1)
- b. Online Feedback Form - Trial Road Closure (Survey 2)
- c. Submissions - including emails/letters/Precinct Committees and comments via related social media posts

All submissions received were collated, analysed and are summarised below. Attachment 1 provides a detailed overview of the feedback received by source.

In summary:

- Council received a total of 353 submissions, including:
- 239 online feedback forms regarding the trial plaza.
- 56 online feedback forms regarding the trial road closure.
- 31 written submissions, including from 5 Precinct Committees; and
- 27 feedback/comments via social media were overt position support/do not support/other) stated
- The following table provides a high-level analysis of the feedback by level of support for a permanent plaza/road closure:

**Table 1. Feedback Summary**

Source	Total	Support	Do not Support	Neither/ Nor	Other
Online Feedback Form - Plaza	239	151	70	14	4
Online Feedback Form - Road Closure	56	22	31	3	0
Submissions (mix of Plaza/Road Closure)	31	16	11	4	0
Social media comments (mix of Plaza/Road Closure)	27	5	8	14	0

Note: 35 respondents provided feedback via both the Online Feedback Forms - Trial Plaza and Trial Road Closure respectively, with the majority providing same/similar feedback on both forms.

### 3.1 Online Feedback Form - Trial Plaza

The online feedback form/survey included a series of questions. The 239 collated results are detailed in Attachment 1. In summary:

- 62.14% (n=128) visited the trial plaza more than three times (Q3).
- the top three most popular activities enjoyed whilst visiting the trial plaza were - had a coffee or a meal (n=99), spent time with friends (n=81) and leisure time with children (n=75). Of the 28% (n=59) 'other - please specify' responses, the majority noted that they just walked through the plaza and did not stop/stay in the plaza (Q4).
- 64% (n=152) support to the permanent installation of the plaza, while 30.5% (n=72) do not support, and 5.5% (n=13) are neither/nor (Q5).
- most respondents were residents living in or near Neutral Bay (n=230), followed by (n=62) visitors to Neutral Bay (Q7); and
- the following table provides a high-level summary of the most and least liked features/aspects of the trial plaza (Q1 and Q2), listed in order of priority/highest response per theme:

Most liked features	Least liked features
<ul style="list-style-type: none"> <li>• Children/family friendly (n=45)</li> <li>• Open space/public space/shade/plants/greenery (n=44)</li> <li>• Car free/pedestrian friendly/safety (n=38)</li> <li>• Atmosphere/sense of community (n=31)</li> <li>• Concept but not the design/location (n=10)</li> <li>• Outdoor seating/dining (n=9)</li> <li>• Other (n=8)</li> <li>• Design elements (n=7)</li> <li>• Convenience (=3)</li> </ul>	<ul style="list-style-type: none"> <li>• Design elements/aesthetics - temporary look and feel/cheap looking (n=61)</li> <li>• Traffic/cycling impacts (n=30)</li> <li>• Design/materials - synthetic turf/rolling hills (n=14)</li> <li>• Other - negative feedback (n=12)</li> <li>• Design/materials - child friendly features/child safety (n=11)</li> <li>• Design/materials - shipping container café (n=11)</li> <li>• Parking impacts (n=10)</li> <li>• Design/materials - lack of shade/rain cover (n=9)</li> <li>• Design/materials - street furniture/seating (n=8)</li> <li>• Design/materials - colour palate specifically (n=7)</li> <li>• Design/materials - platform/levels/elevation (n=7)</li> <li>• Impact on local businesses (n=7)</li> <li>• Noise/acoustics (n=6)</li> <li>• Design/materials - size of area (n=5)</li> <li>• Location (n=5)</li> <li>• Utilisation (n=5)</li> <li>• Cost (n=2)</li> </ul>

### 3.2 Online Feedback Form - Trial Road Closure

The second online feedback form sought feedback on the road closure and associated traffic impact. Most responses received support the road closure.

All the comments received are listed in Attachment 1 (Appendix F).

### 3.3 Submissions

36 written submissions were received including 25 residents, 6 local businesses and 5 Precinct Committees. The submissions are collated in Attachment 1 (Appendix A and B). In summary:

- 16 support the road closure and/or plaza - with the majority support requesting amendment to the current trial design/street furniture etc.
- 11 do not support the road closure and/or plaza; and

4 provided neutral (neither/nor) feedback.

#### 4. Traffic Impact Assessment

Specialist traffic consultants GTA were engaged to analyse and compare pre-closure traffic and parking conditions prior to and during the trial closure.

The following data and information was used for this purpose:

- Data and SIDRA modelling from the 2018 WSP Traffic Impact Assessment
- Pre-closure traffic surveys in the study area collected October 2020
- During closure traffic surveys in the study area collected February 2021 and May 2021

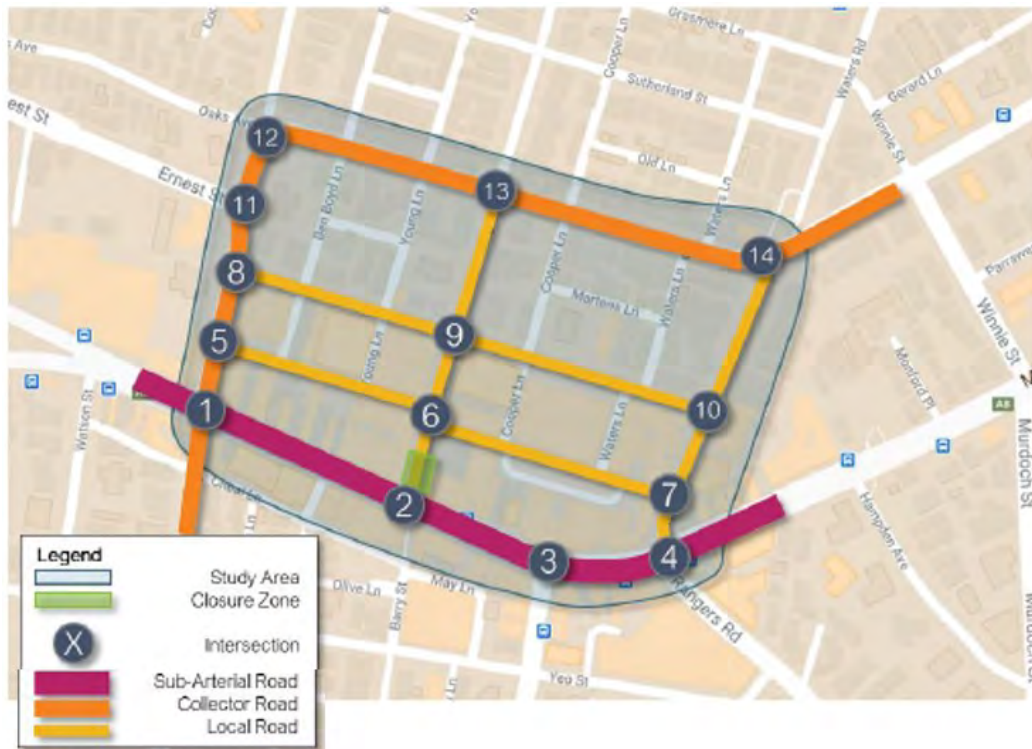


Figure 11. Traffic Study Area around the Young Street Trial Closure

#### Mid-block Traffic Volumes

It was found that there was an increase in traffic on Ben Boyd Road, Waters Road and Grosvenor Street which indicates that traffic has been redistributed as a result of the Young Street closure.

It was also found that there was a 30% increase in traffic in Grosvenor Lane which represents a daily increase of 373 vehicles. In the peak hour the average traffic volumes increased from 115 vehicles per hour to 164 vehicles per hour. This equates to one additional vehicle every 73 seconds, which is a very minor increase in volume.

Table 3.16: Comparison of pre- and post-closure mid-block volumes

Reference No.	Street	Between	Direction	ADT Volumes		Difference	Percentage Difference
				Pre-Closure	Post-Closure		
1	Ben Boyd Road	Grosvenor Lane and Military Road	North	4,957	6,007	1,050	21%
			South	2,687	2,996	309	11%
2	Ben Boyd Road	Grosvenor Street and Grosvenor Lane	North	4,346	4,973	627	14%
			South	2,861	3,111	250	9%
3	Grosvenor Street	Young Street and Ben Boyd Road	East	1,661	1,603	-58	-3%
			West	3,064	2,783	-281	-9%
4	Grosvenor Lane	Young Street and Ben Boyd Road	East	1,262	1,635	373	30%
			West	N/A	5	N/A	0%
5	Young Street	Belgrave Street and Grosvenor Street	North	2,106	1,939	-167	-8%
			South	2,496	2,417	-79	-3%
6	Young Street	Grosvenor Street and Grosvenor Lane	North	1,887	1082	-605	-36%
			South	1,775	1386	-389	-22%
7	Young Street	Grosvenor Lane and Military Road	North	1,570	0	-1,570	-100%
			South	1,018	0	-1,018	-100%
8	Grosvenor Street	Walers Road and Young Street	East	1,619	1,900	282	17%
			West	2,437	2,750	313	13%
9	Grosvenor Lane	Walers Road and Young Street	East	1,576	1,708	132	8%
			West	12	20	8	67%
10	Walers Road	Grosvenor Lane and Military Road	North	622	1,346	724	116%
			South	1,203	1,527	324	27%
11	Walers Road	Grosvenor Street and Grosvenor Lane	North	2,150	2,620	470	22%
			South	989	1,259	270	27%
12	Walers Road	Belgrave Street and Grosvenor Street	North	2,157	2,330	173	8%
			South	1,731	1,761	30	2%

Figure 12. Traffic Study – Mid Block Traffic Volumes pre and post closure comparisons

**Intersection Level of Service (SIDRA modelling)**

Vehicle delay is the most commonly used measure of intersection performance. The level of service is based on the worst-performing turning movement.

GTA undertook SIDRA modelling on the key intersections within the study area to determine the change in the level of service and found that, since the closure of Young Street the network generally runs at a slightly lower level-of-service but to an acceptable degree.

Ben Boyd Road/ Oaks Avenue/ Belgrave Street unsignalised intersection recorded a low level of service (F) in AM peak. It is expected that in practice the nearby signals at Ben Boyd Road/Ernest Street will provide gaps that allow vehicles queued on the unsignalised leg to

discharge each cycle, thereby providing an acceptable performance (albeit with long delays for the minor movement).

Military Road/ Rangers Road/ Waters Road unsignalised intersection also recorded a lower level-of-service (E) in AM peak with the worst performing movement being vehicles exiting Waters Road to Military Road. The corresponding worst-case queue length on Waters Road is approximately 4 vehicle lengths or 30m in the AM peak.

Once again, mitigation is achieved through the gaps created by the adjacent upstream signalised intersection of Military Road/ Wycombe Road, and the overall performance is considered to be acceptable.

## **Parking Impacts**

Approximately 10 short-term parking spaces in Young Street (Between Military Road and Grosvenor Lane) were removed as a result of the closure.

The traffic study prepared by GTA generally found on-street parking was well-utilised but did have some spare capacity.

The study found that the Short-term nature of on-street parking in the immediate area around Young Street which is a mix of 30min (unmetered) and 2 Hour (metered) Parking causes many parking movements and turnover which generally slows the circulation of local traffic.

Overall, the GTA Traffic Study found that traffic has been wholly redistributed within the surrounding local network and the accompanying SIDRA modelling found the network generally performs acceptably with minor increases in overall time delays at some intersections.

It also found that parking turnover during the trial road closure period due to existing parking meters and time restrictions ensured good utilisation of the on-street parking resource and that there was some spare capacity.

The full traffic Study prepared by GTA Traffic Consultants is attached to this report.

## **5. Human Movement Data Analysis**

Council engaged the services of Urbis Consultants to undertake a Human Movement Data Analysis study so that Council could understand changes in visitation rates, visitor profile, temporal analysis, dwell time and cross-usage resulting of the implementation of the trial closure of Young Street (road closure and public plaza).

The purpose of the study was to measure visitation to/from the plaza. Three comparison periods were assessed: a) a historical period (1 year prior to activation), b) the three months pre-construction, and c) the trial period.

The data sample analysed shows increased visitation to Young Street and Neutral Bay Village over the trial period. Visitation to Young Street during the trial period was **27%** higher than



the historical period, with higher levels of visitation observed in the afternoon and evening and greater levels of visitation were also observed on weekends.

## **Methodology**

The Human Movement Data has been sourced from the third-party provider UberMedia. UberMedia's mobile location data is aggregated from a variety of high-quality sources, including data from proprietary apps and locational data derived from mobile advertising.

Across Australia the dataset has approximately 6 million active unique devices per month. Consequently, the dataset is seen as accurate for the purposes of this report. It is important to note that the apps are predominantly English-speaking apps and will have varying levels of penetration across different user groups.

All data is deidentified and neither Urbis nor North Sydney Council can access personal information relating to the users.

Data has been analysed across three periods.

1. 23rd December 2019 to 26th March 2020 (Historical period)
2. 1st August 2020 to 31st October 2020 (Pre-construction period)
3. 23rd December 2020 to 26th March 2021 (Activation period)

The resident and worker location of each mobile phone is derived from the device's common evening and common daytime location respectively. The Common Evening Location (CEL) for a device is estimated by determining where a device most frequently appears during the "nonwork" hours (evening through morning and weekends). The overnight hours are defined as after 6pm and before 8am. The Common Daytime Location (CDL) for a device is estimated by determining where a device most frequently appears during the "work hours (daytime on weekdays). The hours are defined as after 8am and before 6pm from Monday through Friday.

The following diagrams and graphs are extracts from the Urbis Report. A full copy of the Human Movement Data Analysis study is attached to this report.



Figure 13 Human Movement – Study Area – Extract from Urbis Report

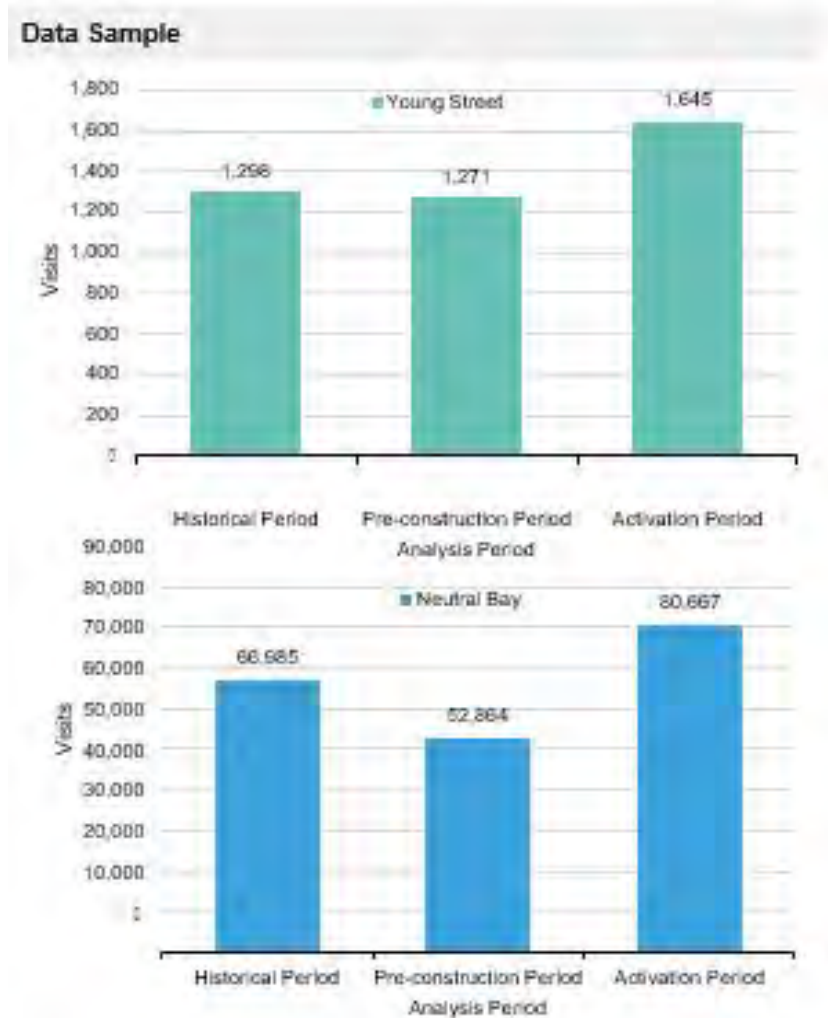
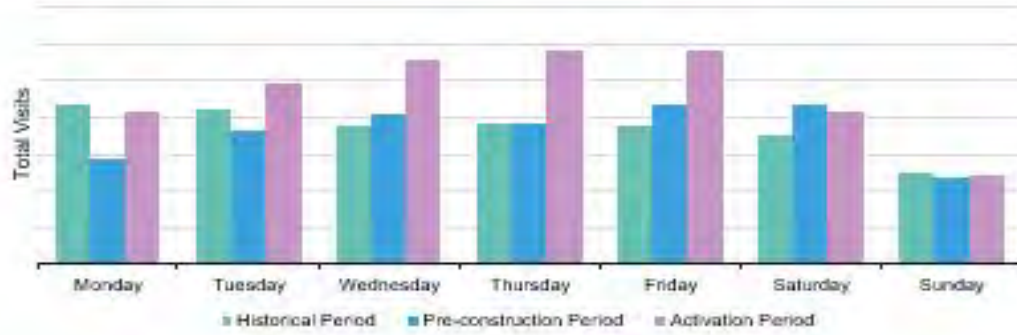


Figure 14 Graph 1: Total Number of Visits - Extract from Urbis Report

**Young Street**



**Neutral Bay**

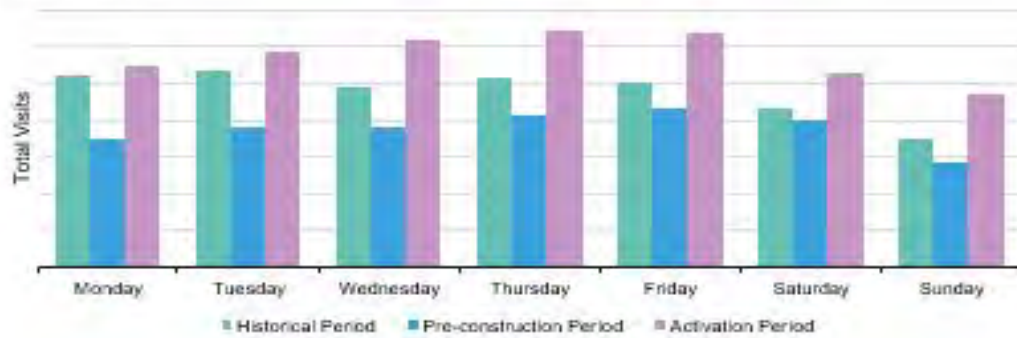
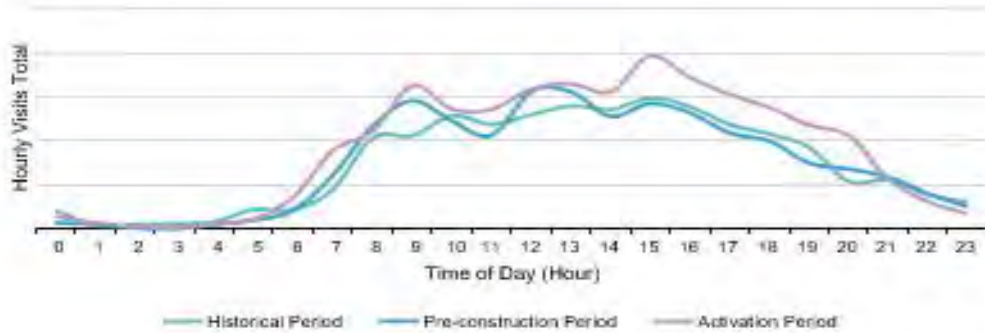


Figure 15 Graph 2: Total Number of Visits per day - Extract from Urbis Report

**Young Street**



**Neutral Bay**

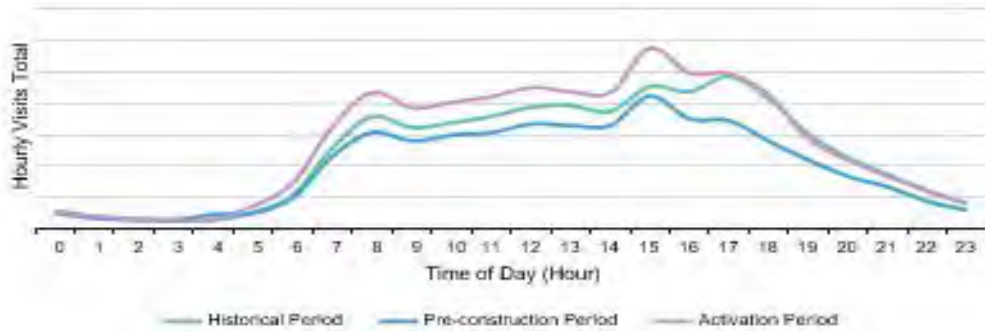
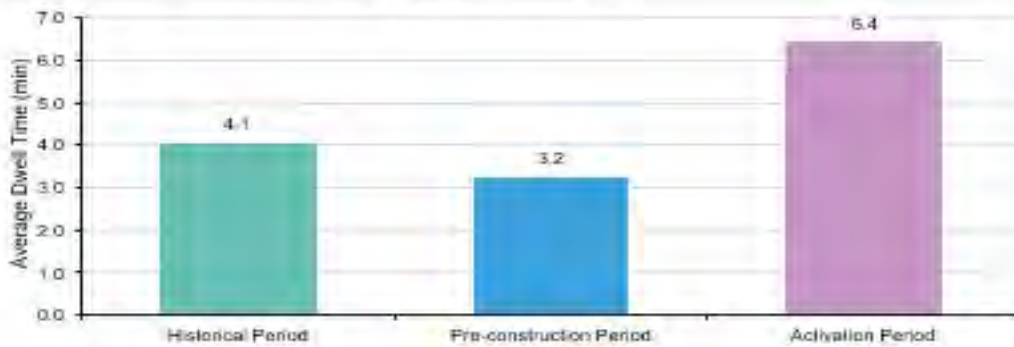
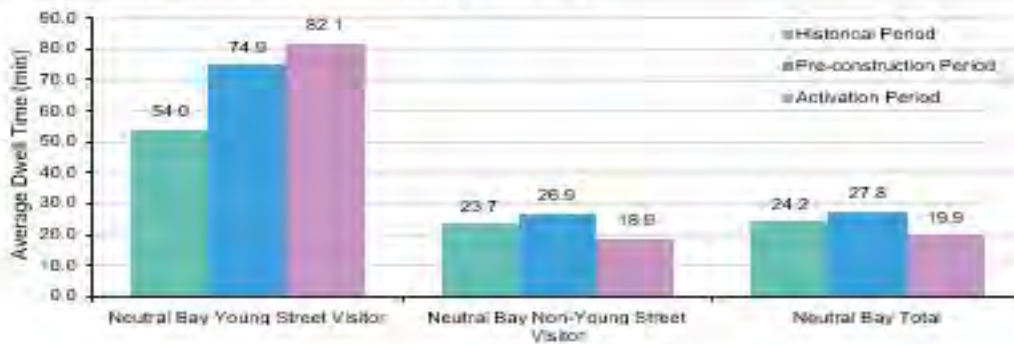


Figure 16 Graph 3: Time of day - Extract from Urbis Report

**Average Dwell Time within Young Street (minutes)**

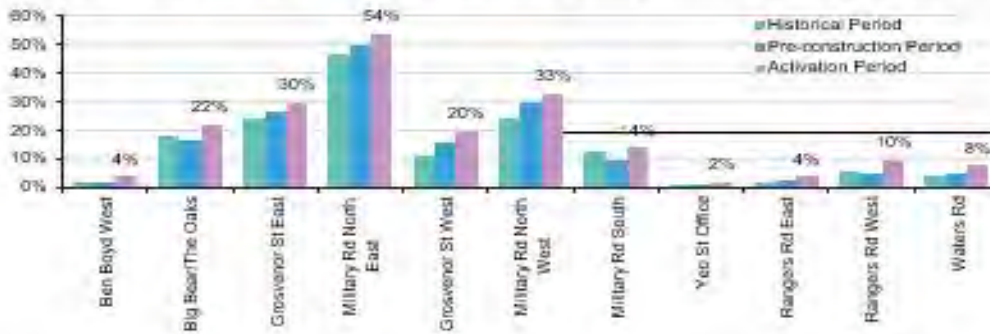


**Average Dwell Time within Neutral Bay (minutes)**

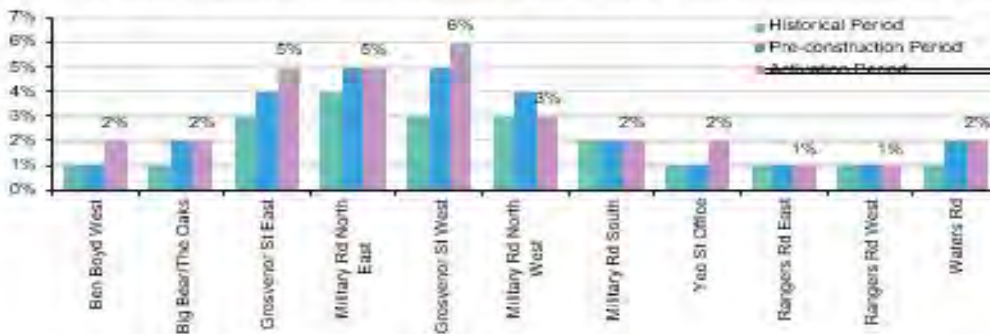


*Figure 17 Graph 4: Dwell Time - Extract from Urbis Report*

**Share of Young Street Visitors that also went to other precincts on the same day**



**Share of Other Precincts Visitors that also went to Young Street on the same day**



*Figure 18 Graph 5: Visitation Spread to other Areas - Extract from Urbis Report*

### Young Street Visitation by Visitor Categories (share of total)

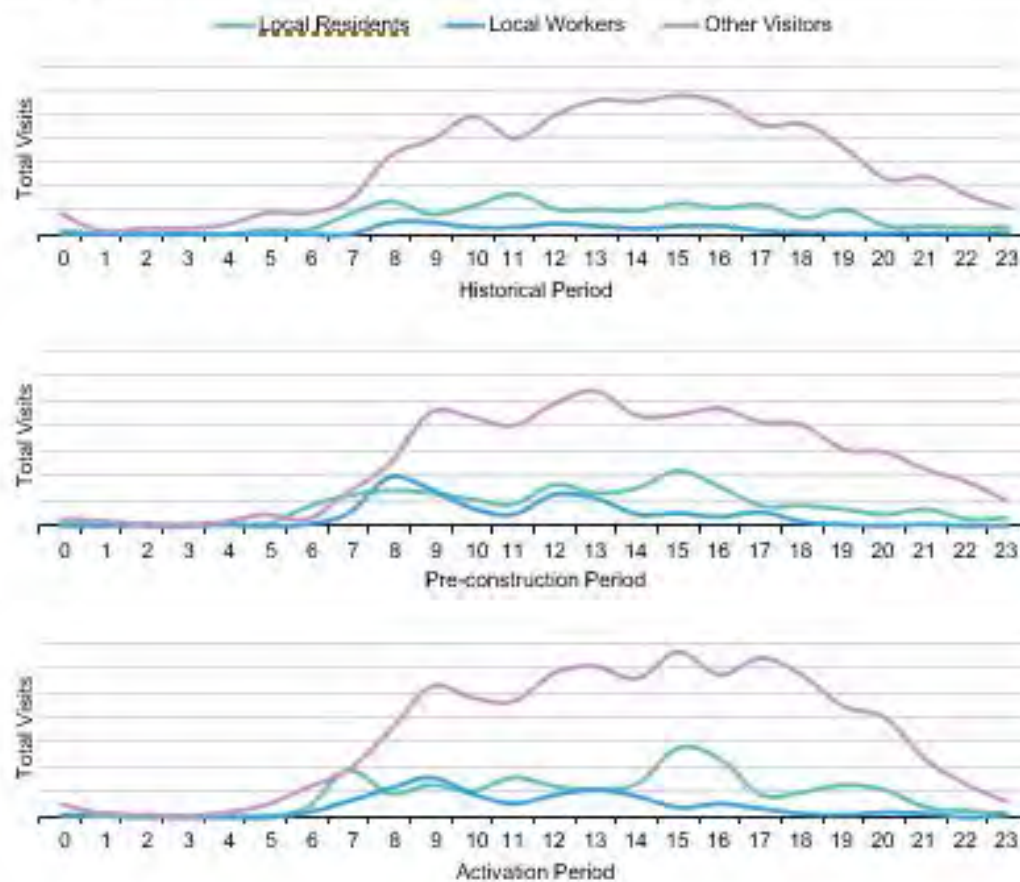


Figure 19 Graph 6: Visitation Type – Resident - Worker – Visitor- Extract from Urbis Report

In Summary the findings of the Human Movement Data study prepared by Urbis found the following:

- The data sample analysed shows increased visitation to Young Street and Neutral Bay over the analysis periods. Visitation to Young Street in the activation period was 27% higher than the historical period.
- In Young Street, higher levels of visitation were observed in the afternoon and evening, relative to the historical period. Greater levels of visitation were also observed on weekends.
- While the majority of visitation is from broader Sydney residents, the share of visitation from local residents and local workers to Young Street increased over the analysis periods.
- During the activation period, the average dwell time for visitors to Young Street increased by 56% relative to the historical period. Visitors to Young Street also typically spent more time across Neutral Bay when compared to those who didn't visit Young Street.
- The share of Young Street visitors who also visited other precincts within Neutral Bay increased between the historical and activation periods.

A full copy of the Human Movement Data Analysis study is attached to this report.

## **6. Amendments to Permanent Plaza Design as a result of Stakeholder Feedback, Traffic Impact Assessment and the Human Movement Study**

In response to the community feedback received and the studies that have been undertaken concurrently on this project, the following modifications have been made to the permanent design that Council has been briefed on and is attached to this report. Refer to Attachment 5:

1. The project is 100% funded by TfNSW (via the executed B-Line funding deed)
2. The trial plaza was always designed to be temporary and that is reflected in the chosen palette of materials and finishes.
3. A new design concept with permanent finishes and fixtures is part of this report. The permanent design has been informed by the outcomes of the different stages of consultation undertaken for this project as well as the traffic and pedestrian (Human Movement Studies) that have been undertaken as part of this project.
4. A different colour and planting palette is included in the permanent plaza concept design.
5. More permanent street furniture – timber clad seating and off-form concrete seating bleaches with timber slats has been added to the final design.
6. The turf area used for the entertainment of children and young families is proposed as part of the final design because it there was majority support for this feature.
7. The undulated turf area is multi use, providing a seating space and a passive play space for young children of all ages.
8. Access to existing driveway is to be kept; this access is a shared zone with 10km/h speed environment with pedestrian priority. Only vehicles accessing the driveway are permitted to use this driveway.
9. A Safety fencing/barrier has will be included to the Military Road frontage to Young Street
10. The demountable building/shipping container within the trial plaza is a hired element that is temporary in nature. It will be replaced with a more permanent kiosk structure that will have services connected to it such as water, and electricity. This Kiosk will be the subject of a future Public Expression of Interest (EOI) to determine the best use for this facility in this location.
11. The plaza cleaning regime was increased during the trial in response to feedback, to ensure it is kept tidy; increased service levels would be maintained under the permanent plaza.
12. Additional decorative lighting will be added to the plaza to match the decorative lighting that was recently installed in the adjoining Grosvenor Lane to activate the Plaza at night and discourage anti-social behavior.

Further, as outlined in section 4 of this report, a review of the traffic and parking on the surrounding road network found that the impacts are acceptable and do not require any mitigative traffic works in the surrounding streets. Council will however upgrade the pedestrian crossing at Waters Road and Grosvenor Street to improve the visibility and safety aspects of this crossing.

# CURRENT CONCEPT PLAN

BASED ON COMMUNITY FEEDBACK



- 1 Café Court with loose outdoor seating & retractable shade sail
- 2 Shipping Container type Café - 3-sided activation
- 3 Timber Deck (At Grade) with loose outdoor seating to café front
- 4 Rolling Artificial Turf Play

- 5 Artificial Turf Slope with timber wave seating
- 6 Timber Seating (combination of benches & seating platforms)
- 7 Raised Timber 'Lounge' Deck
- 8 Shared Access Zone - 4m Wide Emergency Egress (left turn only) onto Military Road

- 9 Driveway Access
- 10 Movable Timber Benches
- 11 Existing Signalled Pedestrian Crossing to Military Road to be retained
- 12 Continuous Pedestrian Crossing
- 13 Timed Loading Zone

- Existing Tree to be retained
- New Deciduous Tree
- New / Transplanted Livistona Palm

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Figure 20. Concept Plan – Young Street – Permanent closure

# MATERIALS PALETTE

## Built Elements



## Raised Planters



## Seating



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Figure 21. Materials Palette for Young Street – Permanent closure

# MATERIALS PALETTE

## Surface Finishes



## Feature Lighting



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GROUPUSA

Figure 22. Materials Palette for Young Street – Permanent closure

# PLANTING PALETTE

## Trees

For instant impact trees are to be planted at semi-mature size, this will also ensure some natural shade is provided throughout the plaza.

Clear stems will provide visibility under the canopy and reduce eye height hazards to pedestrians.

CODE	BOTANICAL NAME	COMMON NAME
T1	<i>Platanus orientalis</i> D.Diplex	Plane Tree
T2	<i>Pyrus ussuriensis</i>	Manchurian Pear
T3	<i>Lagerstroemia indica</i> var. 'Indica'	White China Myrtle
T4	<i>Livistona australis</i>	Cabbage Tree-palm



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For North Sydney Council

GROUPUSA

Figure 23. Planting Palette for Young Street – Permanent closure



# PLANTING PALETTE

## Ornamental Planting

Ornamental planting will complement the plaza, creating a bright and warm palette with varying textures and shape.

A mixture of large plant pots, raised planters and planting at grade provides dynamic planting at a range of heights and helps to define the different spaces within the plaza.

CODE	PLANTING STYLE	LOCATION
P1	Planting at grade	To edges of the plaza, particularly under existing and new trees and to Military Road
P2	Raised planters	Used to define spaces within the plaza and accommodate level changes
P3	Large pots	Scattered throughout the plaza, clustered in groups to provide "Young colour" seasonal displays



Young Street Plaza Concept Report For North Sydney Council

GROUPSA

Figure 24. Planting Palette for Young Street – Permanent closure



Figure 25. Artists Impression for Young Street – Permanent closure



*Figure 26. Artists Impression for Young Street – Permanent closure*



*Figure 27. Artists Impression for Young Street – Permanent closure*



*Figure 28. Artists Impression for Young Street – Permanent closure*

A full copy of the Group GSA Design for the permanent closure and creation of a public plaza at this end of Young Street is attached to this report.

## **6. Permanent Plaza Implementation Program**

1. Council Briefing on Permanent closure 15 June 2021- Completed
2. Report to June 28 Council Meeting
3. If Councils resolves to proceed with the project
4. Detail design documentation July to August
5. Tender for construction end of August
6. Tender Report to Council October Meeting
7. Commence Construction November 2021
8. Construction completed mid-March 2022

## **7. Summary and Recommendations**

This project provides a unique opportunity to create new public open space in the middle of one of North Sydney's most densely populated Village Centres. The consultation that Council has undertaken demonstrates that the majority of respondents support the project proposal, and it is therefore recommended that Council endorses the permanent closure of Young Street and the construction of a permanent pedestrian plaza as per the concept design that is attached to this report.

Additionally, as noted in this report the project is funded through the B-Line Funding Agreement from TfNSW and therefore subject to tender prices received by Council, there is no cost to North Sydney Council ratepayers. The Traffic and Human Movement Data studies that Council has also undertaken concurrently with the trial road closure also indicate that impacts on the local traffic network will be marginal and that the road closure and creation of a new Public Plaza does attract more people to the area.

## ATTACHMENT 1

### Young Street Trial Plaza and Road Closure - Feedback Summary (prepared May 2021)

Feedback on both the trial plaza and the road closure was sought via various formats:

- written submissions (email/letter/Precinct Committees/comments received against the various social media posts promoting the trial plaza) - refer to section 1.1; and
- online feedback form - respective form per trial plaza and road closure (hosted via Your Say North Sydney) - refer to sections 1.2 to 2.1.

#### **1. Trial Plaza Feedback**

##### **1.1 Written Submissions**

A total of 63 written submissions were received. Of these:

- 31 email/letters - with the majority from residents and 6 from businesses
- 5 from Precinct Committees; and
- 27 comments via social media

##### **1.1.1 Email/Letter feedback**

Of the 31 submissions, 25 were from residents and 6 from local businesses. In summary:

- 16 support the road closure and/or plaza - with the majority of those support requesting amendment to the current trial design/street furniture etc;
- 11 do not support the road closure and/or plaza; and
- 4 provided neutral (neither/nor) feedback

The following table provides a high level overview of the submissions (\* = business), which are detailed in Appendix A:

No.	Level of support
1 *	Support road closure and plaza with amendment - does not support a café in the plaza
2	Support plaza with amendment - prefer real to synthetic turf, prefer pop-up/temporary shop within the shipping container verse permanent; benches are well used but temporary furniture not suitable; dislike yellow colour; likes the planter boxes
3	Neither/nor - support plaza concept, but trial finishes/design not suitable; understood it would be similar to the May Gibbs area on other side of road (for continuity); no public amenities.
4	Neither/nor - concerned about traffic implications surrounding the plaza/road closure impacting ability to access to/from Ben Boyd Rd including traffic light sequencing; concerned about flow on implications for older/ageing/low mobility residents
5	Do not support plaza - do not like the "kiddies playground", does not want permanent/"horrible unsightly mess and childish"
6 *	Do not support road closure - impacts on property 3-5 Young St/only building that will front the plaza has underground car parking, the loss of a road access way to the building's driveway without any clearly defined vehicular access way; worse traffic particularly at Ben Boyd Rd and Waters St; concerned about pedestrian interference, street furniture and items/rubbish that may be left in the plaza

No.	Level of support
7 *	Do not support pop-up cafe/retail space within plaza - initial concept was described as a pedestrian plaza, disappointed EOI released afterwards/misleading; negatively impacts local businesses. Neutral Bay is not short on available retail premises/pop up retail opportunity impacts negatively on surrounding businesses; concerned about EOI process. No objection to road closure.
8 *	Do not support plaza - own business negatively impacted by plaza (access to property removed impacting servicing/deliveries to property, shipping container popup cafe/retail space and lack of on street parking deterring potential tenants); disappointed the EOI for pop-up cafe/retail space afterwards, lack of notification/consultation of EOI by Council to local businesses; no reply received to correspondence; only able to speak to the project manager; perceived increased crime.
9	Do not support road closure and plaza - Young St access onto Military Rd was well used route; short term parking loss;
10	Support road closure and plaza - do not encourage vehicles to use Grosvenor Ln as they fly down the street and this is meant to be a shared zone, at the moment pedestrians are largely intimidated by speeding cars. Recommend resident access only. Further recommend outdoor dining in front of 19 Young St.
11	Do not support road closure and plaza
12	Neither/nor - supports trialling concept first, concerned about post COVID impact; closure of Young St means more traffic will either turn left at Ben Boyd Rd or further along at Waters Rd; currently buses banked from freeway to Ben Boyd Rd without additional traffic light left turn thus causing more congestion than prior.
13	Neither/nor - complain t made about own grandson (toddler) injured by fall from boardwalk/seating area; concerned about lack of response/action by Council; concerned about current design suitability for children - no colour delineation between the boardwalk and the concrete below such that it is difficult to note the drop; almost 1m high sections not suitable.
14	Support road closure and plaza with amendment - keep it simple like the Kirribilli one; traffic not turning there is good as often had to watch the cars turning as some did not stop.
15	Do not support road closure and plaza due to location - supports concept, but not the location (next to one of the busiest road, noisy, can be a wind tunnel, and being shaded it can be quite an uninviting space for most of the year); adjacent existing shops not inviting; Parraween St suitable site.
16 *	Do not support road closure and plaza - has created access problem to own commercial property with 20 car parks by building the pedestrian mall with no access for parking for delivery trucks except across our driveway. Access to property must be maintained/safe access for pedestrians.
17	Support plaza with amendment - dining area needs shade; helps activate the surrounding laneways
18	Support plaza - mother/child enjoy space to crawl
19 *	Do not support road closure and plaza - negative impact (in addition to 2017 bus stop relocation)/ reducing foot traffic to on own business; request Young St reopen to allow vehicle access such that all businesses on Military Rd can survive in coming years; welcome opportunity to further discuss.
20	Support plaza - helps create community vibe/atmosphere; the more trees/shade cover the better;
21	Support plaza with amendment - don't like the yellow paint work; overall design (the well-considered plantings, charming garland lighting, the seating, bins, accessibility and bike racks) is great; provides a place for families to relax/play; recommend acoustic live music; great addition to our neighbourhood
22	Support plaza with amendment - resident in Young St; feel the plaza is a great idea; used by young families and adults; appreciate that it is only temporary at this stage so looks a bit scrappy and presume the permanent plaza would be more attractive.
23	Support road closure and plaza with amendment
24 *	Support - express delight in and for the newly-created community space; are a charity devoted to assisting the performing arts/own premises are close by/20 Young St; there is no other open-air place close to the shops - envisage the space being used for puppet shows, appropriate light entertainment, especially on weekends, but with minimal amplification, and by the local Primary School for small recorder and choral concerts; welcome opportunity to further discuss.
25	Do not support plaza - disappointed in the trial, is ugly and unnecessary, cheap materials used; make better use of rates; presume it would make a great hanging/drinking spot after dark; the Cremorne and Langley Plazas are well maintained Council - dirty with dangerous broken tiles, need a deep clean; new plants, complete overhaul.
26	Support plaza with amendment - ugly/eyesore, hope going to become permanent fixture as is; if

No.	Level of support
	intend to permanent ensure it's much more attractive with real grass, trees and flowers and perhaps a few of the Gaudi-style seats which are in the plaza opposite near the Neutral Bay Post Office; acknowledge loss of so much green space with the WHTBL and WF Upgrade impact on St Leonards Park and Cammeray Golf Course.
27	Support road closure with amendment - great addition to the neighbourhood; unfortunately though it's meant that the shared pedestrian and car zone of Grosvenor Ln has become unsafe; the 10km speed limit is not being adhered to. So the closure of one street has defeated the desired positive effect in Grosvenor Ln.
28	Do not support plaza - hideous structure looks nothing like the artist's impression on website. Green space does not have undulations plastic grass and ugly wooden structures; it has taken away much needed parking on top end of Young St - as a mobility holder, would park there as it was closest point to Chemists Warehouse and Specsavers; driving north on Military Rd, Young St is the one most people turn into to get home/to Woolies car park, plaza has caused traffic bottlenecks and dangerous manoeuvres to get a parking spot (photos provided); box structure has remained dormant and unexplained for a period then became a coffee shop - Young St/Military Rd currently has lots of coffee shops with outdoor dining less than 100m away that have lovely outdoor seating and are always popular, as are the many on Military Rd - their loss of part is detrimental; has Council considered the negative impact on surrounding businesses/offices - they are not happy with this structure on their doorstep/is affecting their businesses; a child fell over on this undulating area/unattended kids running barefoot on this is a liability (photo provided); never see anyone using this area for eating/recreation, other than the occasional unattended child/in evenings odd homeless person/vagrants which can be intimidating.
29	Support road closure and plaza with amendment - support some sort of community resting area; very disturbed by the actual trial installation - most inappropriate and unattractive, not vibrant and sustainable; fake grass and hideous/ugly murals on the ground not pleasing; what are the curves for - certainly not for sitting on; plants and greenery are nice; all the carpentry work is weird/not welcoming; complete waste of money; prefer cobblestones, plants, water features and nice seats/ a more traditional approach in keeping with the old world charm (what is left of it) of Neutral Bay.
30	Support road closure and plaza - busy Neutral Bay needs more tranquil areas to relax/enjoy the area; is a dangerous street, feel nervous walking down busy Military Road/cars too fast turning left into Young St; closure helps make streets safer; attractive nature area of trees, grass, seating and tables would be great; should also help to increase business activity.
31	Support plaza with amendment - trial design ugly/horrible/drab/bad seating; it would not be nearly as horrible, if used the same plants hangers and brick/tile work as in Grosvenor Ln.

### 1.1.2 Precinct Committee feedback

Appendix B collates the feedback received from 5 Precinct Committees, as provided via their meeting minutes throughout the duration of the trial period.

### 1.1.3 Social media comments

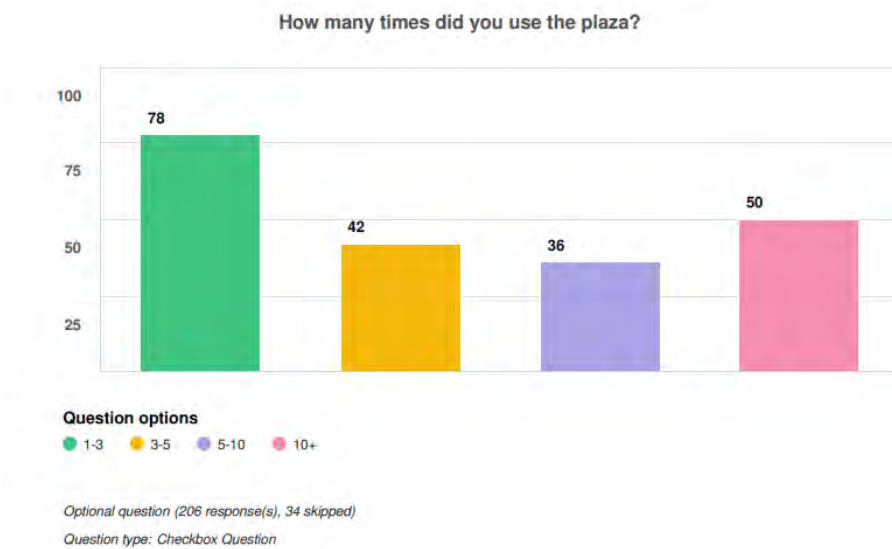
Appendix C collates the feedback received in response to the numerous social media posts promoting the plaza and road closure during the trial; noting that feedback was not specially requested via social media. Feedback has been grouped by level of support where such was overtly stated. Much of the neither/nor comments was mixed e.g. like the plaza with amendments.

## 1.2 Online Feedback Form - Trial Plaza (Survey 1)

The online submission form included a series of questions. The results are summarised below, with the detailed responses included at Appendix D. Note: 35 of the total 239 respondents also provided feedback via the Online Feedback Form - Trial Road Closure, with the majority providing same/similar feedback on both forms.

**How many times did you use the Trial Plaza? (Question 3)**

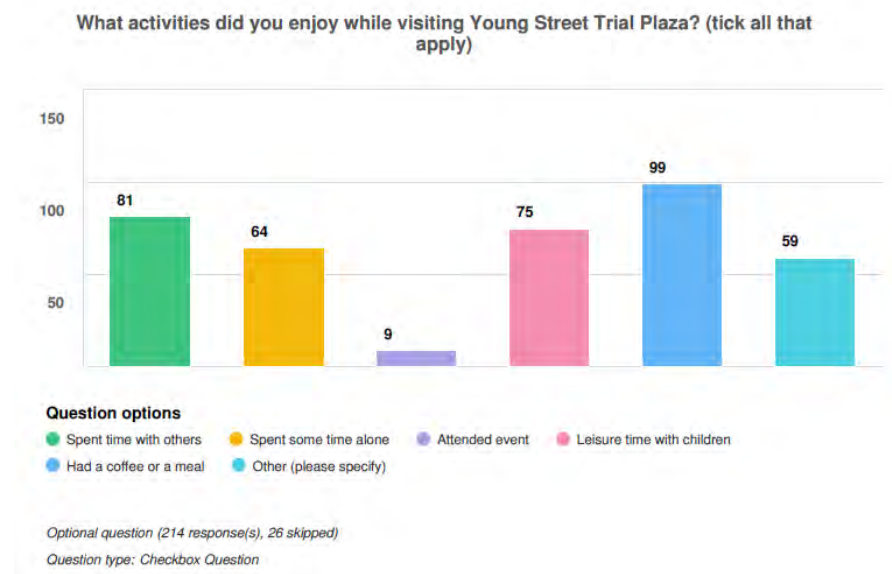
206 (of 239 total) respondents completed this question. As shown in the following graph, the majority (n=78) used the plaza 1-3 times, followed by 10 plus times (n=50). Over 62% (n=128) visited the plaza more than 3 times during the trial.



**What activities did you enjoy while visiting the Trial Plaza? (Question 4)**

214 respondents completed this question. As shown in the following graph, the top 3 activities were:

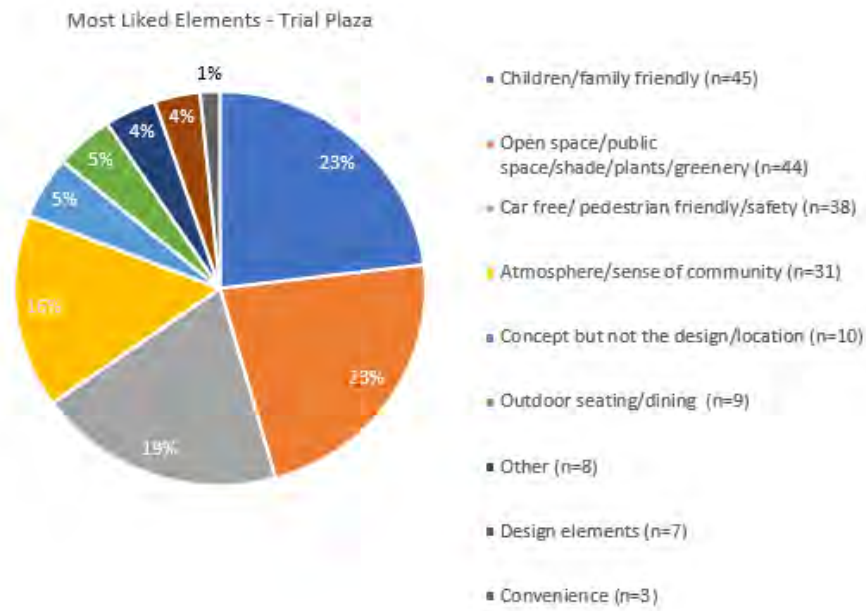
1. Had a coffee or a meal (n=99)
2. Spend time with others (n=81)
3. Leisure time with children (n=75)





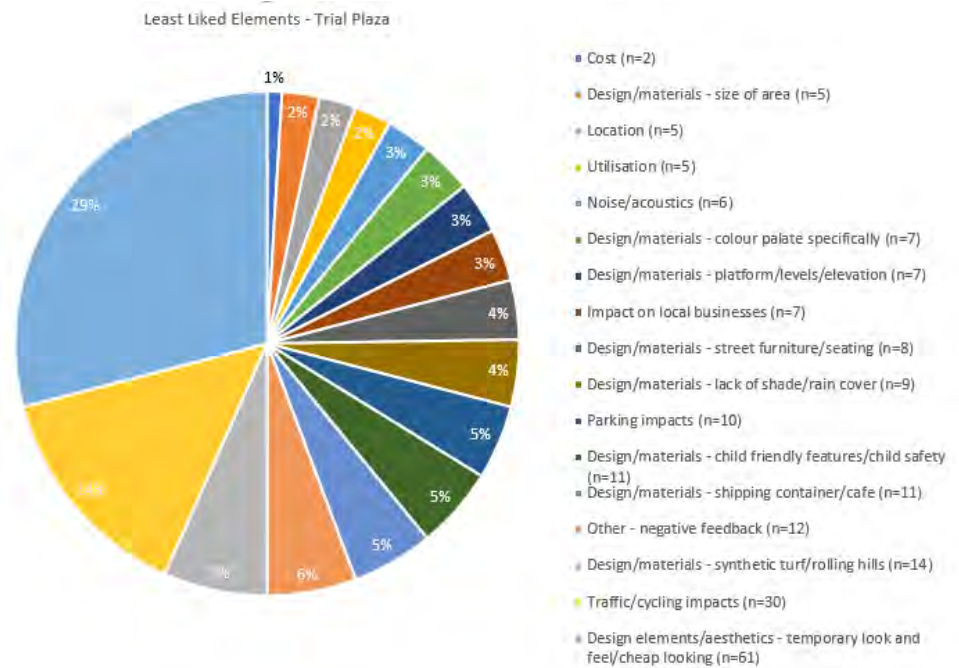
**What did you LIKE THE MOST about Young Street Trial Plaza? (Question 1)**

The following graph relates to the table at Appendix E (verbatim comments), categorising the most liked aspects/features of the trial plaza.



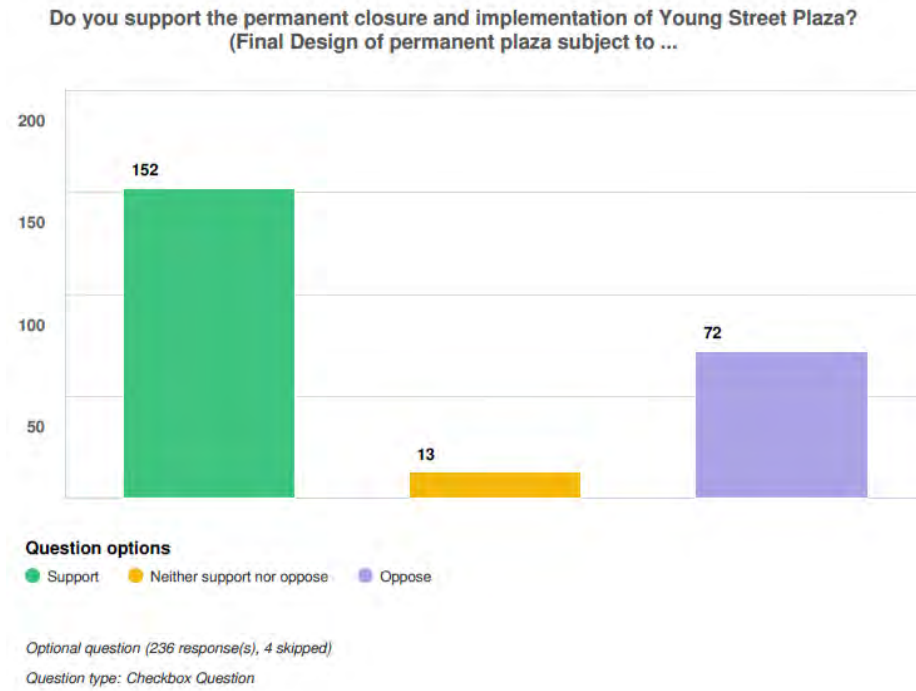
**What did you LIKE THE LEAST about Young Street Trial Plaza? (Question 2)**

The following graph relates to the table at Appendix F (verbatim comments), categorising the least liked aspects/features of the trial plaza.

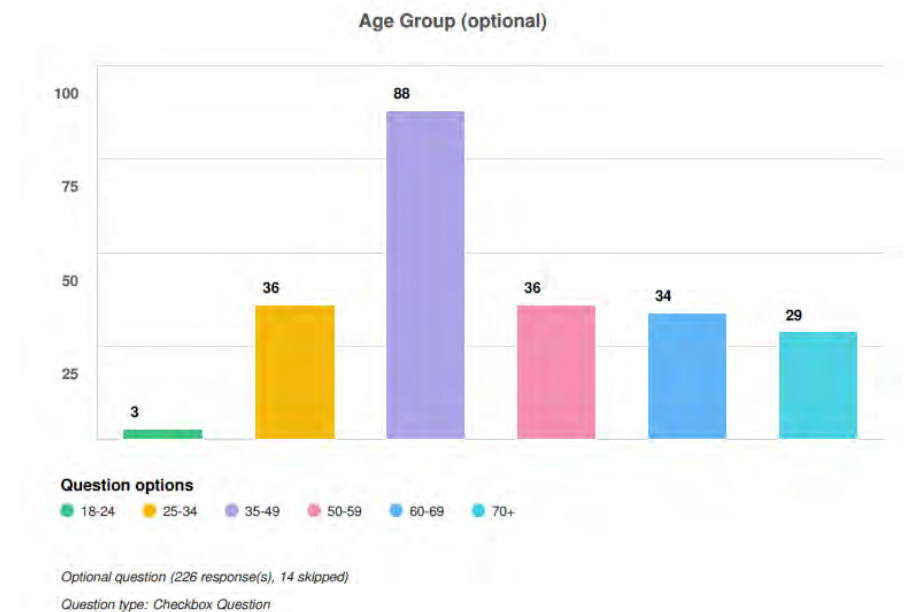


**Do you support the permanent closure and implementation of Young Street Plaza? (final design subject to community consultation) (Question 5)**

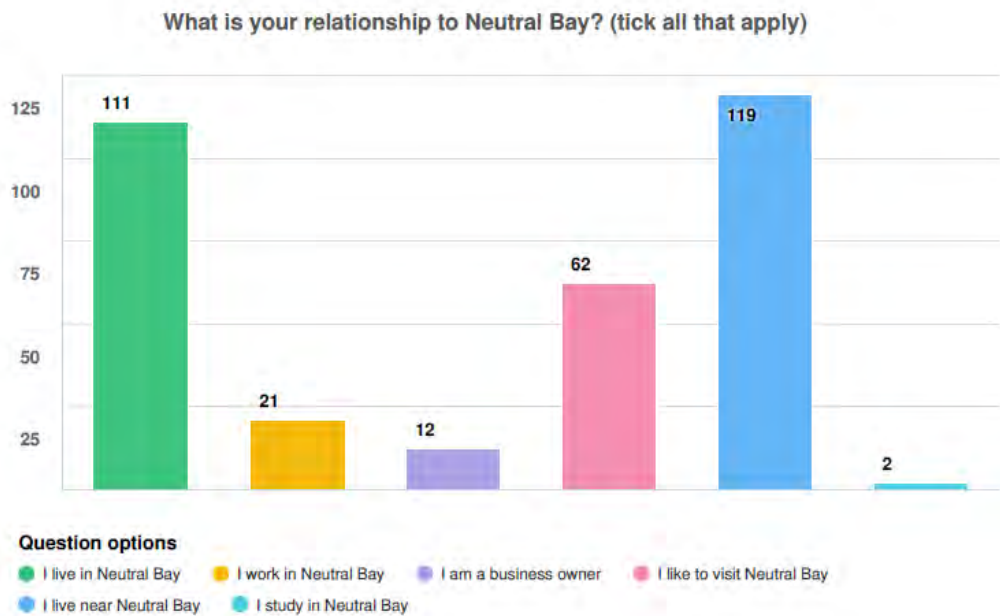
236 respondents completed this question. As shown in the following graph, 64% (n=152) support a permanent Young Street Plaza, while 30.5% (n=72) do not and 5.5% (n=13) are neither/nor.



The online feedback form also sought demographic data from the respondents including age and relationship to Neutral Bay. Most respondents provided this data. The majority of respondents (n=88) were aged between 35-49 years, followed by 25-34 years (n=36) and 50-59 years (n=36).



Respondents were asked to advise their relationship to Neutral Bay, with the majority of respondents living near Neutral Bay (n=119), followed by those living in Neutral Bay (n=111) and visitors to Neutral Bay (n=63). 33 (14%) of respondents were business owners or workers in Neutral Bay.



*Optional question (238 response(s), 2 skipped)*

*Question type: Checkbox Question*

### **Other Comments/General Feedback (Question 6)**

Appendix F has been categorised by level of support, 56% (n=93) of comments were supportive of the plaza, with 37% not supportive and 7% neither/nor. These breakdown is not dissimilar from the results for question 5.

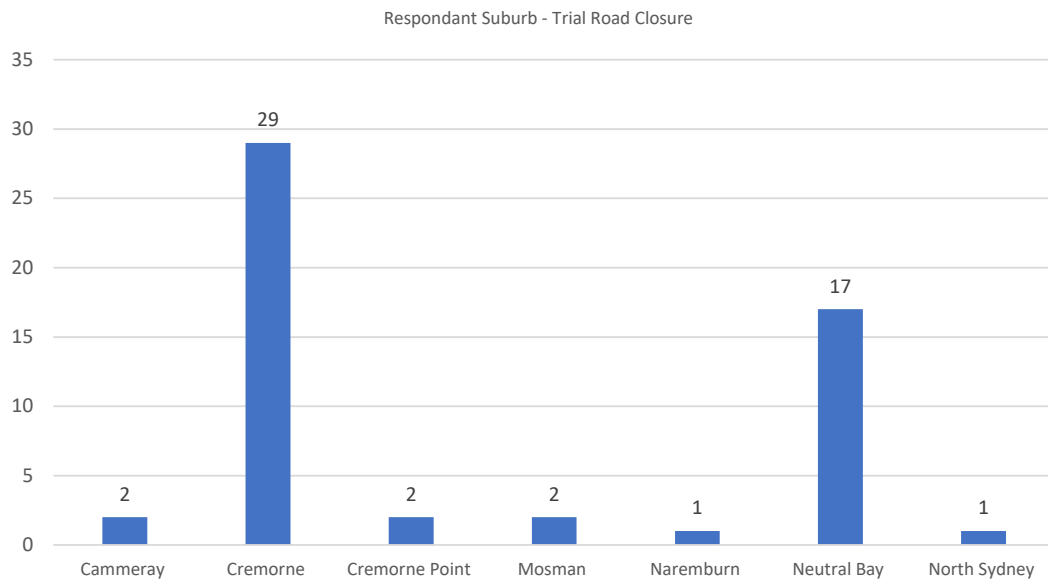
## **2. Road Closure Feedback**

### **2.1 Online Feedback Form - Trial Road Closure (Survey 2)**

Appendix G collates the feedback provided on the road closure, which has been categorised by level of support, 39% (n=22) of comments were supportive of the road closure, with 55% not supportive and 6% neither/nor.

Note: 35 of the total 56 respondents also provided feedback via the Online Feedback Form - Trial Plaza, with the majority providing same/similar feedback on both forms.

Respondents were asked to advise their suburb, with the majority of respondents from Cremorne (n=29) and Neutral Bay (n=17).



### Appendix A. Collated written submission feedback via emails/letters

The following table collates the verbatim written submissions (emails/letters):

No.	Submission
1	<p>We absolutely want to work with Council in regards to the upgrade of the area and we initially welcomed the new cul de sac. But we are now genuinely concerned about the designated use of the kiosk. As you probably already know, there are within a 30 meter radius of the Neutral Bay village area 11 cafes all battling to stay profitable and all competing for a piece of the pie. Our humble corner shop, which has been a cafe in some way, shape or form, has been on this corner for more than 30 years. It has seen a number of successful owners over that time, each brining a distinct flavour and character to the area and has supported financially a number of employees over the same period. Today it finds us at the helm and with over 30 employees we are doing our best to build on the legacy left by those before us. My business partners and I have preserved through this difficult year, we have scaled our business and we have managed to create strong bonds with our community and our area. We generally welcome competition but in this instance we do not think that a cafe run by council or appointed by Council is a viable and positive step for our business and for businesses like ours in the immediate area.</p> <p>I find myself in the unfortunate position of having to write this email and express my disappointment and displeasure at Council's decision to bring in a non local coffee operator to the Young Street plaza development. We spoke on the issue a few weeks ago, and I met with someone from Council who assured us that the kiosk would either be operated as a arts and crafts centre or if in the case that it is to be operated as hospitality venue it would be done so by one of the local operators who already have hospitality businesses on Young Street. I specifically emailed you too and expressed my concerns on introducing a new competitor to the area, especially after the difficulties and pressures that this year has put on the hospitality industry.</p> <p>Instead, we were ignored, and effectively penalised, as our new competitor enjoys free rent as well as expansive free council outdoor space in contrast to us, a long serving business in the community who have to pay for our small outdoor area, with little to no support from Council.</p>
2	<p>It's lovely to have an outdoor "grassed" area in Neutral Bay. I believe there are none close by. Ideally the permanent area would be real grass, but I imagine this wouldn't be viable - in which case, fake grass is a good solution. I like the shipping container solution as it creates a barrier for both noise and sight of the main road, but more importantly, it creates a calmness barrier between the busy road and the plaza. I don't know if I would like a permanent shop there, as the area might start to feel like it belongs to the shop. Pop-ups and temporary shops would feel the best. The bench areas are used a fair amount. The temporary ones are not great looking, but I understand they're temporary. Hopefully a permanent plaza would have a better solution. The yellow paint seems to be the biggest complaint people have about the designs. The planter boxes are fantastic. They bring back a feeling of nature to the area. Overall I personally love the concept, and hope that a permanent plaza would be even better. If you have any questions, or would like to survey me over the phone, please forward contact details and I would be happy to offer my time.</p>
3	<p>I am writing to express my disappointment in the current Young street redevelopment.</p> <p>It is not up to the standard of Neutral Bay, I understood it would be similar to the May Gibbs area. It provides no public amenities and seems like a waste of rate payers funds. I have been a ratepayer for 46 years and I was excited to think this area could have been of similar standard to the May Gibbs area. Is this the completed project?</p>
4	<p>Even before Young Street is closed at Military Road there are major traffic issues for local residents, which need to be urgently addressed by Council.</p> <p>I live in an apartment at 221 Ben Boyd Road. The entrance and access to our car park is via Ben Boyd Lane. I am in my late 70s, and have mobility issues. Currently to attend medical and physiotherapy appointments, chemist and grocery shopping at Cremorne Junction, I drive south on Ben Boyd Lane turn left into Grosvenor Street then Right into Young Street. I can then turn left after waiting for the pedestrian lights and access Military Rd easily. It is still a long wait but possible. The alternative</p>

No.	Submission
	<p>which I no longer use is turn right onto Grosvenor Street then left on Ben Boyd Road and left on Military Rd. Using this route my travel time from home to Cremorne Junction (less than 1.5 km) has doubled in the past 2 years, from 10-15 mins to 25 -35 mins on a bad day.</p> <p>This is due to a series of Council decisions. 'Upgrading Grosvenor Lane' to a shared zone has significantly increased traffic in both directions on Grosvenor Street. This delays exit from Ben Boyd Lane as traffic is banked in both directions often stationary for long periods. The next problem is traffic turning left from Grosvenor Street into Ben Boyd Road. On Military Rd, increased pedestrian traffic, slow walkers using phones etc result in only 2-3 cars being able to turn left or right at Military Road. Turning right from Grosvenor Street into Ben Boyd Rd is a problem also.</p> <p>Car parking on Ben Boyd Rd obscures visibility especially when cars are banked up on Ben Boyd Rd down to the traffic lights on Ernest Street. This whole problem has now been made worse by the 16 month plus, construction of an apartment complex on the corner of Ben Boyd Rd and Grosvenor Street resulting in frequent traffic stoppages. I can easily imagine the effect of creating Young Street Plaza. I am not naive and do not believe that this will be reversed in April 2021. Have you considered the long term effects of COVID. There seem to be many more cars on the road as people avoid public transport. An effective vaccine will at best produce about 50% immunity so it could take 5 years to develop adequate herd immunity. Working from home will be here for a few years and how sure are we that people will want to socialise in the cold sunless wind tunnel of Young Street while socially distancing.</p> <p>Mean while what can you do to assist North Sydney Council rate payers rather than Northern Beaches residents.</p> <p>Many of us are ageing and less mobile and like me having always been a walker are now more dependent on using cars. Traffic light sequencing on Military Road plus a dedicated Right arrow turn on to Military Rd for all times of the day may help. Could you consider delaying the Young Street Plaza scheme at least until the apartment complex is completed. The reverse parking in Grosvenor Street could also be changed to parallel parking as this would reduce congestion.</p>
5	Kiddies playground - No to become permanent it is horrible unsightly mess and childish
6	<p>I object to the closure of Young Street between Grosvenor Lane and Military Road and the conversion of the closed road into a plaza for the following reasons:</p> <p>As 3-5 Young Street is the only building that will front the proposed Young Street plaza that has underground car parking, the loss of a road access way to the building's driveway by the creation of a plaza without any clearly defined vehicular access way to the building's car park free from: significant pedestrian interference; street furniture that may be placed in the proposed plaza; and items and rubbish that may be left in the plaza is of concern.</p> <p>The closure of Young Street at Military Road is likely to create worse traffic in the area particularly at Ben Boyd Road and Waters Street.</p> <p>The removal of on street parking in Young Street will only worsen the car parking difficulties faced by those who visit the area by car including for the purposes of work and deliveries to businesses, noting that Council's own Planning Study recognises public feedback to the 2019 discussion papers identified support for more on-street parking options to cater for a future increase of workers in the area.</p> <p>In the event that owning the top floor and rooftop access and I wish to develop the property, the existence of the plaza will make redevelopment much more difficult in terms of access of builders and equipment, removal of debris, delivery of supplies and the safety of those in the vicinity of the building and who may use the plaza at times when site deliveries may be made.</p> <p>For all of the above reasons, the creation of a plaza in front of the building at 3-5 Young Street is likely to have an adverse effect on:</p> <ul style="list-style-type: none"> <li>* the ease with which the commercial office space within the building can be leased and the rental rates that may be achieved for that space;</li> <li>* the value of current strata title lots comprised in the building; and</li> <li>* the redevelopment value of the building as a whole.</li> </ul>
7	When the idea of closing this part of Young street (from Military Rd to Grosvenor Lane) was first put to us and sketches shown, there was no mention of there being a "pop-up café or retail space" included. I was under the understanding - and as your description describes - it was to be a purely "pedestrian plaza" to provide better

No.	Submission
	<p>access for pedestrians walking between the Bus Stops, Military Road and Neutral Bay Village and the Restaurant Precinct of Grosvenor Road. Given there is no suitable Public Walkway between these Areas, this seemed to make sense to me and would be a welcome addition. Particularly when the car park works begin. Then, only a few days ago, we received a letter expressing the plan of Council's real intention.</p> <p>In your Description in your covering letter titled "Invitation to Submit Expression of Interest for Utilisation of Young Street Pavilion" you mention a "small portable building" as a "visual and physical buffer" to Military Rd. None of these statements are actually true.</p> <p>I believe there are some serious issues of Council misleading the public and businesses into accepting their Proposed ideas and then substituting these with a completely different Proposal altogether.</p> <p>None of the rest of us are allowed to carry out this type of deception, so why should Council be allowed to.</p> <p>The area allocated for the Closure "to enhance public pedestrian access" is now to be filled with:</p> <ul style="list-style-type: none"> <li>• play areas for children (or so it appears) - I was not aware it was to be a "play area".</li> <li>• a very large and ugly building/structure in the form of a shipping container - that dominates the Space Visually and makes it appear more of a Built Space than Open Pedestrian Space.</li> <li>• a pop-up business to be awarded to someone of Council's favour - Becoming then an Extra Retail Space, something which Neutral Bay is hardly short of.</li> </ul> <p>I cannot begin to describe how angry and disappointed I am in Council's Total disrespect for the Businesses that are already in Neutral Bay. In case Council is unaware, it has been one shocking year for everyone in Business, but particularly those in any kind of Retail or Hospitality Trade. There have been many closures in the Area, (all of which I feel for), of Businesses that have been here for many years, but could not manage this last onslaught. Perhaps you are unaware of what a fine line many Businesses operate on, and what many people are willing to risk in order to keep their businesses afloat.</p> <p>Council may think that the offering of yet another space to take over is a "great opportunity" for one of the Local Businesses. I do not see it like that at all. In fact, on reading your Proposal for "Expressions of Interest - Activation of Young Street Plaza Pavilion", I sincerely hope that no one falls for what is clearly Council's ploy to offset to someone else's responsibility: the required Insurances for the Space; the maintaining and storing of Council's associated furniture; the provision of a working space for "Council's Events" – including it seems Water, waste, and toilets!!</p> <p>I think it is an absolute cop-out by Council to try and put all of these responsibilities – not to mention costs – onto someone else. When does Council step up and provide something itself for the Community I would like to know? Any time Council wants to spend some of its Budget, it seems to Cost the rest of us dearly e.g. digging up and replacing the footpaths straight after the Covid Closures and the now the hourly aggressive pursuit of Parking Attendants - when Businesses are finally getting some much-needed Xmas trade!) It's a pretty poor show.</p> <p>I also see any selection by Council of a Candidate for the Proposed "pop-up" cannot be deemed as Democratic Process. With the selection of any one candidate over another, Council will be showing some kind of favouritism and by default penalising all other possibilities and Businesses in the surrounding area.</p> <p>Why should anyone Business get two bites of the same cherry? Is Council Proposing any actions to actually bring more customers to the Area for the already existing Businesses?</p> <p>We have already had many discussions with Local Residents that come to our Café in order to gauge their response to the Unfolding Works and many people are appalled by its 'ugliness' and the prospect of any Business in that Area.</p> <p>It's also interesting to Note that after my Phone complaint about the Proposal we have received a daily visit from a Council Inspector, threatening to fine us over any small transgression on our part, something we have not seen in the 2 years we have been in the Space. A mysterious coincidence perhaps – or are we now being targeted?</p> <p>We have no Objection to the Closure of the Road to Provide Open Space and Pedestrian Access in principle, but we do Object strongly to the introduction of any other</p>

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	Business into the Space and will be gathering Local's Signatures to the Opposition of such Development.
8	<p>Issues of Concern</p> <ol style="list-style-type: none"> <li>1. As a primary business directly impacted by this proposal we as owners have never been consulted as to the impact of this proposal from Council.</li> <li>2. We initiated conversation with the project manager as a result of a conversation with local business owners, and real estate agents who brought this proposal to our attention (not the Council nor the project manager)</li> <li>3. Discussions with the project manager post this awareness was purely in relation to the project and not to address any impact to our business or property.</li> <li>4. The project proposals discussed with the project manager never detailed the structure currently erected (elevated platform, container positioned directly in the front of our property nor the removal of access to our property. In fact quite the contrary advising some form of vehicular access would be available to our property.</li> <li>5. I have since sent emails to the Mayor and Deputy - no response has been received nor any acknowledgment of the receipt of these emails</li> <li>6. Telephoning the Council has been ineffective as I have been directed in every phone call to the project manager.</li> </ol> <p>The current situation is that my business has been decimated by the Council's actions. This is reflected in the fact that</p> <ol style="list-style-type: none"> <li>1. All access to my property has been removed.</li> <li>2. Servicing the property for essential maintenance is now near impossible. We have utilised heavy machinery for roofing, plumbing and air conditioning maintenance in the past which now cannot be undertaken.</li> <li>3. Tenants will not occupy the premises as a result of the structure out the front of the building - including the shipping container directly in the front of our building</li> <li>4. Tenants cannot receive deliveries, nor have any loading or unloading capability restricting any tenancy the council may think favourable for this property, including restaurants, showrooms.</li> </ol> <p>The current situation has reduced usage potentially to office space Without parking possibilities this is also questionable.</p> <ol style="list-style-type: none"> <li>5. Increased criminal activity in the area - resulting in a shoot-out in Grosvenor Lane last week. The police using our property to undertake surveillance of the area as a result of this activity.</li> </ol> <p>We are a small family business and this property is our superannuation. We are not part of any consortium nor property amalgamation. We simply wish to be able to carry out our business.</p> <p>In addition the Council has re-zoned this area for high density residential allowing up to 6 stories of development. The issues impacting us are</p> <ol style="list-style-type: none"> <li>1. Without access this property cannot be developed</li> <li>2. The State Government will rate taxes etc in accordance with other properties /sales in the area, hence land tax etc will not reflect the impacts of this Council project on our property</li> <li>3. We cannot provide off street parking of any form without street access for any development - again restricting the development potential of our property</li> </ol>
9	<p>When the notice to close Young St was announced I did contact the Manager of the plan and expressed my concerns. It is a complete failure as hardly anyone stops and "relaxes" in the uninviting monstrosity. Young St was used by thousands of motorists eager to leave Military Rd to go to the local shops and facilities. Also it is closed to valuable short term parking.</p> <p>It should be pulled down immediately and never to be built again at North Sydney ratepayers. Terrible waste of money not to mention an eyesore.</p>
10	<p>As a local resident of almost 20 years, thank you for trialling out this amazing space, the plans look great!</p> <p>One piece of feedback I would like to offer is the Grosvenor Lane traffic, please don't direct cars to use this lane as they fly down the street and this is meant to be a shared zone, at the moment pedestrians are largely intimidated by speeding cars. I wish this lane would be resident access only.</p>



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	<p>Thank you again for the plaza, I hope everyone will love it and it will be here to stay beyond March. Another lovely addition would be outdoor dining section for [19 Young Street], nobody would be missing a couple of parking spots out the front and the benefits will be great.</p>
11	<p>This needs to be removed!</p>
12	<p>I am pleased that Council continues to invest in Neutral Bay for today and the future. I have only once concern regarding the proposed Stage 1 of the Town Centre. Having lived on Military Road for the best part of 14 years I have well versed on traffic flows. I understand that a trial period of closing Young St is a good idea, rather than just closing Young St without a trial. But I still have my concerns. Of course with current changes taking place due to Covid-19 it is hard to say of the trial will be reflective of long term demands. If Young St were to close, more traffic will either turn left at Ben Boyd Road or further along at Waters Road. As it is now, buses can be banked from the expressway all the way to Ben Boyd Road without additional traffic turning left at the traffic lights, thus causing added/new congestion than before. Turning left at Young St from Military Road is relatively easy as this section of the road is not a peak hour transit lane, this however comes later and indeed to turn into Waters Road does require navigation into a Bus/Transit lane in peak times which can be quite problematic. Additionally, more traffic will be fed from Young St to surrounding roads to turn onto Military Road, which may lead to other problems or bottlenecks along Ben Boyd Road, Grosvenor St, and Belgrave St.</p>
13	<p>I write to make a formal complaint and notify Council of a serious incident involving my grandson (22 months old) which occurred this morning at the New "Plaza" in Young St, Neutral Bay. He was walking on the faux grass boardwalk/seating area when he tripped and fell off a roughly ½ a metre drop onto the concrete below. He hit both his head and knee and was clearly dazed and significantly distressed following the incident. Fortunately a couple in the coffee shop adjacent were very kind to give us an ice pack and any assistance required. Unbelievably they also went on to tell me that he had already written to the Council to notify of this danger and was told words to the effect that Council ' just see how it goes'...really! The lack of action from Council is a disgrace and could potentially have resulted in a significant (if not worse) injury to my young Grandson. We all know the well documented risks of head injuries (including a number of high profile fatalities) from impact to concrete gutters or paving. I am stunned that anyone can think that the area is safe, not only for children but for adults alike. There is no colour delineation between the boardwalk and the concrete below (noting the concrete has been coated with fake grass) such that it is difficult to note the drop (particularly for a young child or elderly person); nor is there a guard rail or rope in place to prevent a fall. It is not clear why the platform needs to be raised up to nearly 1 metre almost (at some points) off the concrete road below, why?</p>
14	<p>We realise it is temporary, we just hope eventually a better plan for Young St. Certainly traffic not turning there is good as often had to watch the cars turning as some did not stop. I think just keep it simple like the Kirribilli one. We always praise North Sydney Council for all that you have done here, so many trees, street plantings and street clean ups, garbage etc. all excellent. We are fortunate to reside here after years on the Northern Beaches as everything so convenient and great bus services. Best wishes to you all working hard.</p>
15	<p>It's admirable that North Sydney Council is considering providing more open areas for public use, particularly since "North Sydney Council has less open space per person than every other northern Sydney council." However, this part of Young St is not the area that the public would want to use. Being off Military Road, one of the busiest roads in Sydney, it is noisy, can be a wind tunnel, and being shaded it can be quite an uninviting space for most of the year. The shops along this suggested closure are not the type that would encourage</p>

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	people to the area, to sit and stay a while, unlike further down Young St, between the roundabout and the laneway to Woolworths. If the goal of Council is to provide "an opportunity to increase public areas that the community can use", then this part of Young Street is not it and I do not support this proposal. Please do pursue this objective and find an area that is more amenable to stop and stay awhile. Parraween St is an example of the type of area. Sunny, leafy, quiet and with cafés.
16	Please be advised the Council has created this problem of access to our 3 level commercial building with 20 car parks by building the pedestrian mall now with no access for parking for delivery trucks except across our driveway. It is the Council's responsibility to maintain access to our building and maintain safe access for pedestrians who are at risk of being run over. I suggest Council inspect the site ASAP before there is a serious incident. I will also contact Pedestrian Council of Australia - Harold Scruby who always uses the press to highlight dangerous situations.
17	I think the green pedestrian area on Young St, Neutral Bay is absolutely brilliant. It helps activate the lane ways and increases the village feel. Dining areas need some more shade though.
18	I just want to say that my daughter and I love the Young St space. We come very often and she crawls on the hills. Thank you for creating it.
19	I am a business owner on Military Road. The business has been established over 45 years in Neutral Bay while it is one of the last independent 24 hours cafe which attracts many clientele from Sydney metropolitan areas. Since the relocation of Neutral Bay Junction Bus Stop on 27 November 2017, on-street parking directly outside of the four food outlet has a dramatic decrease in walk in patrons (a reduction of 25-30% in customers and revenue). Young Street closure is further reducing foot traffic and discourages customers who drive to visit due to lack of direct parking. Young Street is a commercial hub in Neutral Bay whilst on-street parking is essential to all local businesses. The amount of vacant commercial spaces on Young Street and Military Road is a good indication of the success of the recent proposals. I would like the Council to reconsider the Young Street Plaza and reopen to allow vehicle access such that all businesses on Military Road can survive in coming years. I would also like to invite members from the Council to visit our businesses to discuss further in person.
20	I saw at Neutral Bay is having a three month trial for a Plaza in Young Street. I think it should be kept permanently for a pedestrian plaza. Must reduce the amount of car traffic interference. We need to give enough space for pedestrians instead of car crazy. It helps give a good vibe to the community and in that sense. Have that atmosphere especially to help green the environment. More trees the better. We need to have enough shade especially in the hot humid weather condition. Help move forward. It should be limitation for car users in that location. The trouble these days they use their cars unnecessary. They need to know there limits. We must respect the community to help provide enough room.
21	While I'm not quite sold on the yellow paintwork, the overall design (the well-considered plantings, charming garland lighting, the seating, bins, accessibility and bike racks) is great! As a long time resident of Young St and mother of a young boy, the plaza is welcome - providing green space, adding to the village atmosphere, reducing traffic turning off Military Rd onto our community streets and giving kids somewhere to run/meet while parents relax. Covid makes everything trickier, but sitting here now in the sunshine while my son races up and down the grassy hills, I can't help but think how nice some acoustic live music would be too! Well done. A great addition to our neighbourhood!
22	As a resident in Young Street, I feel the plaza is a great idea. It is used by young families and adults. I appreciate that it is only temporary at this stage so looks a bit scrappy and presume the permanent plaza would be more attractive. I support the plaza
23	I have welcomed the closure of this part of Young Street and the establishment of a pedestrian plaza. I feel it definitely adds to the ambiance, safety, accessibility and useability of the immediate area. I hope this closure remains permanent. It also complements the recent make-over of the Grosvenor Lane into a shared zone, which I also support. Even though this makeover has actually made the Lane more dangerous by making it narrower for pedestrians to walk alongside cars travelling down the street (it is hard to get out of the way), the planting and idea behind

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	<p>it is good.</p> <p>However, if this Young Street closure is to remain permanent, I would hope that the fixtures and design of the plaza area would change - I am not a fan of the current "temporary" design. It would be great to see all the vacant shops in that area fill with restaurants, cafés and boutiques with space for families, children to dine, play and enjoy the open space but with a more sophisticated design in keeping with the area. I don't feel like the current design makes the best use of the valuable space and doesn't appeal to the wider community as it is more focused on younger children.</p>
24	<p>I am writing on behalf of the Seaborn, Broughton &amp; Walford Foundation to express our delight in and support for the newly-created community space in Young Street Neutral Bay.</p> <p>As you are aware, we are a charity devoted to assisting the performing arts, a sector badly damaged by the recent, necessary 'social distance' COVID 19 restrictions, and our premises at 20 Young Street, are close by this open space.</p> <p>There is no other open-air place close to the shops, Primary School and Aged Care facility and, with the buffer against traffic noise created by the popup cafe, wonderful fresh opportunities for community participation and entertainment have been created.</p> <p>We can envisage the space being used for puppet shows, appropriate light entertainment, especially on weekends - but with minimal amplification - and by the local Primary School for small recorder and choral concerts.</p> <p>We would welcome an opportunity to discuss with Council ways in which we could support these ideas and become involved.</p>
25	<p>I would like to express my disappointment at the trial of the Young Street "mall". It is ugly and unnecessary. Obviously temporary with the cheap timber that has been used. Please dismantle and make better use of our rates. I presume it would also make a great hanging/drinking spot after dark.</p> <p>The Cremorne and Langley Plazas cannot be properly maintained by Council. They are dirty with dangerous broken tiles. These plazas need a deep clean with new plants and a complete overhaul.</p>
26	<p>I do hope this ugly plaza is not going to become a permanent fixture. I was aghast when I first saw it. It is such an eyesore. If the Council intends to put a plaza there, please ensure it's much more attractive with real grass, trees and flowers and perhaps a few of the Gaudi-style seats which are in the plaza opposite near the Neutral Bay Post Office. We are already losing so much green space with the butchering of St Leonards Park and Cammeray Golf Course, due to the expansion of the Warringah Freeway.</p>
27	<p>A quick note to say that the closure of Young St at Military Rd is a great addition to the neighbourhood. Unfortunately though it's meant that the shared pedestrian and car zone of Grosvenor Lane has become unsafe. There is an increase in car usage and as a regular walker I can assure you that the 10km speed limit is not being adhered to. So the closure of one street has defeated the desired positive effect in Grosvenor Lane. I will not use it anymore.</p>
28	<p>I wish to address concerns about this hideous structure that by the way, looks nothing like the artists rendering of "green space" shown on your website. Green space does not have undulations plastic grass and ugly wooden structures.</p> <p>My concerns are as follows:</p> <ol style="list-style-type: none"> <li>1. It has taken away much needed parking on top end of young street, as a mobility holder, I would park there as it was closest point to pick up meds from Chemists Warehouse and get to Specsavers.</li> <li>2. Driving north on Military Rd, Young street is the one most people turn into to get home, or to Woolies car park, now this plaza has caused traffic bottlenecks and dangerous manoeuvres to get a parking spot. I have attached photos taken Saturday morning to support this.</li> <li>3. This box structure has remained dormant and unexplained, however on Thursday morning there was construction going on and I asked the man what he was doing, he said this box was going to be a coffee shop! If you look at photos, Young st currently has lots of coffee shops that have lovely outdoor seating and are always popular, as are the many on Military rd. These are less than 100m away from this plaza (see photo) So why would a deserted and unused hideous eyesore need a</li> </ol>

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	<p>coffee shop to the detriment of much needed extra parking?</p> <p>4. Has council considered the negative impact on surrounding businesses and offices? They are not happy with this ugly structure on their doorstep and is affecting their businesses.</p> <p>5. I have attached a photo of a child that fell over on this undulating area and was tended to by parents. Considering the unattended kids running barefoot on this, (see photo) it is a liability to council and lawsuit waiting to happen.</p> <p>6. I never see anyone using this area for eating or recreation, other than the occasional unattended child or in evenings the odd homeless person or vagrants which are sometimes if walking past alone can be quite intimidating.</p> <p>For all these reasons I believe this plaza is ugly, and serves no purpose to the community.</p>
29	<p>I am writing to let you as a North Sydney rate payer my thoughts on the Young Street Plaza. I am in favour of the closing of the road and the installation of some sort of community resting area.</p> <p>However, I am very disturbed by the actual installation that has happened in this space. I truly think it is most inappropriate and unattractive. I cannot see how fake grass and all those hideously ugly murals on the ground are in anyway pleasing to the eye. I am also at a complete loss as to what those curves are supposed to be for? Certainly not for sitting on! The plants and greenery are really nice, but all that carpentry work that has taken place there is truly weird and not in any way welcoming. This is just a complete waste of council money. Whoever authorised this needs an aesthetics lesson. Vibrant and sustainable???? How is fake grass sustainable? What happens when dogs urinate and worse, on this stuff then kids go jumping all over it?</p> <p>As a long term resident and passionate supporter of Neutral Bay, I am begging of you, please, please, do not make this horrible, ugly, jarring to the eye, piece of handiwork, permanent. What is wrong with lovely cobblestones, plants, water features and nice seats? In other words a sore traditional approach in keeping with the old world charm (what is left of it) of Neutral Bay.</p>
30	<p>The people I have spoken to agree with me; busy Neutral Bay needs more tranquil areas to relax and enjoy our fine area. I feel nervous each time I walk down busy Military Road, to cross Young street. Constantly around to the left into Young Street too fast. Please help to make our streets safer by the permanent closure of this dangerous street. An attractive nature area of trees, grass, seating and tables would be great. This should also help to increase business activity.</p>
31	<p>I am contacting the Council to make a complaint about the new Young St plaza. I am very sad and unhappy about the ugly street closure. It would not be nearly as horrible as it is now, if the Council used the same beautiful plants hangers and brick and tile work as they have in Grosvenor Lane, but the horrible drab and not very nice closure and "seating" as it has now is horrendous!</p>

## Appendix B. Collated feedback from Precinct Committees

The feedback from Precinct Committees, received via their meeting minutes throughout the trial period, has been collated in the following table:

Precinct	Minutes	Feedback
Brightmore	February 2021	<ul style="list-style-type: none"> <li>Concerned about timing of the trial - why over summer/warm weather/school holidays, as probably different feedback if conducted in mid-winter.</li> <li>Dangerous, with increased traffic coming from the Grosvenor Lane shared zone across Young St to the Council carpark (catch-22, as the increased traffic is due to the closure of Young St at Military Rd).</li> <li>Associated issue is the Shared Zone in Grosvenor Ln between Ben Boyd Rd and Young St. Now that the footpath has been removed, it is more dangerous for pedestrians. Garden beds on either side of the street force pedestrians from one side of the street to the other as walkways dead-end.</li> <li>There is a "NO ENTRY" sign on Young St at the Shared Zone exit. The "BICYCLES EXCEPTED" sign that was there previously has been removed. However, cyclists continue to travel west from Young St to Ben Boyd Rd in the shared zone, with food delivery bikes proliferating in the area during the pandemic and using this short-cut. Maybe a "NO ENTRY - BICYCLES INCLUDED" sign should be erected.</li> <li>Similarly, despite a "TRUCKS PROHIBITED" sign at the entrance to Grosvenor Lane Shared Zone off Ben Boyd Rd, large trucks continue to use the road.</li> <li>There seems to be very little visible policing of these infringements by Council rangers.</li> </ul>
	April 2021	<ul style="list-style-type: none"> <li>The current Grosvenor Lane Carpark, and potential Grosvenor Plaza, will still have to have truck deliveries servicing existing or even renovated shops. The idea the new plaza will be an open space without access for vehicles is laughable.</li> <li>The survey, report and conclusions is biased claiming unsupported benefits. The photos of usage were not typical and were taken at one-off Council events.</li> <li>The pavilion - blocks off the Plaza rather than opens it? It is rarely used and does not improve pedestrian safety as claimed as it directs more bikes to the footpaths on Military Rd where they may have previously used the road?</li> <li>It is ugly and has forced more traffic as shown on the reports traffic studies in Grosvenor Lane, and at a speed between Ben Boyd Rd and Young St at more than double the shared zone 10 mph speed limit? How can this and increased traffic caused by the Street closure improve pedestrian safety?</li> </ul>
	May 2021	<ul style="list-style-type: none"> <li>Some of the photos on the Council website are not typical of the usage of the plaza, showing one-off community events such as live entertainment and library readings staged by Council.</li> <li>With the closure of Young St, the volume of traffic in the Shared Zone of Grosvenor Ln between Ben Boyd Road and Young Street has increased by 29% (19 March 2021, Extension of the Trial Young Street Plaza, report of Manager Traffic &amp; Transport Operations, Michaela Kemp &amp; Project Manager, Diana Mejia). The 85th speed was 22.2km/h - this Shared Zone has a speed limit of 10 km/h.</li> </ul>

Precinct	Minutes	Feedback
		<ul style="list-style-type: none"> <li>If Council is going to introduce Shared Zones, it should have the responsibility of enforcement of speed limits and traffic offences in the said areas.</li> </ul>
Milson	March 2021	<ul style="list-style-type: none"> <li>The temporary plaza is apparently well used by pedestrians at sometimes, but the Military Rd traffic noise has bearing on its future convenience.</li> <li>Its future must reflect on the level of interruption to service vehicles, in particular, servicing adjacent retail and commercial premises e.g. Woolworths trucks.</li> <li>Milson Precinct supports a further trial of this street closure, if, after a determination of the traffic impact on the servicing of the adjacent commercial and retail premises, it is not negative; the current structures and street furniture are very 'temporary' in nature, and recommend a better selection of finishes, street furniture and sound barrier if it is to remain.</li> </ul>
Neutral		<ul style="list-style-type: none"> <li>Supports the closure and the implementation of the plaza as it creates exciting open spaces for the area.</li> </ul>
	November 2020	<ul style="list-style-type: none"> <li>It was agreed that the Plaza should improve pedestrian safety and access in the area between Military Road and Grosvenor Lane, particularly at the intersection with Military Road.</li> <li>It was noted that the Mayor, at the October Combined Precincts Meeting, had indicated that pedestrian safety was her number one priority.</li> <li>Concern was raised that the Plaza means a significant loss of car parking spaces which are already at a premium in the area. Concern was expressed that Waters Road could be greatly impacted by the additional traffic detoured from entering Young Street from Military Road.</li> <li>The ongoing issue, raised by residents at many Neutral Precinct meetings, of installing a safer pedestrian crossing of Military Road within the shopping precinct, was raised once again. It was noted again that the Military Road Corridor Planning Study Stage 1 proposes a wide road level crossing between May Gibbs Plaza and the Young Street Plaza.</li> <li>The merits of an overhead pedestrian walkway, were discussed and the cost of such infrastructure was acknowledged. The meeting agreed unanimously that the installation of an overhead walkway, similar to Bridgepoint Mosman, could be made a requirement of a building developer in the context of the Local Infrastructure Contributions Plan.</li> <li>The meeting unanimously agreed to continue to advocate to Council for an overhead, covered pedestrian pass across Military Road in Neutral Bay.</li> </ul>
	February 2021	<ul style="list-style-type: none"> <li>Mixed views were expressed.</li> <li>Positive comments: Residents have noted much activity with families and individuals using the area for various recreational activities, sitting having a coffee from the pop-up coffee bar, using laptop computers or reading. The area is well shaded by the plane trees. Pedestrian access crossing Young Street at the Military Road end is significantly improved.</li> <li>Negative comments: Traffic, particularly delivery trucks, has increased substantially in the Shared Zone area of Grosvenor Lane between Ben Boyd Road and Young Street making it more perilous for pedestrians. It was suggested that one lane</li> </ul>

Precinct	Minutes	Feedback
		access off Military Road could be provided with the remainder given over to a plaza. Vehicle access to Grosvenor Street from Ben Boyd Road has been difficult and sometimes impossible during the current building works on the corner of Grosvenor St and Ben Boyd Rd.
	April 2021	<ul style="list-style-type: none"> <li>• Neutral Precinct requests that the Council undertake urgent work in Grosvenor Ln to improve pedestrian safety.</li> <li>• The Committee said the Precinct residents held mixed views but were mainly in favour of a Plaza. The Committee had noted families, children and individuals regularly using the Trial area facilities.</li> <li>• The Committee pointed out the closure of this section of Young St had greatly increased the amount of traffic using the Grosvenor Lane shared zone between Ben Boyd Road and Young Street. We were sitting in a cafe with the Mayor opposite the Lane and observed traffic for more than an hour. We witnessed several near misses between vehicles and pedestrians.</li> </ul>
Parks	November 2020	<ul style="list-style-type: none"> <li>• Question from the floor was on how to handle the traffic when Young St is closed. <ul style="list-style-type: none"> <li>○ PS would not like to see high traffic volume at Young St Plaza, then suggested monitoring through traffic numbers and speed</li> <li>○ GD asked what is Young St Plaza supposed to do? SM responded that Council wanted more green space. Young St Plaza is not a skate park. The container is a multipurpose space. The lawn, including the waves, looks like being artificial grass. There are also playrooms. More open space is part of overall Council strategy for the 10 year, 4 year and 1 year implementation process.</li> <li>○ PS stated it is creating a complimentary plaza to the one next to the Post Office.</li> <li>○ From the floor it was asked Who is invited to use it? Are artists etc going to be invited to use it?</li> <li>○ CT mentioned it was probably compensation for the B line (layer confirmed that Funding is from the NSW government compensation for the B Line impact on Neutral Bay)</li> <li>○ JA Objected to the plaza. Suggested it is pushing traffic into Ben Boyd Rd, Grosvenor St and Waters Rd. Why block of a St so close to the main road.</li> <li>○ Parks Chair SM responded that it imposed more traffic into Grosvenor Lane rather than Waters Rd as expected</li> </ul> </li> <li>• Motion: Parks Precinct write to Council suggesting that Council monitor traffic and speed through Grosvenor Lane as traffic has increased following the closure of Young St. Parks Precinct expects this to be a No Thoroughfare St i.e. no through traffic but deliveries and access to parking is allowed (GD and CT to draft) Carried without opposition</li> </ul>
	March 2021	<ul style="list-style-type: none"> <li>• There was considerable concern about the increased traffic in Grosvenor Ln. The Chair pointed out that the Traffic Report presented to the Traffic Committee of had noted a 39% increase in traffic since the Young St closure. The meeting felt that this was an understatement as traffic started to react to the closure and find that the best route was through Grosvenor Ln. The 10km/h speed limit does not seem to be followed and pedestrians are not given right of way.</li> <li>• Closure of Young St access to and from Military Rd also increases traffic volumes at intersections at Ben Boyd Rd, Waters Rd and Winnie St. At these three intersections motorists have to share time with pedestrians and it is increasingly difficult to</li> </ul>

Precinct	Minutes	Feedback
		turn onto Military Rd. <ul style="list-style-type: none"> <li>• Parks Precinct considers the closure of Young St has been deleterious to local traffic". Passed unanimously.</li> <li>• There was discussion on why so much had been spent on Grosvenor Ln now that it was becoming a major thoroughfare. The meeting felt that if Young St Plaza went ahead then Grosvenor Ln should be "No Thoroughfare". This would support building access and deliveries.</li> </ul>
	April 2021	<ul style="list-style-type: none"> <li>• Unfavourable comments on the aesthetics of the Young St Plaza were noted and that the section of Grosvenor Ln between Young St and Woolworths are regularly blocked by delivery trucks to Woolworths and that the general vicinity has become more dangerous for pedestrians.</li> </ul>
Willoughby Bay	November 2020	<ul style="list-style-type: none"> <li>• A Precinct member stated that with concern that the Young Street closure cars travelling from the west on Military Road bank up considerably as they wait to turn left into Ben Boyd Road.</li> </ul>
	February 2021	<ul style="list-style-type: none"> <li>• Resident comment on the general presentation of the trial locality is not favourable.</li> </ul>



**Appendix C. Social Media Comments (Verbatim)**

The following table groups the verbatim comments by level of support.

Level of Support	Verbatim Comments
Support (n=8)	<ul style="list-style-type: none"> <li>• Yes, more plaza, less cars think about it #change</li> <li>• This is such a fantastic idea. Close it permanently, There’s certainly no one who misses driving through here!</li> <li>• Yes love the idea too. Its great for shops near by too as people get take outs and sit around. Good for families to mingle as hard to get kids to sit in a café for too long. All positive for me.</li> <li>• Less cars, more walkways please #carsthatAteNeutralbay</li> <li>• I like the concept of a park going in there. I think it will be well used and be good for the retailers in the area. The idea of bringing in music is wonderful. Thank you Council for trying something different. The temp status will allow you to tweak it before you make it permanent.</li> <li>• Love it but now you need to install a marked pedestrian crossing at the corner of Waters Rd and Military Rd as this corner is now taking a lot of the diverted traffic.</li> <li>• Looks cool!</li> <li>• How lovely for families.</li> </ul>
Do not support (n=5)	<ul style="list-style-type: none"> <li>• This monstrosity is a complete disaster for local businesses. This has effectively made this part of Young St a dead zone. Businesses have left, good tenants are not interested in looking at a great big shipping container, an in effect children’s class room elevated segregated and relegated pedestrian traffic to the laneways of the footpaths. The Council is trying to secure funding from the State Government in agreement for B-Line busses as and this is part of the agreement to secure this funding. What Council would totally render a street useless, place a shipping container in the middle of the street, and put a dangerous elevated platform in a critical location such as this Potential tenants who come to the area laugh, and walk away. I have watched parents with little children using this area, I wait for an accident to happen. I watch pedestrians having to walk around the area, literally scampering to get through this dead zone. The Council has now placed a coffee shop in the shipping container, really? ... Thinking they want restaurants to open to utilise this place - it’s never going to happen. I can see homeless people utilising this space in future as a place to seek shelter, I can see gatherings of teenagers drinking in the middle of the night in this area, as no-one else will be able to utilise this area for any benefit. The Council has made this a dedicated space for their benefit not the local community....</li> <li>• But this will move all traffic to Winnie St.</li> <li>• Terrible spot for a plaza, dark, windy and noisy. Not to mention the extra traffic it will push onto Ben Boyd Rd and Waters Rd for people trying to get on, or across, Military Rd.</li> <li>• The photos don’t show the true story. Show the decimation to business the empty shops, the elevated platform, the pedestrian traffic separation and corridors they must transverse. Show how useless the area really is. I don’t see any COVID compliance signage on the ground, poor design and a waste of public money.</li> <li>• Great idea - wrong place.</li> </ul>

Level of Support	Verbatim Comments
Neither/no (n=14)	<ul style="list-style-type: none"> <li>• Pretty polluted air from Military Rd and probably noisy. Hope it works out.</li> <li>• Woolworths outside carpark area would be the perfect area for community space. Away from Military Rd and associated issues. More parking can be put underground.</li> <li>• If the traffic can be managed to the Woolworths carpark effectively, it could be a great change to the area.</li> <li>• Can you do the same thing or a one way “shared zone” form Military Rd to Yeo St, in Rangers Rd?</li> <li>• Outdoor dining at its best, let’s petition for a big screen.</li> <li>• And Waters Rd.</li> <li>• Why build a plaza when you can sell the land to a property developer to build anonymous and charmless high-rise dwellings? Needs more concrete...</li> <li>• Do you need a street artist for painting some of the area?</li> <li>• Temporary installation.</li> <li>• What happens at the end of the test drive’ if the public wishes to retore Young St to its previous form? Will that be respected after the investment made by Council with ratepayers money?</li> <li>• It’s so ugly and not well thought-out. Go see Lane Cove’s pedestrian area. Kid friendly and pet friendly. Kids can’t fall off the raised platform here and why the bike ramps? Definitely needs to be aesthetically more pleasing</li> <li>• I love the idea but \$450K spend on a temporary space? I can’t for the life of me work out how Council managed to spend so much on this</li> <li>• There’s nothing like fake grass to make you feel nice.</li> <li>• Great skate spot!</li> </ul>

#### APPENDIX D. Most Liked Features/Aspects of the Trial Plaza

The following table lists the raw/verbatim aspects respondents liked most about the trial plaza, used to inform the graph on page 5. Note: some responses contain more than one aspect, and for the purposes of presentation, these been (alphabetically listed) grouped by theme i.e. by first aspect stated where more than one given. Each aspect has been individually counted and reflected in the graph on page 5.

Theme	Comments (Verbatim)
Atmosphere/sense of community	<ul style="list-style-type: none"> <li>• Adds to village atmosphere</li> <li>• Adds value to the surrounding business/plus a much needed space for kids</li> <li>• Attempt to make the area people friendly, rather than vehicle friendly.</li> <li>• Community area/coffee shop/kids play area</li> <li>• Community coming together in a relaxed space</li> <li>• For something next door to Military Rd, it is such a peaceful and calming area.</li> <li>• I love the sense of community/I can enjoy the seats/shade/and seeing families enjoy the space. Military Road is quieter, the space has a good view and is away from busy cars/I like meeting friends there for a takeaway coffee and a chat.</li> <li>• I loved the sense of community. This is space has the opportunity to connect so many community groups.</li> <li>• Increased village feel/and less traffic</li> <li>• Interactive space that is people friendly in an otherwise car ridden busy and unattractive area</li> <li>• It upgrades the aesthetic of the general area and created a community friendly feel for local residents</li> <li>• It was nice to see people organically come together. Good community feel.</li> <li>• It's a welcome oasis in the middle of a busy area. These spaces are so scarce around Neutral Bay.</li> <li>• It's very welcoming</li> <li>• It makes me feel like I am in a nice suburb not a Parramatta Road type area. The greenery is such a nice break from the bleak Military Rd. It is a splash of happiness. Love love love it! Much safer too - I hated crossing this road previously, hard to see.</li> <li>• Location and open community feel</li> <li>• Love the trail plaza. It's definitely promoting community interaction.</li> <li>• Quiet pit stop from the surrounding hustle</li> <li>• Quiet and space to sit.</li> <li>• Relaxing, nice spot to have coffee and relax being outdoors</li> <li>• So much better than before with all the cars. Nice to relax with young children.</li> <li>• The communal space</li> <li>• The community/village feel</li> <li>• The area now has calmness to it instead of being a constant flow of cars and trucks off Military Road. I hope this will be a permanent closure bring some feel of a village back to Neutral Bay.</li> <li>• The creation of a quiet street with space to sit outside</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• The space is a relaxed and safe space for people to meet. It is easily accessible in the heart of Neutral Bay and has become a focal point for the community. I have seen more and more people using the space as the trial has gone on.</li> <li>• The village/community feel</li> <li>• Vibrant atmosphere, lovely to see how much people stop and use the space</li> <li>• We are so pleased with the people friendly plaza. Great spot to meet with friends and have lunch or a cuppa without any traffic. We are thrilled that through to Military Road has been blocked as it is much quieter and safer now.</li> <li>• We don't own a car so I walk around Neutral Bay a lot with a pram and it is nice to have an area in the centre which doesn't feel dominated by cars. Also love the idea of events happening here such as storytime and music.</li> <li>• What a lovely space for local residents - kids seem to love it! Also love that it closes off that dangerous intersection</li> </ul>
Car free/ pedestrian friendly/safety	<ul style="list-style-type: none"> <li>• A safe place to rest</li> <li>• As a resident of upper Young Street (right in front of the plaza) it significantly helps the volume of traffic coming through our street and Grosvenor lane (Woolworths side) this means significantly less noise for me and not to mention a great spot to sit</li> <li>• Better and safer pedestrian access/Reclaiming some street space from traffic.</li> <li>• Easier to cross the road</li> <li>• Feels safe/creates a village feel</li> <li>• Easier to walk to Military Rd</li> <li>• Great space for pedestrians/Great location.</li> <li>• I love that it's a space that is for local pedestrians not cars!</li> <li>• It has been closed and now much safer</li> <li>• It makes it easier to turn out of the laneway.</li> <li>• It opens up a normal congested street and allows for kids to have a place to eat and relax near shopping</li> <li>• It shows that car traffic is not the only priority and that community space can be</li> <li>• Lack of cars! It's quieter and nice to walk around</li> <li>• Lack of cars.</li> <li>• Less traffic</li> <li>• Less traffic a place to sit down and relax</li> <li>• Living on Grosvenor Street I have noticed a reduction of traffic on the backroads being used as a shortcut or alternative to Military Road or Belgrave St/Seeing parents and children using the space for play and leisure has a nice community atmosphere</li> <li>• Making it pedestrian, car free zone is so good.</li> <li>• More public pedestrian space - less space allocation to roads and cars</li> <li>• No cars (n=2)</li> <li>• No cars racing down Young Street, as this is what I have noticed since we moved into the area.</li> <li>• No through traffic from Military Rd</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• No traffic access. Provides an opportunity to revitalise the area for people.</li> <li>• Pedestrian access, less risk of cars when crossing the road, good to have the space to enjoy food from nearby businesses with little kids</li> <li>• Pedestrian friendly area, quiet and acts as a barrier against Military Road</li> <li>• Removal of traffic</li> <li>• Safety and nice environment for pedestrians</li> <li>• That it blocked the road and therefore the traffic. It makes the area more like a village, more peaceful, safer and overall a better feel.</li> <li>• That the road is closed and the area is available for public use</li> <li>• That there is no traffic racing down Young Street and my young son can enjoy the lovely outdoor space and play with other kids in the community while my partner and I enjoy a coffee and food from local surrounding businesses</li> <li>• The ability to safely walk across what was a dangerous intersection with Military Road. The plaza provides a reprieve from the business on Military Road after crossing at the traffic lights/Also a great spot to enjoy coffee with a friend(s).</li> <li>• The concept of getting cars off the road was great</li> <li>• The closure of the street to create a public space</li> <li>• The end of cars turning into Young St</li> <li>• The fact that it is a pedestrian only place.</li> <li>• The reduced traffic, especially from the cars that usually turn left onto Young Street from Military Road. It's also a lovely area to catch up with friends while enjoying a coffee.</li> </ul>
Children/family friendly	<ul style="list-style-type: none"> <li>• A great space for kids to run around safely in in Neutral Bay CBD</li> <li>• A place for children to explore and be outside</li> <li>• Children playing. People sitting, chatting</li> <li>• Everything - kids love it</li> <li>• Extra open space, area for kids to run around/open seating areas</li> <li>• Family/child friendly</li> <li>• Family friendly environment and a great place to meet</li> <li>• Gives a much needed place for the kids to jump about when out doing errands</li> <li>• Good to see kids enjoying themselves playing in the open</li> <li>• Great for kids</li> <li>• Great for kids and a place to sit and eat and relax</li> <li>• Having space for kids to play and have a break while shopping on the high street was a definite plus. Also enjoyed meeting another families having just moved to the area.</li> <li>• Incredible use of the space - the street is not a natural thoroughfare for traffic and it is so much safer for young families dining at the various cafes. The play area is incredible; we come here 5-7 days a week easily. Would use this plaza 365 day a year</li> <li>• I like the fact there are children playing there, I like the reduction in traffic, I like the fact it is a start to creating a "heart" to Neutral Bay.</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• I love that kids have a space to run around/The seating area is great to have a bite to eat and/or a coffee/The coffee kiosk is a great addition/Story time for kids is brilliant.</li> <li>• I think it is fantastic. Increasing family and kid friendliness in the area and reduces/slows traffic to walk across safely.</li> <li>• In an area with not a lot of parks it was somewhere else to take my 8 month old daughter to play. Also great to meet there with my mother's group as shady and coffee nearby.</li> <li>• It has given the youngster a lovely playground while their parents enjoy a coffee and sweets or just stand by and enjoy the activity.</li> <li>• It provides a green open space for my daughter to play and relax, as we live in a tight unit nearby, without having to go further to the Grasmere Park. She loves the trial plaza especially the curved hilly green area</li> <li>• It's great. Perfect for families with kids and community. The kids have so much fun. Love the green. There is no place like that in the area.</li> <li>• Kids love it</li> <li>• Place for kids to play/workers eat lunch/less noise</li> <li>• Seeing toddlers play there</li> <li>• Space for kids to play</li> <li>• Space for kids to run</li> <li>• Space for kids to run around freely near shops and cafes</li> <li>• Safer for kids around the area as there are no cars</li> <li>• Somewhere central where the kids can stop and play in between visits to local retail and hospitality venues</li> <li>• Recreational space for kids and adults</li> <li>• The cafe that is suited to playing with children. Too many cafes do not have an outdoor area for kids. As we become more dense we need to provide more areas people and not cars. Great stuff.</li> <li>• The whole space is fantastic but especially the grassy area for kids to run around. We love the coffee cart and bean bag chairs too. Fantastic and much needed green space</li> <li>• We live close by and like having a space for our kids to enjoy.</li> <li>• We liked the outdoor space with trees and tables near the coffee shop/We especially like the wheelchair access and height of bench to allow wheelchair convenient access height.</li> </ul>
Convenience	<ul style="list-style-type: none"> <li>• Close to shops and restaurants/Safe for kids/Perfect shade in sunny days</li> <li>• Convenient</li> <li>• Convenient coffee container with fresh air</li> </ul>
Concept but not the design/location	<ul style="list-style-type: none"> <li>• I am in favour of more village like space in Neutral Bay but this area is not well thought out. It is a busy area for access to the local businesses and Woolworths. The mix of cars and people in this area is now dangerous and not safe for my child.</li> <li>• I like the idea but unfortunately I think the trial plaza is tasteless.</li> <li>• I'm all for more closed off streets for people to stroll about on, I'm just not sure Young St is a good choice.</li> </ul>

Theme	Comments (Verbatim)
Design elements	<ul style="list-style-type: none"> <li>• Design, location under beautiful trees and proximity to shops</li> <li>• I like the idea of a well designed plaza for Young Street.</li> <li>• I liked that the space was sectioned off, you can sit down and have a chat or coffee. The fairy lights are beautiful at night.</li> <li>• The graphic floor and the bumps.</li> <li>• The hills</li> <li>• The installations and the greenery (even though artificial!) in the middle of busy Neutral Bay/That it's a zone for kids and for relaxation (sort of)/ Plaza is also a good meeting point.</li> <li>• The open and colourful space for all the use</li> </ul>
Outdoor seating/dining	<ul style="list-style-type: none"> <li>• Allows a place for people to have a sit down and meet other locals/The bean bags and hills provided my little one some play time too</li> <li>• A new outdoor seating space</li> <li>• Finally somewhere to sit if you grab lunch in Neutral Bay, which we regularly do when working from home. Good to be able to enjoy it outside.</li> <li>• I love the idea of a little park space, plus it was a little used street.</li> <li>• Outdoor seating</li> <li>• Sitting areas</li> <li>• That you can seat and rest if needed</li> </ul>
Open space/public space/shade/plant s/greenery	<ul style="list-style-type: none"> <li>• Additions of plants</li> <li>• Calm shady space with coffee and entertainment for children (green slopes).</li> <li>• Fake grass and sitting area</li> <li>• It creates open space, the trees, the quietness</li> <li>• Grass area. Lots of eating spaces to eat food/lunch. Highly covered with trees and shade.</li> <li>• Great to have more community space, safety as a pedestrian as almost hit regularly there</li> <li>• Greater walking area, aesthetically more pleasing, useful for humans rather than cars. The street is so small and there are other routes close by to get to Grosvenor Street et al so I say go for it, keep it</li> <li>• Green space (x2)</li> <li>• Having public space to sit and relax. Kids having space to play and the coffee shop</li> <li>• Having no cars and the increased greenery</li> <li>• I love that it is a place to go and spend time. It encouraged me to stop and take a moment rather than just walking my through Neutral Bay.</li> <li>• I love that there is an additional space to relax. What became abundantly clear during the height of COVID when the local hospitality trade could only do take-away was the dearth of places to sit in the vicinity.</li> <li>• I love the concept of making a great public space in Young Street. Such a good idea.</li> <li>• I love the creation of a community space for people to use that's close to everything. My partner and I took a break from working at home</li> </ul>

Theme	Comments (Verbatim)
	<p>to come out and listen to the music today and grab some takeaway whilst getting some sun - it was great!</p> <ul style="list-style-type: none"> <li>• It provides a space away from the intense traffic of Military Road and makes it much nicer to spend time in Neutral Bay</li> <li>• It's a great new local place to relax, I come here every day on my lunch break to enjoy the breeze and eat</li> <li>• It's an open space that invites people to use it.</li> <li>• It's become a nice and quiet street. Going to one of the restaurants and bars is now much more enjoyable.</li> <li>• It's quiet</li> <li>• Lovely plants and black arch/Nice community feel</li> <li>• Nice open area to sit and relax</li> <li>• Nice to have an outdoor area to sit with your take away drink or snack and have space for my toddler to run around without worrying about traffic etc</li> <li>• Nice to have some 'green space' in the middle of neutral bay shopping precinct. Much needed.</li> <li>• Nice use of the existing greenery and shade</li> <li>• Nice use of the existing greenery for shade</li> <li>• Open public space to hang out with friends and family. These spaces are laughing Neutral Bay and it is so nice to have another.</li> <li>• Open space for young children to have some fun and run around</li> <li>• Open space to sit/walk through, and young children having some space to play</li> <li>• Open space with seating</li> <li>• Plants</li> <li>• Pleasant open space which is complementary to the cafes on Young Street and intention to improve street activation</li> <li>• Provides a place to sit and relax when all the cafes are full or you just want a short break. The grass/turf is a very nice touch!</li> <li>• Provides passive outdoor space for residents, office workers and shoppers.</li> <li>• Public space being reclaimed for pedestrians</li> <li>• Quality of plants and designated area for a much needed plaza</li> <li>• Some open space is nice - whether this is the place for this is another question next to a main road.</li> <li>• Space/friendly atmosphere</li> <li>• The open space, tables and benches to relax, have a coffee, talk with friends and neighbours.</li> <li>• The plants</li> <li>• The plaza is a welcome change and it provides a green (although unfortunate it is temporary) space.</li> <li>• The shaded space where people can sit and enjoy</li> <li>• There aren't many plazas/squares in the neighbourhood. Good area for kids to play without cars around</li> </ul>
Other	<ul style="list-style-type: none"> <li>• I think it's a good idea in long-term. We need help to be sustainable environment. We've gotta stop the car crazy.</li> <li>• I think it's a good think it is good idea and must be kept permanently for pedestrian Plaza.</li> <li>• I think that the Plaza is a good use of space and the redirection of traffic doesn't cause too many issues</li> </ul>



Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• It's only a trial</li> <li>• Love it</li> <li>• That the Council was open to innovation and change.</li> <li>• The potential to innovate.</li> <li>• There are more garbage bins provided</li> </ul>

Note: n=59 of the comments provided were negative/not in support for plaza/least liked aspects

- A bad idea poorly executed and at the wrong time of year
- Absolutely nothing. It is a miserable area that the local shops, excluding the cafe no doubt find most annoying. With very limited parking to get to any shop e.g. chemist warehouse one has to try to park in the Woolworths carpark! and walk quite a distance.
- Don't like it at all (n=2)
- I do not like anything about it
- I do not like anything about the Young Street Trial Plaza. I do agree that more open space is needed and important to the community but this was the wrong place to do this.
- I don't, it just does not fit in, the design could be much better, build it the same as Grosvenor Lane
- I don't like anything about the Young Street Trial Plaza
- I don't like it at all. It is very "tacky" and not in keeping with the area.
- I don't like it, and think it should be removed. I see no positives about it. There is a park for children 200m down the road. Have story time down there.
- I hate it. Get rid of this monstrosity and please give us our street back It's hideous.
- It looks cheap and dreadful and removes the ability to drive into Young Street and get off Military Road along with the parking amenity of Young Street
- Highlights new and different ways councils can find to waste money & then justify increasing charges/rates even further
- Nil
- None, it look ugly and lost the traditional look of Neutral Bay
- Not any aspect whatsoever.
- Not much. Too close to very busy main road
- Not much looks very cheap. A stGe [sic] is good to dull the traffic noise
- Nothing (n=25)
- Nothing. It is a design abomination that has been thrown together by people with zero knowledge of urban streetscape design. It is a total embarrassment and has lowered property values in the precinct.
- Nothing. It is hideous, garish, meaningless and irrelevant. Is it a rawkish mini skateboard park with an army camouflage underfoot with the added attraction of nasty fake grass. Is anyone seriously suggesting that a coffee could be enjoyed there?
- Nothing. It provides poor adult space and utility - e.g. for night eating, poor children space and utility - no play facilities.

- Nothing at all - it's unsightly, a haven for smokers and disruption to what was a perfectly ideal access point to/from Military Road with little or no impact on the B-Line Service at all.
- Nothing, it blocks traffic and creates more headaches than what it's worth. When I walk past 4-5 times a week between 5-6pm I don't see anyone there.
- Nothing, it's ugly, inconvenient and a trip hazard
- Nothing - it's in a bad place
- Nothing - it is an absolute waste of time and ratepayers funds. This is not a location to create more open space. What a joke! Very few people ever use it and why would they want to. This is a local area disaster
- That it is temporary and can be painlessly removed. Young Street needs to be opened again to traffic.
- There is little to commend the structures and painted surfaces.
- There is nothing I like about it (n=2)
- There weren't many facilities.
- We do not like it at all - seems to be a waste of Council monies that could be spent on more worthwhile projects such as a disability access Seniors Centre.

**APPENDIX E. Least Liked Features/Aspects of the Trial Plaza**

The following table lists the raw/verbatim aspects respondents liked least about the trial plaza, used to inform the graph on page 5. Note: some responses contain more than one aspect, and for the purposes of presentation, these been (alphabetically listed) grouped by theme i.e. by first aspect stated where more than one given. Each aspect has been individually counted and reflected in the corresponding graph.

Theme	Comments (Verbatim)
Cost	<ul style="list-style-type: none"> <li>• Its cost. Council has spent \$500k on this "experiment". a waste of money no doubt supported by unreasonable increases in rates.</li> <li>• That the community focused on the \$450k price tag of the project and attributed that to construction materials. This should have been clarified to obtain better feedback. (Your survey form isn't mobile friendly. I can't use the return key for a new line)</li> </ul>
Design elements/ aesthetics - temporary look and feel/cheap looking	<ul style="list-style-type: none"> <li>• Aesthetics aren't great but this is largely related to looking very temporary</li> <li>• As a "trial" it doesn't really reach the heights of refinement that a permanent space could achieve.</li> <li>• Cheap looking and not very user friendly/I expect something like Lane Cove canopy/This place is too dark and uninviting</li> <li>• Cheap poor quality structure</li> <li>• Could be much nicer - temporary fixture looks cheap. Would be much nicer with permanent fixtures with better urban design.</li> <li>• Everything... very uninspiring.</li> <li>• Eye sore and inconvenience</li> <li>• Fixtures to be permanent and more accessible</li> <li>• I hate the design and colours of the trial plaza/It looks very uncomfortable as well although I didn't use it.</li> <li>• I hope Council will add more amenities for kids</li> <li>• I think it is hideous and cheapens the look of the area.</li> <li>• I think the design needs a little more work but ultimately I don't dislike anything about the plaza concept</li> <li>• If made permanent will the furniture be plywood or handsome weatherproof structures.</li> <li>• Insufficient in scope. More could be done, notwithstanding the problem of Military Road.</li> <li>• It could be more fun oriented</li> <li>• It doesn't look good and not really inviting.</li> <li>• It is ugly; I have seen only very few people using it; it is covered in dead leaves and I have never seen the supposed coffee outlet in operation</li> <li>• It looks and feels like a play zone for toddlers. We have enough playgrounds.</li> <li>• It looks cheap and is not aesthetically pleasing/It takes away parking</li> <li>• It looks cheap and tacky</li> <li>• It looks horrible. Local residents live here because it's a classy suburb for one, the fit out/style is not becoming of one of Sydney's most prestigious suburbs in the scheme of things. The area needs a touch of hip and cool like Paddington.</li> <li>• It looks like a Year 4 project gone wrong</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• It looks temporary. I would like to see the permanent design.</li> <li>• It needs to extend and be much bigger to provide through pedestrian access around all those little Neutral Bay lanes. It would be so much better to stay longer, shop have coffees dinner and stroll around away from the massive traffic rush of Military Road</li> <li>• It's cheap looking and ugly/It's meant more traffic using the redeveloped Grosvenor Lane.</li> <li>• It's dirty, it pushes traffic in to side streets, serves zero purpose/Not suitable for children</li> <li>• It's just awful, garish and horrible</li> <li>• It's not very aesthetically pleasing. It would be great for it to look more sophisticated and premium. It looks like a kids playground, not a really lovely space.</li> <li>• Its temporary nature looks cheap and unfinished. The children's play area is sweet but little one can still access a major road</li> <li>• It's tacky</li> <li>• Just about everything</li> <li>• Just to make it more visually pleasing if it was a permanent structure.</li> <li>• Looks hideous/Have never seen it used by anyone/Makes access to car park more difficult.</li> <li>• Obviously the build is low quality as temporary - the final version will of course be higher spec</li> <li>• Needs more plants.</li> <li>• Not quite sure of some of the functions of the space</li> <li>• Poor design for the trial concept, photo Montague had Grey Stone and modern metal beams. Currently, this looks cheap and suitable for kids play ground. As a local we prefer nice Stone and European finish with leafy neutral bay feel.</li> <li>• Poor design/layout, seats and tables barely used.</li> <li>• Practically useless for all ages of residents</li> <li>• Quality of materials used and overall design.</li> <li>• Tacky</li> <li>• Temporary design is not attractive at all. Far too 'kiddie' and lacks the style of Young Lane. So long as this is not the final look if it becomes a permanent plaza, then all good.</li> <li>• The actual design of the Plaza - I am not sure if it is the best use of space at the moment/ The "grass" it's itchy for kids</li> <li>• The concept plan looks great the trial version I don't feel is hugely successful/The Astro turf feels very sterile/The container lining Military Road does not feel an appropriate edge/Real planting would feel much better than pot plants.</li> <li>• The construction is an eyesore</li> <li>• The design is incredibly ugly; such an offence to the eye that I would prefer not to have this facility than having to look at this monstrosity. At the moment I walk past it as quickly as possible and pretend I don't live here.</li> <li>• The design is not very inviting</li> <li>• The fixtures don't look very nice. I'm all for bright colours, but the boxes look quite cheap and not as inviting as they could be, but I imagine this is because it's temporary. If they could improve the aesthetics of the fixtures it would be perfect!</li> <li>• The plaza is not aesthetically pleasing and does not suit the vibe of Neutral Bay. Due to the position of Young Street, there is a significant</li> </ul>

Theme	Comments (Verbatim)
	<p>amount of traffic surrounding the plaza, making it unappealing to spend time at.</p> <ul style="list-style-type: none"> <li>• The tackiness/Proximity to Military Road</li> <li>• The temporary nature of the hired fixtures but I guess that would change if the trial reverts to permanent.</li> <li>• The quality and visual appeal of the fixtures could be improved if the space becomes permanent.</li> <li>• Understandably, the fittings/grass are temporary at present, and my hope is the permanent facilities will be suitably aesthetically pleasing.</li> <li>• Unightly, eyesore</li> <li>• Was dirty and seemed dated, not exciting or really that pleasant</li> <li>• While I appreciate it is a temporary area, much of it did not make sense. The bench/seating area seemed too squashed and I was confused about the 'green wave' zone. Is it for seating? Or playing? Not sure what the identity is meant to be.</li> </ul>
Design/materials - colour palate	<ul style="list-style-type: none"> <li>• Garish colours, looks like a kids playground</li> <li>• Gawdy colours</li> <li>• The colouring is not all that attractive - maybe some local street artists could make something brighter (not greens)</li> <li>• The colour scheme of the wooden seats - yellow? How about a nice navy blue or a dark green</li> <li>• The garish colours</li> <li>• Yellow timber boxes looked cheap/Felt like a kids playground with floor paintings/green turf looked cheap</li> </ul>
Design/materials - child friendly features/ child safety	<ul style="list-style-type: none"> <li>• Cars of nearby street (Young Street) = dangerous for children. Unclear where traffic free zone ends. Should be blocked off better</li> <li>• Could do with one or two activities for kids like they have at Newport Arms for example (large Jenga, a ten pin bowling lane)</li> <li>• Kids play area</li> <li>• Needs child proof fencing on Military Rd side (behind the container) as kids are running around the container and can be out of site and run into Military Rd</li> <li>• Not child safe. Too many ledges/stairs and large ledge with drop off without a barrier. Shipping container needs something more visually appealing for a permanent closure. Due to COVID, no events so was usually an eyesore worse than the road itself.</li> <li>• Not child safe, plus the bins are dirty and daily maintenance is required</li> <li>• Not safe enough for kids to play. Sharp corners and would need a net to prevent toddlers from tipping when playing on fake grass area Not sufficient use by the community at large</li> <li>• Potentially deadly for young children, so easy to run into Military Road. Needs blocking off immediately</li> <li>• Would never take children to play in that spot (traffic fumes and noise), neither would I sit and relax or have a coffee there (same reason)</li> <li>• Unsafe for toddler aged children/Not all-weather friendly</li> </ul>
Design/materials - lack of shade/rain cover	<ul style="list-style-type: none"> <li>• Needs cover especially from the sun. Trees don't provide enough cover.</li> <li>• No covering for when it gets to hot or rains</li> <li>• No shade from the harsh sun</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• No undercover areas meant the space was only useable in fine weather and not during the sunniest parts of the day.</li> <li>• Problem when wet... no undercover/Also there needs to be a barrier to Military Road so children can't run into it.</li> </ul>
Design/materials - platform/levels/ elevation	<ul style="list-style-type: none"> <li>• It feels like you have to "step up" to utilize it rather than it being an integral part of the street. I think it would be better if the end of the street was closed off with planter boxes and then the area was grassed or whatever at street level.</li> <li>• The deck it a bit high and will be dangerous if little one fall off</li> <li>• The height of the platform. It is a great please for kids to play but I was often nervous about my little one falling off. The temporary furnishings. It will be great when the permanent design is installed.</li> <li>• The platform too high, a little dangerous for kids playing</li> <li>• The raised height</li> <li>• The uneven flooring</li> </ul>
Design/materials - shipping container/ cafe	<ul style="list-style-type: none"> <li>• Cafe dominating the "grassy" space with own seating</li> <li>• I didn't like the coffee at the cafe that opened up within the plaza.</li> <li>• No cafes</li> <li>• Not sure what the large container was for (noise abatement?) But perhaps a nicer looking wall to demarcate the area</li> <li>• The building didn't really seem to work/Not enough greenery or thought about public use/You should check out the Coogee Bay Road, that is awesome.</li> <li>• The cafe uses too much space</li> <li>• The cafe. It detracts from the use of the plaza.</li> <li>• The coffee</li> <li>• The demountable in the middle of the street.</li> <li>• The structure covers to much of the area, would prefer pavers and open space, such as a shared zone</li> </ul>
Design/materials - size	<ul style="list-style-type: none"> <li>• Could be bigger</li> <li>• More space</li> <li>• That it didn't extend the whole way down Young Street to Grosvenor St. I think this would be a good option to consider.</li> <li>• The small area is tokenistic and prone to overshadowing and noise from traffic.</li> <li>• Wish it was larger</li> </ul>
Design/materials - street furniture/ seating	<ul style="list-style-type: none"> <li>• Could be more comfortable</li> <li>• It can have better tables</li> <li>• Needs more comfortable furniture</li> <li>• The benches are on the non shady side of the plaza. The coffee person tells me the chairs are very hard to pack away each day.</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• The presumably temporary street furniture does not fire the imagination.</li> <li>• The seating benches are not very inviting, due to material/setting. They look bulky and collect dust on the surface easily</li> <li>• There is only 1 or 2 tables and the rest of the area is totally impractical.</li> </ul>
Design/materials - synthetic turf/rolling hills	<ul style="list-style-type: none"> <li>• Grass area could be a little bigger.</li> <li>• I don't really understand the rolling hills part - seats or play area? But even that is not bother, I don't care I just like seeing the green it looks lovely.</li> <li>• Not a big fan of the bumpy side of the area. Not sure what it is for?</li> <li>• The astro turf and the undulating surface area which makes the area look like a skate park!</li> <li>• The fake grass, but understand this may be temporary.</li> <li>• The grassy hill and play area for children, don't need a playground in the middle of Neutral Bay</li> <li>• The green lumpy area isn't functional. Can't we just have a usable flat space with some tables and chairs. If you're saying we've got the least public space of any northern Sydney council, surely we should use our limited public space functionally.</li> <li>• The green skateboard like hills and the black stand that was easy to bang into.</li> <li>• The humps on the artificial grass</li> <li>• The man made components. Although interesting, doesn't serve a great purpose. The kids liked running on it but the grass burns we're not fun.</li> <li>• The scale of the "mounds" and miscellany of structures and colours are an eyesore. There is no apparent theme or style in the selection of cluttered items/The 6-lane Military Road is noisy, smelly and unsuitable for children.</li> </ul>
Impact on local businesses	<ul style="list-style-type: none"> <li>• New Pavilion cafe on the site. We have so many cafes in Neutral Bay, we don't need another and it significantly reduces the space as a community space for anyone who does not want to purchase anything from the cafe.</li> <li>• That it takes away access to and from the nearby shops and parking.</li> <li>• There is not a single thing about what the Council has done here that is attractive, practical or beneficial to local business</li> </ul>
Location	<ul style="list-style-type: none"> <li>• I would prefer to have [the] open car park area between Woolworths and Chaos Cafe, Bakers Delight etc made a large community space and have car parking underground. This is the perfect area for community space in Neutral Bay.</li> <li>• It is in the wrong place</li> <li>• Its location. It is a hindrance to the residents of North Cremorne and their neighbours travelling to and from home.</li> <li>• Too close to busy main road/Not a particularly attractive area architecturally or visually.</li> </ul>
Noise/acoustics	<ul style="list-style-type: none"> <li>• A bit noisy with construction but traffic noise isn't as bad as expected.</li> <li>• I wonder if the Military Road noise could be reduced somehow, maybe with some noise cancelling installations, so this would be more than the gate concept, and more a blocking out, should help with the space.</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• Military Road is loud</li> <li>• Noise from Military Road/Lack of shade</li> <li>• Suggest increase sound barrier to Military Rd to create more sanctuary</li> <li>• The additional noise from pedestrians.</li> </ul>
Parking impacts	<ul style="list-style-type: none"> <li>• It has reduced parking in a place where parking was difficult anyway/There is no need for another coffee shop, there are at least 4 other ones within 50 metres.</li> <li>• Less parking</li> <li>• Less car parking, it is located around businesses not cafes, It was raised, the green fake grass is a toilet for animals, it is high and hard to walk through for someone with disabilities</li> <li>• Reduction in parking spaces for shops, creates vehicle congestion on Young Street/The Plaza is not visually pleasing</li> <li>• Takes away more car parks without bringing any new car parks</li> <li>• The inability to park and drive on Young Street and how cheap and unattractive it looks</li> <li>• There is access to an underground car park in the middle of the space, it totally defeats the purpose of a pedestrian plaza when cars are allowed in and it's an accident waiting to happen until a child is run over.</li> </ul>
Traffic/cycling impacts	<ul style="list-style-type: none"> <li>• Being diverted towards the Woolies parking lot - the busiest stretch this side of town!</li> <li>• Blocking vehicle access from the Military Road</li> <li>• Closure of Young St - and vehicular access to the commercial buildings , new traffic issues being experienced, the raised platform isolating pedestrian traffic to the sidewalks</li> <li>• Effects on local traffic</li> <li>• Grosvenor Lane (Between Ben Boyd and Young) is used as a rat run and cars exceed the speed limit. It has become dangerous to walk down.</li> <li>• Increased traffic on Grosvenor Lane</li> <li>• Interruption to traffic; lost parking spaces/non-events, no people attending events.</li> <li>• It blocks traffic</li> <li>• It effect on traffic is understated, the plaza is ugly, the construction of an unnecessary wall and coffee shop in contrary to an open space and the connection to pedestrians on Military Road. The retaining of what was the pedestrian safety crossing is ...</li> <li>• It increases the traffic down Grosvenor Lane to access Woolworths.</li> <li>• It is dangerous for pedestrians</li> <li>• It totally messes up traffic flow, and access into Young St from Military Rd, and flow from Young St to Military Rd. It forces traffic into quieter laneways and onto Grosvenor St and Lane.</li> <li>• It's forced more traffic down Grosvenor Lane</li> <li>• Lack of car access</li> <li>• Lack of cycle access up to bike parking area - too narrow.</li> </ul>



Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• Part of the space is still a road because of access required to the underground car park/The yellow paint used is different to the plan design and doesn't look as good as it could/Before the cafe/tables/bean bags were installed, nobody was using it.</li> <li>• Retention of vehicular access to service existing driveway and basement car park to building on eastern side of Young Street</li> <li>• That you closed the street</li> <li>• The broader traffic flow particularly after the recent lane redesign, this has caused more traffic on neighbouring street. The closure has also affected taking a left onto military road. Turning left from young was safer than the left from the next street.</li> <li>• The closure of access to Young St from Military rd means that traffic is now diverted into various suburban streets</li> <li>• The driveway entry and bollards do limit the size of the space. I wonder if the Grosvenor Lane parking entrance could be used or connected.</li> <li>• The fact it takes away scarce parking resources in the street</li> <li>• The majority of people come to Neutral Bay to shop at Woolworths and dine. Access is not easy at the best of time. Closing off Young St to vehicle traffic makes it that more difficult.</li> <li>• The traffic and reduction of parking options</li> <li>• The traffic backlog into Young Lane</li> <li>• Uninviting, unattractive, windy/increased traffic in local streets, including the Shared Zone in Grosvenor Lane between Ben Boyd Rd and Young St increased by 29%, and the section of Waters Rd between Military Rd and Grosvenor Lane by a whopping 71%</li> </ul>
Utilisation	<ul style="list-style-type: none"> <li>• In fact, it is a depressing place and hardly anyone spends time there - the light in that location is most inviting and not at all welcoming/Motorist access to Military Road is needed - closing Young Street has greatly increased congestion in the area.</li> <li>• It has attracted families, not a enjoyable place to relax with screaming kids running around the whole area</li> <li>• Nobody is ever there. Not people or kid friendly. Not near cafes/Badly designed</li> <li>• We walk past daily and plaza seems to be hardly used except for coffee and Neutral Bay is already saturated with coffee places.</li> </ul>
Other - negative feedback	<ul style="list-style-type: none"> <li>• Everything about it.</li> <li>• Everything.</li> <li>• Everything. Blocking off the road means an excellent entry to Military Road (pedestrian crossing with lights holding up traffic)/No traffic means small businesses suffer/Of course - Hatred of the car again.</li> <li>• Everything. It is ugly beyond belief. It is already a hub for smokers, willing the area with smoke. It is attracting drunks and addicts of all kinds, as yet again the Council does all it can to kill off local businesses.</li> <li>• Everything. Stupid location to achieve an objective that cannot be realised by shutting a road. Closing the top of Young Street benefits no one. It pushes local traffic into other streets to access our homes. It should be reopened ASAP. I never used it.</li> <li>• Everything! Under-utilised, un-required public space adjacent to a busy arterial route, with exposure to noxious fumes and dust/Costs the community 13 valuable parking spaces near Neutral Bay shopping village, when parking and traffic is already very limited.</li> <li>• Hard to pinpoint its worst feature</li> <li>• Help clean environment. Entertainment area plus sitting area</li> </ul>

Theme	Comments (Verbatim)
	<ul style="list-style-type: none"> <li>• I saw a family letting their dog sit in and lie on one of the tables. Please put up signs</li> <li>• Not relevant</li> <li>• The whole concept is completely unnecessary; Transport for NSW has made Neutral Bay even more unlike a "Village" now. The traffic in and around the Grosvenor St and Lane, Waters Rd and all adjoining streets and laneways are even more congested and dangerous to all</li> <li>• The whole thing is awful</li> </ul>

Note: n=44 of the comments provided were positive/in support for plaza/most liked aspects

- All good (n=2)
- I liked everything
- I think it's a good idea in long-term. We need help to be sustainable environment. We've gotta stop the car crazy.
- I wish it was permanent
- It should have been done years ago
- It's a shame that it is only a trial at this point. We hope it is here to stay!
- Maybe few little food pop up, music, great idea need more, one near Cremorne too.
- N/A (n=2)
- No negatives
- None, see above
- Nothing (n=10)
- Nothing - I think they did a wonderful job for a temporary structure.
- Nothing I did not use the plaza
- Nothing- it is great
- Nothing negative to add
- Nothing noted. I appreciated it was a temporary structure and therefore not to be regarded as the final aesthetic.
- Nothing to dislike
- Nothing, I use Ben Boyd Road so it has no great affect on me.
- Nothing, it's great (n=2)
- Nothing. It was great
- Nothing. There doesn't appear to be any adverse traffic impacts.
- Some information material onsite works have been nice. At the beginning I didn't know at all what's happening.
- Temporary nature of it.
- That it is a trial. Leadership involves considering positions and then making decisions. Not trailing decisions. It is a great initiative but we need to make it permanent.

- That the trial will finish :-)
- That it's not permanent (yet!)
- The fact that it may end
- Understandably COVID has stopped a lot of things happen, but I'd love to see more community events and live music happening in this space whilst the trial is going on.

### Appendix F. Trial Plaza Online Feedback Form - General Comments (Verbatim)

The following table groups the verbatim general comments by level of support.

Level of Support	Verbatim Comments
Support (n=93)	<ul style="list-style-type: none"> <li>• Support if it is designed to look more up market. Prefer either tiles or stone rather than kids painting on the floor.</li> <li>• This is a great move for the area! I am here today and there are at least 30 people enjoying it.</li> <li>• Could we see food trucks on a Friday/weekend? Maybe one each week? Would be a great open space to enjoy in the summer evenings.</li> <li>• Support the space but Need to manage traffic on Grosvenor Lane, the street has no separation between pedestrian and traffic which makes it's very difficult to walk along the street with increased traffic. Also please make the space aesthetically pleasing, not like the ugly LEDs and black/yellow tiles on Grosvenor Lane.</li> <li>• I think it should be kept permanently for a pedestrian plaza. Must reduce the amount of car traffic interference. We need to give enough space for pedestrians instead of car crazy. It helps give a good vibrant to the community and in that sense. Have that atmosphere especially to help green the environment. More trees the better. It is beneficial and to live within harmony. We need to have enough shade specially in the hot humid weather condition. Help move forward. It should be limitation for car users in that location. The trouble these days they use their cars unnecessary. They need to know there limits. We must respect the community to help provide enough room.</li> <li>• I also have a disability and this really helps my confidence. I can walk safely around my street, and enjoy outdoor activities.</li> <li>• The concept is great. It's a dangerous street. The play area is quite unusual. I don't really like it. I'm sure it will improve if it's permanently approved.</li> <li>• More child friendly.</li> <li>• Desperately needs to be fenced off from Military Road.</li> <li>• This funky design was a mistake. People would support a sophisticated area that feels more piazza and less playzone. We have enough playgrounds and children's areas (and I have kids). It needs to be timeless by design, or it will age badly in about 10 years.</li> <li>• Would be good to add a little stage.</li> <li>• Please keep the road closed but make it much better. Make it befitting of the suburb. There's plenty of kiddy arras. We need a place that invites a cafe society/bar culture that brings people (old and young) together day and night in line with NSW government push to 24 hour economy.</li> <li>• I think Council has taken too long with construction in general. It's very disruptive to small businesses around. All attempts to speed up should be made. The trial period of COVID isn't a great time as people aren't out and about much with the northern beaches cluster.</li> <li>• Please permanently close Young St and implement the Young St plaza.</li> <li>• At some point the T-section of Grosvenor and Waters will have to be addressed. Stop sign or lights , Better visibility of crossing and plants pruned back for cars turning right out of Grosvenor to Military Rd.</li> <li>• Great initiative.</li> <li>• See above suggestion about safety net on edges to be added</li> </ul>

Level of Support	Verbatim Comments
	<ul style="list-style-type: none"> <li>• I would recommend adding the following features to the Plaza which will increase its use by the local community: 1. Shade cover and/or glass rain cover (similar to Lane Cove Plaza and Canopy), 2. Noise barriers between the Plaza and Military Road , 3. (if possible) extend the green area a bit further toward Grosvenor lane so kids have more space to run around.</li> <li>• Great initiative the kids loved it and it must be good for local businesses.</li> <li>• If it has a dual purpose.</li> <li>• Could be enhanced with a few kids playground equipment like slide and see saw.</li> <li>• For the permanent closure - I would recommend extending cool lighting features - like those from the recent upgrades at the nearby Grosvenor Lane.</li> <li>• Yes yes yes, this is a huge improvement. This makes our suburb feel like a home not a thoroughfare. It encourages the cafe and restaurant scene. It is nice to have somewhere to sit and any extra greenery is fabulous.</li> <li>• To make this pedestrian free area work and attract the community it would be up to the private sector to expand the food and beverage offering along the street to encourage outdoor dining and public gatherings. It would then become a destination onto itself rather than just a thoroughfare. Glad to see this all happen though.</li> <li>• Really nice idea. Would work brilliantly on Rangers Rd too</li> <li>• Until you can redevelop the Woolies car park and put the parking underground like lane cove then maybe for nothing</li> <li>• I think it's wonderful - a space for us locals rather than cars! It makes me feel valued as a pedestrian and as someone who walks to and from the shops from my home on Barry street. Can't wait for some coffee shop spaces to open up and for some Covid safe events to happen - it's going to be a real blessing for the community.</li> <li>• Need more of these.</li> <li>• I hope that this becomes a permanent community plaza. The area and businesses definitely benefit from having somewhere people can gather outside.</li> <li>• We are in need of more easily accessible green space here in Neutral Bay particularly near the shops.</li> <li>• Great to have community space.</li> <li>• More green/open space is much needed for the community in this crowded area. If it's not going ahead we would wish council to provide an alternative. Thank you.</li> <li>• Great placemaking initiative, nice to relax in an urban space and for my daughter to meet/play with other infants. More initiatives like this please!</li> <li>• That is the way to go. I need to make an inspiring.</li> <li>• Great initiative, and would love to see more in North Sydney. Fantastic stuff.</li> <li>• Great work Council. Strategic street closures where there is no traffic impacts will really improve the amenity of the area.</li> <li>• Happy to retain the public plaza, but the current design is wasting valuable space and deters public use. It could be so much better.</li> <li>• It needs some re design plus once permanent a fence as it's not safe for small children. Perhaps a canopy for sun protection. Love the coffee pop up.</li> <li>• I think this is a fabulous initiative, and since it's been opened have seen more and more people using it. I also appreciate not having to run</li> </ul>

Level of Support	Verbatim Comments
	<p>the gauntlet of cars turning in/to Military Road when crossing the street. What is also lovely is the canopy of existing trees, and I would love to see the final design incorporate more greenery/shade (for summer). A little like Reservoir Park in Mosman which is a beautiful oasis with plantings, pergolas and rotundas.</p> <ul style="list-style-type: none"> <li>• A permanent plaza will have a better feel.</li> <li>• I support the closure of Young St, with better seating and a cafe, not a playground.</li> <li>• Love it! Here here to more open public spaces.</li> <li>• I often used Young Street from Military Rd to access Grosvenor St and the Woolies car park. I thought closing the street would be inconvenient and create more traffic on Ben Boyd and Waters Rd but it hasn't been too bad at all. Before the cafe opened, the new space was barely used so I think it's important to have the cafe as a draw. The space at the top needs more chairs and tables. I walked past yesterday and the three tables were all occupied at 9:30am. The bean bags are a nice touch.</li> <li>• This is a fantastic idea to make the city liveable again and push back cars and roads. More please!</li> <li>• As someone who regularly used the Military Rd Young Street exit I am surprised how little impact the closure has had on my daily car routes. I think we need more open space like this, and support this concept fully to create a better sense of community and more places to enjoy our neighbourhood together. I like the way the design address the slope of the street. Would like a few different seating arrangements to suit different group sizes. Spaces in the shade seemed most used.</li> <li>• A great initiative, however need to stop the rat run down Grosvenor Lane between Ben Boyd and Young Street.</li> <li>• The area needs to be at ground level. The raised platform without barriers is unsafe for active children. I would also support of fully fencing the area (in an aesthetically pleasing way) as it's too close to an arterial road. It's also not all weather friendly- a canopy would be a great addition. Lastly, the grass is very slippery first thing in morning and when it's raining. It's a much needed community space in the area so I definitely support it.</li> <li>• Would be good to see trees planted and shaded area for people to enjoy.</li> <li>• May want to consider more play equipment for kids and look at increased shading options for summer, particularly near the newsagent. Look into improving the noise blocking of Military Rd although it's surprisingly good at the moment considering it's just a pop up. This should be repeated at the top of Willoughby Rd one way zone in Crows Nest too!</li> <li>• A great space. Hopefully the empty shops will soon be occupied with more food options for families. Only concern is that it could attract the wrong crowd that may loiter or graffiti. Installation of some type of monitoring or security to prevent this would be good.</li> <li>• This [is] a great initiative and one I feel that most residents will enjoy and see benefit from.</li> <li>• Thank you for providing this much needed space. Please look in to other opportunities around North Sydney so that residents and workers have somewhere to sit and enjoy the outdoors without the rush of traffic around them.</li> <li>• Make it happen ASAP.</li> <li>• Wish the space was larger and surrounded by cafes and restaurants, like in Lane Cove.</li> <li>• Played a game with levels and it was really fun (aged 8).</li> <li>• The plaza has great potential, similar to Lane Cove Plaza and could become a real focal point and drive community spirit. Live music, Christmas Carols etc</li> <li>• The plaza had a relaxed, friendly feeling that is very welcome at a time when travelling elsewhere has been so limited.</li> </ul>

Level of Support	Verbatim Comments
	<ul style="list-style-type: none"> <li>• Would like to see permanent plaza and road closure.</li> <li>• Thanks for this initiative! With a good landscape and lighting design, this can become a great place.</li> <li>• I would love to see restaurants and/or cafes opening on the sides of the plaza with the use of the plaza for their seating. nothing brings people more than coffee and food.</li> <li>• I fully support this being a permanent change. I am a local resident and would've previously used Young Street to get off/onto Military Road, however I do not think the change in traffic route outweighs the positive aspects that the plaza brings to the area and the opportunities it may make for businesses that choose to lease property around the top end of Young Street. I do think that in order for this to happen the layout of the space needs to change and I think certain aspects of what the temporary plaza incorporates are no necessarily the best use of space.</li> <li>• The plazas have improved the amenity of Neutral Bay so please continue the good work.</li> <li>• I'd like to see more initiatives like this in the area.</li> <li>• Please keep it closed.</li> <li>• This is great. I'd love to see a lot more of these kind of projects!</li> <li>• Please look at reducing the speed limit on neighbouring streets to 30kph. I've noticed increased traffic on Grosvenor St and with the movement of pedestrians this should be a low speed street.</li> <li>• It brings a different feel to the area, inviting people to congregate and hang around rather than being a place you walk straight past</li> <li>• Please make this permanent! So good for residents and pedestrians to get some real estate back from vehicles and carparking. The kids love it.</li> <li>• There is very little outdoor public space around the Neutral Bay shopping area. This is a fantastic change for the area. We live at the bottom end of Young St and have found no inconvenience with not being able to access Military Rd from Young St by car anymore. We fully support this proposal.</li> <li>• Causes no problem with traffic and looks really good.</li> <li>• Love the coffee shed for blocking road noise from military road - however they need water and power to be able to offer wider variety of food. Also love the green slopes - they keep my grandchildren entertained for ages.</li> <li>• Good in theory. Please make it a more nicer, enjoyable space for people.</li> <li>• Need more plants, colour and shade to make it more inviting.</li> <li>• I am fully supportive of creating more community open space in Neutral Bay. I would love the traffic to substantially reduce in the whole area. A tunnel under Military Road would solve a lot of problems. In the meantime, a footbridge over Neutral Bay junction from Wycombe Road into the upstairs of Theo's arcade would be fabulous!</li> <li>• I think it's a must as there really is no patch of grass around the shops cafe area to sit and meet up with people. It really brings people together - I meet new people every time I go there.</li> <li>• There seems to be a vocal minority that oppose this. I believe the we need to invite people into the community and stop prioritizing cars and parking. This has worked so well in Europe and it could transform the community.</li> <li>• Alternative parking would be great.</li> </ul>

Level of Support	Verbatim Comments
	<ul style="list-style-type: none"> <li>• We definitely need a pedestrian only place like the one in Cremorne where you can leave your children run around safely while you are enjoying a coffee.</li> <li>• Great work north Sydney council. It is so lovely to see everyone enjoying the space. It's worth so much more to the community as a gathering space, than 12 car spaces! I do think this could help the many vacant commercial shop fronts when the permanent structure is installed.</li> <li>• Loved the story time and cafe addition!</li> <li>• Really love the little cafe there, very friendly operators. Really hope they could stay.</li> <li>• Please, please keep it. It has so much utility and has made my street safer for my child.</li> <li>• I think this has only positive impacts on the local community.</li> <li>• Council should embrace pedestrian plaza's for use by residents and supportive business similar to many European cities.</li> <li>• Neutral Bay is critically short of open space and the Grosvenor Car Park should be earmarked as a pedestrian only space in association with underground parking. The slope between Military Rd and Grosvenor Lane would permit such a development.</li> <li>• I think the Plaza is a wonderful initiative by Council. The street closure makes it safer for pedestrians crossing Young Street at the Military Rd. end. If the Plaza is made permanent I would like to see some native planting such as the red flowering eucalyptus or low growing white crepe myrtles used in streetscapes elsewhere in the suburb. The street closure at Military Road has caused many more vehicles, including large delivery trucks, to use Grosvenor Lane making the Lane perilous for pedestrians. Please remove the concrete installations along the Military Road Side of the Lane at the Young Street end. Between these installations and the car parking on the other side of this end of the Lane there is no room for pedestrians other than to step into the driveways to let vehicles pass. Vehicles do not stop for pedestrians in the Lane.</li> <li>• It would be great to have an evening cafe or food truck that comes occasionally so that you could make use of it in the evenings. Kids love the grass area. Great idea to have a little cafe in the container. An upgrade to the benches would be good but I understand this is a temporary fixture at the moment and they are fine for that purpose.</li> <li>• Peace/lack of traffic noise.</li> <li>• I would like a comfortable and tasteful looking plaza.</li> <li>• I would be happy to provide more support to the cafe. The owners are very kind.</li> <li>• Please let us see the final design. I would like to see an Italian style plaza with cafes with outdoor seating and shades and a fountain, small performance space, and play space for children, etc.</li> <li>• The retention of the vehicular access to service single building on eastern side of Young Street means that the open space design is less successful. The present pavement marking attempts to make the open space appear larger to encompass this vehicular access but that creates a safety problem and it is easy to be lulled into a false sense of security that the area is closed to traffic. Notwithstanding that there are bollards I have at least twice inadvertently traversed this roadway area not thinking to look for oncoming vehicles - on one occasion there was a car egressing into this area.</li> <li>• It's great for my nieces when I take them . They enjoy the little play area. And I get to enjoy my coffee.</li> </ul>
Neither/Nor (n=11)	<ul style="list-style-type: none"> <li>• Typical Council 'doing it to create an impression you are doing something'. Could be vaguely ok if it matched the Berry St/Nutcote opposite.</li> </ul>



Level of Support	Verbatim Comments
	<p>Looks appalling and dangerous especially for children as it is.</p> <ul style="list-style-type: none"> <li>• I would rather see Council spending money on other projects, in particular keeping the streets clean, public awareness campaign to home owners and strata cleaners not to blow leaf litter onto the streets. After the street sweepers have been through it looks tidy for a day or three.</li> <li>• I think an artist's impression of what can be achieved may help residence accept the proposal. As it is the installation fills me with shock and horror.</li> <li>• I would prefer a more thought out solution so the area has a clear identity and ideally less hard surfaces. A grassed area would be wonderful and more planting around seating. Perhaps planting could also be a natural playground for children? A concern is whether it has encouraged more use of Grosvenor Lane between Ben Boyd Road and Young Street. Walking there recently we have noticed vehicles speeding down there, beeping at pedestrians and therefore am concerned about that being a safety issue.</li> <li>• If the plaza gets the go ahead please make sure it looks better than the temp design.</li> <li>• I like the idea and think neighbourhood needs more of these sprinkled around. But the location of this one isn't great. Proximity to military road makes it unpleasant to sit there.</li> <li>• Check out Coogee Bay Road temporary closure.</li> <li>• I would support the plaza if it was more tasteful as I like the idea of a space where people can gather and children can play.</li> <li>• The area needs to be easily accessible everyone, one level and any cafe type structure on ground level, the space closest to Military Road is wasted as is in the current layout, more tables for oldies to access and seats. The current version appears to be for children and pets.</li> <li>• Thanks for trying to improve our area.</li> <li>• Good stuff.</li> </ul>
Do not support (n=61)	<ul style="list-style-type: none"> <li>• Young Street closure affected businesses on Military Road. It removed direct vehicle access and parking is essential to the growth of the local businesses. The plaza is underutilised, deactivates vehicle and pedestrian movements and creates congestions on neighbouring local roads.</li> <li>• I'd like our road back please.</li> <li>• Trial is a gross waste of money.</li> <li>• The stupid fake grass skate park is literally a hazard for children and anyone that goes on it. Because the whole plaza is raised on a deck if they fall off the edge of double humps there's a high chance that they'll also fall another metre to the ground which a gutter is also there to welcome injuries. The art on the floor is also trashy and dirty now that there have been storms. Everything about it looks trashy. Waste of space and money. The yellow paint on the seating is terrible. Looks a 5 year old did it. You have deleted parking for Young Street and it has crippled business in the area considering COVID has already done that.</li> <li>• Unsuitable structures and poor traffic consequences.</li> <li>• A total waste of ratepayers money. Looks tacky and just plain dumb to close a road down when Military Rd is already choked with traffic. There are enough parks around the immediate area for families to use!</li> <li>• There is nothing temporary about this "trial". We are going to be lumbered with this excrescence and bludgeoned into paying for it.</li> <li>• It is not possible to support it as it appears poorly thought out for the following reasons: 1. the shipping container is ugly, 2. the area is</li> </ul>

Level of Support	Verbatim Comments
	<p>raised off the ground so dangerous for young children and older people, 3. the leaves off the trees aren't swept regularly so looks messy, and 4. there is nowhere (except one table) to sit and eat or have a coffee.</p> <ul style="list-style-type: none"> <li>• I understand roads are more than a means of transporting people and goods and sometimes road closure trials are a worthy experiment. However, to install a temporary mishmash of unworkable, unsafe, awkward and unappealing contraptions into this space is complete madness. This visual mayhem causes confusion and chaos as well as hinders our way-finding ability. The enormous tables, benches, platforms and huge hideous plant pots combined with caution signs alerting danger ahead is a complete failure. Lack of planning has in the past led to very ugly urban environments with poor accessibility for pedestrians. "The journeys on foot" concept should extend to people in wheel chairs, pushing prams, zimmer frames etc. The plan should demand a functioning connected system for pedestrians including children's right to mobility. This poor example of a pedestrian plaza should be abandoned at the end of the trial and a close look at fine examples of pedestrian spaces explored should the concept remain.</li> <li>• I suggest making that section of Young St one way so you can turn left off Military Rd to access the Woolworths shopping area. Beautify the rest of the roadway with trees and plants and comfortable seating.</li> <li>• The access of Young Street for vehicles is important. The closure creates congestion, no parking to local shops. The plaza is not appealing to local residents and it is underutilised for what it intended to achieve.</li> <li>• The closures cut off access and business on both ends of young street shops. It favours one side of the business whilst all shops on Military Road is suffering.</li> <li>• Plaza meant to create an open space, yet it looks dingy, sheltered, and uninviting.</li> <li>• Bring back the old neutral bay, support the small business and allow them to open late.</li> <li>• Business will make less money by removing more car parks, without adding additional car parks - the public space cannot be used well and local business suffer.</li> <li>• Do not support the plaza. I believe the detour adds unnecessary headache to traffic especially attempting to enter Woolworths. The design looks tacky and cheap.</li> <li>• I think the council forgets this is also a residential area and with all of the hard surfaces the noise from this area just bounces around like crazy. It is already SO noisy. I have also seen it has become a great place for the local dogs to do their wees. Charming. Have a nice day.</li> <li>• Please remove the plaza; the traffic is already bad in Neutral bay and this area is very congested.</li> <li>• Closing a vital street connection for the purpose of a children playground is absolutely insane. There are not many children in that specific area anyway!</li> <li>• Please focus on roads and rubbish. Stop your rubbish screwing up of the roads!</li> <li>• Good concept, terrible execution. It chokes the traffic around there even more than it already is and is not a nice or enjoyable place to spend time.</li> <li>• Make a U-turn/cul-de-sac style exit from the street so traffic isn't forced into the one way lane heading into a carpark.</li> <li>• The result is appalling. Experts assess it an no more than a few hundred thousand dollars with of construction, yet millions were received from the State Government, the remainder pocketed by the NSC in its insatiable greed for taxpayer dollars. As predicted it has redirected vast traffic volumes into Waters Road, where young schoolchildren and the elderly and frail are now in serious danger crossing the road. The Council very cynically measured traffic volumes during the COVID lockdown, ensuring the data would be unrepresentative of reality. Traffic</li> </ul>

Level of Support	Verbatim Comments
	<p>volumes need to be measured now, and the results shared with ratepayers. One final comment. This feedback form has been deliberately coded to prevent people using copy-paste, and prevent review as writing. We ratepayers are not the fools that you think we are. Fix it.</p> <ul style="list-style-type: none"> <li>• The road closure has meant more cars are turning into Ben Boyd road then driving down Grosvenor lane unaware of the 10km speed limit. Not many 5 to 10 year old children in the area. Seating uncomfortable.</li> <li>• This entire project has been rammed through by a coalition of politicians and bureaucrats in contempt of the interests of residents. Just because it was funded by the State government doesn't mean it came free of charge. We all pay taxes.</li> <li>• Dog owners have little respect for others dying this area. I note dogs on the stage area urinating etc.</li> <li>• Design is impracticable and unappealing. Young Street is a shaded and windy area and the trial plaza had a most definite negative aspect to the area. Additionally it is rare to see anyone using the space.</li> <li>• Please consider moving this area to a better location like Grosvenor Lane or Waters Road. Both of these already have a village atmosphere and would benefit from more investment.</li> <li>• This is purely a project for a council money grab from state government. There is no benefit in what has been done for the local community nor local business. It is an eyesore, dangerous, and has limited pedestrian traffic to the corridors of the footpaths. The area needs to be at ground level, paved and a thoroughfare. This ridiculous idea is has in effect made the centre of Young St a Council children's classroom. It's a disgrace and a waste of public money.</li> <li>• I don't think taking away parking and potential business activity for people travelling to the area is sensible, when the space is only used by locals.</li> <li>• Neutral Bay is losing its character, it's many local businesses and its reputation as a once thriving 'Village' to live in - shame on Transport NSW and North Sydney Council for allowing this to happen. Instead of multiple nail salons, hairdressers, gyms and florists all competing against one another, there are now 5 Charity Shops too. Where is a decent hardware store - there used to be one in Yeo Street some years ago, where are the choices in men's and women's clothing shops - there used to be many on Military Road! We've even lost our travel agents now! The list could go on but it will, as usual, fall on 'deaf ears'. Why should local residents have to travel out of their suburb for a decent choice of what used to be a great suburb. Even Crows Nest has a better mix of shops than Neutral Bay now.</li> <li>• The disruption to traffic flows is dreadful. Vehicles turning into Waters Road from Military Road drive angrily and fast down Waters Road (annoyed they can't turn left at Young Street). They often don't realise there is a pedestrian crossing on Waters Road/Grosvenor Street. There has been considerable damage to road surfaces on the roads previously used only by cars, now there are more trucks. Loss of parking spaces for the plaza - how about providing more car parking in the present car parking area opposite Woolworths? Suggest - digging down, or adding floors). There is no longer a "Village" in Neutral Bay. It is a built-up, thoroughfare suburb of Sydney.</li> <li>• The closure of Young St prevents access from Military Rd and many vehicles have to wind around the nearby streets to access Primrose Park who's is a popular spot at the end of Young St.</li> <li>• It's an eye sore, please close it down.</li> <li>• Never used it, never will. Serves no purpose. Why would you want to sit next to the military road traffic, fumes of buses and trucks, noise. It serves no benefit to our village, residents, visitors or our retailers. The retail along that section is either empty /vacant stores, or professional services. I am sure that everyone would welcome back the street to be opened. Who was the ill-informed box ticking</li> </ul>

Level of Support	Verbatim Comments
	<p>bureaucrat that dreamt that one up? As a resident of Young Street I don't recall the community consultation of this one? We have already had to put up with the waste of money cycle paths, (\$1M)If you can spot a cyclist using the paths I will be knocked over by a feather! they all use the recently narrower roads - brilliant! the 'new' landscaping (the worse I have ever seen) Even the Council gardeners think so - they have told me this themselves. And how can we ever forget about the removal of our roundabouts!!! Another fabulously popular decision. Just stop it - reopen the street and go and worry about the loss of Cammeray golf club grounds to the roadworks. How about you remove the hideous structure that has been in place in scooter park/Primrose Park for years now! Give us back that too!</p> <ul style="list-style-type: none"> <li>• This was not a well thought out plan and honestly seems like a box ticking exercise to increase North Sydney Council's "open space per person". If you wish to increase open space, I suggest you look at the City of Sydney, specifically suburbs like Zetland that have more green/open space that is integrated with residential living. I understand it is quite difficult to do this but the young street plaza, which is a dreadfully small space does not achieve the intended goal and if anything, it has created more traffic detours for those on Young and Grosvenor street.</li> <li>• Please reopen the road. Please reinstall the roundabouts at Grasmere and Young. Stop removing easy access for residents. There is no benefit [to] retailers and it's difficult for people with disability, mobility issues and families with proms to navigate. It's a ludicrous proposition to create an area like this on a congested main arterial road in Sydney. How about some public art, non-commercial rest spaces and improved facilities at existing parks. There's no cohesion or connection to the mall work in Grosvenor Lane, where is our connected green space?</li> <li>• I love what has been done on Grosvenor Lane and totally support North Sydney Council increasing open space and public areas that the community can use but this street is really important in getting off Military Road and access to retail and parking. Add some greenspace make it pretty like Grosvenor Lane but don't take away the Street altogether. Make the bridges over the freeway much wider and green with terraced gardens and public space areas - that's where we really need them and that would be an outstanding initiative and attraction for North Sydney.</li> <li>• This space would be better used as a shared zone for traffic, as there are already enough cafes and restaurants in that area. The place is not large enough to be used for entertainment purposes.</li> <li>• Not in favour at all.</li> <li>• It is destined to be a white elephant and so a waste of ratepayers money.</li> <li>• The plaza is hardly used when I'm passing every week so it's a waste of money.</li> <li>• I cannot see any benefit in this closure and the design is dreadful, unattractive.</li> <li>• Also forced more traffic along Grosvenor St.</li> <li>• Complete waste of money, as usual!</li> <li>• There should be a zero times used option in question 3.</li> <li>• More tables and chairs for cafe and restaurants - and support for light music performance at night with dinning.</li> <li>• What are you thinking, roads and shops, you killing the last decent strip of shops.</li> <li>• Please think of moving this plaza are to another area where it can be enjoyed ... I may be the only voice who has written in amongst friends and family but so many people are saying it's such a bad idea and 'waste of money'.</li> <li>• All the Big trucks going to Woolworths now have to travel further into the suburb, even down lanes, to access supermarket, instead of</li> </ul>

Level of Support	Verbatim Comments
	<p>coming off Military Rd into Young St. Bad idea.</p> <ul style="list-style-type: none"> <li>• I strongly oppose the plaza. The conclusions in your report are not supported by the facts? e.g. Impact on Pedestrians: Closure of Young Street increases available open space making it safer for pedestrians to walk around Neutral Bay Village .This is not correct .The safety of pedestrians has been negatively impacted by the closure because of the increase in Cars using the Governor Lane between Ben Boyd Rd and Young street (your report 29%), which is a shared Pedestrian zone lane with a speed limit of 10 KPH and your traffic study shows the average traffic moves at 22.2kph. Neither Council nor the police seem interested in enforcing the speed limit? Similarly traffic on the narrower Grosvenor lane from Young St to Waters Rd has increased 8% (I think by more).The increased use of Bikes including Electric Delivery Bikes in the area including on Footpaths on Young St and Military Road as well as the shared zone lane is a threat to pedestrian safety. The bikes on Military road footpaths often reach speeds in excess of 25KPH. Your photo shows a Bike rider heading towards Military Road on the plaza. Where does he go to get to Military road without being on a footpath? How does this make it safer for pedestrians particularly as Bike riders never dismount the bike to use a footpath as required by Law if they are 16 or more? Delivery trucks that service many restaurants and businesses from the loading zone in Young street who were previously able to turn left onto Military Rd now have to turn left down the lane to Waters road. With the delays with the trucks using the Woolworths loading dock this adds to the congestion and the risks and congestion of pedestrians. Finally it is indeed an expensive waste of \$475,000 to build an unutilized ugly and uninviting space that blocks any view to the south across to May's Place and the Post Office. To cap it off we now have another café that competes with existing cafes just as they are trying to make a dollar after a year of restrictions and closures?</li> <li>• I do not understand the decision to locate a Plaza at this location. (will comment on that on other forum). If it is permanent - hopefully not- at least re- design it to so it is less boxy and garish.</li> <li>• Young Street “Plaza” is totally uninviting and unattractive. How can this cost \$475,000? Someone saw Council coming a mile away. Even though Council isn’t paying, we are all paying for it ultimately through our taxes. \$475,000 for some wooden hillocks covered with fake grass, some wooden slats nailed together to make benches around planter boxes, bright green and yellow paving paint. Tacky. At the moment the whole area is littered with plane tree leaves. One sunny Saturday lunchtime a couple of months ago, there was no-one there. Now, with the pop-up coffee shop, it resembles a children’s play group area, full of the obstacle course of prams and strollers, discouraging others who just want to sit quietly and eat their lunch or read a book. This upper area also has the only semi-comfortable seating, with a few tables with proper chairs with backs on them. Unlike the lower area that has the wooden (wide) benches with low backs. In winter, it will revert to the cold wind-tunnel that it is. More open space is needed, but this is not the right place. I note that yet another business has recently closed, the convenience store at 2 Young Street, on the corner of Military Road, in addition to the shop at 1 Young Street on the other side of the “plaza”. Traffic volume in the new Shared Zone in Grosvenor Lane between Ben Boyd Road and Young Street has “increased by 29% which represents an increase of approximately 363 vehicles per day, or 49 vehicles in the peak hour which equates to one additional vehicle every 73 seconds”. (NSC Report Item 4. 6 - Traffic - 19/03/21 Extension of the Trial Young Street Plaza). So a zone Council has created for pedestrians has had a significant increase in vehicle movements. The same report says that traffic volumes on Waters Road between Grosvenor Lane and Military Road has increased by 71%, and Waters Road between Grosvenor Street and Grosvenor Lane (+27%). Given the above statistics I don’t know how the following Conclusion in the above-mentioned NSC report can be reached: “the traffic impacts during the trial to date have been minimal”. I wouldn’t call 71% minimal. Given Council’s plan to</li> </ul>

Level of Support	Verbatim Comments
	<p>develop the whole area around the Grosvenor Lane Carpark, with 8-12 storey buildings, as part of the Military Road Corridor Planning Study, the permanent closure of Young Street seems premature and extremely short-sighted, and I object to its permanent closure.</p> <ul style="list-style-type: none"> <li>• This is a terrible zone for a small, dark and cold Plaza. Because of the existing buildings/ and subterranean parking it has an access road through approximately 50% of the space. The trial has been run during good weather December 2020 to March 2021. It would have been much more realistic and appropriate to run a trial later in the year. The trial period has seen less traffic on the roads due to both COVID restrictions and being conducted across the annual Christmas break and summer holidays. Traffic during this time would be less than normal volumes and is unrepresentative. Even with these factors traffic has seen a marked increase on Waters and Ben Boyd Rd due to the Young St blockage and detour. Councils own figures demonstrate this. Due to overshadowing this is a cold, windy and dark place to sit. The trial also fails to anticipate the Councils own plans to increase residential and business capacity in the area - proposing 4 x 6 storey, 3 x 8 storey and 3 x 12 Storey buildings around Grosvenor St/Lane. The loss of another conduit road with this level of residential uplift is unthinkable. In summary the space is uninviting, unappealing, dark windy and noisy. An awful location for a plaza. Nearby Young Lane is an existing sun filled "mini" plaza which is much quieter, more pleasant and safer. The Council is also planning a large Plaza in Grosvenor St. Young St, would be "Plaza overkill" I object to Young St Plaza - this is not the location for such an open space.</li> <li>• Don't know whose idea to block the section for such an underused kids playground.</li> <li>• I oppose it because it has made Grosvenor Lane a "run through" to Woolies. Cars speed down the Lane and are oblivious to pedestrians.</li> <li>• A 29% increase in the traffic using Grosvenor Lane has made what was already a unsafe area for pedestrians even more dangerous. If the Young St Plaza is to become permanent then you need to address the Grosvenor Lane again. The works to the laneway have no doubt improved the visual amenity but the speed that cars travel down the laneway and the fact there is no clear footpath make it highly dangerous. The shared zone, portable speed sign and stop signs are ignored and the concrete blocks have been hit by drivers too many times to mention but one only need look at the state they are in to recognise the design has failed.</li> <li>• If Council insists on closing traffic access to/from Military Rd. The space would be better utilised to provide much needed extra parking. (Angle parking both sides with a turning circle at the end).</li> <li>• To reiterate, it totally messes up traffic flow in the area, forcing traffic into laneways and roads that do not need extra traffic. Having to turn left off Military Road into Waters Road so that you can come back to any one of the stores that backs onto the open air car park near Woolworths is ludicrous.</li> <li>• This Plaza is an "EYE SORE" and takes one entrance into Neutral Bay. I walk up that way a couple times a week and it is rare to see more than one or two people there and sometimes no one.</li> <li>• I am the owner of 1 Young St with a current view to developing this site to take advantage of the new zoning. Road access to my property has been removed without consultation or discussion. Intent is to put underground parking for 4 new units above the property. This property will require vehicular access both during the construction and post construction for tenants, residents and construction vehicles. It is unacceptable that that Council removes this access without any consultation or discussion with myself or any other property owner. This directly affects the value, rentability and use of the property. There has been no consideration to the impact of this type of enhancement to the area with myself.</li> </ul>

**APPENDIX G. Comments on Trial Road Closure**

The following table lists the raw/verbatim comments received via the online feedback form - road closure, grouped by level of support.

Level of Support	Verbatim Comments
Support (n=22)	<ul style="list-style-type: none"> <li>• Terrific! About time Council did something for Neutral Bay. The neglect is agonising. Make the closure permanent and the installation permanent.</li> <li>• No concerns with the road closure - we have enough roads for cars and other vehicles.</li> <li>• I would support more road closures in the Cremorne, natural bay area if they encourage outdoor dining as well. Might help Cremorne grow too.</li> <li>• Fantastic concept bringing much needed life and vibrancy to otherwise conservative underutilised area. This will boost the local economy and jobs. At night this area is classically dead and dead boring. Make it happen guys.</li> <li>• I welcome this and further road closures to enable smoother passage of traffic in the main road and provide safer pedestrians traffic.</li> <li>• It's great, much safer to walk through. Plenty of alternative routes for cars.</li> <li>• Wonderful - public pedestrian space is crucial in this area where there is so much noise and traffic.</li> <li>• I think it's a great idea to close the road. This road along with others is much more beneficial to be used by people than by cars. The city becomes so much more liveable with less traffic. I'm absolutely in favour of closing more roads! Well done on moving forward with it I support it 100%!</li> <li>• The closure is a very good thing for public safety and green space. As a local resident I walk through this plaza almost every day on my way to buses and my PO Box. This strip of road was used as a rat run and many cars drove too fast, I personally witnessed several near misses (with pedestrians). This section of Young St (and the surrounding area) has the potential to have a village atmosphere with this road closure as it has reduced the thoroughfare to only those needing access to buildings and the parking quadrangle.</li> <li>• The road closure has had no impact at all on my commute times and ability to get around the neighbourhood using the other Military Rd exits. I support the closure.</li> <li>• As a resident of Young St I have enjoyed the plaza and having another outdoor area to meet up with friends, relax with a coffee or play with the kids. I never really used the tip of Young St to access Military Rd so not having vehicle access does not impact me.</li> <li>• As a 21 year resident in Young St I fully support the road closure.</li> <li>• I really like having no cars in this section. It completely changes the dynamics of the area. It's quieter and feels less rushed. Passive recreation is possible. Even crossing Young St without having to worry about cars is easier. Every square metre taken away from cars - driving and parking - and given back to pedestrians is a win, in my book. I'd love to see more of it across Neutral Bay, as has been done by the City of Melbourne in Carlton, North &amp; West Melbourne, to give the small pocket parks and urban nodes back to the community. It's hard to enjoy even the most comfortable park bench under and shady tree if cars are rushing by.</li> <li>• I would just like to voice my support for the closure of Young St at Military Rd. As a pedestrian, Young St was hazardous to cross north-bound, especially at peak hour. I've witnessed many near-misses in the past by drivers who took that left-hand turn too fast and expected right of way. So refreshing to be able to walk up and down Military Rd without that extra hazard.</li> </ul>

Level of Support	Verbatim Comments
	<ul style="list-style-type: none"> <li>• It's a welcome closure. Residents can move more freely in that area without the fear of passing cars. The traffic that comes off Military Rd is usually moving fast in opposition to the pedestrians using the same space. A permanent road closure would be much safer for all.</li> <li>• Support the closure. Other streets can provide adequate access.</li> <li>• I think it's only a minor disruption and the community benefit far outweighs any inconvenience.</li> <li>• Keep it closed - reserve for cafe and restaurant seats and light music support performances for dinners. Turn it into a eat street with street food etc.</li> <li>• I support the concept of the road closure to create a green space or rest area, very much needed in Neutral Bay. I strongly object to the current design of the road closure and hope that the permanent design will utilize the space more effectively. I do not understand the design of the bumps, the artificial grass and generally lack of sitting area. I suggest that the proposed plaza utilizes high quality artificial grass, provides comfortable seating (the design of seating across Military Rd Nutcote place, is uncomfortable and ill designed and defeats the purpose of creating open space). I would encourage the use of native plants rather than the imported English plan varieties that abound in Neutral Bay. Let's bring back Sydney natives.</li> <li>• The reduction in traffic is good.</li> <li>• Agree but Grosvenor Ln must also be closed to traffic.</li> <li>• It is a great asset to have more space for people. I have lived in Neutral Bay for 15 years and the place is getting more dense. To have an extra park is such a wonderful idea. Thank you.</li> </ul>
Do not support (n=31)	<ul style="list-style-type: none"> <li>• This closure has already caused huge traffic issues on Military Rd. On what planet would you think this was a good idea?? Definitely do not continue with this. No way.</li> <li>• This proposal cuts off a very valuable artery. Young St was a safe easy way to turn into Military Rd. The pedestrian lights stopped traffic and it was easy to turn especially too to change into the furthest lanes to get down to Mosman safely, traffic is nightmarish in our area This was a lifeline. Try turning into Military Rd from Ben Boyd Rd. Interminable wait made worse even now because traffic leaving Woolworths now has to turn in Grosvenor St and go around an already congested traffic circle to get to Ben Boyd Rd. Alternatively try turning into Winnie to get to Military Rd with traffic from Parraween St trying to turn too. The closure also takes away parking spaces a very precious commodity. Down Young St is a lovely Park. Can't imagine what this counterproductive proposal can achieve except more congestion, and at considerable cost too.</li> <li>• The closure is driving more traffic down Grosvenor Ln which is making that less of a pleasant pedestrian space. Also the pedestrian island in the middle of Young Street near Military Rd has been painted the same colours and patterns as the road. This will be a major trip hazard once the bollards are removed.</li> <li>• A Precinct member stated that with concern that the Young St closure cars travelling from the west on Military Rd bank up considerably as they wait to turn left into Ben Boyd Rd.</li> <li>• The structure that has been erected that looks like a children's skate park is not what was shown on the original plans, is ugly, useless and inappropriate. It also presents a hazard to passing foot traffic. It does not make any sense?</li> <li>• Who in their right mind felt this was a good idea. The traffic built up coming out of Waters Rd and Ben Boyd Rd getting onto Military Rd is now a total disaster. Secondly who wants to sit that close to 6 lanes of traffic and eat lunch or read the paper. This is a total waste of rate</li> </ul>



Level of Support	Verbatim Comments
	<p>payers money, a waste of resources and looks overall underwhelming.</p> <ul style="list-style-type: none"> <li>• To block vehicular access to Young St is unreasonable given the pressure this places on Ben Boyd Rd and Waters Rd which are already difficult left turns. Young St provides access to Woolworths and the northern side of Military Rd. Increased pressure now is on the laneway between Ben Boyd Rd and Young St, this laneway is now a pedestrian and vehicular road so increases pedestrian risk with more traffic given left turn block to Young St. Parking spaces have been reduced which is an issue during morning peak hours and Military Rd clear way.</li> <li>• Whilst being in favour of more open spaces, this one has, unfortunately created and increased traffic problems, and potential accidents through the closure of Young St onto Military Rd. one example, and there are many, many others: Cars exiting Woolies car park must now go either one extra block along Grosvenor St to Ben Boyd Rd, and several light changes to get into the flow so they can turn onto Military Rd. The alternative - along Grosvenor St in the opposite direction and right into Waters Rd has poor visibility, plus is at an aged pedestrian crossing. Plus poorer visibility turning from Waters Rd onto Military Rd.</li> <li>• The road closure has severely impacted the flow of traffic, especially into the already too small Woolworths area car park. Multi storey to be built or road restored. Has impacted small business in the area as well.</li> <li>• Shutting off the entry to Military Rd from Young St, denies motorists a decent chance of entry, because traffic is held up by the lights at pedestrian crossing opposite post office. The shutdown forces more traffic into the already nightmare roads and street and lanes of this area. The action is irresponsible and insupportable. And plain dumb.</li> <li>• I am totally against the permanent road closure. It will increase traffic turning off Military Rd at Ben Boyd Rd and right into Grosvenor Ln to access Woolworths and the village shops. Council has just turned that part of Grosvenor Ln into an attractive combined pedestrian/vehicle roadway, only to have pedestrians constantly dodging traffic. I can't see the logic in this.</li> <li>• The closure of Young St is inconvenient for vehicle access, and minimise parking to local shops.</li> <li>• There's less pedestrian traffic since the closure of Young St. Businesses on Military Rd are heavily affected.</li> <li>• Terrible idea to block such a main thoroughfare. Great concept but terrible execution.</li> <li>• I support more village like space in Neutral Bay but this is the wrong road to close. The traffic from Military Rd now turns left into Ben Boyd Rd and right into Grosvenor Ln to get into Young Street (avoiding traffic lights). I go to the gym four times a week in Grosvenor Ln and I get close to being hit by a car approximately 50% of the time. The chicane effect now in the Lane, coupled with no pedestrian walking area on the sides, is dangerous. Please invest in this lane to become a proper village like space instead.</li> <li>• Makes access to Military Rd very difficult as parking only available at Woolworth Carpark and have to therefore walk a distance to shop at say Chemist Warehouse! or the Newsagent.</li> <li>• Young Street offers access to Military Rd and visa versa with no traffic light impediments. Removing this access point, and forcing traffic to use Ben Boyd Rd and Winnie St is creating a demand on these intersections which they cannot cope with, resulting in sitting at traffic lights for 2-3 cycles before being able to turn onto, or cross Military Rd. It also removes very precious parking spots, which along with the removal of parking along Military Rd means that it's becoming more and more difficult to find a park, which could result in people being forced to shop at major shopping centres rather than the high street shops, which in my opinion are vital to strong communities. We need to support our local shopping strips. There are a number of lovely parks in the area which are far more pleasant to sit in, rather than next to a very busy arterial road. I have not seen many people using the area, which leads me to think the concept is not resonating with the local community. I applaud the Council for trying new ideas, but not all of them will be right, and I really don't think this initiative will be a positive change for</li> </ul>

Level of Support	Verbatim Comments
	<p>the community.</p> <ul style="list-style-type: none"> <li>• This closure is pushing all traffic into Waters Rd which is a far more risky entry point onto Military Rd. I have witnessed many an almost accident as the cars entering have limited viewing of oncoming traffic. Young St is a far safer option as there are lights that allow easy entry onto Military Rd.</li> <li>• I object to the closure due to the traffic impacts and loss of accessibility. The benefits of closure are very low.</li> <li>• Whilst the concept of providing more public space is good, the location is inappropriate. The plaza proposed faces South, is windswept, is sloping, and in Winter time lacks adequate sunshine to be an enjoyable place to sit. The lovely photomontage does not portray a realistic image of the actual site at all. The plaza location will be further compromised by the planned increase in building heights in Neutral Bay - the increase in shade will make the plaza proposed even more shady and wind-swept.</li> <li>• The closure is a huge inconvenience for traffic turning off Military Rd to reach Woolworths and other shops. We are forced to use other roads and laneways to get there which take longer and cause traffic to pass through laneways which are also used by pedestrians.</li> <li>• Will cause traffic holdups.</li> <li>• Absolutely ridiculous and badly thought out.</li> <li>• 1. It prevents convenient vehicular access to our area and to shops from Military Rd and creates unnecessary traffic congestion in adjacent streets. 2. It serves as a de facto justification for the creation of high rise residential developments on Military Rd, which has been approved by Council (contrary to what the Mayor had promised: "5 to 6 storey max") and which I oppose. 3. In its present form, it looks cheap and unattractive. The site is too small for a proper green park with lawn, playground and in-ground flowerbeds, and thus totally inappropriate for the project. 4. I am yet to be convinced that this development in its present form and as proposed serves any useful purpose for our community. 5. Parking for family use is a big problem and not a lot of families live within walking distance. They could use Grasmere Park instead. That is where Council should concentrate its spending, not Young St at Military Rd.</li> <li>• Young St entry to Military Rd should not be blocked. Access to Military Rd from Ben Boyd Rd, Waters Rd and Winnie St is very bad. In these three cases, pedestrians and cars are in competition for use of the intersections. Waters Road has been blocked and does not allow through traffic, so only two intersections are useful. One morning I waited in Winnie St for four changes of lights before I could turn left onto Military Rd because of the number of pedestrians crossing Military Rd. As the pedestrian crossing near Young St is closer to Ben Boyd Rd it allows traffic to turn left without pedestrian traffic and is safer for pedestrians. With anticipated increases in traffic volume and Harbour Bridge access more difficult, roads such as Young St should not be blocked.</li> <li>• Too much traffic now coming through Grosvenor Lane. Not seeing any real community benefit from the Plaza. Mostly it sits empty.</li> <li>• With Young St closed off to huge delivery trucks wanting to access Woolworths, now have to travel further into the suburb Inc the new lane, on side roads not configured for this. It is creating a negative traffic result and possibly dangerous and unnecessary. Bad idea.</li> <li>• The closure of Young St intersection with Military Rd has resulted in more vehicles using Grosvenor Ln. This Lane has become very dangerous to pedestrians due to the new 'shared arrangements' which has resulted in decreased safety to pedestrians. The parking bays in Grosvenor Ln are also very hard for motorists to use and this is another issue that impacts on pedestrian safety as motorists concentrate on trying to park successfully and are less aware of pedestrians attempting to walk around their vehicle.</li> <li>• Why spend \$\$\$ on beautifying Grosvenor Ln only to encourage cars to use it to access the car park? This is what has happened since the closure of Young St. Young St is the logical access road to the shopping centre. It has lost parking spots- to stop and quickly grab a paper for</li> </ul>

Level of Support	Verbatim Comments
	<p>example. I have read that part of the rationale is to enable pedestrians to cross the junction of Young Military Rd to access the bus stop, particularly B2 buses. Given that Military Rd is often gridlocked and there are pedestrian lights nearby there must be an alternative solution. I hope the Council grab the bull by the horns and improve the whole precinct with a coordinated plan. Look at what Lane Cove Council have achieved with their transformation of the old Council car park.</p> <ul style="list-style-type: none"> <li>• It has made Grosvenor Ln very busy and cars do not respect the speed limit or respect pedestrians.</li> <li>• Do not agree with closing the road as it causes more traffic congestion and turns nearby roads into rat runs. You should at least be able to turn into Young St from Military Rd.</li> </ul>
Neither/nor (n=3)	<ul style="list-style-type: none"> <li>• Seeing a lot more traffic flowing onto Merlin St (north) to Earnest St on weekdays, above the usual summer seasonal flow.</li> <li>• I visited Young Street last week to see what the 'plaza' looked like. I realise it is temporary at this stage but overall, the design was terrible! I'm not sure what you wanted to be achieved but a less welcoming site would be hard to find. Where's the greenery, the seats, something to make someone linger. It's awful.</li> <li>• Military Rd intersection at Winnie St should be monitored. Closure of Young St has increased pressure on this intersection. It is a major crossing from North to south and providing access to Military Rd. It is also an important pedestrian intersection.</li> </ul>

# Young Street Temporary Closure and Trial Plaza

Post-Implementation  
Transport Impact Assessment



Prepared by: GTA Consultants (Group) Pty Ltd for North Sydney Council  
on 10/06/2021  
Reference: N204900  
Issue #: B



now



# Young Street Temporary Closure and Trial Plaza

## Post-Implementation Transport Impact Assessment

Client: North Sydney Council

on 10/06/2021

Reference: N204900

Issue #: B

### Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
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A	28/04/2021	Final	Jason Huang Ashish Modessa	Steve Manton	Steve Manton	Steve Manton
B	10/06/2021	Final – Updated Pedestrian Surveys	Jason Huang Ashish Modessa	Steve Manton	Steve Manton	<i>P. Manton</i>

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GTA Report (NSW)



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## INTRODUCTION

# 1. INTRODUCTION

## 1.1. Background

North Sydney Council (Council) has temporarily closed a section of Young Street, Neutral Bay to vehicular traffic between Grosvenor Lane and Military Road, replacing it with a trial pedestrian plaza. The intent of the closure, which was implemented in December 2020, is to activate the area adjacent to the existing shopping and commercial strip for pedestrians and to encourage town centre placemaking for both residents and visitors.

The works are fully funded by Transport for NSW as part of the funding deed with Council for streetscape upgrade works along Military Road that complement the Northern Beaches B-Line Bus Service that commenced in 2018.

The closure of Young Street at Military Road was anticipated to result in a redistribution of traffic within the local road network, and the decision on whether to make the plaza a permanent feature is therefore contingent upon the observed traffic conditions and transport impacts arising from the road closure.

North Sydney Council commissioned GTA, now Stantec (GTA) in February 2021 to undertake a transport study to investigate the impacts of the road closure. This study follows an assessment of the potential impacts of the road closure that was undertaken by WSP in 2018 for Transport for NSW (TfNSW), prior to the closure, and assesses the traffic and transport conditions within the network after the closure.

## 1.2. Purpose of this Report

This report provides an assessment of the transport impacts and implications arising from the temporary road closure and trial plaza, including consideration of the following:

- traffic and parking conditions prior to the Young Street Closure
- traffic and parking conditions as a result of the Young Street closure
- access arrangements as a result of the Young Street closure
- suitability of the proposed closure for the surrounding network
- the transport impact of the road closure on the surrounding road network.

## 1.3. References

In preparing this report, reference has been made to the following:

- inspections of the site and its surrounds conducted by GTA in February 2021
- *Young Street Road Closure Traffic Impact Assessment, December 2018* prepared by WSP
- Traffic surveys undertaken by Matrix Traffic and Transport for North Sydney Council, dated October 2020
- traffic surveys undertaken by Matrix Traffic and Transport for GTA, dated February 2021 and May 2021
- other documents and data as referenced in this report.

EXISTING CONDITIONS

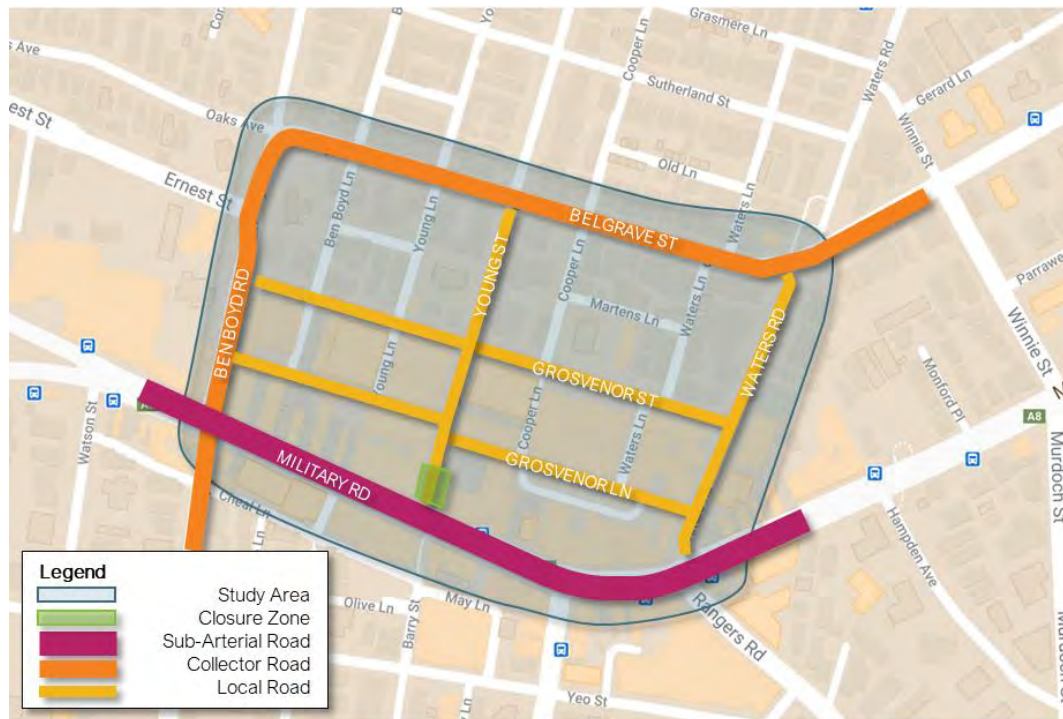
# 2. EXISTING CONDITIONS

## 2.1. Location

The temporary road closure and associated trial plaza is located at the southern end of Young Street within the Neutral Bay town centre (the study area). The existing road network within the study area that has been examined as part of this assessment consists of Military Road, Young Street, Ben Boyd Road, Belgrave Street, Grosvenor Street, Grosvenor Lane and Waters Road. The local road network within the study area is observed to be set out in a general grid pattern. Further details of key roads within the study area are provided in Section 2.2.2.

Figure 2.1 outlines the road network analysed as part of this study.

Figure 2.1: Study area and key roads



Base image source: Google Maps, accessed February 2021

## 2.2. Transport Network

### 2.2.1. 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.

## EXISTING CONDITIONS

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. TfNSW is 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.

TfNSW defines four levels in a typical functional road hierarchy, ranked from high mobility and low accessibility, to high accessibility and low mobility. These road classes comprise:

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

**Sub-Arterial Roads** – Managed by either Council or TfNSW 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.

### 2.2.2. Surrounding Road Network

#### Military Road

Military Road is classified as a State main road (MR164) and functions as a sub arterial road. In the vicinity of the site it is aligned in an east-west direction and is a two-way road configured with three lanes in the eastbound direction and two lanes in the westbound direction, set within an approximately 24-metre-wide road reserve.

The road is subject to 60 kilometres per hour speed zoning. Kerbside parking is not permitted on either side of the road.

Military Road is shown in Figure 2.2 and Figure 2.3, and carries approximately 74,000 vehicles per day.

Figure 2.2: Military Road (looking east)



Figure 2.3: Military Road (looking west)



**EXISTING CONDITIONS**

**Ben Boyd Road**

Ben Boyd Road functions as a collector road and in the vicinity of the site is aligned in a north-south direction. It is a two-way road configured with one lane in each direction, set within an approximately 20-metre-wide road reserve.

The road is subject to 50 kilometres per hour speed zoning. Kerbside parking is permitted, subject to time restrictions.

Ben Boyd Road is shown in Figure 2.4 and Figure 2.5, and carries approximately 6,000 vehicles per day.

Figure 2.4: Ben Boyd Road (looking north)



Figure 2.5: Ben Boyd Road (looking south)



**Belgrave Street**

Belgrave Street functions as a collector road and in the vicinity of the site is aligned in an east-west direction. It is a two-way road configured with two lanes in the westbound direction and one-lane in the eastbound direction, set within an approximately 19-metre-wide road reserve.

The road is subject to 50 kilometres per hour speed zoning. Kerbside parking is permitted, subject to time restrictions on the northern side of the street and carries approximately 20,000 vehicles per day.

Belgrave Street is shown in Figure 2.6 and Figure 2.7.

Figure 2.6: Belgrave Street (looking east)



Figure 2.7: Belgrave Street (looking west)



**Young Street**

Young Street functions as a local road and in the vicinity of the site is aligned in a north-south direction. It is a two-way road configured with one lane in each direction, set within an approximately 20-metre-wide road reserve.

**EXISTING CONDITIONS**

The road is subject to 50 kilometres per hour speed zoning. Kerbside parking is permitted, subject to time restrictions and is ticketed in some sections. Residents' permits allow for unrestricted parking.

Young Street is shown in Figure 2.8 and Figure 2.9, and carries approximately 2,000 vehicles per day.

Figure 2.8: Young Street (looking north)



Figure 2.9: Young Street (looking south)



**Waters Road**

Waters Road functions as a local road and in the vicinity of the site is aligned in a north-south direction. It is a two-way road configured with one lane in each direction, set within an approximately 19-metre-wide road reserve.

The road is subject to 50 kilometres per hour speed zoning outside of school zones. Kerbside parking is permitted, subject to time restrictions and residents' exemptions.

Waters Road is shown in Figure 2.10 and Figure 2.11, and carries approximately 2,500 vehicles per day.

Figure 2.10: Waters Road (looking north)



Figure 2.11: Waters Road (looking south)



**Grosvenor Street**

Grosvenor Street functions as a local road and in the vicinity of the site is aligned in an east-west direction. It is a two-way road configured with one lane in each direction, set within an approximately 18-metre-wide carriageway.

The road is subject to 50 kilometres per hour speed zoning. Kerbside parking is permitted, subject to time restrictions. A combination of right-angle parking and parallel parking is provided on-street.

Grosvenor Street is shown in Figure 2.12 and Figure 2.13, and carries approximately 1,800 vehicles per day.

## EXISTING CONDITIONS

Figure 2.12: Grosvenor Street (looking east)



Figure 2.13: Grosvenor Street (looking west)



### Grosvenor Lane

Grosvenor Lane functions as a local road and in the vicinity of the site is aligned in an east-west direction. It is a one-way eastbound road, set within an approximately 10-metre-wide carriageway.

The street is classified as a shared zone along its full length between Ben Boyd Road and Waters Road with 10 kilometre per hour speed zoning. Between Cooper Lane and Waters Lane, the street operates as a circulation road for an at-grade car park. Parallel / angle parking spaces are marked/ indented off the carriageway.

Grosvenor Lane is shown in Figure 2.14 and Figure 2.15, and carries approximately 1,700 vehicles per day.

Figure 2.14: Grosvenor Lane (looking east)



Figure 2.15: Grosvenor Lane (looking west)



### 2.2.3. Surrounding Intersections

The following key intersections have been analysed as part of the study:

1. Military Road/ Ben Boyd Road
2. Military Road/ Young Street (closed as part of Young Street closure)
3. Military Road/ Wycombe Road
4. Military Road/ Rangers Road/ Waters Road
5. Ben Boyd Road/ Grosvenor Lane
6. Young Street/ Grosvenor Lane (restricted as part of Young Street closure)
7. Waters Road/ Grosvenor Lane
8. Ben Boyd Road/ Grosvenor Street

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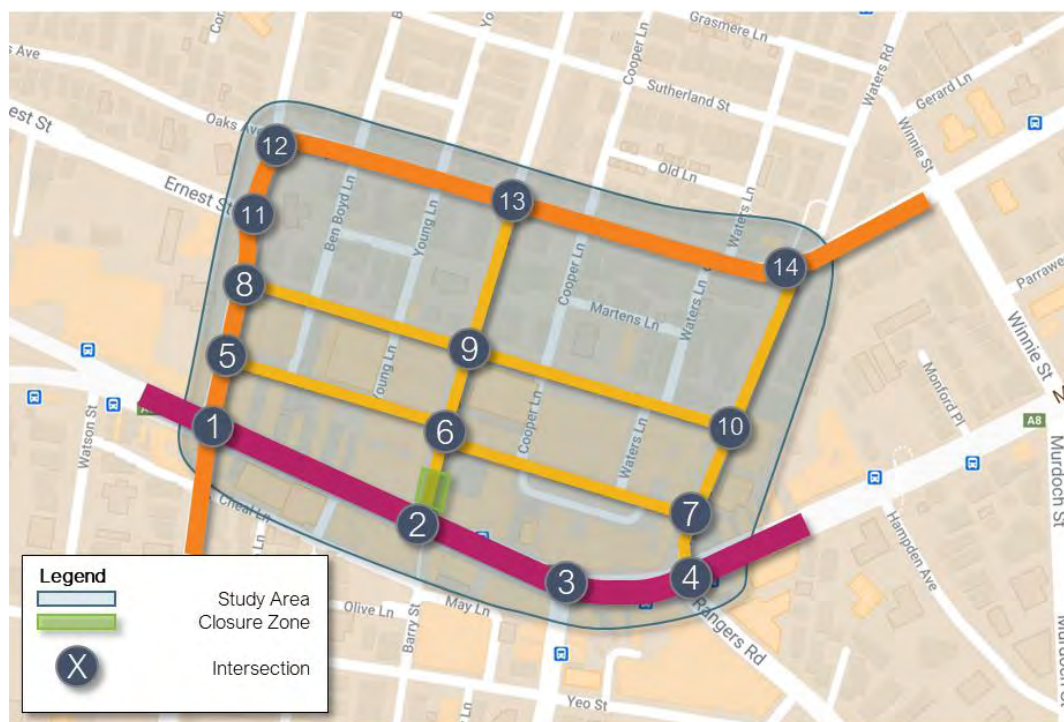
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**EXISTING CONDITIONS**

- 9. Young Street/ Grosvenor Street
- 10. Waters Road/ Grosvenor Street
- 11. Ben Boyd Road/ Ernest Street
- 12. Ben Boyd Road/ Oaks Avenue/ Belgrave Street
- 13. Belgrave Street/ Young Street
- 14. Belgrave Street/ Waters Road/ Gerard Street.

These intersections are shown in Figure 2.16.

Figure 2.16: Study intersections



Base image source: Google Maps, accessed February 2021

**2.3. On-Street Parking**

Site inspections conducted on 18 February 2021 during the AM and PM peak periods provided the opportunity to observe and gain a qualitative appreciation of the parking demand and supply within the commercial centre. Generally, on-street parking within the study area was shown to be well utilised but with some spare capacity, and it is expected that drivers would for the most part be able to find a parking space reasonably close to their desired destination.

Due to the short-term nature of some on-street parking, many parking manoeuvres were observed within the study area, slowing traffic circulation for general traffic.

**EXISTING CONDITIONS**

Approximately 10 short-term parking spaces were removed as a result of the Young Street closure, however, as indicated above there is still some spare on-street parking available on a typical weekday within the study area.

Figure 2.17: General parking restriction



Figure 2.18: General parking supply- Grosvenor Lane



**2.4. Operational Vehicular Access (with Young Street Closure)**

The pedestrianisation of the subject section of Young Street has been implemented in such a way that the loading and unloading arrangements are mostly undisturbed compared to conditions that existed prior to the Young Street closure, with vehicular access to 5 Young Street and its underground loading bay maintained. Notably, the Young Street closure includes two 'levels' of pedestrianisation: an initial level extending 10 metres south from the Grosvenor Lane intersection to the 5 Young Street driveway, which involves differential road marking and painting to signify the intent of the area and increase driver awareness; and a second level including bollards barring vehicular entry into Young Street between the bollards and Military Road.

Photos showing the different treatments are provided in Figure 2.19 and Figure 2.20 below.

Figure 2.19: Road paint treatment



Figure 2.20: Bollard treatment



**2.5. Public Transport**

Bus provision is mostly unchanged from pre-closure conditions. A review of the major bus routes available near the site is summarised in Table 2.1 and shown indicatively in Figure 2.21.



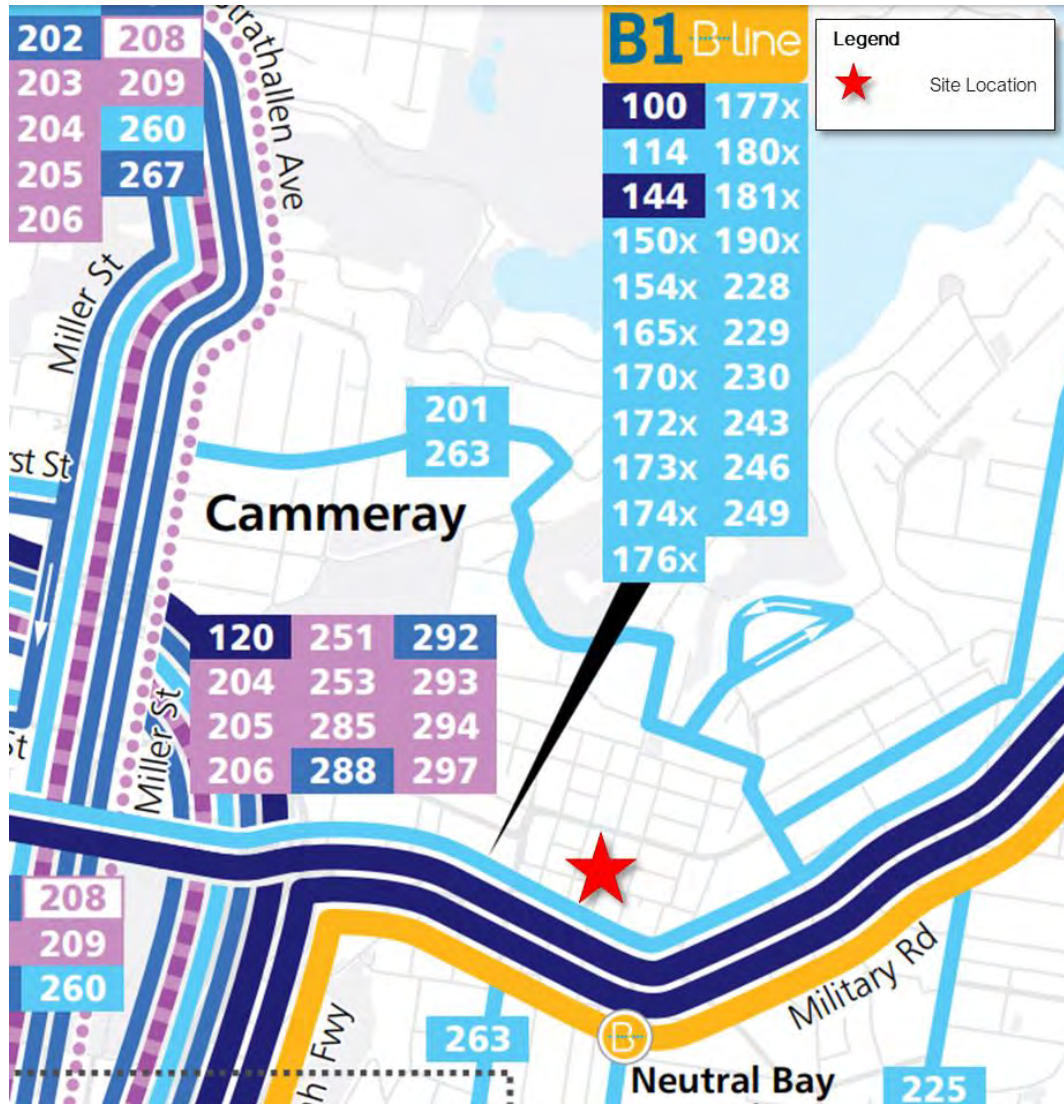
## EXISTING CONDITIONS

Table 2.1: Bus provision

Route number	Route description	Frequency – AM Peak	Frequency – PM Peak	Frequency – Weekend Peak
B1	Express Mona Vale to City	1 per 6-10 minutes	1 per 6-10 minutes	1 per 10 minutes
100	Taronga Zoo to City QVB (Loop)	1 per 5 minutes	1 per 5 minutes	1 per 5 minutes
114	Balmoral to RNS Hospital	1 per 10 minutes	1 per 10 minutes	1 per 20 minutes
144	Manly to Chatswood	1 per 6-10 minutes	1 per 10 minutes	1 per 10 minutes
150X	Manly to Milsons Point	1 per 7-8 minutes	1 per 10 minutes	N/A
165X	South Curl Curl to City Wynyard	1 per 4 minutes	1 per 10 minutes	N/A
172X	Warringah Mall to City Wynyard	1 per 4 minutes	1 per 10 minutes	1 per hour
173X	Express Warringah Mall to City Wynyard	1 per 20 minutes	1 per 20 minutes	1 per 20 minutes
243, 246, 247, 248, 249	Military Road to City	1 per 5-10 minutes	1 per 5-10 minutes	N/A

EXISTING CONDITIONS

Figure 2.21: Surrounding public transport network



Base image source: Transport for NSW, accessed 25 February 2021

Public transport provisions are mostly unchanged as a result of the Young Street closure. Route changes were observed to have occurred over the period, but these are related to other developments. Other minor routes are present in the network, but provide very specific and infrequent services.

2.6. Walking and Cycling Infrastructure

Footpaths are provided along Military Road and most local streets within the study area, except some laneways where footpaths are narrow or disconnected. A shared zone is implemented along the full length of Grosvenor Lane between Ben Boyd Road and Waters Road, where the default speed limit is reduced to 10 km/h and vehicles are required to give way to pedestrians.

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**EXISTING CONDITIONS**

Signalised pedestrian crossings are provided on all legs of most intersections within the study area.

At Belgrave Street and Young Street, signalised pedestrian crossings are only provided on the east and west legs. Partial provision of crossing facilities at this intersection results in a disconnection of pedestrian access in an east-west direction.

Additionally, a pedestrian crossing is not provided on the western leg of the Belgrave Street and Waters Road intersection. Pedestrians crossing at this location would need to utilise the crossing facilities on other legs and travel a longer distance.

Other facilities within the study area include a pedestrian (zebra) crossing on Waters Road, south of Grosvenor Street. Ben Boyd Road, Young Street and Waters Road all provide north-south access for pedestrians within the study area connecting Military Road. There are also pedestrian laneways and through-building connections between the Grosvenor Lane car park and Military Road.

Young Street is centrally located within the Neutral Bay town centre and attracts the most pedestrian demand and activity amongst the three north-south links. Young Street also intersects with Grosvenor Lane and Grosvenor Street, where high pedestrian activities are already generated by the existing shared zone, on-street and off-street parking and nearby shops.

During both peaks, moderate pedestrian volumes were generally observed, concentrated in the core retail area on and surrounding the Grosvenor Lane car park.

Pedestrian facilities are shown in Figure 2.22.

Figure 2.22: Surrounding pedestrian facilities



Base map: Google Maps, accessed 23 April 2021

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**EXISTING CONDITIONS**

High levels of cycling traffic were observed along Military Road. Young Street has been identified as a potential new cycling route in the future.

The surrounding cycling infrastructure is shown in Figure 2.23.

Figure 2.23: Surrounding cycling network



Base image source: Northern Sydney Cycling Map, North Sydney Council, accessed 25 February 2021

**2.7. Origin- Destination Travel Behaviour**

WSP commissioned origin-destination surveys on Thursday 14 June and Saturday 16 June 2018. For the purpose of assessment, it has been assumed that the 2021 origins and destinations are effectively the same as in 2018, as no disproportionate development has occurred between 2018 and 2021. All traffic movements previously observed at the intersection of Military Road and Young Street (which pre-closure permitted left-turn in and left-turn out movements only) would therefore be expected to be redirected to the most relevant intersection according to that survey data.

The origin-destination surveys generally showed that most vehicles entering Young Street at the intersection of Military Road and Young Street would be either accessing the car park (Woolworths) east down Grosvenor Lane, or heading through to the intersection of Belgrave Street and Young Street to exit the network. Vehicles egressing from Young Street at the Military Road and Young Street intersection would be travelling from Belgrave Street and Grosvenor Street. The critical traffic data related to the pre-closure traffic movements between Military Road and Young Street is presented in Table 2.2 and Table 2.3.

As can be observed from Table 2.2, the volumes of traffic at the Military Road/ Young Street intersection prior to its closure were modest only, being less than 100 veh/ hr in or out in each of the observed peak periods.

## EXISTING CONDITIONS

Table 2.2: Pre-closure volumes in and out of Young Street

Peak Period	Left Turn in from Military Road	Left Turn out into Military Road
Weekday AM	71 veh/ hr	46 veh/ hr
Weekday PM	96 veh/ hr	55 veh/ hr
Saturday Middy	93 veh/ hr	89 veh/ hr

Table 2.3: Origin-destination proportion results – Military Road/ Young Street

Peak Period	Direction	To/ From Young Street				
		Grosvenor Ln E(in)/ W(out)	Grosvenor St W	Grosvenor St E	Belgrave St	Within Network
Weekday AM	Into study area – northbound from intersection	31%	20%	7%	31%	11%
Weekday PM		34%	13%	5%	38%	10%
Saturday Middy		34%	22%	6%	24%	14%
Weekday AM	Out of study area – southbound from intersection	20%	22%	33%	26%	0%
Weekday PM		18%	24%	20%	38%	0%
Saturday Middy		11%	26%	17%	46%	0%

## TRAFFIC ANALYSIS

## 3. TRAFFIC ANALYSIS

### 3.1. Pre-Closure Traffic

#### 3.1.1. Traffic Volumes

##### Intersection

WSP commissioned traffic movement counts at 14 key intersections within the vicinity of the site in June 2018 during the following peak periods:

- Weekday AM: 6:00am to 10:00am
- Weekday PM: 3:00pm to 7:00pm
- Saturday Midday: 10:00am to 2:00pm.

The Weekday AM and PM peak hours for the intersections within the network as a whole were found to occur from 7:30am to 8:30am and 4:45pm to 5:45pm respectively, while the Saturday midday peak occurred from 12:15pm to 1:15pm. The WSP peak hour intersection volumes are summarised in Table 3.1.

These volumes have been compared with intersection counts commissioned by Council in October 2020, just before the closure of the subject section of Young Street and the associated intersections with Military Road and Grosvenor Lane, to examine the background traffic growth in the intervening period and the potential impacts arising from COVID-19. The October 2020 counts were conducted at four intersections only, as shown in Table 3.2.

**Table 3.1: Pre-closure intersection traffic volumes (WSP - June 2018)**

Intersection	Peak Period	Volume
Military Road/ Ben Boyd Road	AM	4,672
	PM	4,818
	Sat	5,093
Military Road/ Young Street (pre-closure)	AM	3,952
	PM	4,091
	Sat	4,327
Military Road/ Wycombe Road	AM	4,053
	PM	4,172
	Sat	4,609
Military Road/ Rangers Road/ Waters Road	AM	4,102
	PM	4,243
	Sat	4,689
Ben Boyd Road/ Grosvenor Lane	AM	718
	PM	784
	Sat	862

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Intersection	Peak Period	Volume
Young Street/ Grosvenor Lane (pre-closure)	AM	283
	PM	412
	Sat	468
Waters Road/ Grosvenor Lane	AM	213
	PM	273
	Sat	312
Ben Boyd Road/ Grosvenor Street	AM	695
	PM	723
	Sat	822
Young Street/ Grosvenor Street	AM	587
	PM	840
	Sat	914
Waters Road/ Grosvenor Street	AM	377
	PM	514
	Sat	515
Ben Boyd Road/ Ernest Street	AM	2,856
	PM	2,874
	Sat	2,291
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	2,733
	PM	2,791
	Sat	2,276
Belgrave Street/ Young Street	AM	2,871
	PM	3,029
	Sat	2,480
Belgrave Street/ Waters Road/ Gerard Street	AM	2,666
	PM	2,786
	Sat	2,265

## TRAFFIC ANALYSIS

Table 3.2: Pre-closure intersection traffic volumes (Council - October 2020)

Intersection	Peak Period	Volume	% Increase over 2018
Military Road/ Ben Boyd Road	AM	5,005	7%
	PM	5,033	4%
	Sat	4,566	-10%
Military Road/ Rangers Road/ Waters Road	AM	4,476	9%
	PM	4,602	8%
	Sat	4,246	2%
Ben Boyd Road/ Grosvenor Lane	AM	707	-2%
	PM	751	-4%
	Sat	744	-14%
Ben Boyd Road/ Grosvenor Street	AM	702	1%
	PM	793	10%
	Sat	752	-9%
<b>TOTAL (AM Peak)</b>		<b>10,890</b>	<b>7%</b>
<b>TOTAL (PM Peak)</b>		<b>11,179</b>	<b>6%</b>
<b>TOTAL (Saturday Peak)</b>		<b>10,308</b>	<b>-10%</b>

Based on the above data, the 2020 surveyed volumes in the weekday AM and PM peak periods were on average approximately 6% higher than the 2018 surveyed volumes, suggesting a 3% per annum growth rate. Conversely, the Saturday midday peak volumes are observed to have decreased by approximately 5% p.a.

It is likely that the recent trends observed in traffic volumes may be explained in part by the coronavirus restrictions on bus capacity and general community concerns regarding public transport usage, with car drivership in broad terms observed to increase significantly in 2020 for commuter trips (i.e. corresponding to the weekday AM and PM peak hours). Conversely, weekend peak hour trips may have reduced due to a reduction in non-essential travel.

As a result, it is considered likely that the traffic counts conducted by Council have been impacted by the effects of COVID-19 to some extent and are potentially a little higher or lower (depending on the period in question) than would otherwise be the case. However, in broad terms the traffic volumes in 2018 and 2020 are still of a similar magnitude to each other, and a comparison of the pre-closure data with counts conducted by GTA post-closure (which may also include some travel behaviour impacts arising from COVID-19) is considered to be reasonable for the purposes of this study.

### Mid-Block

Council commissioned mid-block counts in October 2020 within the network. The locations of these counts are shown in Figure 3.1 and the average daily traffic (ADT) volumes have been tabulated in Table 3.3.

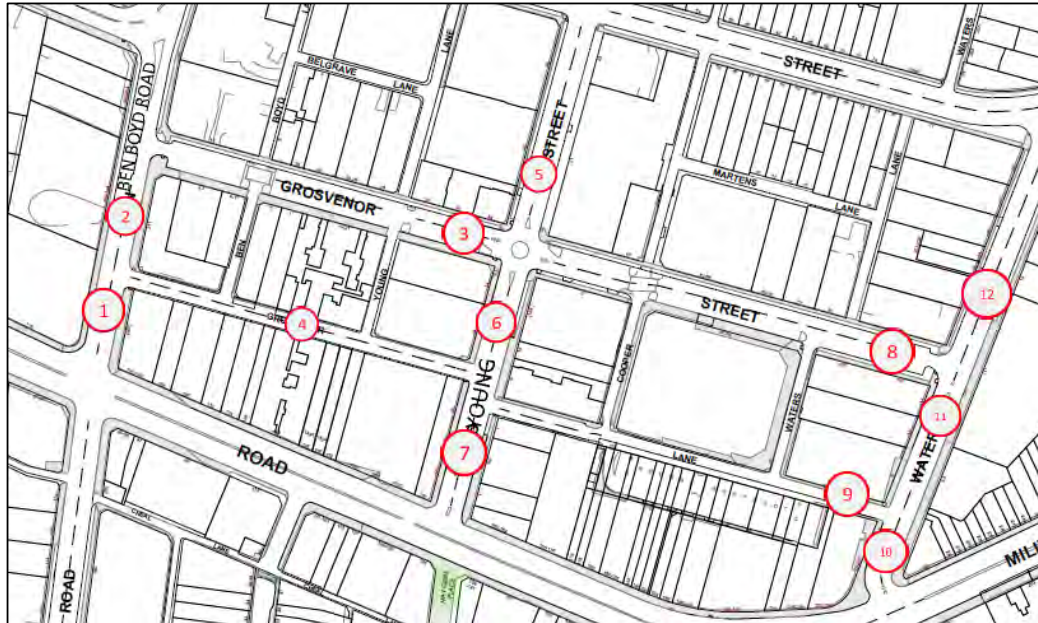
As noted in the previous section, since these counts were conducted during COVID-19 they too are likely to have been impacted a little by changes in travel behaviour arising from the pandemic. However, given that they were conducted at the same time as Council's intersection counts, then similar outcomes to those



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discussed in the previous section would be expected, and the use of the data as a pre-closure comparator with GTA's post-closure survey data is concluded to represent a reasonable approach.

Figure 3.1: Mid-block count locations



Source: North Sydney Council (2020)

Table 3.3: Pre-closure mid-block traffic volumes (Council - October 2020)

Reference No.	Street	Between	Direction	ADT Volume
1	Ben Boyd Road	Grosvenor Lane and Military Road	North	4,957
			South	2,687
2	Ben Boyd Road	Grosvenor Street and Grosvenor Lane	North	2,861
			South	4,346
3	Grosvenor Street	Young Street and Ben Boyd Road	East	1,661
			West	3,064
4	Grosvenor Lane	Young Street and Ben Boyd Road	East	1,262
			West	N/A
5	Young Street	Belgrave Street and Grosvenor Street	North	2,106
			South	2,496
6	Young Street	Grosvenor Street and Grosvenor Lane	North	1,687
			South	1,775
7	Young Street	Grosvenor Lane and Military Road	North	1,570
			South	1,018

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Reference No.	Street	Between	Direction	ADT Volume
8	Grosvenor Street	Waters Road and Young Street	East	1,618
			West	2,437
9	Grosvenor Lane	Waters Road and Young Street	East	1,576
			West	12
10	Waters Road	Grosvenor Lane and Military Road	North	622
			South	1,203
11	Waters Road	Grosvenor Street and Grosvenor Lane	North	2,150
			South	989
12	Waters Road	Belgrave Street and Grosvenor Street	North	2,157
			South	1,731

### 3.1.2. Intersection Operation

The operation of the key intersections within the study area was previously assessed by WSP using SIDRA INTERSECTION<sup>1</sup> (SIDRA), a computer-based modelling package which calculates intersection performance.

The commonly used measure of intersection performance, as defined by the TfNSW, is vehicle delay. SIDRA 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 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 pre-closure operation of the network, reproduced from WSP's report<sup>2</sup>.

<sup>1</sup> Program used under license from Akcelik & Associates Pty Ltd.

<sup>2</sup> *Young Street Road Closure Traffic Impact Assessment*, December 2018 prepared by WSP

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Table 3.5: Pre-closure operating conditions (WSP – 2018 modelling results)

Intersection	Peak	Cycle Time (if applicable) (sec)	Degree of saturation (DOS)	Average delay (sec)	95th percentile queue (m)	Level of service (LOS)
Military Road/ Ben Boyd Road	AM	130	0.93	20	330	LOS B
	PM	130	0.90	14	225	LOS A
	Sat	130	0.96	17	294	LOS B
Military Road/ Young Street (pre-closure)	AM	130	0.91	10	229	LOS A
	PM	130	0.82	4	146	LOS A
	Sat	130	0.80	2	111	LOS A
Military Road/ Wycombe Road	AM	130	0.96	10	171	LOS A
	PM	130	0.98	11	171	LOS A
	Sat	130	0.99	14	132	LOS A
Military Road/ Rangers Road/ Waters Road	AM	N/A	0.62	36	167	LOS C
	PM	N/A	0.76	28	156	LOS B
	Sat	N/A	0.74	15	145	LOS B
Ben Boyd Road/ Grosvenor Lane	AM	N/A	0.25	4	9	LOS A
	PM	N/A	0.27	4	18	LOS A
	Sat	N/A	0.36	1	48	LOS A
Young Street/ Grosvenor Lane (pre-closure)	AM	N/A	0.09	8	3	LOS A
	PM	N/A	0.14	9	4	LOS A
	Sat	N/A	0.16	9	5	LOS A
Waters Road/ Grosvenor Lane	AM	N/A	0.07	8	2	LOS A
	PM	N/A	0.11	8	3	LOS A
	Sat	N/A	0.12	8	3	LOS A
Ben Boyd Road/ Grosvenor Street	AM	N/A	0.32	12	7	LOS A
	PM	N/A	0.26	12	7	LOS A
	Sat	N/A	0.28	13	8	LOS A
Young Street/ Grosvenor Street	AM	N/A	0.16	9	7	LOS A
	PM	N/A	0.26	10	12	LOS A
	Sat	N/A	0.27	10	12	LOS A
Waters Road/ Grosvenor Street	AM	N/A	0.10	6	3	LOS A
	PM	N/A	0.14	5	4	LOS A
	Sat	N/A	0.14	7	4	LOS A
Ben Boyd Road/ Ernest Street	AM	90	0.77	13	73	LOS A
	PM	95	0.66	12	65	LOS A
	Sat	90	0.68	17	73	LOS B

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Intersection	Peak	Cycle Time (if applicable) (sec)	Degree of saturation (DOS)	Average delay (sec)	95th percentile queue (m)	Level of service (LOS)
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	N/A	0.50	49	38	LOS D
	PM	N/A	0.53	54	4	LOS D
	Sat	N/A	0.50	33	84	LOS C
Belgrave Street/ Young Street	AM	90	0.73	11	128	LOS A
	PM	95	0.92	21	176	LOS B
	Sat	90	0.94	24	129	LOS B
Belgrave Street/ Waters Road/ Gerard Street	AM	90	0.69	9	64	LOS A
	PM	95	0.90	13	132	LOS A
	Sat	90	0.91	15	159	LOS B

Table 3.5 indicates that prior to the closure, each intersection was operating satisfactorily with a maximum LOS of C and maximum average delay of 36 seconds. The only exception to this was at the priority-controlled intersection of Ben Boyd Road/ Oaks Avenue/ Belgrave Street, where a maximum LOS of D was predicted in the AM and PM peak periods and an average delay up to 54 seconds. However, this was deemed to be acceptable by WSP, with a maximum DOS of 0.53 indicating spare capacity available at this location. Furthermore, a model LOS of A was predicted for the study area as a whole, indicating generally low delay times.

Military Road, while operating at a satisfactory level of service overall, experiences high degrees of saturation of up to 0.99 indicating it is approaching capacity. This is typical for high demand sub-arterial roads which support broader regional movement patterns.

### 3.1.3. Queueing

WSP carried out site inspections during 2018 on both a weekday and a weekend period to get an understanding of pre-closure road conditions. The following observations were made in relation to queuing on the road network at that time.

#### Military Road

Intersecting Ben Boyd Road, the eastbound queuing extended approximately 210 metres west, beyond its capacity. Otherwise, generally slow-moving queues were observed.

#### Belgrave Street

Eastbound queuing was noticed on Belgrave Street west of Waters Road and extending beyond the study area. In particular, the right turn into Young Street was noted to experience significant delays due to heavy traffic in both directions.

#### Young Street

Due to vehicles looking for on-street parking, vehicles moved slower than necessary and queued behind the lead vehicle.

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### Ben Boyd Road

Ben Boyd Road allows for on-street parking on Saturdays. Therefore, the reduction from two lanes to one lane southbound results in queuing in the Saturday peak.

### Grosvenor Lane

Parking turnover resulted in delays along the street in both directions at its eastern end.

Table 3.6 tabulates the traffic survey queue length data obtained at selected locations by WSP. It is noted that one vehicle length equates to approximately 7.5 metres of space.

**Table 3.6: Pre-closure queuing survey (WSP – 2018)**

Intersection Name	Peak	95 <sup>th</sup> Percentile Queue Lengths (Rounded)			
		South	East	North	West
Military Road/ Ben Boyd Road	AM	13 vehicles	13 vehicles	12 vehicles	9 vehicles
	PM	8 vehicles	12 vehicles	8 vehicles	9 vehicles
	Sat	12 vehicles	11 vehicles	14 vehicles	10 vehicles
Military Road/ Young Street (pre-closure)	AM	N/A	9 vehicles	0 vehicles	14 vehicles
	PM	N/A	13 vehicles	0 vehicles	12 vehicles
	Sat	N/A	14 vehicles	0 vehicles	11 vehicles
Military Road/ Wycombe Road	AM	9 vehicles	8 vehicles	N/A	10 vehicles
	PM	9 vehicles	10 vehicles	N/A	14 vehicles
	Sat	8 vehicles	8 vehicles	N/A	12 vehicles
Military Road/ Rangers Road/ Waters Road	AM	3 vehicles	18 vehicles	5 vehicles	0 vehicles
	PM	2 vehicles	25 vehicles	3 vehicles	15 vehicles
	Sat	7 vehicles	25 vehicles	6 vehicles	13 vehicles
Ben Boyd Road/ Ernest Street	AM	7 vehicles	N/A	7 vehicles	5 vehicles
	PM	6 vehicles	N/A	5 vehicles	7 vehicles
	Sat	6 vehicles	N/A	5 vehicles	4 vehicles
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	1 vehicle	<1 vehicle	1 vehicle	1 vehicle
	PM	13 vehicles	6 vehicles	2 vehicles	2 vehicles
	Sat	10 vehicles	12 vehicles	1 vehicle	1 vehicle
Belgrave Street/ Young Street	AM	4 vehicles	9 vehicles	6 vehicles	8 vehicles
	PM	6 vehicles	12 vehicles	7 vehicles	13 vehicles
	Sat	5 vehicles	12 vehicles	7 vehicles	15 vehicles
Belgrave Street/ Waters Road/ Gerard Street	AM	4 vehicles	8 vehicles	N/A	15 vehicles
	PM	17 vehicles	12 vehicles	N/A	18 vehicles
	Sat	11 vehicles	9 vehicles	N/A	18 vehicles

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### 3.1.4. Pedestrian Volumes

WSP included pedestrian volumes in their SIDRA models (where applicable), collected as part of their pre-closure intersection counts. A summary of the pre-closure pedestrian volumes extracted from the WSP SIDRA models (where available) has been tabulated in Table 3.17 alongside the 2021 post-closure volumes.

## 3.2. Post-Closure Traffic

### 3.2.1. Traffic Volumes

#### Intersection

GTA commissioned traffic counts to capture the intersection turning movements at the same 14 key study intersections previously surveyed by WSP, following the closure of Young Street to vehicular traffic. The surveys were conducted on Thursday 18 February 2021 and Saturday 20 February 2021 during the following peak periods:

- Thursday:
  - 7:00am to 9:00am
  - 4:00pm to 6:00pm.
- Saturday
  - 11:45am to 1:45pm.

Some additional traffic counts were subsequently undertaken at two of the intersections on Thursday 13 May 2021 for the same periods as discussed in a later section. These counts were requested by Council to examine the potential impacts of rain during the PM peak on the original Thursday count, although with a primary focus on the pedestrian movements observed at those intersections.

The AM and PM peak hours were found to occur from 7:30am to 8:30am and 4:30pm to 5:30pm respectively, while the weekend peak occurred from 12:00pm to 1:00pm. A summary of the intersection traffic volumes at each location is provided in Table 3.7. Full survey results are contained in Appendix A.

**Table 3.7: Post-closure intersection volumes (GTA 2021)**

Intersection	Peak Period	Volume <sup>1</sup>
Military Road/ Ben Boyd Road	AM	5,180
	PM	4,991
	Sat	4,997
Military Road/ Young Street (post-closure)	AM	4,383
	PM	4,172
	Sat	N/A
Military Road/ Wycombe Road	AM	4,602
	PM	4,293
	Sat	N/A
Military Road/ Rangers Road/ Waters Road	AM	4,631
	PM	4,510

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Intersection	Peak Period	Volume <sup>1</sup>
	Sat	4,428
Ben Boyd Road/ Grosvenor Lane	AM	760
	PM	821
	Sat	808
Young Street/ Grosvenor Lane (post-closure)	AM	160
	PM	238
	Sat	N/A
Waters Road/ Grosvenor Lane	AM	310
	PM	330
	Sat	N/A
Ben Boyd Road/ Grosvenor Street	AM	741
	PM	785
	Sat	769
Young Street/ Grosvenor Street	AM	571
	PM	662
	Sat	N/A
Waters Road/ Grosvenor Street	AM	497
	PM	465
	Sat	N/A
Ben Boyd Road/ Ernest Street	AM	2,594
	PM	2,311
	Sat	N/A
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	2,515
	PM	2,239
	Sat	N/A
Belgrave Street/ Young Street	AM	2,461
	PM	2,446
	Sat	N/A
Belgrave Street/ Waters Road/ Gerard Street	AM	2,619
	PM	2,243
	Sat	N/A

<sup>1</sup> N/A indicates the particular intersection was only surveyed on a weekday and not on a Saturday.

A discrepancy is observed between the volumes noted along Belgrave Street, westbound. This can be understood as traffic arising from rat-running along minor streets, allowing vehicles to enter and exit the network without passing through the Belgrave Street/ Young St intersection. Namely, Ben Boyd Lane, Young

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Lane, Cooper Lane and Waters Lane are all likely to be rat-running routes which allow left-turning vehicles to avoid Belgrave Street/ Young Street, a signalised intersection. This is expected to have little impact on the modelling as it pertains to Young Street's Closure.

### Midblock

GTA Consultants commissioned mid-block traffic counts concurrent to the intersection counts above, with identical locations to those shown previously in Figure 3.1 (with the exception of Location 7, which has been removed due to the Young Street closure). Table 3.8 shows the volumes recorded.

**Table 3.8: Post-closure mid-block traffic volumes (February 2021)**

Reference No.	Street	Between	Direction	ADT Volume
1	Ben Boyd Road	Grosvenor Lane and Military Road	North	6,007
			South	2,996
2	Ben Boyd Road	Grosvenor Street and Grosvenor Lane	North	4,973
			South	3,111
3	Grosvenor Street	Young Street and Ben Boyd Road	East	1,603
			West	2,783
4	Grosvenor Lane	Young Street and Ben Boyd Road	East	1,635
			West	5
5	Young Street	Belgrave Street and Grosvenor Street	North	1,939
			South	2,417
6	Young Street	Grosvenor Street and Grosvenor Lane	North	1082
			South	1386
7	Young Street	Grosvenor Lane and Military Road	North	N/A
			South	N/A
8	Grosvenor Street	Waters Road and Young Street	East	1,900
			West	2,750
9	Grosvenor Lane	Waters Road and Young Street	East	1,708
			West	20
10	Waters Road	Grosvenor Lane and Military Road	North	1,346
			South	1,527
11	Waters Road	Grosvenor Street and Grosvenor Lane	North	2,620
			South	1,259
12	Waters Road	Belgrave Street and Grosvenor Street	North	2,330
			South	1,761



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### 3.2.2. SIDRA Methodology

#### Model Assumptions

SIDRA intersection modelling was completed by WSP for the study area in 2018 and was made available to GTA for the purpose of this review. To understand the impacts to the adjacent road network of closing the subject section of Young Street to vehicular traffic, the WSP SIDRA network models were used.

The model for this study was created only for the year 2021 and no future years were analysed. Considering historic data from the TfNSW Traffic Volume Viewer indicates a general negative growth in annual average daily traffic near the site (Station 21029, on Military Road 100 metres west of Ben Boyd Road), an assumption (where necessary) of no growth/ change from WSP's 2018 volumes and current 2021 volumes was considered to be representative.

Additionally, the following methodology was adopted to develop current conditions models:

- Traffic volumes were updated with the 2021 surveyed volumes. It is noted that the current surveys did not identify buses as a separate classification. Therefore, the bus volumes from the WSP models were maintained, and subtracted from the surveyed heavy vehicle classification to identify the heavy vehicle (excluding buses) volumes.
- Intersection/ road geometry has been updated where appropriate.
- Pedestrian volumes were updated with the 2021 surveyed volumes.
- SCATS traffic signal data for the survey day was analysed to identify the operational cycle length and phase splits. The models have been processed adopting "User Given Cycle Length". The calculated phase splits were initially determined by SIDRA and then default Maximum Green and Minimum Green parameters modified to generally match the SCATS Phase Times (+/- 2 seconds).
- Following the processing of the models, if the Degree of Saturation was over  $DOS = 1$ , any changes made to the default SIDRA parameters in the WSP models were reviewed. In general, the WSP models had included capacity reduction parameters on approach to some of the signalised intersections and lane utilisation ratios as part of their model calibration. Given that traffic volumes, cycle lengths and signal timings have changed, these parameters are not necessarily applicable to the current models. As such, minor changes were made where necessary to reduce the DOS to 1.0 or better. The full list of changes is documented in Appendix C.

### 3.2.3. Intersection Operation

The operation of the study intersections within the study area has been assessed for the 2021 post-closure scenario using SIDRA. For the Saturday models, Council requested surveys for four intersections only:

- Military Road and Ben Boyd Road
- Military Road and Waters Road
- Ben Boyd Road and Grosvenor Lane
- Ben Boyd Road and Grosvenor Street.

These intersections were identified to be the most critical in terms of performance on a typical Saturday, and the Saturday modelling has therefore been limited to these locations only.

Table 3.9 presents a summary of the post-closure operation of the key intersections for the relevant peak periods, with full results presented in Appendix B of this report.

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Table 3.9: Post-closure operating conditions (GTA 2021)

Intersection	Peak	Cycle Time (if applicable) (sec)	Degree of saturation (DOS)	Average delay (sec)	95th percentile queue (m)	Level of service (LOS)
Military Road/ Ben Boyd Road	AM	140	0.99	42	745	LOS C
	PM	140	0.95	17	297	LOS B
	Sat	136	0.96	21	217	LOS B
Military Road/ Young Street (post-closure)	AM	140	0.95	17	229	LOS B
	PM	140	0.76	4	149	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
Military Road/ Wycombe Road	AM	140	0.94	12	191	LOS A
	PM	140	0.74	10	114	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
Military Road/ Rangers Road/ Waters Road	AM	N/A	0.82	63	30	LOS E
	PM	N/A	0.64	25	17	LOS B
	Sat	N/A	0.98	46	50	LOS D
Ben Boyd Road/ Grosvenor Lane	AM	N/A	0.26	1	6	LOS A
	PM	N/A	0.27	4	7	LOS A
	Sat	N/A	0.32	5	30	LOS A
Young Street/ Grosvenor Lane	AM	N/A	0.07	8	2	LOS A
	PM	N/A	0.09	8	3	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
Waters Road/ Grosvenor Lane	AM	N/A	0.12	8	4	LOS A
	PM	N/A	0.12	8	3	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
Ben Boyd Road/ Grosvenor Street	AM	N/A	0.01	13	0	LOS A
	PM	N/A	0.01	13	0	LOS A
	Sat	N/A	0.02	13	0	LOS A
Young Street/ Grosvenor Street	AM	N/A	0.11	11	4	LOS A
	PM	N/A	0.22	10	10	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
Waters Road/ Grosvenor Street	AM	N/A	0.12	7	3	LOS A
	PM	N/A	0.15	6	4	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
	AM	95	0.76	18	73	LOS B

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Intersection	Peak	Cycle Time (if applicable) (sec)	Degree of saturation (DOS)	Average delay (sec)	95th percentile queue (m)	Level of service (LOS)
Ben Boyd Road/ Ernest Street	PM	87	0.65	12	64	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	N/A	0.51	106	9	LOS F
	PM	N/A	0.12	44	3	LOS D
	Sat	N/A	N/A	N/A	N/A	N/A
Belgrave Street/ Young Street	AM	95	0.61	10	103	LOS A
	PM	87	0.80	13	91	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A
Belgrave Street/ Waters Road/ Gerard Street	AM	95	0.77	11	130	LOS A
	PM	87	0.74	12	100	LOS A
	Sat	N/A	N/A	N/A	N/A	N/A

On the basis of the above assessment, it is clear that the network generally operates well with minimal queues and delays at each intersection. The exceptions to this are the intersections of Military Road/ Rangers Road/ Waters Road and Ben Boyd Road/ Oaks Road/ Belgrave Street which experience some delays and reduced levels of service on the minor road approaches. Further discussion is provided in Section 3.3.3.

### 3.2.4. WSP Closure Modelling

A summary of the predicted intersection operations in 2028 based on the future case models created by WSP has been provided in Table 3.10 below. It has been assumed that the 2028 conditions are similar to 2021 conditions, considering existing background growth trends.

**Table 3.10: Modelled operating conditions (WSP 2018, for 2028)**

Intersection	Peak	Cycle Time (if applicable) (sec)	Degree of saturation (DOS)	Average delay (sec)	95th percentile queue (m)	Level of service (LOS)
Military Road/ Ben Boyd Road	AM	130	1.00	19.6	306.6	LOS B
	PM	130	0.99	15.0	208.0	LOS B
	Sat	130	1.45	209.8	1594.3	LOS F
Military Road/ Young Street (post-closure)	AM	130	0.83	3.7	228.5	LOS A
	PM	130	0.68	3.2	129.9	LOS A
	Sat	130	1.09	59.3	228.5	LOS E
Military Road/ Wycombe Road	AM	130	1.27	100.7	148.2	LOS F
	PM	130	0.96	29.7	142.6	LOS C
	Sat	130	1.12	86.2	195.8	LOS F
	AM	N/A	0.90	48.8	353.1	LOS E

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Intersection	Peak	Cycle Time (if applicable) (sec)	Degree of saturation (DOS)	Average delay (sec)	95th percentile queue (m)	Level of service (LOS)
Military Road/ Rangers Road/ Waters Road	PM	N/A	1.23	244.3	87.0	LOS F
	Sat	N/A	1.21	218	87	LOS F
Ben Boyd Road/ Grosvenor Lane	AM	N/A	0.30	1	7	LOS A
	PM	N/A	0.34	1	10	LOS A
	Sat	N/A	0.44	1	14	LOS A
Young Street/ Grosvenor Lane	AM	N/A	0.09	7	3	LOS A
	PM	N/A	0.14	8	5	LOS A
	Sat	N/A	0.15	8	5	LOS A
Waters Road/ Grosvenor Lane	AM	N/A	0.10	8	3	LOS A
	PM	N/A	0.19	8	4	LOS A
	Sat	N/A	0.21	8	4	LOS A
Ben Boyd Road/ Grosvenor Street	AM	N/A	0.29	8	7	LOS A
	PM	N/A	0.02	1	1	LOS A
	Sat	N/A	0.21	8	108	LOS A
Young Street/ Grosvenor Street	AM	N/A	0.17	6	7	LOS A
	PM	N/A	0.25	6	7	LOS A
	Sat	N/A	0.30	6	1	LOS A
Waters Road/ Grosvenor Street	AM	N/A	0.14	6	4	LOS A
	PM	N/A	0.21	7	6	LOS A
	Sat	N/A	0.24	7	7	LOS A
Ben Boyd Road/ Ernest Street	AM	90	0.81	15	73	LOS B
	PM	90	0.92	2	278	LOS A
	Sat	90	0.76	18	73	LOS B
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	N/A	0.13	16	3	LOS B
	PM	N/A	0.34	74	6	LOS F
	Sat	N/A	0.46	5	99	LOS A
Belgrave Street/ Young Street	AM	90	0.78	11	133	LOS A
	PM	90	1.04	37	277	LOS C
	Sat	90	0.95	24	225	LOS B
Belgrave Street/ Waters Road/ Gerard Street	AM	90	0.72	9	73	LOS A
	PM	90	1.01	17	236	LOS B
	Sat	90	1.03	19	190	LOS B

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### 3.2.5. Queueing

Formalised queueing surveys were conducted on Thursday 18 February 2021 and Saturday 20 February 2021 for most of the study's key intersections. In addition, supplementary qualitative queue observations were made as part of the site inspection on 18 February 2021. A summary of the observed queues is provided in Table 3.11.

Table 3.11: Post-closure queueing analysis (GTA 2021)

Intersection Name	Peak	95 <sup>th</sup> Percentile Queue Lengths (Rounded) and Observations			
		South	East	North	West
Military Road/ Ben Boyd Road	AM	12 vehicles	Overflowing queues to the upstream intersection	5 vehicles	7 vehicles
	PM	12 vehicles	Overflowing queues to the upstream intersection	6 vehicles	4 vehicles
	Sat	23 vehicles	N/A	7 vehicles	N/A
Military Road/ Young Street (post-closure)	AM	N/A	Slow moving, very few stand-still queues	N/A	Slow moving, very few stand-still queues
	PM	N/A	Slow moving, very few stand-still queues	N/A	Slow moving, very few stand-still queues
	Sat	N/A	N/A	N/A	N/A
Military Road/ Wycombe Road	AM	6 vehicles	Overflowing queues to the upstream intersection	N/A	Average of 7 vehicles
	PM	6 vehicles	Overflowing queues to the upstream intersection	N/A	Overflowing queues to the upstream intersection
	Sat	N/A	N/A	N/A	N/A
Military Road/ Rangers Road/ Waters Road	AM	2 vehicles	Slow moving, very few stand-still queues	8 vehicles	Slow moving, very few stand-still queues
	PM	7 vehicles	Slow moving, very few stand-still queues	7 vehicles	Slow moving, very few stand-still queues
	Sat	7 vehicles	N/A	10 vehicles	N/A
Ben Boyd Road/ Grosvenor Lane	AM	3 vehicles	N/A	4 vehicles	N/A
	PM	2 vehicles	N/A	6 vehicles	N/A
	Sat	N/A	N/A	N/A	N/A

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Intersection Name	Peak	95 <sup>th</sup> Percentile Queue Lengths (Rounded) and Observations			
		South	East	North	West
Young Street/ Grosvenor Lane	AM	Average of <1 vehicle	Average of <1 vehicle	Average of <1 vehicle	Average of <1 vehicle
	PM	Average of <1 vehicle	Average of <1 vehicle	Average of <1 vehicle	Average of <1 vehicle
	Sat	10 vehicles	N/A	8 vehicles	N/A
Waters Road/ Grosvenor Lane	AM	0 vehicles	N/A	1 vehicle	0 vehicles
	PM	0 vehicles	N/A	2 vehicles	0 vehicles
	Sat	N/A	N/A	N/A	N/A
Ben Boyd Road/ Grosvenor Street	AM	4 vehicles	7 vehicles	0	N/A
	PM	3 vehicles	8 vehicles	0	N/A
	Sat	N/A	N/A	N/A	N/A
Young Street/ Grosvenor Street	AM	0 vehicles	0 vehicles	0 vehicles	2 vehicles
	PM	0 vehicles	0 vehicles	0 vehicles	3 vehicles
	Sat	N/A	N/A	N/A	N/A
Waters Road/ Grosvenor Street	AM	0 vehicles	N/A	0 vehicles	2 vehicles
	PM	0 vehicles	N/A	0 vehicles	1 vehicle
	Sat	7 vehicles	23 vehicles	6 vehicles	N/A
Ben Boyd Road/ Ernest Street	AM	9 vehicles	N/A	9 vehicles	4 vehicles
	PM	7 vehicles	N/A	12 vehicles	8 vehicles
	Sat	N/A	N/A	N/A	N/A
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	0 vehicles	0 vehicles	3 vehicles	2 vehicles
	PM	0 vehicles	0 vehicles	3 vehicles	4 vehicles
	Sat	N/A	N/A	N/A	N/A
Belgrave Street/ Young Street	AM	4 vehicles	7 vehicles	4 vehicles	4 vehicles
	PM	4 vehicles	9 vehicles	4 vehicles	7 vehicles
	Sat	N/A	N/A	N/A	N/A
Belgrave Street/ Waters Road/ Gerard Street	AM	5 vehicles	4 vehicles	N/A	11 vehicles
	PM	6 vehicles	4 vehicles	N/A	5 vehicles
	Sat	N/A	N/A	N/A	N/A

At a rate of one vehicle equating to 7.5 metres of queue length, it can be observed that the model's queueing generally matches observed queues, and the model can be considered valid.

### 3.2.6. Pedestrian Volumes

A summary of the pedestrian volumes observed at the Young Street trial plaza for the peak periods on Thursday 18 February 2021 and Saturday 20 February 2021 is provided in Table 3.12. While the weather

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was generally fine for the duration of these surveys it is noted that on the Thursday rainfall occurred for some periods between approximately 12:00pm and 4:00pm, which in theory could have reduced the level of pedestrian activity during that time.

Based on the data it can be seen that the trial plaza experienced moderate usage of between approximately 250 – 350 pedestrian movements per hour (two-way) at each end of the plaza during the weekday AM and PM network peak periods, increasing to approximately 400 – 500 pedestrian movements per hour (two way) during the Saturday midday peak.

**Table 3.12: Young Street trial plaza pedestrian utilisation during network peaks (February 2021)**

Access Point	Peak Period	In/ Out	Pedestrian Volume	
			Directional	Two-way
North (Grosvenor Lane)	AM	In	213	316
		Out	103	
	PM	In	147	341
		Out	194	
	Sat	In	210	433
		Out	223	
South (Military Road)	AM	In	104	262
		Out	158	
	PM	In	193	342
		Out	149	
	Sat	In	240	477
		Out	237	

Due to the aforementioned weather conditions, Council subsequently requested an additional weekday count for the same location. On Thursday 13 May 2021, the Young Street pedestrian plaza was re-surveyed. The results are shown in Table 3.13.

**Table 3.13: Young Street trial plaza pedestrian utilisation during network peaks (May 2021)**

Access Point	Peak Period	In/ Out	Pedestrian Volume	
			Directional	Two-way
North (Grosvenor Lane)	AM	In	153	271
		Out	118	
	PM	In	160	334
		Out	174	
South (Military Road)	AM	In	102	237
		Out	135	
	PM	In	160	284
		Out	124	

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The May 2021 survey recorded fewer pedestrian trips than the February survey, suggesting that the rain may not have played a significant part in the original results (noting that pedestrian demands may vary on any given day, so this is not conclusive). Notwithstanding, the pedestrian volumes still ranged between 240 – 250 pedestrian movements per hour (two-way) at the plaza during the weekday AM and PM network peak periods.

It should be noted that the results reproduced above are for the network peak periods, consistent with the methodology used in the WSP 2018 report at other locations (i.e. the surveyed intersections). In the case of the intersections, this allows a direct comparison of the pre-and-post-closure pedestrian volumes to be made as presented later in Table 3.17. However, since the pedestrian surveys for the Young Street plaza specifically were undertaken over a 12-hour period, this allows the identification of separate pedestrian peak periods to be made.

The key difference between these peaks can be considered to relate to the purpose of the site area – during the vehicular peaks the arterial roads experience heavy volumes as the site area primarily serves as a movement corridor, but during the pedestrian peaks, the Neutral Bay town centre serves for placemaking ([Practitioner's Guide to Movement and Place](#), NSW Government, March 2020), and indeed the Young Street plaza serves to encourage placemaking initiatives.

The results for the pedestrian activity peak times are shown below:

**Table 3.14: Young Street Plaza- Peak Pedestrian Volumes**

Access Point	Peak Period	In/ Out	May 2021	
			Directional	Two-way
North (Grosvenor Lane)	AM (0830-0930)	In	199	350
		Out	151	
	PM (1215-1315)	In	220	437
		Out	217	
South (Military Road)	AM (0815-0915)	In	134	294
		Out	160	
	PM (1245-1345)	In	198	385
		Out	187	

Based on these results, the pedestrian peak volumes are approximately 30 per cent higher than those observed during the network peaks, suggesting that although comparing network peaks with the WSP 2018 report provides the most like-for-like comparison and is necessary at the intersections, analysis of the pedestrian peaks potentially provides a better picture of the usage of the Young Street plaza.

More generally, pedestrian activity in the study area was modest in the weekday AM peak but heavy in the PM peak, particularly around the Grosvenor Lane car park and surrounding area. A combined pedestrian volume summary for the surveyed intersections is presented in the following section in Table 3.17.



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### 3.3. Net Change

#### 3.3.1. Traffic Volumes

##### Intersection

A comparison of pre-closure (June 2018) and post-closure (February 2021) volumes (sum of all movements at the intersection) is shown in Table 3.15 below:

Table 3.15: Comparison of pre- and post-closure intersection volumes (all movements)

Intersection	Peak Period	Volume		Difference	Percentage Change
		Pre-Closure (14-16 June 2018)	Post-Closure (18-20 February 2021)		
Military Road/ Ben Boyd Road	AM	4,672	5,180	508	11%
	PM	4,818	4,991	173	4%
	Sat	5,093	4,997	-96	-2%
Military Road/ Young Street (post-closure)	AM	3,952	4,383	431	11%
	PM	4,091	4,172	81	2%
	Sat	4,327	N/A	0	N/A
Military Road/ Wycombe Road	AM	4,053	4,602	549	14%
	PM	4,172	4,293	121	3%
	Sat	4,609	N/A	0	N/A
Military Road/ Rangers Road/ Waters Road	AM	4,102	4,631	529	13%
	PM	4,243	4,510	267	6%
	Sat	4,689	4,428	-261	-6%
Ben Boyd Road/ Grosvenor Lane	AM	718	760	42	6%
	PM	784	821	37	5%
	Sat	862	808	-54	-6%
Young Street/ Grosvenor Lane (post-closure)	AM	283	160	-123	-43%
	PM	412	238	-174	-42%
	Sat	468	N/A	0	N/A
Waters Road/ Grosvenor Lane	AM	213	310	97	46%
	PM	273	330	57	21%
	Sat	312	N/A	0	N/A
Ben Boyd Road/ Grosvenor Street	AM	695	741	46	7%
	PM	723	785	62	9%
	Sat	822	769	-53	-6%
Young Street/ Grosvenor Street	AM	587	571	-16	-3%
	PM	840	662	-178	-21%
	Sat	914	N/A	0	N/A
Waters Road/ Grosvenor Street	AM	377	497	120	32%
	PM	514	465	-49	-10%
	Sat	515	N/A	0	N/A

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Intersection	Peak Period	Volume		Difference	Percentage Change
		Pre-Closure (14-16 June 2018)	Post-Closure (18-20 February 2021)		
Ben Boyd Road/ Ernest Street	AM	2,856	2,594	-262	-9%
	PM	2,874	2,311	-563	-20%
	Sat	2,291	N/A	0	N/A
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	2,733	2,515	-218	-8%
	PM	2,791	2,239	-552	-20%
	Sat	2,276	N/A	0	N/A
Belgrave Street/ Young Street	AM	2,871	2,461	-410	-14%
	PM	3,029	2,446	-583	-19%
	Sat	2,480	N/A	0	N/A
Belgrave Street/ Waters Road/ Gerard Street	AM	2,666	2,619	-47	-2%
	PM	2,786	2,243	-543	-19%
	Sat	2,265	N/A	0	N/A

In summary, it can be noted that:

- the following intersections have seen a notable increase in volume during the peak periods:
  - Military Road/ Ben Boyd Road (AM)
  - Military Road/ Young Street (AM)
  - Military Road/ Wycombe Street (AM)
  - Military Road/ Rangers Road/ Waters Road (AM)
  - Waters Road/ Grosvenor Lane
  - Ben Boyd Road/ Grosvenor Street
  - Waters Road/ Grosvenor Street (AM).
- The following intersections have seen a notable decrease in volume during the peak periods:
  - Young Street/ Grosvenor Lane
  - Young Street/ Grosvenor Street (PM)
  - Ben Boyd Road/ Ernest Street
  - Ben Boyd Road/ Oaks Avenue/ Belgrave Street
  - Belgrave Street/ Young Street
  - Belgrave Street/ Waters Road/ Gerard Street (PM).

Traffic volumes along Military Road have increased during the weekday peak periods, however, this is more likely due to COVID-19 with more people commuting by car over bus.

### Mid-Block

Mid-block comparisons between GTA-commissioned counts in February 2021 and Council counts in October 2020 generally confirm the patterns above, refer Table 3.16.

## TRAFFIC ANALYSIS

Table 3.16: Comparison of pre- and post-closure mid-block volumes

Reference No.	Street	Between	Direction	ADT Volumes		Difference	Percentage Difference
				Pre-Closure	Post-Closure		
1	Ben Boyd Road	Grosvenor Lane and Military Road	North	4,957	6,007	1,050	21%
			South	2,687	2,996	309	11%
2	Ben Boyd Road	Grosvenor Street and Grosvenor Lane	North	4,346	4,973	627	14%
			South	2,861	3,111	250	9%
3	Grosvenor Street	Young Street and Ben Boyd Road	East	1,661	1,603	-58	-3%
			West	3,064	2,783	-281	-9%
4	Grosvenor Lane	Young Street and Ben Boyd Road	East	1,262	1,635	373	30%
			West	N/A	5	N/A	0%
5	Young Street	Belgrave Street and Grosvenor Street	North	2,106	1,939	-167	-8%
			South	2,496	2,417	-79	-3%
6	Young Street	Grosvenor Street and Grosvenor Lane	North	1,687	1,082	-605	-36%
			South	1,775	1,386	-389	-22%
7	Young Street	Grosvenor Lane and Military Road	North	1,570	0	-1,570	-100%
			South	1,018	0	-1,018	-100%
8	Grosvenor Street	Waters Road and Young Street	East	1,618	1,900	282	17%
			West	2,437	2,750	313	13%
9	Grosvenor Lane	Waters Road and Young Street	East	1,576	1,708	132	8%
			West	12	20	8	67%
10	Waters Road	Grosvenor Lane and Military Road	North	622	1,346	724	116%
			South	1,203	1,527	324	27%
11	Waters Road	Grosvenor Street and Grosvenor Lane	North	2,150	2,620	470	22%
			South	989	1,259	270	27%
12	Waters Road	Belgrave Street and Grosvenor Street	North	2,157	2,330	173	8%
			South	1,731	1,761	30	2%

When considering daily mid-block volumes, there has generally been an increase across the road network, specifically Ben Boyd Road, Waters Road and Grosvenor Street which indicates that traffic has been redistributed as a result of the Young Street closure.

The 30 per cent increase in traffic in Grosvenor Lane represents a daily increase of 373 vehicles. In the peak hour the average traffic volumes increased from 115 vehicles per hour to 164 vehicles per hour. This equates to one additional vehicle every 73 seconds, which is a very minor increase in volume.

## TRAFFIC ANALYSIS

### 3.3.2. Pedestrian Volumes

A summary of both pre-closure and post-closure pedestrian volumes at a number of the key intersections during the network peaks is shown in Table 3.17.

Table 3.17: Comparison of pre- and post-closure pedestrian volumes

Intersection	Peak	Pedestrian Volumes		Difference	Difference %
		Pre-Closure (WSP 2018)	Post Closure (GTA Feb 2021)		
Military Road/ Ben Boyd Road	AM	272	274	2	1%
	PM	511	275	-236	-46%
	Sat	624	514	-110	-18%
Military Road/ Young Street (post-closure)	AM	250	125	-125	-50%
	PM	250	204	-46	-18%
Military Road/ Wycombe Road	AM	493	488	-5	-1%
	PM	722	597	-125	-17%
Military Road/ Rangers Road/ Waters Road	AM	672	212	-460	-68%
	PM	401	297	-104	-26%
	Sat	365	365	0	0%
Young Street/ Grosvenor Lane (post closure)	AM	N/A	556	N/A	N/A
	PM	N/A	685	N/A	N/A
Waters Road/ Grosvenor Street	AM	201	259	58	29%
	PM	182	137	-45	-25%
Ben Boyd Road/ Ernest Street	AM	184	145	-39	-21%
	PM	159	141	-18	-11%
	Sat	106	106	0	0%
Belgrave Street/ Young Street	AM	98	123	25	26%
	PM	81	88	7	9%
Belgrave Street/ Waters Road/ Gerard Street	AM	183	255	72	39%
	PM	125	105	-20	-16%

It is noted that there has generally been a reduction of pedestrian volumes within the study area. The reason for this is unclear. It may partially be due to the rain that occurred on Thursday 18th February 2021, although as previously discussed in Section 3.2.6 this was only for a limited period between the peak periods.

Notwithstanding, Council requested that two of the intersections that were observed to experience the highest reductions in pedestrian volumes (in comparison to the pre-closure WSP data) be re-surveyed to ensure that the weather had not played a significant part. Additional counts were subsequently undertaken on Thursday 13 May 2021 at the following locations:

- o Military Road/ Ben Boyd Road
- o Military Road/ Rangers Road/ Waters Road

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The pedestrian volumes observed from the May 2021 surveys during the network peak periods are shown in Table 3.18.

**Table 3.18: Post-closure pedestrian volumes (May 2021)**

Intersection	Peak	Pedestrian Volumes (GTA February 2021)	Pedestrian Volumes (GTA May 2021)
Military Road/ Ben Boyd Road	AM	274	347
	PM	275	485
Military Road/ Rangers Road/ Waters Road	AM	212	405
	PM	297	322

The pedestrian volumes at the two re-surveyed intersections are observed to be higher than in February 2021, but still generally lower than those recorded in the WSP report dated 2018. This suggests that there may be other factors at play, such as a reduced level of activity associated with non-essential trips (i.e. a change in travel behaviour) due to COVID-19. However, it is not possible to confirm this as part of this study.

### 3.3.3. Intersection Operation

A comparison of the level of service at the 14 key intersections for the pre-closure and post-closure scenarios (including the 2028 modelled forecasts developed by WSP) is summarised in Table 3.19.

**Table 3.19: Comparison of pre- and post-closure intersection performance**

Intersection	Peak Period	Level of Service		
		2018 Pre-Closure (WSP)	2021 Post-Closure (GTA)	2028 Modelled Post-Closure (WSP)
Military Road/ Ben Boyd Road	AM	LOS B	LOS C	LOS B
	PM	LOS A	LOS B	LOS B
	Sat	LOS B	LOS B	LOS F
Military Road/ Young Street (post-closure)	AM	LOS A	LOS B	LOS A
	PM	LOS A	LOS A	LOS A
	Sat	LOS A	N/A	LOS E
Military Road/ Wycombe Road	AM	LOS A	LOS A	LOS F
	PM	LOS A	LOS A	LOS C
	Sat	LOS A	N/A	LOS F
Military Road/ Rangers Road/ Waters Road	AM	LOS C	LOS E	LOS E
	PM	LOS B	LOS B	LOS F
	Sat	LOS B	LOS D	LOS F
Ben Boyd Road/ Grosvenor Lane	AM	LOS A	LOS A	LOS A
	PM	LOS A	LOS A	LOS A
	Sat	LOS A	LOS A	LOS A
	AM	LOS A	LOS A	LOS A

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Intersection	Peak Period	Level of Service		
		2018 Pre-Closure (WSP)	2021 Post-Closure (GTA)	2028 Modelled Post-Closure (WSP)
Young Street/ Grosvenor Lane (post-closure)	PM	LOS A	LOS A	LOS A
	Sat	LOS A	N/A	LOS A
Waters Road/ Grosvenor Lane	AM	LOS A	LOS A	LOS A
	PM	LOS A	LOS A	LOS A
	Sat	LOS A	N/A	LOS A
Ben Boyd Road/ Grosvenor Street	AM	LOS A	LOS A	LOS A
	PM	LOS A	LOS A	LOS A
	Sat	LOS A	LOS A	LOS A
Young Street/ Grosvenor Street	AM	LOS A	LOS A	LOS A
	PM	LOS A	LOS A	LOS A
	Sat	LOS A	N/A	LOS A
Waters Road/ Grosvenor Street	AM	LOS A	LOS A	LOS A
	PM	LOS A	LOS A	LOS A
	Sat	LOS A	N/A	LOS A
Ben Boyd Road/ Ernest Street	AM	LOS A	LOS B	LOS B
	PM	LOS A	LOS A	LOS A
	Sat	LOS B	N/A	LOS B
Ben Boyd Road/ Oaks Avenue/ Belgrave Street	AM	LOS D	LOS F	LOS B
	PM	LOS D	LOS D	LOS F
	Sat	LOS C	N/A	LOS A
Belgrave Street/ Young Street	AM	LOS A	LOS A	LOS A
	PM	LOS B	LOS A	LOS C
	Sat	LOS B	N/A	LOS B
Belgrave Street/ Waters Road/ Gerard Street	AM	LOS A	LOS A	LOS A
	PM	LOS A	LOS A	LOS B
	Sat	LOS B	N/A	LOS B

Generally, it can be observed that the network runs at a slightly lower level-of-service post-closure, but to an acceptable degree, and to a degree generally better than the modelled performance expected for 2028. It is noted that the WSP 2028 network included background growth rates, which were naturally unnecessary for a 2021 existing model, and WSP has previously noted that worsened performance may be as a direct result of the assumptions made in relation to that growth.

While the intersection of Ben Boyd Road/ Oaks Avenue/ Belgrave Street has recorded a level-of-service of F in the AM peak for the 2021 post-closure scenario, it is important to note that for an unsignalised intersection the reporting is based on the worst-performing turning movement (i.e. the one with the longest average delay) – which in this case occurs on the northern leg (Ben Boyd Road). Considering that the intersection of

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Ben Boyd Road/ Ernest Street located upstream of this intersection is a signalised intersection, it is expected that the platooning of traffic will in practice provide gaps that allow vehicles queued on the Ben Boyd Road leg to discharge each cycle, thereby providing an acceptable performance (albeit with long delays for the minor movement).

A similar result is observed at the Military Road/ Rangers Road/ Waters Road intersection in the AM Peak for the 2021 post-closure scenario, with the worst performing movement on the northern leg (i.e. Waters Road) recording a level-of-service of E. The corresponding 95<sup>th</sup> percentile queue length for the left turn movement on this leg is predicted to be approximately 4 vehicle lengths or 30m in the AM peak based on the SIDRA modelling. Once again, mitigation of this issue is achieved through the gaps created by the adjacent upstream signalised intersection of Military Road/ Wycombe Road, and the overall performance (including the predicted queuing) is therefore considered to be acceptable.

### 3.3.4. Mitigation Treatments

Based on the above assessment, the network operation is concluded to remain acceptable in 2021 following the closure of the subject section of Young Street. Therefore, no formal mitigation measures are deemed necessary at this point in time to address operational issues. However, the WSP modelling shows that the intersection performance by 2028, in particular along the Military Road corridor, is predicted to worsen. This appears to be a function of the traffic growth assumptions made by WSP and is not as a direct result of the closure of Young Street.

Notwithstanding the above findings, it is noted that permanent pedestrianisation of the subject site will potentially lead to higher pedestrian volumes in the area over time, for which high pedestrian access area treatments should be considered. This may include zoning parts of the study area as 40 kilometre per hour speed zones.

## CONCLUSION

## 4. CONCLUSION

- North Sydney Council has temporarily closed Young Street to create a pedestrian plaza between Military Road and Grosvenor Lane from late-2020 to early-2021.
- GTA was engaged to review the traffic and transport performance of the Neutral Bay town centre as a result of the Young Street closure.
- GTA has reviewed:
  - The WSP traffic impact assessment (2018) forecasting the Young Street Closure for TfNSW.
  - Traffic surveys conducted in October 2020 for North Sydney Council.
- Generally, the traffic has been wholly redistributed within the surrounding network, and a minor decrease in network traffic volume was observed, indicating that the study area captures all re-distributions.
- SIDRA modelling has been conducted based on WSP base models of the network, updated with new geometry and volumes.
- SIDRA modelling reveals that the network generally performs acceptably in response to the Young Street Closure, with small increases in delay time overall.
- Intersections with level-of-service D and above are a result of delays on the minor leg of unsignalised intersections. In each case an upstream signalised intersection is present on the major leg, resulting in platooning behaviours which provide consistent gaps for turning. Moreover, queue lengths at these minor legs are in the order of 1-2 vehicles on average, which have minimal impact on the overall performance of the network.
- The site performs better than initially modelled by WSP for the year 2028, although background growth governs this outcome.
- No mitigation measures have been identified as necessary to address the operating conditions predicted at 2021; however, it would be advised that further pedestrianisation should be met with high pedestrian access arrangements, including local area traffic management and a 40km/h speed zoning.



APPENDIX: TRAFFIC SURVEY DATA

# A. TRAFFIC SURVEY DATA



<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 1 - Ben Boyd Road
<b>Location</b>	Between Military and Grosvenor Lane
<b>Site No</b>	1
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	NB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	483	491	429	491	514	415	412	<b>6181</b>	<b>6007</b>
PM Peak	452	478	464	524	522	491	511		
0:00	23	13	15	32	42	95	72	25	42
1:00	8	6	8	15	17	54	65	11	25
2:00	10	7	6	8	11	13	21	8	11
3:00	22	5	9	6	8	10	13	10	10
4:00	18	13	10	19	19	11	9	16	14
5:00	76	60	76	76	71	33	49	72	63
6:00	253	265	253	258	241	83	59	254	202
7:00	417	418	377	441	364	215	104	403	334
8:00	<b>483</b>	<b>491</b>	422	<b>491</b>	<b>514</b>	301	163	480	409
9:00	430	423	<b>429</b>	418	411	<b>415</b>	246	422	396
10:00	358	384	367	383	410	373	332	380	372
11:00	305	369	373	378	438	<b>415</b>	<b>412</b>	373	384
12:00	364	350	365	400	443	<b>491</b>	<b>511</b>	384	418
13:00	308	349	384	392	369	449	411	360	380
14:00	326	328	339	338	346	438	360	335	354
15:00	405	369	423	377	427	438	386	400	404
16:00	395	417	390	439	434	389	362	415	404
17:00	<b>452</b>	460	<b>464</b>	<b>524</b>	460	412	370	472	449
18:00	421	<b>478</b>	433	474	<b>522</b>	402	341	466	439
19:00	218	318	327	338	350	354	274	310	311
20:00	170	198	233	236	279	263	187	223	224
21:00	131	169	193	222	226	179	137	188	180
22:00	52	76	107	123	201	169	90	112	117
23:00	27	33	54	66	119	131	36	60	67
<b>Total</b>	<b>5672</b>	<b>5999</b>	<b>6057</b>	<b>6454</b>	<b>6722</b>	<b>6133</b>	<b>5010</b>	<b>6181</b>	<b>6007</b>

7-19	4664	4836	4766	5055	5138	4738	3998	4892	4742
6-22	5436	5786	5772	6109	6234	5617	4655	5867	5658
6-24	5515	5895	5933	6298	6554	5917	4781	6039	5842
0-24	5672	5999	6057	6454	6722	6133	5010	6181	6007

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 1 - Ben Boyd Road
<b>Location</b>	Between Military and Grosvenor Lane
<b>Site No</b>	1
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	SB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	211	192	198	204	213	216	175	<b>3029</b>	<b>2996</b>
PM Peak	202	198	224	221	219	250	213		
0:00	17	22	16	30	41	72	61	25	37
1:00	15	9	10	17	25	52	54	15	26
2:00	6	6	4	3	18	30	28	7	14
3:00	9	6	9	6	11	14	10	8	9
4:00	8	12	5	12	10	11	7	9	9
5:00	33	33	39	44	36	15	10	37	30
6:00	83	76	98	100	88	46	38	89	76
7:00	174	165	198	204	175	109	58	183	155
8:00	211	192	192	180	213	152	105	198	178
9:00	160	172	190	197	194	180	162	183	179
10:00	162	162	144	160	186	204	149	163	167
11:00	179	157	194	172	198	216	175	180	184
12:00	167	153	163	208	193	250	213	177	192
13:00	191	190	183	177	186	226	191	185	192
14:00	181	177	215	187	178	202	181	188	189
15:00	202	176	160	188	177	166	187	181	179
16:00	178	198	177	205	195	173	166	191	185
17:00	201	193	224	221	219	186	170	212	202
18:00	173	196	207	203	200	167	163	196	187
19:00	181	177	179	191	184	200	149	182	180
20:00	115	145	175	180	167	153	158	156	156
21:00	85	113	110	129	176	121	124	123	123
22:00	44	61	96	99	154	124	60	91	91
23:00	33	32	44	54	90	111	31	51	56
<b>Total</b>	<b>2808</b>	<b>2823</b>	<b>3032</b>	<b>3167</b>	<b>3314</b>	<b>3180</b>	<b>2650</b>	<b>3029</b>	<b>2996</b>

7-19	2179	2131	2247	2302	2314	2231	1920	2235	2189
6-22	2643	2642	2809	2902	2929	2751	2389	2785	2724
6-24	2720	2735	2949	3055	3173	2986	2480	2926	2871
0-24	2808	2823	3032	3167	3314	3180	2650	3029	2996

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<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 2 - Ben Boyd Rd
<b>Location</b>	Between Grosvenor St and Grosvenor Lane
<b>Site No</b>	2
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	NB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	385	405	412	431	446	359	335	<b>5132</b>	<b>4973</b>
PM Peak	372	421	429	450	406	407	395		
0:00	18	8	8	20	27	69	66	16	31
1:00	6	6	13	13	10	39	49	10	19
2:00	8	3	5	5	10	12	15	6	8
3:00	15	3	8	2	4	8	10	6	7
4:00	11	7	7	17	14	8	4	11	10
5:00	65	46	56	58	65	23	37	58	50
6:00	216	230	232	242	207	68	45	225	177
7:00	355	343	345	376	301	163	76	344	280
8:00	<b>385</b>	<b>405</b>	<b>412</b>	<b>431</b>	<b>446</b>	217	129	416	346
9:00	357	345	394	383	379	347	187	372	342
10:00	277	317	287	31	311	345	281	245	264
11:00	268	308	317	282	332	<b>359</b>	<b>335</b>	301	314
12:00	286	292	276	328	367	<b>407</b>	<b>395</b>	310	336
13:00	250	281	315	320	293	395	361	292	316
14:00	251	283	275	283	287	339	322	276	291
15:00	342	329	391	317	356	332	321	347	341
16:00	353	370	372	363	355	321	300	363	348
17:00	<b>372</b>	403	<b>429</b>	<b>450</b>	401	353	307	411	388
18:00	338	<b>421</b>	386	412	<b>406</b>	335	280	393	368
19:00	171	275	277	258	296	273	222	255	253
20:00	137	183	194	173	229	226	145	183	184
21:00	120	147	157	180	165	156	107	154	147
22:00	45	63	91	108	160	143	77	93	98
23:00	20	30	47	49	82	115	25	46	53
<b>Total</b>	<b>4666</b>	<b>5098</b>	<b>5294</b>	<b>5101</b>	<b>5503</b>	<b>5053</b>	<b>4096</b>	<b>5132</b>	<b>4973</b>

7-19	3834	4097	4199	3976	4234	3913	3294	4068	3935
6-22	4478	4932	5059	4829	5131	4636	3813	4886	4697
6-24	4543	5025	5197	4986	5373	4894	3915	5025	4848
0-24	4666	5098	5294	5101	5503	5053	4096	5132	4973

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary** 23/03/2021

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 2 - Ben Boyd Rd
<b>Location</b>	Between Grosvenor St and Grosvenor Lane
<b>Site No</b>	2
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	SB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	228	215	238	210	235	267	186	<b>3161</b>	<b>3111</b>
PM Peak	240	241	260	256	245	260	247		
0:00	10	17	9	20	25	48	56	16	26
1:00	13	8	12	12	19	34	42	13	20
2:00	4	5	4	2	20	24	19	7	11
3:00	6	8	5	5	4	11	8	6	7
4:00	8	8	3	9	9	6	6	7	7
5:00	29	32	37	39	36	12	8	35	28
6:00	67	77	82	79	75	38	33	76	64
7:00	171	191	205	180	160	86	45	181	148
8:00	<b>228</b>	<b>215</b>	<b>238</b>	<b>210</b>	<b>235</b>	129	85	225	191
9:00	173	200	202	203	220	197	140	200	191
10:00	142	165	159	23	200	238	161	138	155
11:00	186	184	195	177	220	<b>267</b>	<b>186</b>	192	202
12:00	182	188	179	216	212	<b>260</b>	208	195	206
13:00	213	186	202	195	207	231	<b>247</b>	201	212
14:00	199	199	217	196	207	226	198	204	206
15:00	230	198	203	220	198	185	192	210	204
16:00	215	<b>241</b>	204	214	208	183	182	216	207
17:00	<b>240</b>	222	<b>260</b>	233	<b>245</b>	193	194	240	227
18:00	198	226	241	<b>256</b>	232	208	198	231	223
19:00	180	175	191	203	225	210	154	195	191
20:00	97	144	170	169	192	180	153	154	158
21:00	73	104	114	119	135	115	105	109	109
22:00	33	48	79	81	137	108	47	76	76
23:00	21	21	29	35	68	93	22	35	41
<b>Total</b>	<b>2918</b>	<b>3062</b>	<b>3240</b>	<b>3096</b>	<b>3489</b>	<b>3282</b>	<b>2689</b>	<b>3161</b>	<b>3111</b>

7-19	2377	2415	2505	2323	2544	2403	2036	2433	2372
6-22	2794	2915	3062	2893	3171	2946	2481	2967	2895
6-24	2848	2984	3170	3009	3376	3147	2550	3077	3012
0-24	2918	3062	3240	3096	3489	3282	2689	3161	3111

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 3 - Grosvenor St
<b>Location</b>	Between Young St and Young Lane
<b>Site No</b>	3
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	EB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	112	116	133	128	125	118	113	<b>1632</b>	<b>1603</b>
PM Peak	130	152	135	183	151	142	161		
0:00	2	2	3	5	6	12	9	4	6
1:00	3	2	3	2	2	11	8	2	4
2:00	4	1	1	1	1	2	4	2	2
3:00	3	2	1	1	2	0	0	2	1
4:00	1	1	0	4	4	5	2	2	2
5:00	10	12	10	15	17	9	23	13	14
6:00	40	37	37	40	42	15	18	39	33
7:00	<b>112</b>	74	92	89	88	53	23	91	76
8:00	106	<b>116</b>	<b>133</b>	<b>128</b>	<b>125</b>	69	44	122	103
9:00	104	101	86	98	105	110	63	99	95
10:00	74	79	69	88	98	109	87	82	86
11:00	100	106	96	97	98	<b>118</b>	<b>113</b>	99	104
12:00	86	117	98	123	136	130	<b>161</b>	112	122
13:00	92	96	105	146	119	131	141	112	119
14:00	86	87	108	108	92	120	94	96	99
15:00	104	115	109	103	110	96	83	108	103
16:00	105	95	123	135	113	108	78	114	108
17:00	<b>130</b>	128	124	135	123	117	113	128	124
18:00	116	<b>152</b>	<b>135</b>	<b>183</b>	<b>151</b>	<b>142</b>	136	147	145
19:00	62	107	101	120	141	121	67	106	103
20:00	48	74	70	81	88	80	67	72	73
21:00	31	45	43	49	51	46	36	44	43
22:00	18	26	25	28	34	42	24	26	28
23:00	6	9	9	10	18	16	7	10	11
<b>Total</b>	<b>1443</b>	<b>1584</b>	<b>1581</b>	<b>1789</b>	<b>1764</b>	<b>1662</b>	<b>1401</b>	<b>1632</b>	<b>1603</b>

7-19	1215	1266	1278	1433	1358	1303	1136	1310	1284
6-22	1396	1529	1529	1723	1680	1565	1324	1571	1535
6-24	1420	1564	1563	1761	1732	1623	1355	1608	1574
0-24	1443	1584	1581	1789	1764	1662	1401	1632	1603

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 3 - Grosvenor St
<b>Location</b>	Between Young St and Young Lane
<b>Site No</b>	3
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	WB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	191	175	206	186	176	246	214	<b>2801</b>	<b>2783</b>
PM Peak	227	247	244	253	257	215	227		
0:00	7	9	5	13	17	27	32	10	16
1:00	8	4	5	10	12	25	26	8	13
2:00	4	1	3	10	13	17	8	6	8
3:00	6	5	4	6	8	7	5	6	6
4:00	6	5	4	6	7	8	3	6	6
5:00	20	18	25	24	24	11	5	22	18
6:00	58	59	67	63	61	30	33	62	53
7:00	146	135	136	125	119	75	54	132	113
8:00	<b>191</b>	146	<b>206</b>	<b>186</b>	<b>176</b>	139	83	181	161
9:00	153	122	159	162	163	182	117	152	151
10:00	141	131	140	163	175	214	175	150	163
11:00	157	<b>175</b>	175	175	174	<b>246</b>	<b>214</b>	171	188
12:00	178	191	180	217	177	212	214	189	196
13:00	177	175	183	232	182	207	<b>227</b>	190	198
14:00	161	168	201	201	178	<b>215</b>	188	182	187
15:00	224	194	187	195	154	180	174	191	187
16:00	186	198	182	215	168	174	162	190	184
17:00	<b>227</b>	219	229	198	208	197	168	216	207
18:00	178	<b>247</b>	<b>244</b>	<b>253</b>	<b>257</b>	197	187	236	223
19:00	146	165	212	235	220	195	134	196	187
20:00	95	61	144	185	172	167	127	131	136
21:00	65	37	87	112	138	92	91	88	89
22:00	36	24	56	72	123	113	40	62	66
23:00	21	10	23	29	46	55	21	26	29
<b>Total</b>	<b>2591</b>	<b>2499</b>	<b>2857</b>	<b>3087</b>	<b>2972</b>	<b>2985</b>	<b>2488</b>	<b>2801</b>	<b>2783</b>

7-19	2119	2101	2222	2322	2131	2238	1963	2179	2157
6-22	2483	2423	2732	2917	2722	2722	2348	2655	2621
6-24	2540	2457	2811	3018	2891	2890	2409	2743	2717
0-24	2591	2499	2857	3087	2972	2985	2488	2801	2783

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 4 - Grosvenor Lane
<b>Location</b>	Between Ben Boyd Lane and Young Lane
<b>Site No</b>	4
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	EB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	127	110	123	121	132	140	127	<b>1695</b>	<b>1635</b>
PM Peak	122	174	168	186	177	136	150		
0:00	8	2	5	7	8	11	5	6	7
1:00	2	0	1	3	5	8	6	2	4
2:00	4	7	1	5	5	3	2	4	4
3:00	2	1	1	4	6	2	2	3	3
4:00	5	6	2	2	6	4	4	4	4
5:00	14	14	23	20	12	4	26	17	16
6:00	51	49	42	31	45	19	15	44	36
7:00	80	83	83	86	90	54	32	84	73
8:00	<b>127</b>	106	119	<b>121</b>	115	97	40	118	104
9:00	124	<b>110</b>	<b>123</b>	114	84	102	81	111	105
10:00	106	92	97	92	118	107	78	101	99
11:00	80	105	102	119	<b>132</b>	<b>140</b>	<b>127</b>	108	115
12:00	109	105	107	136	139	117	<b>150</b>	119	123
13:00	93	104	123	114	101	131	121	107	112
14:00	100	76	82	112	106	110	84	95	96
15:00	113	103	97	113	104	<b>136</b>	100	106	109
16:00	115	134	109	107	107	82	96	114	107
17:00	<b>122</b>	137	120	147	149	116	97	135	127
18:00	117	<b>174</b>	<b>168</b>	<b>186</b>	<b>177</b>	129	107	164	151
19:00	83	113	113	128	155	115	67	118	111
20:00	37	47	61	90	90	67	51	65	63
21:00	14	43	34	46	52	43	29	38	37
22:00	13	20	17	23	40	26	11	23	21
23:00	5	6	5	8	17	15	6	8	9
<b>Total</b>	<b>1524</b>	<b>1637</b>	<b>1635</b>	<b>1814</b>	<b>1863</b>	<b>1638</b>	<b>1337</b>	<b>1695</b>	<b>1635</b>

7-19	1286	1329	1330	1447	1422	1321	1113	1363	1321
6-22	1471	1581	1580	1742	1764	1565	1275	1628	1568
6-24	1489	1607	1602	1773	1821	1606	1292	1658	1599
0-24	1524	1637	1635	1814	1863	1638	1337	1695	1635

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**



<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 4 - Grosvenor Lane
<b>Location</b>	Between Ben Boyd Lane and Young Lane
<b>Site No</b>	4
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	WB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	22-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb		
AM Peak	2	0	0	1	1	1	2	4	5
PM Peak	2	1	0	2	2	1	2		
0:00	2	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	1	0	0	0
2:00	0	0	0	0	0	0	0	0	0
3:00	0	0	0	1	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0
6:00	0	0	0	0	1	0	0	0	0
7:00	0	0	0	0	0	0	0	0	0
8:00	1	0	0	0	0	0	0	0	0
9:00	0	0	0	1	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
11:00	1	0	0	0	0	1	2	0	1
12:00	0	0	0	1	2	0	2	1	1
13:00	0	0	0	2	0	0	1	0	0
14:00	0	0	0	1	0	0	1	0	0
15:00	0	0	0	0	1	0	0	0	0
16:00	0	0	0	0	1	0	0	0	0
17:00	0	1	0	0	0	1	0	0	0
18:00	2	0	0	0	1	0	0	1	0
19:00	0	0	0	0	1	1	0	0	0
20:00	0	0	0	1	0	1	0	0	0
21:00	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>5</b>

7-19	4	1	0	5	5	2	6	3	3
6-22	4	1	0	6	7	4	6	4	4
6-24	4	1	0	6	7	4	6	4	4
0-24	6	1	0	7	7	5	6	4	5

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 5 - Young St
<b>Location</b>	North of Grosvenor St
<b>Site No</b>	5
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	NB




Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	128	138	150	163	178	148	131	2015	1939
PM Peak	187	162	169	199	186	177	193		
0:00	2	2	1	5	6	3	7	3	4
1:00	1	1	2	0	2	3	7	1	2
2:00	0	0	0	1	0	0	0	0	0
3:00	1	0	0	0	0	0	0	0	0
4:00	0	1	0	2	2	1	0	1	1
5:00	4	4	4	3	3	3	4	4	4
6:00	35	37	33	40	38	12	6	37	29
7:00	99	109	103	106	111	51	28	106	87
8:00	127	138	150	151	163	99	51	146	126
9:00	128	131	110	133	136	148	80	128	124
10:00	115	105	119	123	129	141	113	118	121
11:00	111	121	141	163	178	148	131	143	142
12:00	142	138	152	166	183	157	193	156	162
13:00	129	121	131	161	186	177	141	146	149
14:00	139	127	121	147	155	143	118	138	136
15:00	137	139	124	151	143	128	121	139	135
16:00	146	151	148	161	139	116	128	149	141
17:00	187	162	167	189	169	132	116	175	160
18:00	128	150	169	199	168	164	118	163	157
19:00	73	110	127	152	166	112	94	126	119
20:00	49	74	59	67	81	79	70	66	68
21:00	19	51	41	54	60	45	37	45	44
22:00	12	14	24	27	31	39	15	22	23
23:00	2	5	7	6	11	11	3	6	6
<b>Total</b>	<b>1786</b>	<b>1891</b>	<b>1933</b>	<b>2207</b>	<b>2260</b>	<b>1912</b>	<b>1581</b>	<b>2015</b>	<b>1939</b>

7-19	1588	1592	1635	1850	1860	1604	1338	1705	1638
6-22	1764	1864	1895	2163	2205	1852	1545	1978	1898
6-24	1778	1883	1926	2196	2247	1902	1563	2006	1928
0-24	1786	1891	1933	2207	2260	1912	1581	2015	1939

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 5 - Young St
<b>Location</b>	North of Grosvenor St
<b>Site No</b>	5
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	SB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	174	173	184	206	196	214	167	<b>2476</b>	<b>2417</b>
PM Peak	231	183	190	225	225	220	201		
0:00	4	2	1	5	4	9	11	3	5
1:00	2	1	4	1	4	11	6	2	4
2:00	2	0	0	4	2	2	1	2	2
3:00	0	0	0	1	1	3	0	0	1
4:00	2	4	4	5	3	2	2	4	3
5:00	22	19	28	26	17	8	7	22	18
6:00	42	51	46	39	30	29	16	42	36
7:00	132	133	142	158	144	66	50	142	118
8:00	<b>174</b>	<b>173</b>	<b>184</b>	<b>206</b>	189	162	85	185	168
9:00	173	147	149	183	175	190	136	165	165
10:00	152	132	164	154	162	169	158	153	156
11:00	142	157	142	198	<b>196</b>	<b>214</b>	<b>167</b>	167	174
12:00	186	155	175	222	<b>225</b>	219	<b>201</b>	193	198
13:00	151	161	157	171	201	<b>220</b>	160	168	174
14:00	167	173	151	177	171	162	168	168	167
15:00	168	165	182	188	185	138	159	178	169
16:00	162	163	<b>190</b>	165	166	135	157	169	163
17:00	<b>231</b>	<b>183</b>	188	202	210	186	167	203	195
18:00	156	181	178	<b>225</b>	218	186	158	192	186
19:00	88	128	139	165	182	168	106	140	139
20:00	69	77	91	93	117	103	74	89	89
21:00	45	42	59	57	63	54	43	53	52
22:00	16	13	29	30	44	36	15	26	26
23:00	6	2	6	13	20	18	2	9	10
<b>Total</b>	<b>2292</b>	<b>2262</b>	<b>2409</b>	<b>2688</b>	<b>2729</b>	<b>2490</b>	<b>2049</b>	<b>2476</b>	<b>2417</b>

7-19	1994	1923	2002	2249	2242	2047	1766	2082	2032
6-22	2238	2221	2337	2603	2634	2401	2005	2407	2348
6-24	2260	2236	2372	2646	2698	2455	2022	2442	2384
0-24	2292	2262	2409	2688	2729	2490	2049	2476	2417

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 6 - Young St - Resurvey
<b>Location</b>	Between Grosvenor Lane and Grosvenor St
<b>Site No</b>	6
<b>Start Date</b>	24-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	NB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	1-Mar	2-Mar	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb		
AM Peak	87	71	77	78	78	107	63	<b>1130</b>	<b>1082</b>
PM Peak	90	95	118	149	125	109	93		
0:00	4	3	4	5	5	6	4	4	4
1:00	1	5	1	2	1	7	3	2	3
2:00	1	2	2	2	4	1	3	2	2
3:00	1	1	3	1	2	1	4	2	2
4:00	2	2	1	0	1	4	3	1	2
5:00	8	5	11	10	8	3	4	8	7
6:00	28	15	29	18	13	10	8	21	17
7:00	49	47	46	55	48	24	16	49	41
8:00	<b>87</b>	64	74	<b>78</b>	77	54	22	76	65
9:00	78	54	60	<b>78</b>	68	<b>107</b>	54	68	71
10:00	60	<b>71</b>	<b>77</b>	65	71	94	<b>63</b>	69	72
11:00	51	50	56	57	<b>78</b>	84	43	58	60
12:00	69	72	85	81	104	93	<b>93</b>	82	85
13:00	69	83	86	69	75	82	78	76	77
14:00	70	76	52	79	74	74	56	70	69
15:00	54	85	89	61	74	59	55	73	68
16:00	73	89	96	94	81	59	42	87	76
17:00	<b>90</b>	<b>95</b>	101	110	108	68	40	101	87
18:00	72	86	<b>118</b>	<b>149</b>	<b>125</b>	<b>109</b>	64	110	103
19:00	42	58	77	98	93	84	57	74	73
20:00	30	42	47	66	50	54	26	47	45
21:00	18	26	30	42	35	32	24	30	30
22:00	6	11	13	17	23	28	13	14	16
23:00	4	8	10	4	6	8	7	6	7
<b>Total</b>	<b>967</b>	<b>1050</b>	<b>1168</b>	<b>1241</b>	<b>1224</b>	<b>1145</b>	<b>782</b>	<b>1130</b>	<b>1082</b>

7-19	822	872	940	976	983	907	626	919	875
6-22	940	1013	1123	1200	1174	1087	741	1090	1040
6-24	950	1032	1146	1221	1203	1123	761	1110	1062
0-24	967	1050	1168	1241	1224	1145	782	1130	1082

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary** 23/03/2021

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 6 - Young St - Resurvey
<b>Location</b>	Between Grosvenor Lane and Grosvenor St
<b>Site No</b>	6
<b>Start Date</b>	24-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	SB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	1-Mar	2-Mar	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb		
AM Peak	106	104	100	109	121	130	104	<b>1409</b>	<b>1386</b>
PM Peak	95	100	100	145	123	116	107		
0:00	4	5	5	5	4	5	6	5	5
1:00	2	4	5	3	4	8	5	4	4
2:00	2	3	2	4	1	3	3	2	3
3:00	0	1	3	1	2	5	2	1	2
4:00	1	0	2	2	2	3	1	1	2
5:00	17	14	19	17	15	7	4	16	13
6:00	31	38	44	29	34	21	15	35	30
7:00	93	74	80	103	88	50	33	88	74
8:00	88	87	<b>100</b>	106	86	103	57	93	90
9:00	<b>106</b>	94	99	<b>109</b>	<b>121</b>	<b>130</b>	79	106	105
10:00	83	103	88	92	81	97	<b>104</b>	89	93
11:00	63	<b>104</b>	76	95	103	128	73	88	92
12:00	92	91	99	117	102	<b>116</b>	<b>107</b>	100	103
13:00	90	78	93	105	115	105	91	96	97
14:00	83	95	95	103	86	96	76	92	91
15:00	79	<b>100</b>	<b>100</b>	88	90	108	73	91	91
16:00	73	93	94	126	102	78	78	98	92
17:00	<b>95</b>	83	94	134	101	85	80	101	96
18:00	86	93	91	<b>145</b>	<b>123</b>	115	77	108	104
19:00	73	67	85	93	82	100	71	80	82
20:00	50	61	65	56	57	81	46	58	59
21:00	28	28	28	38	45	31	32	33	33
22:00	9	13	14	15	26	33	13	15	18
23:00	6	4	3	5	15	11	8	7	7
<b>Total</b>	<b>1254</b>	<b>1333</b>	<b>1384</b>	<b>1591</b>	<b>1485</b>	<b>1519</b>	<b>1134</b>	<b>1409</b>	<b>1386</b>

7-19	1031	1095	1109	1323	1198	1211	928	1151	1128
6-22	1213	1289	1331	1539	1416	1444	1092	1358	1332
6-24	1228	1306	1348	1559	1457	1488	1113	1380	1357
0-24	1254	1333	1384	1591	1485	1519	1134	1409	1386

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 8 - Grosvenor St
<b>Location</b>	Between Waters Lane and Waters Road
<b>Site No</b>	8
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	EB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	119	142	118	150	156	158	151	<b>1975</b>	<b>1900</b>
PM Peak	160	160	192	206	198	180	160		
0:00	3	1	2	3	6	11	8	3	5
1:00	2	0	1	2	1	6	3	1	2
2:00	3	2	0	1	1	2	4	1	2
3:00	3	2	2	4	3	0	1	3	2
4:00	4	1	4	5	4	5	1	4	3
5:00	5	4	10	16	6	3	3	8	7
6:00	17	30	29	35	25	6	4	27	21
7:00	87	63	92	76	79	32	21	79	64
8:00	111	103	<b>118</b>	125	130	80	39	117	101
9:00	<b>119</b>	87	113	129	107	131	77	111	109
10:00	117	103	109	122	105	135	105	111	114
11:00	<b>119</b>	<b>142</b>	113	<b>150</b>	<b>156</b>	<b>158</b>	<b>151</b>	136	141
12:00	128	156	141	<b>206</b>	192	<b>180</b>	<b>160</b>	165	166
13:00	158	130	141	144	176	159	156	150	152
14:00	140	118	148	175	164	159	127	149	147
15:00	151	154	147	161	166	130	130	156	148
16:00	153	146	<b>192</b>	169	146	113	101	161	146
17:00	<b>160</b>	<b>160</b>	153	173	179	133	130	165	155
18:00	157	133	119	161	<b>198</b>	134	113	154	145
19:00	68	98	120	98	154	133	87	108	108
20:00	63	72	82	80	90	66	61	77	73
21:00	45	53	58	59	66	55	34	56	53
22:00	19	25	23	19	37	48	10	25	26
23:00	1	5	6	10	16	18	3	8	8
<b>Total</b>	<b>1833</b>	<b>1788</b>	<b>1923</b>	<b>2123</b>	<b>2207</b>	<b>1897</b>	<b>1529</b>	<b>1975</b>	<b>1900</b>

7-19	1600	1495	1586	1791	1798	1544	1310	1654	1589
6-22	1793	1748	1875	2063	2133	1804	1496	1922	1845
6-24	1813	1778	1904	2092	2186	1870	1509	1955	1879
0-24	1833	1788	1923	2123	2207	1897	1529	1975	1900

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 8 - Grosvenor St
<b>Location</b>	Between Waters Lane and Waters Road
<b>Site No</b>	8
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	WB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	205	184	211	258	243	245	198	<b>2800</b>	<b>2750</b>
PM Peak	229	191	211	246	275	231	219		
0:00	4	2	7	3	11	16	22	5	9
1:00	7	2	3	4	5	14	19	4	8
2:00	2	1	1	4	5	10	5	3	4
3:00	3	2	3	4	3	2	4	3	3
4:00	9	6	5	5	6	9	1	6	6
5:00	16	18	25	20	21	6	10	20	17
6:00	51	61	61	80	55	27	15	62	50
7:00	153	121	158	149	155	79	62	147	125
8:00	<b>205</b>	133	<b>211</b>	<b>258</b>	216	138	93	205	179
9:00	167	<b>184</b>	181	180	172	187	124	177	171
10:00	163	173	161	145	205	187	191	169	175
11:00	169	<b>184</b>	193	179	<b>243</b>	<b>245</b>	<b>198</b>	194	202
12:00	216	190	<b>211</b>	<b>246</b>	234	205	<b>219</b>	219	217
13:00	201	164	196	205	217	225	218	197	204
14:00	195	<b>191</b>	191	186	176	196	194	188	190
15:00	<b>229</b>	178	<b>211</b>	212	186	194	176	203	198
16:00	190	179	209	196	198	190	172	194	191
17:00	203	165	201	190	210	177	182	194	190
18:00	208	178	179	221	<b>275</b>	<b>231</b>	178	212	210
19:00	122	174	160	124	226	196	163	161	166
20:00	85	93	123	125	157	116	115	117	116
21:00	48	60	73	64	86	61	48	66	63
22:00	24	42	33	47	65	66	26	42	43
23:00	6	7	15	11	22	29	7	12	14
<b>Total</b>	<b>2676</b>	<b>2508</b>	<b>2811</b>	<b>2858</b>	<b>3149</b>	<b>2806</b>	<b>2442</b>	<b>2800</b>	<b>2750</b>

7-19	2299	2040	2302	2367	2487	2254	2007	2299	2251
6-22	2605	2428	2719	2760	3011	2654	2348	2705	2646
6-24	2635	2477	2767	2818	3098	2749	2381	2759	2704
0-24	2676	2508	2811	2858	3149	2806	2442	2800	2750

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 9 - Grosvenor Lane
<b>Location</b>	Between Waters Lane and Waters Road
<b>Site No</b>	9
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	EB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	98	96	116	165	131	119	104		
PM Peak	141	141	133	153	167	144	130	<b>1726</b>	<b>1708</b>
0:00	2	3	3	3	7	11	13	4	6
1:00	3	2	4	4	2	11	6	3	5
2:00	6	6	1	7	4	2	1	5	4
3:00	1	3	1	0	1	3	3	1	2
4:00	4	3	2	1	7	4	4	3	4
5:00	6	12	17	12	13	11	5	12	11
6:00	34	30	42	30	33	19	8	34	28
7:00	64	56	74	81	67	42	35	68	60
8:00	<b>98</b>	75	86	<b>165</b>	89	83	57	103	93
9:00	97	92	99	114	84	110	72	97	95
10:00	97	94	100	73	104	83	98	94	93
11:00	97	<b>96</b>	<b>116</b>	97	<b>131</b>	<b>119</b>	<b>104</b>	107	109
12:00	113	100	110	118	129	123	110	114	115
13:00	113	111	109	113	125	<b>144</b>	125	114	120
14:00	117	120	109	105	108	107	114	112	111
15:00	123	93	<b>133</b>	107	119	130	<b>130</b>	115	119
16:00	130	120	<b>133</b>	123	130	132	122	127	127
17:00	135	119	131	133	132	132	121	130	129
18:00	<b>141</b>	<b>141</b>	126	<b>153</b>	<b>167</b>	135	117	146	140
19:00	113	110	114	138	138	137	120	123	124
20:00	93	107	104	106	108	109	99	104	104
21:00	59	56	64	69	74	69	51	64	63
22:00	22	30	43	38	51	50	19	37	36
23:00	6	5	8	7	22	23	5	10	11
<b>Total</b>	<b>1674</b>	<b>1584</b>	<b>1729</b>	<b>1797</b>	<b>1845</b>	<b>1789</b>	<b>1539</b>	<b>1726</b>	<b>1708</b>

7-19	1325	1217	1326	1382	1385	1340	1205	1327	1311
6-22	1624	1520	1650	1725	1738	1674	1483	1651	1631
6-24	1652	1555	1701	1770	1811	1747	1507	1698	1678
0-24	1674	1584	1729	1797	1845	1789	1539	1726	1708

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**



<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 9 - Grosvenor Lane
<b>Location</b>	Between Waters Lane and Waters Road
<b>Site No</b>	9
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	WB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	22-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb		
AM Peak	3	2	2	3	4	4	8	19	20
PM Peak	2	4	2	3	5	2	2		
0:00	2	1	0	0	0	0	1	1	1
1:00	0	0	1	1	0	2	1	0	1
2:00	3	2	0	1	1	2	0	1	1
3:00	2	0	2	0	0	0	0	1	1
4:00	1	2	1	2	4	4	2	2	2
5:00	2	0	0	1	0	2	8	1	2
6:00	0	0	0	1	1	3	1	0	1
7:00	1	0	0	0	0	1	1	0	0
8:00	0	0	0	3	0	0	0	1	0
9:00	1	0	1	0	1	0	0	1	0
10:00	2	0	1	2	0	1	0	1	1
11:00	0	1	2	1	2	0	0	1	1
12:00	0	1	2	2	5	2	1	2	2
13:00	0	3	1	0	2	0	2	1	1
14:00	0	4	1	0	1	0	0	1	1
15:00	0	1	1	1	0	0	0	1	0
16:00	0	0	2	0	0	1	0	0	0
17:00	2	0	1	0	0	0	0	1	0
18:00	1	0	0	2	0	0	1	1	1
19:00	0	0	0	3	1	1	1	1	1
20:00	0	2	1	0	2	2	0	1	1
21:00	1	0	1	0	1	0	0	1	0
22:00	0	0	1	0	0	0	0	0	0
23:00	1	0	0	0	0	1	0	0	0
<b>Total</b>	<b>19</b>	<b>17</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>19</b>	<b>19</b>	<b>20</b>

7-19	7	10	12	11	11	5	5	10	9
6-22	8	12	14	15	16	11	7	13	12
6-24	9	12	15	15	16	12	7	13	12
0-24	19	17	19	20	21	22	19	19	20

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 10 - Waters Road
<b>Location</b>	Between Military and Grosvenor lane
<b>Site No</b>	10
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	NB




Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	22-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb		
AM Peak	89	102	93	100	108	115	87	<b>1361</b>	<b>1346</b>
PM Peak	103	98	109	138	153	108	120		
0:00	5	8	10	10	14	21	26	9	13
1:00	5	3	5	7	7	17	22	5	9
2:00	7	4	4	7	8	10	7	6	7
3:00	5	3	5	6	5	3	7	5	5
4:00	5	6	3	7	9	9	2	6	6
5:00	10	9	14	11	11	6	12	11	10
6:00	30	25	28	32	37	21	13	30	27
7:00	64	52	59	70	73	35	25	64	54
8:00	68	68	93	90	92	51	32	82	71
9:00	89	97	83	88	87	86	50	89	83
10:00	80	87	75	87	85	80	72	83	81
11:00	81	102	86	100	108	115	87	95	97
12:00	98	90	105	123	96	108	102	102	103
13:00	103	91	105	108	86	104	120	99	102
14:00	100	83	95	85	104	108	68	93	92
15:00	87	88	100	92	100	94	98	93	94
16:00	94	93	96	88	96	86	88	93	92
17:00	7	97	93	96	104	85	75	79	80
18:00	0	98	109	138	153	95	80	100	96
19:00	0	76	77	82	114	106	61	70	74
20:00	0	59	66	74	101	66	74	60	63
21:00	3	40	45	28	53	42	31	34	35
22:00	17	22	28	55	58	58	21	36	37
23:00	11	8	17	16	26	28	8	16	16
<b>Total</b>	<b>969</b>	<b>1309</b>	<b>1401</b>	<b>1500</b>	<b>1627</b>	<b>1434</b>	<b>1181</b>	<b>1361</b>	<b>1346</b>

7-19	871	1046	1099	1165	1184	1047	897	1073	1044
6-22	904	1246	1315	1381	1489	1282	1076	1267	1242
6-24	932	1276	1360	1452	1573	1368	1105	1319	1295
0-24	969	1309	1401	1500	1627	1434	1181	1361	1346

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary** 23/03/2021

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 10 - Waters Road
<b>Location</b>	Between Military and Grosvenor lane
<b>Site No</b>	10
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	SB




Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	22-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb		
AM Peak	96	96	105	112	113	125	107	<b>1537</b>	<b>1527</b>
PM Peak	134	121	126	136	153	159	123		
0:00	4	3	3	8	9	23	19	5	10
1:00	2	3	5	7	5	10	12	4	6
2:00	9	6	2	7	6	8	4	6	6
3:00	5	4	3	4	4	1	2	4	3
4:00	5	3	4	9	9	4	2	6	5
5:00	8	11	14	21	9	7	6	13	11
6:00	22	28	27	32	29	17	10	28	24
7:00	51	51	85	79	71	32	29	67	57
8:00	73	77	83	85	91	63	30	82	72
9:00	83	66	70	79	83	80	60	76	74
10:00	96	85	105	107	84	99	84	95	94
11:00	89	96	95	112	113	125	107	101	105
12:00	105	117	114	130	91	159	101	111	117
13:00	113	121	118	109	108	135	117	114	117
14:00	118	106	111	109	137	134	121	116	119
15:00	134	109	123	133	131	111	123	126	123
16:00	119	111	126	102	107	103	92	113	109
17:00	19	112	119	132	124	110	115	101	104
18:00	0	105	103	136	153	111	94	99	100
19:00	0	111	96	111	134	129	65	90	92
20:00	0	95	92	101	120	80	69	82	80
21:00	5	49	55	62	97	64	40	54	53
22:00	21	25	34	32	52	43	18	33	32
23:00	4	4	8	10	23	28	7	10	12
<b>Total</b>	<b>1085</b>	<b>1498</b>	<b>1595</b>	<b>1717</b>	<b>1790</b>	<b>1676</b>	<b>1327</b>	<b>1537</b>	<b>1527</b>

7-19	1000	1156	1252	1313	1293	1262	1073	1203	1193
6-22	1027	1439	1522	1619	1673	1552	1257	1456	1441
6-24	1052	1468	1564	1661	1748	1623	1282	1499	1485
0-24	1085	1498	1595	1717	1790	1676	1327	1537	1527

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 11 - Waters Road
<b>Location</b>	Between Grosvenor lane and Grosvenor St
<b>Site No</b>	11
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	NB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	166	177	179	220	205	217	162	<b>2666</b>	<b>2620</b>
PM Peak	210	209	202	238	288	228	207		
0:00	6	6	8	9	16	24	33	9	15
1:00	6	3	5	7	7	21	21	6	10
2:00	3	1	4	4	8	11	7	4	5
3:00	4	1	4	7	5	5	8	4	5
4:00	3	5	2	4	5	7	1	4	4
5:00	9	11	16	8	10	6	6	11	9
6:00	50	40	52	49	50	28	13	48	40
7:00	117	101	116	127	122	56	40	117	97
8:00	152	128	141	220	165	104	70	161	140
9:00	166	168	142	188	105	168	103	154	149
10:00	149	168	137	140	175	155	143	154	152
11:00	147	177	179	192	205	217	162	180	183
12:00	174	169	189	233	230	202	186	199	198
13:00	195	167	192	207	190	220	207	190	197
14:00	170	165	190	186	180	189	142	178	175
15:00	166	154	202	180	184	200	186	177	182
16:00	185	174	185	195	189	175	175	186	183
17:00	210	200	199	195	206	191	161	202	195
18:00	206	209	199	238	288	228	179	228	221
19:00	144	150	160	173	237	198	163	173	175
20:00	94	111	138	132	157	147	129	126	130
21:00	59	69	89	70	102	85	53	78	75
22:00	23	42	55	78	91	95	28	58	59
23:00	11	10	23	20	38	49	11	20	23
<b>Total</b>	<b>2449</b>	<b>2429</b>	<b>2627</b>	<b>2862</b>	<b>2965</b>	<b>2781</b>	<b>2227</b>	<b>2666</b>	<b>2620</b>

7-19	2037	1980	2071	2301	2239	2105	1754	2126	2070
6-22	2384	2350	2510	2725	2785	2563	2112	2551	2490
6-24	2418	2402	2588	2823	2914	2707	2151	2629	2572
0-24	2449	2429	2627	2862	2965	2781	2227	2666	2620

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary** 23/03/2021

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 11 - Waters Road
<b>Location</b>	Between Grosvenor lane and Grosvenor St
<b>Site No</b>	11
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	SB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	22-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb		
AM Peak	96	77	90	104	102	93	77	<b>1305</b>	<b>1259</b>
PM Peak	109	99	107	130	137	124	100		
0:00	5	1	1	4	3	16	15	3	6
1:00	2	0	2	3	2	8	4	2	3
2:00	3	2	1	1	1	3	4	2	2
3:00	3	1	2	4	5	0	2	3	2
4:00	4	1	3	6	4	4	3	4	4
5:00	4	3	12	18	4	3	5	8	7
6:00	14	25	25	27	20	10	5	22	18
7:00	51	46	90	51	61	23	17	60	48
8:00	96	77	82	95	96	46	20	89	73
9:00	68	55	55	71	54	67	49	61	60
10:00	65	64	72	76	64	85	62	68	70
11:00	70	73	67	104	102	93	77	83	84
12:00	84	99	85	130	102	124	82	100	101
13:00	83	90	102	93	89	117	95	91	96
14:00	94	77	83	104	117	113	80	95	95
15:00	109	97	102	116	137	90	100	112	107
16:00	88	90	100	99	76	71	64	91	84
17:00	95	97	107	97	109	78	88	101	96
18:00	82	77	81	108	116	92	75	93	90
19:00	44	73	71	81	114	101	55	77	77
20:00	36	62	76	66	78	53	47	64	60
21:00	37	41	35	50	72	44	22	47	43
22:00	13	16	21	23	41	35	11	23	23
23:00	1	4	7	9	18	23	6	8	10
<b>Total</b>	<b>1151</b>	<b>1171</b>	<b>1282</b>	<b>1436</b>	<b>1485</b>	<b>1299</b>	<b>988</b>	<b>1305</b>	<b>1259</b>

7-19	985	942	1026	1144	1123	999	809	1044	1004
6-22	1116	1143	1233	1368	1407	1207	938	1253	1202
6-24	1130	1163	1261	1400	1466	1265	955	1284	1234
0-24	1151	1171	1282	1436	1485	1299	988	1305	1259

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary** 23/03/2021

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 12 - Waters Road
<b>Location</b>	Between Grosvenor St and Belgrave
<b>Site No</b>	12
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	NB



Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	147	172	153	190	185	180	158	<b>2430</b>	<b>2330</b>
PM Peak	199	198	201	222	257	201	195		
0:00	4	2	4	8	13	12	20	6	9
1:00	0	2	3	3	3	12	8	2	4
2:00	2	0	2	1	4	4	5	2	3
3:00	2	0	1	3	2	3	5	2	2
4:00	0	2	0	2	2	1	1	1	1
5:00	5	5	7	11	10	3	3	8	6
6:00	36	28	44	46	49	18	5	41	32
7:00	124	95	110	109	124	38	19	112	88
8:00	<b>147</b>	103	149	177	160	86	60	147	126
9:00	143	118	146	165	142	144	98	143	137
10:00	140	138	126	155	144	135	129	141	138
11:00	144	<b>172</b>	<b>153</b>	<b>190</b>	<b>185</b>	<b>180</b>	<b>158</b>	169	169
12:00	158	152	161	<b>222</b>	229	195	<b>195</b>	184	187
13:00	169	153	176	182	207	<b>201</b>	167	177	179
14:00	167	130	180	195	179	157	139	170	164
15:00	163	174	163	155	189	167	141	169	165
16:00	170	165	200	204	188	150	157	185	176
17:00	<b>199</b>	188	<b>201</b>	199	214	165	154	200	189
18:00	192	<b>198</b>	191	195	<b>257</b>	176	142	207	193
19:00	114	106	141	164	195	141	122	144	140
20:00	88	88	130	107	115	110	100	106	105
21:00	53	55	74	61	76	67	49	64	62
22:00	16	29	35	58	53	66	14	38	39
23:00	7	5	11	13	28	33	6	13	15
<b>Total</b>	<b>2243</b>	<b>2108</b>	<b>2408</b>	<b>2625</b>	<b>2768</b>	<b>2264</b>	<b>1897</b>	<b>2430</b>	<b>2330</b>

7-19	1916	1786	1956	2148	2218	1794	1559	2005	1911
6-22	2207	2063	2345	2526	2653	2130	1835	2359	2251
6-24	2230	2097	2391	2597	2734	2229	1855	2410	2305
0-24	2243	2108	2408	2625	2768	2264	1897	2430	2330

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

<b>Job No</b>	N6198 - Neutral Bay
<b>Client</b>	GTA
<b>Site</b>	ATC 12 - Waters Road
<b>Location</b>	Between Grosvenor St and Belgrave
<b>Site No</b>	12
<b>Start Date</b>	16-Feb-21
<b>Description</b>	Volume Summary
<b>Direction</b>	SB

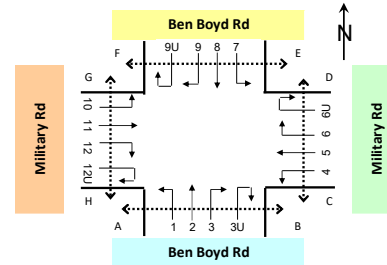


Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon 22-Feb	Tue 16-Feb	Wed 17-Feb	Thu 18-Feb	Fri 19-Feb	Sat 20-Feb	Sun 21-Feb		
AM Peak	190	109	184	187	163	134	138	<b>1815</b>	<b>1761</b>
PM Peak	161	136	137	175	149	164	143		
0:00	4	3	2	3	4	8	15	3	6
1:00	2	1	2	1	2	5	8	2	3
2:00	1	0	0	1	1	3	5	1	2
3:00	1	0	1	0	2	0	1	1	1
4:00	6	3	2	4	3	2	2	4	3
5:00	11	12	18	17	12	3	6	14	11
6:00	34	49	57	67	48	19	11	51	41
7:00	135	97	158	114	129	52	35	127	103
8:00	<b>190</b>	93	<b>184</b>	<b>187</b>	<b>163</b>	91	68	163	139
9:00	103	104	121	108	120	108	102	111	109
10:00	103	<b>109</b>	110	116	125	121	<b>138</b>	113	117
11:00	115	102	121	148	150	<b>134</b>	131	127	129
12:00	150	134	131	<b>175</b>	148	150	<b>143</b>	148	147
13:00	104	114	122	109	142	<b>164</b>	115	118	124
14:00	125	116	114	113	114	127	132	116	120
15:00	<b>161</b>	<b>136</b>	<b>137</b>	148	<b>149</b>	111	112	146	136
16:00	119	106	123	112	117	113	117	115	115
17:00	139	99	135	110	135	107	135	124	123
18:00	106	104	104	119	<b>149</b>	123	107	116	116
19:00	57	98	82	90	136	115	77	93	94
20:00	40	47	89	65	90	62	63	66	65
21:00	36	31	30	35	52	29	26	37	34
22:00	8	15	7	25	23	22	7	16	15
23:00	2	2	3	3	13	18	4	5	6
<b>Total</b>	<b>1752</b>	<b>1575</b>	<b>1853</b>	<b>1870</b>	<b>2027</b>	<b>1687</b>	<b>1560</b>	<b>1815</b>	<b>1761</b>

7-19	1550	1314	1560	1559	1641	1401	1335	1525	1480
6-22	1717	1539	1818	1816	1967	1626	1512	1771	1714
6-24	1727	1556	1828	1844	2003	1666	1523	1792	1735
0-24	1752	1575	1853	1870	2027	1687	1560	1815	1761

MATRIX ATC 7 Day Austroads 13 Bin FEB 2021 - Neutral Bay (N6198)\_inc\_resurvey Site 6.xlsm **Volume Summary 23/03/2021**

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 1. Military Road / Ben Boyd Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



Classifications	Class 1 Lights	Class 2 Heavies
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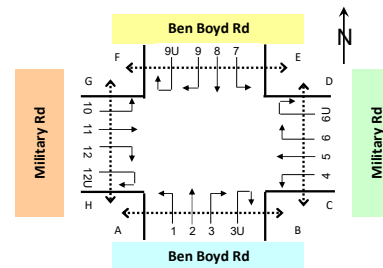
Approach	Ben Boyd Rd												Military Rd											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	12	1	13	32	2	34	4	1	5	0	0	0	8	0	8	536	35	571	0	0	0	0	0	0
7:15 to 7:30	16	0	16	42	1	43	5	0	5	0	0	0	11	2	13	526	53	579	0	0	0	0	0	0
7:30 to 7:45	19	0	19	27	1	28	5	0	5	0	0	0	4	0	4	544	71	615	0	0	0	0	0	0
7:45 to 8:00	18	3	21	46	1	47	8	0	8	0	0	0	6	0	6	552	57	609	0	0	0	0	0	0
8:00 to 8:15	13	1	14	45	0	45	4	0	4	0	0	0	7	0	7	545	63	608	0	0	0	0	0	0
8:15 to 8:30	17	3	20	51	1	52	3	0	3	0	0	0	3	0	3	517	63	580	0	0	0	0	0	0
8:30 to 8:45	14	0	14	43	2	45	6	0	6	0	0	0	2	1	3	542	66	608	0	0	0	0	0	0
8:45 to 9:00	21	1	22	49	0	49	2	1	3	0	0	0	6	0	6	526	41	567	0	0	0	0	0	0
<b>AM Totals</b>	<b>130</b>	<b>9</b>	<b>139</b>	<b>335</b>	<b>8</b>	<b>343</b>	<b>37</b>	<b>2</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>3</b>	<b>50</b>	<b>4,288</b>	<b>449</b>	<b>4,737</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	15	0	15	43	0	43	10	0	10	0	0	0	9	0	9	439	40	479	0	0	0	0	0	0
16:30 to 16:45	25	0	25	40	0	40	6	0	6	0	0	0	10	0	10	435	40	475	0	0	0	0	0	0
16:45 to 17:00	8	0	8	39	2	41	8	0	8	0	0	0	9	1	10	409	40	449	0	0	0	0	0	0
17:00 to 17:15	17	0	17	59	0	59	9	0	9	0	0	0	9	0	9	432	25	457	0	0	0	0	0	0
17:15 to 17:30	7	0	7	52	0	52	3	0	3	0	0	0	6	0	6	426	34	460	0	0	0	0	0	0
17:30 to 17:45	8	0	8	58	1	59	4	0	4	0	0	0	8	0	8	425	32	457	0	0	0	0	0	0
17:45 to 18:00	17	1	18	46	2	48	5	0	5	0	0	0	10	0	10	402	30	432	0	0	0	0	0	0
18:00 to 18:15	11	0	11	52	1	53	10	0	10	0	0	0	6	0	6	394	19	413	0	0	0	0	0	0
<b>PM Totals</b>	<b>108</b>	<b>1</b>	<b>109</b>	<b>389</b>	<b>6</b>	<b>395</b>	<b>55</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>1</b>	<b>68</b>	<b>3,362</b>	<b>260</b>	<b>3,622</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Military Rd												Crossing Pedestrians									
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)												
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total	
7:00 to 7:15	0	0	0	17	0	17	16	1	17	0	0	0	64	5	69	436	47	483	0	0	0	0	0	0	8	5	1	1	1	0	4	2	22	
7:15 to 7:30	1	0	1	26	0	26	10	0	10	0	0	0	62	2	64	441	52	493	0	0	0	0	0	0	15	8	5	6	1	1	6	3	45	



7:30 to 7:45	0	0	0	44	1	45	12	0	12	0	0	0	66	1	67	456	54	510	0	0	0	0	0	0	0	11	8	3	5	1	6	3	7	44
7:45 to 8:00	1	0	1	39	2	41	18	0	18	0	0	0	83	5	88	402	51	453	0	0	0	0	0	0	0	9	10	9	5	0	10	2	3	48
8:00 to 8:15	2	0	2	40	0	40	13	0	13	0	0	0	82	1	83	407	59	466	0	0	0	0	0	0	0	15	11	4	9	0	3	9	14	65
8:15 to 8:30	3	1	4	45	4	49	9	2	11	0	0	0	85	7	92	433	54	487	0	0	0	0	0	0	0	23	4	25	8	1	3	6	9	79
8:30 to 8:45	1	0	1	26	0	26	12	1	13	0	0	0	83	3	86	397	40	437	0	0	0	0	0	0	0	8	7	6	10	2	4	4	9	50
8:45 to 9:00	2	0	2	37	0	37	9	2	11	0	0	0	85	3	88	354	51	405	0	0	0	0	0	0	0	13	15	19	12	2	6	5	9	81
<b>AM Totals</b>	<b>10</b>	<b>1</b>	<b>11</b>	<b>274</b>	<b>7</b>	<b>281</b>	<b>99</b>	<b>6</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>610</b>	<b>27</b>	<b>637</b>	<b>3,326</b>	<b>408</b>	<b>3,734</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>102</b>	<b>68</b>	<b>72</b>	<b>56</b>	<b>8</b>	<b>33</b>	<b>39</b>	<b>56</b>	<b>434</b>	
16:15 to 16:30	2	0	2	49	0	49	12	0	12	0	0	0	72	1	73	458	37	495	0	0	0	0	0	0	0	11	17	8	8	8	6	3	10	71
16:30 to 16:45	1	0	1	44	0	44	18	0	18	0	0	0	86	0	86	529	36	565	0	0	0	0	0	0	0	4	11	12	5	9	4	9	4	58
16:45 to 17:00	1	0	1	38	0	38	10	0	10	0	0	0	76	1	77	563	27	590	0	0	0	0	0	0	0	17	13	8	12	5	8	11	13	87
17:00 to 17:15	3	0	3	36	0	36	19	0	19	0	0	0	76	0	76	534	41	575	0	0	0	0	0	0	0	13	14	7	9	0	7	3	4	57
17:15 to 17:30	0	0	0	36	1	37	6	2	8	0	0	0	101	1	102	517	37	554	0	0	0	0	0	0	0	16	14	7	7	0	10	6	13	73
17:30 to 17:45	1	0	1	35	3	38	11	0	11	0	0	0	84	1	85	534	40	574	0	0	0	0	0	0	0	18	12	12	12	5	7	5	11	82
17:45 to 18:00	3	0	3	56	1	57	12	3	15	0	0	0	93	0	93	511	41	552	0	0	0	0	0	0	0	12	21	11	11	4	5	12	19	95
18:00 to 18:15	3	0	3	41	0	41	9	2	11	0	0	0	75	0	75	537	44	581	0	0	0	0	0	0	0	12	2	6	15	3	7	4	9	58
<b>PM Totals</b>	<b>14</b>	<b>0</b>	<b>14</b>	<b>335</b>	<b>5</b>	<b>340</b>	<b>97</b>	<b>7</b>	<b>104</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>663</b>	<b>4</b>	<b>667</b>	<b>4,183</b>	<b>303</b>	<b>4,486</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>103</b>	<b>104</b>	<b>71</b>	<b>79</b>	<b>34</b>	<b>54</b>	<b>53</b>	<b>83</b>	<b>581</b>	

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 1. Military Road / Ben Boyd Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary

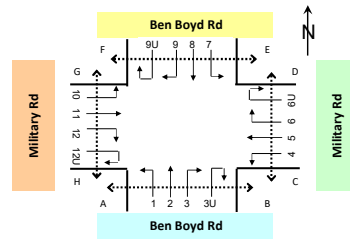


Approach	Ben Boyd Rd									Military Rd																										
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)														
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total						
7:00 to 8:00	65	4	69	147	5	152	22	1	23	0	0	0	29	2	31	2,158	216	2,374	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 to 8:15	66	4	70	160	3	163	22	0	22	0	0	0	28	2	30	2,167	244	2,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 to 8:30	67	7	74	169	3	172	20	0	20	0	0	0	20	0	20	2,158	254	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 to 8:45	62	7	69	185	4	189	21	0	21	0	0	0	18	1	19	2,156	249	2,405	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 to 9:00	65	5	70	188	3	191	15	1	16	0	0	0	18	1	19	2,130	233	2,363	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>AM Totals</b>	<b>130</b>	<b>9</b>	<b>139</b>	<b>335</b>	<b>8</b>	<b>343</b>	<b>37</b>	<b>2</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>3</b>	<b>50</b>	<b>4,288</b>	<b>449</b>	<b>4,737</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
16:15 to 17:15	65	0	65	181	2	183	33	0	33	0	0	0	37	1	38	1,715	145	1,860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30 to 17:30	57	0	57	190	2	192	26	0	26	0	0	0	34	1	35	1,702	139	1,841	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45 to 17:45	40	0	40	208	3	211	24	0	24	0	0	0	32	1	33	1,692	131	1,823	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 to 18:00	49	1	50	215	3	218	21	0	21	0	0	0	33	0	33	1,685	121	1,806	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15 to 18:15	43	1	44	208	4	212	22	0	22	0	0	0	30	0	30	1,647	115	1,762	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>PM Totals</b>	<b>108</b>	<b>1</b>	<b>109</b>	<b>389</b>	<b>6</b>	<b>395</b>	<b>55</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>1</b>	<b>68</b>	<b>3,362</b>	<b>260</b>	<b>3,622</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Approach	Ben Boyd Rd												Military Rd								Crossing Pedestrians																
Direction	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)															
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total	
7:00 to 8:00	2	0	2	126	3	129	56	1	57	0	0	0	275	13	288	1,735	204	1,939	0	0	0	0	0	0	43	31	74	18	17	35	3	17	20	15	15	30	159
7:15 to 8:15	4	0	4	149	3	152	53	0	53	0	0	0	293	9	302	1,706	216	1,922	0	0	0	0	0	0	50	37	87	21	25	46	2	20	22	20	20	40	202
7:30 to 8:30	6	1	7	168	7	175	52	2	54	0	0	0	316	14	330	1,698	218	1,916	0	0	0	0	0	0	58	33	91	41	27	68	2	22	24	20	33	53	236
7:45 to 8:45	7	1	8	150	6	156	52	3	55	0	0	0	333	16	349	1,639	204	1,843	0	0	0	0	0	0	55	32	87	44	32	76	3	20	23	21	35	56	242
8:00 to 9:00	8	1	9	148	4	152	43	5	48	0	0	0	335	14	349	1,591	204	1,795	0	0	0	0	0	0	59	37	96	54	39	93	5	16	21	24	41	65	275
<b>AM Totals</b>	<b>10</b>	<b>1</b>	<b>11</b>	<b>274</b>	<b>7</b>	<b>281</b>	<b>99</b>	<b>6</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>610</b>	<b>27</b>	<b>637</b>	<b>3,326</b>	<b>408</b>	<b>3,734</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>102</b>	<b>68</b>	<b>170</b>	<b>72</b>	<b>56</b>	<b>128</b>	<b>8</b>	<b>33</b>	<b>41</b>	<b>39</b>	<b>56</b>	<b>95</b>	<b>434</b>
16:15 to 17:15	7	0	7	167	0	167	59	0	59	0	0	0	310	2	312	2,084	141	2,225	0	0	0	0	0	0	45	55	100	35	34	69	22	25	47	26	31	57	273
16:30 to 17:30	5	0	5	154	1	155	53	2	55	0	0	0	339	2	341	2,143	141	2,284	0	0	0	0	0	0	50	52	102	34	33	67	14	29	43	29	34	63	275
16:45 to 17:45	5	0	5	145	4	149	46	2	48	0	0	0	337	3	340	2,148	145	2,293	0	0	0	0	0	0	64	53	117	34	40	74	10	32	42	25	41	66	299
17:00 to 18:00	7	0	7	163	5	168	48	5	53	0	0	0	354	2	356	2,096	159	2,255	0	0	0	0	0	0	59	61	120	37	39	76	9	29	38	29	26	55	307
17:15 to 18:15	7	0	7	168	5	173	38	7	45	0	0	0	353	2	355	2,099	162	2,261	0	0	0	0	0	0	58	49	107	36	45	81	12	29	41	27	52	79	308
<b>PM Totals</b>	<b>14</b>	<b>0</b>	<b>14</b>	<b>335</b>	<b>5</b>	<b>340</b>	<b>97</b>	<b>7</b>	<b>104</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>663</b>	<b>4</b>	<b>667</b>	<b>4,183</b>	<b>303</b>	<b>4,486</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>103</b>	<b>104</b>	<b>207</b>	<b>71</b>	<b>79</b>	<b>150</b>	<b>34</b>	<b>54</b>	<b>88</b>	<b>53</b>	<b>83</b>	<b>136</b>	<b>581</b>



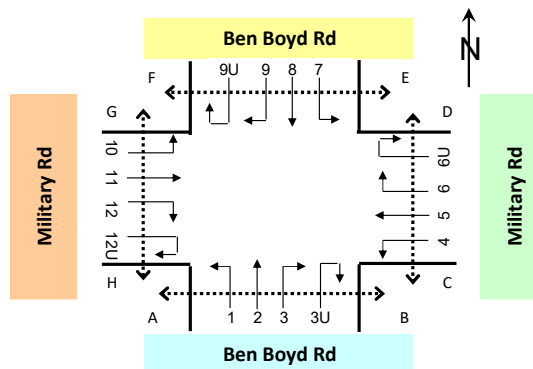
Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 1. Military Road / Ben Boyd Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary



Approach	Ben Boyd Rd			Military Rd			Ben Boyd Rd			Military Rd			Grand Total
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:30 to 8:30	256	10	266	2,178	254	2,432	226	10	236	2,014	232	2,246	5,180
PM 16:30 to 17:30	273	2	275	1,736	140	1,876	212	3	215	2,482	143	2,625	4,991

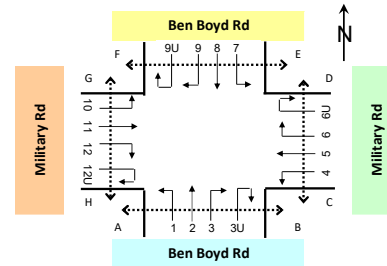
Approach	Ben Boyd Rd			Military Rd			Ben Boyd Rd			Military Rd			Grand Total
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	234	10	244	2,187	218	2,405	184	4	188	2,010	217	2,227	5,064
7:15 to 8:15	248	7	255	2,195	246	2,441	206	3	209	1,999	225	2,224	5,129
7:30 to 8:30	256	10	266	2,178	254	2,432	226	10	236	2,014	232	2,246	5,180
7:45 to 8:45	268	11	279	2,174	250	2,424	209	10	219	1,972	220	2,192	5,114
8:00 to 9:00	268	9	277	2,148	234	2,382	199	10	209	1,926	218	2,144	5,012
<b>AM Totals</b>	<b>502</b>	<b>19</b>	<b>521</b>	<b>4,335</b>	<b>452</b>	<b>4,787</b>	<b>383</b>	<b>14</b>	<b>397</b>	<b>3,936</b>	<b>435</b>	<b>4,371</b>	<b>10,076</b>
16:15 to 17:15	279	2	281	1,752	146	1,898	233	0	233	2,394	143	2,537	4,949
16:30 to 17:30	273	2	275	1,736	140	1,876	212	3	215	2,482	143	2,625	4,991
16:45 to 17:45	272	3	275	1,724	132	1,856	196	6	202	2,485	148	2,633	4,966
17:00 to 18:00	285	4	289	1,718	121	1,839	218	10	228	2,450	161	2,611	4,967
17:15 to 18:15	273	5	278	1,677	115	1,792	213	12	225	2,452	164	2,616	4,911
<b>PM Totals</b>	<b>552</b>	<b>7</b>	<b>559</b>	<b>3,429</b>	<b>261</b>	<b>3,690</b>	<b>446</b>	<b>12</b>	<b>458</b>	<b>4,846</b>	<b>307</b>	<b>5,153</b>	<b>9,860</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 1. Military Road / Ben Boyd Road  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	Time Period	B to A	A to B	D to C	C to D	F to E	E to F	H to G
7:00 to 7:15	8	5	1	1	1	0	4	2
7:15 to 7:30	15	8	5	6	1	1	6	3
7:30 to 7:45	11	8	3	5	1	6	3	7
7:45 to 8:00	9	10	9	5	0	10	2	3
8:00 to 8:15	15	11	4	9	0	3	9	14
8:15 to 8:30	23	4	25	8	1	3	6	9
8:30 to 8:45	8	7	6	10	2	4	4	9
8:45 to 9:00	13	15	19	12	2	6	5	9
<b>AM Totals</b>	<b>102</b>	<b>68</b>	<b>72</b>	<b>56</b>	<b>8</b>	<b>33</b>	<b>39</b>	<b>56</b>
16:15 to 16:30	11	17	8	8	8	6	3	10
16:30 to 16:45	4	11	12	5	9	4	9	4
16:45 to 17:00	17	13	8	12	5	8	11	13
17:00 to 17:15	13	14	7	9	0	7	3	4
17:15 to 17:30	16	14	7	7	0	10	6	13
17:30 to 17:45	18	12	12	12	5	7	5	11
17:45 to 18:00	12	21	11	11	4	5	12	19
18:00 to 18:15	12	2	6	15	3	7	4	9
<b>PM Totals</b>	<b>103</b>	<b>104</b>	<b>71</b>	<b>79</b>	<b>34</b>	<b>54</b>	<b>53</b>	<b>83</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 1. Military Road / Ben Boyd Road  
 Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



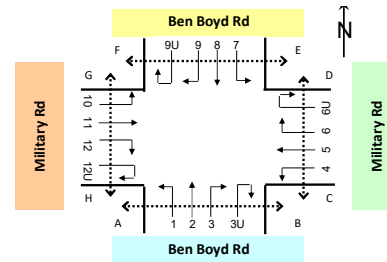
Classifications	Class 1 Lights	Class 2 Heavies
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Approach	Ben Boyd Rd												Military Rd											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
11:45 to 12:00	14	0	14	36	0	36	5	0	5	0	0	0	5	1	6	459	12	471	0	0	0	0	0	0
12:00 to 12:15	19	0	19	38	1	39	7	0	7	0	0	0	10	1	11	505	7	512	0	0	0	0	0	0
12:15 to 12:30	21	1	22	47	0	47	8	0	8	0	0	0	7	1	8	456	14	470	0	0	0	0	0	0
12:30 to 12:45	24	0	24	42	0	42	15	0	15	0	0	0	9	0	9	451	16	467	0	0	0	0	0	0
12:45 to 13:00	19	0	19	40	1	41	9	0	9	0	0	0	7	0	7	406	13	419	0	0	0	0	0	0
13:00 to 13:15	10	0	10	60	0	60	11	0	11	0	0	0	10	0	10	437	15	452	0	0	0	0	0	0
13:15 to 13:30	16	0	16	48	0	48	13	0	13	0	0	0	6	0	6	469	14	483	0	0	0	0	0	0
13:30 to 13:45	12	0	12	38	0	38	8	0	8	0	0	0	7	0	7	497	14	511	0	0	0	0	0	0
<b>Total</b>	<b>135</b>	<b>1</b>	<b>136</b>	<b>349</b>	<b>2</b>	<b>351</b>	<b>76</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>3</b>	<b>64</b>	<b>3,680</b>	<b>105</b>	<b>3,785</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Military Rd												Crossing Pedestrians										
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)													
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
11:45 to 12:00	2	0	2	39	0	39	12	1	13	0	0	0	80	1	81	516	17	533	0	0	0	0	0	0	0	15	17	10	5	26	22	16	6	117	
12:00 to 12:15	3	1	4	46	0	46	10	0	10	0	0	0	80	0	80	518	8	526	0	0	0	0	0	0	0	12	15	8	3	26	38	11	10	123	
12:15 to 12:30	4	0	4	55	0	55	14	0	14	0	0	0	90	1	91	498	16	514	0	0	0	0	0	0	0	21	8	4	1	31	38	12	15	130	
12:30 to 12:45	6	0	6	46	1	47	10	0	10	0	0	0	73	0	73	569	7	576	0	0	0	0	0	0	0	17	18	12	2	20	21	10	15	115	
12:45 to 13:00	6	0	6	46	0	46	16	0	16	0	0	0	81	1	82	558	18	576	0	0	0	0	0	0	0	11	11	6	10	30	50	18	10	146	
13:00 to 13:15	5	0	5	44	0	44	13	1	14	0	0	0	81	0	81	545	10	555	0	0	0	0	0	0	0	18	9	16	8	35	30	14	17	147	
13:15 to 13:30	4	0	4	41	0	41	16	0	16	0	0	0	69	1	70	500	12	512	0	0	0	0	0	0	0	10	13	10	2	22	28	8	9	102	
13:30 to 13:45	3	0	3	33	0	33	19	0	19	0	0	0	78	1	79	562	13	575	0	0	0	0	0	0	0	12	20	8	4	21	20	7	6	98	
<b>Total</b>	<b>33</b>	<b>1</b>	<b>34</b>	<b>350</b>	<b>1</b>	<b>351</b>	<b>110</b>	<b>2</b>	<b>112</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>632</b>	<b>5</b>	<b>637</b>	<b>4,266</b>	<b>101</b>	<b>4,367</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>111</b>	<b>74</b>	<b>35</b>	<b>211</b>	<b>247</b>	<b>96</b>	<b>88</b>	<b>978</b>		

▲

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 1. Military Road / Ben Boyd Road  
 Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary



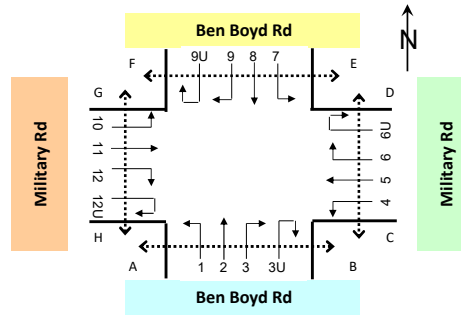
Approach	Ben Boyd Rd												Military Rd														
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
	11:45 to 12:45	78	1	79	163	1	164	35	0	35	0	0	0	31	3	34	1,871	49	1,920	0	0	0	0	0	0	0	0
12:00 to 13:00	83	1	84	167	2	169	39	0	39	0	0	0	33	2	35	1,818	50	1,868	0	0	0	0	0	0	0	0	0
12:15 to 13:15	74	1	75	189	1	190	43	0	43	0	0	0	33	1	34	1,750	58	1,808	0	0	0	0	0	0	0	0	0
12:30 to 13:30	69	0	69	190	1	191	48	0	48	0	0	0	32	0	32	1,763	58	1,821	0	0	0	0	0	0	0	0	0
12:45 to 13:45	57	0	57	186	1	187	41	0	41	0	0	0	30	0	30	1,809	56	1,865	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>135</b>	<b>1</b>	<b>136</b>	<b>349</b>	<b>2</b>	<b>351</b>	<b>76</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>3</b>	<b>64</b>	<b>3,680</b>	<b>105</b>	<b>3,785</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Military Rd								Crossing Pedestrians																		
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)		Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total							
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
	11:45 to 12:45	15	1	16	186	1	187	46	1	47	0	0	0	323	2	325	2,101	48	2,149	0	0	0	0	0	0	0	0	0	0	0	0	65	58	34	11	103	119	49	46
12:00 to 13:00	19	1	20	193	1	194	50	0	50	0	0	0	324	2	326	2,143	49	2,192	0	0	0	0	0	0	0	0	0	0	0	0	61	52	30	16	107	147	51	50	514
12:15 to 13:15	21	0	21	191	1	192	53	1	54	0	0	0	325	2	327	2,170	51	2,221	0	0	0	0	0	0	0	0	0	0	0	0	67	46	38	21	116	139	54	57	538
12:30 to 13:30	21	0	21	177	1	178	55	1	56	0	0	0	304	2	306	2,172	47	2,219	0	0	0	0	0	0	0	0	0	0	0	0	56	51	44	22	107	129	50	51	510
12:45 to 13:45	18	0	18	164	0	164	64	1	65	0	0	0	309	3	312	2,165	53	2,218	0	0	0	0	0	0	0	0	0	0	0	0	51	53	40	24	108	128	47	42	493
<b>Total</b>	<b>33</b>	<b>1</b>	<b>34</b>	<b>350</b>	<b>1</b>	<b>351</b>	<b>110</b>	<b>2</b>	<b>112</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>632</b>	<b>5</b>	<b>637</b>	<b>4,266</b>	<b>101</b>	<b>4,367</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>111</b>	<b>74</b>	<b>35</b>	<b>211</b>	<b>247</b>	<b>96</b>	<b>88</b>	<b>978</b>			





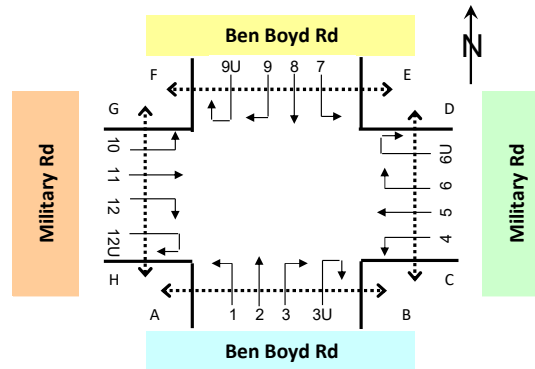
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 1. Military Road / Ben Boyd Road  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



Approach	Ben Boyd Rd			Military Rd			Ben Boyd Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
12:00 to 13:00	289	3	292	1,851	52	1,903	262	2	264	2,467	51	2,518	4,977

Approach	Ben Boyd Rd			Military Rd			Ben Boyd Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
11:45 to 12:45	276	2	278	1,902	52	1,954	247	3	250	2,424	50	2,474	4,956
12:00 to 13:00	289	3	292	1,851	52	1,903	262	2	264	2,467	51	2,518	4,977
12:15 to 13:15	306	2	308	1,783	59	1,842	265	2	267	2,495	53	2,548	4,965
12:30 to 13:30	307	1	308	1,795	58	1,853	253	2	255	2,476	49	2,525	4,941
12:45 to 13:45	284	1	285	1,839	56	1,895	246	1	247	2,474	56	2,530	4,957
<b>Total</b>	<b>560</b>	<b>3</b>	<b>563</b>	<b>3,741</b>	<b>108</b>	<b>3,849</b>	<b>493</b>	<b>4</b>	<b>497</b>	<b>4,898</b>	<b>106</b>	<b>5,004</b>	<b>9,913</b>

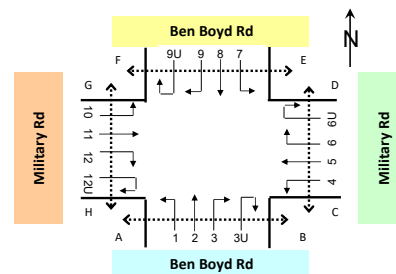
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 1. Military Road / Ben Boyd Road  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
11:45 to 12:00	15	17	10	5	26	22	16	6
12:00 to 12:15	12	15	8	3	26	38	11	10
12:15 to 12:30	21	8	4	1	31	38	12	15
12:30 to 12:45	17	18	12	2	20	21	10	15
12:45 to 13:00	11	11	6	10	30	50	18	10
13:00 to 13:15	18	9	16	8	35	30	14	17
13:15 to 13:30	10	13	10	2	22	28	8	9
13:30 to 13:45	12	20	8	4	21	20	7	6
<b>Total</b>	<b>116</b>	<b>111</b>	<b>74</b>	<b>35</b>	<b>211</b>	<b>247</b>	<b>96</b>	<b>88</b>

**Job No.** : AUNSW851  
**Client** : GTA Consultants (Nsw) Pty Ltd  
**Suburb** : Neutral Bay  
**Location** : 2. Military Rd / Ben Boyd Rd  
  
**Day/Date** : Thu, 13th May 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
 : 15 mins Data

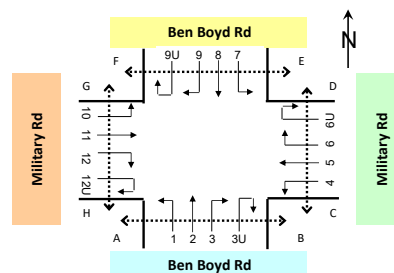
<b>Classifications</b>	<b>Class 1</b>	<b>Class 2</b>
	Lights	Heavies



Approach	Ben Boyd Rd												Military Rd											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	11	0	11	30	3	33	5	0	5	0	0	0	12	0	12	476	42	518	0	0	0	0	0	0
7:15 to 7:30	9	2	11	31	1	32	0	0	0	0	0	0	9	0	9	566	45	611	0	0	0	0	0	0
7:30 to 7:45	8	0	8	28	1	29	8	1	9	0	0	0	8	0	8	533	55	588	0	0	0	0	0	0
7:45 to 8:00	20	2	22	37	2	39	4	0	4	0	0	0	4	0	4	571	49	620	0	0	0	0	0	0
8:00 to 8:15	22	2	24	46	1	47	5	0	5	0	0	0	13	0	13	509	65	574	0	0	0	0	0	0
8:15 to 8:30	16	1	17	43	3	46	9	2	11	0	0	0	13	0	13	531	62	593	0	0	0	0	0	0
8:30 to 8:45	17	1	18	38	1	39	6	1	7	0	0	0	5	1	6	532	57	589	0	0	0	0	0	0
8:45 to 9:00	22	0	22	52	1	53	4	0	4	0	0	0	8	2	10	475	43	518	0	0	0	0	0	0
<b>AM Totals</b>	<b>125</b>	<b>8</b>	<b>133</b>	<b>305</b>	<b>13</b>	<b>318</b>	<b>41</b>	<b>4</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>3</b>	<b>75</b>	<b>4,193</b>	<b>418</b>	<b>4,611</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	21	0	21	29	1	30	11	0	11	0	0	0	8	3	11	441	33	474	0	0	0	0	0	0
16:30 to 16:45	13	1	14	48	1	49	7	0	7	0	0	0	9	0	9	406	38	444	0	0	0	0	0	0
16:45 to 17:00	7	0	7	41	0	41	9	1	10	0	0	0	10	0	10	455	34	489	0	0	0	0	0	0
17:00 to 17:15	16	0	16	52	0	52	6	0	6	0	0	0	9	0	9	415	39	454	0	0	0	0	0	0
17:15 to 17:30	7	1	8	52	0	52	5	0	5	0	0	0	13	0	13	439	39	478	0	0	0	0	0	0
17:30 to 17:45	10	0	10	60	0	60	8	0	8	0	0	0	6	0	6	392	33	425	0	0	0	0	0	0
17:45 to 18:00	8	2	10	57	1	58	3	0	3	0	0	0	15	0	15	453	23	476	0	0	0	0	0	0
18:00 to 18:15	9	0	9	48	0	48	7	0	7	0	0	0	7	1	8	385	27	412	0	0	0	0	0	0
<b>PM Totals</b>	<b>91</b>	<b>4</b>	<b>95</b>	<b>387</b>	<b>3</b>	<b>390</b>	<b>56</b>	<b>1</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>4</b>	<b>81</b>	<b>3,386</b>	<b>266</b>	<b>3,652</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Military Rd												Crossing Pedestrians														
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total						
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total
7:00 to 7:15	2	1	3	24	1	25	13	0	13	0	0	0	60	0	60	409	48	457	0	0	0	0	0	0	0	5	6	4	7	10	10	2	2	46					
7:15 to 7:30	0	0	0	35	1	36	15	0	15	0	0	0	70	4	74	447	50	497	0	0	0	0	0	0	6	7	13	4	8	9	4	0	51						
7:30 to 7:45	1	0	1	36	0	36	12	1	13	0	0	0	70	6	76	433	39	472	0	0	0	0	0	0	12	14	9	9	14	13	11	4	86						
7:45 to 8:00	0	0	0	50	1	51	10	0	10	0	0	0	71	2	73	451	48	499	0	0	0	0	0	0	8	17	7	9	13	17	9	3	83						
8:00 to 8:15	3	0	3	50	1	51	13	0	13	0	0	0	88	4	92	384	48	432	0	0	0	0	0	0	8	19	9	8	22	10	11	5	92						
8:15 to 8:30	0	0	0	57	0	57	14	2	16	0	0	0	76	1	77	322	50	372	0	0	0	0	0	0	16	14	5	7	20	11	9	4	86						
8:30 to 8:45	0	0	0	31	1	32	9	1	10	0	0	0	69	9	78	343	48	391	0	0	0	0	0	0	17	15	9	10	16	15	20	7	109						
8:45 to 9:00	0	0	0	43	0	43	15	1	16	0	0	0	81	3	84	398	50	448	0	0	0	0	0	0	14	14	11	20	12	16	17	7	111						
<b>AM Totals</b>	<b>6</b>	<b>1</b>	<b>7</b>	<b>326</b>	<b>5</b>	<b>331</b>	<b>101</b>	<b>5</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>585</b>	<b>29</b>	<b>614</b>	<b>3,187</b>	<b>381</b>	<b>3,568</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>106</b>	<b>67</b>	<b>74</b>	<b>115</b>	<b>101</b>	<b>83</b>	<b>32</b>	<b>664</b>						
16:15 to 16:30	2	0	2	40	0	40	9	0	9	0	0	0	80	1	81	497	39	536	0	0	0	0	0	0	12	13	7	11	19	28	8	5	103						
16:30 to 16:45	5	0	5	42	0	42	16	0	16	0	0	0	84	0	84	519	36	555	0	0	0	0	0	0	11	17	8	10	22	20	8	6	102						
16:45 to 17:00	0	0	0	53	0	53	16	1	17	0	0	0	82	0	82	561	33	594	0	0	0	0	0	0	12	13	11	12	28	26	10	12	124						
17:00 to 17:15	2	0	2	62	0	62	10	1	11	0	0	0	91	0	91	543	38	581	0	0	0	0	0	0	10	12	12	11	27	27	11	15	125						
17:15 to 17:30	1	0	1	57	1	58	9	1	10	0	0	0	79	0	79	535	43	578	0	0	0	0	0	0	16	17	4	16	29	32	14	6	134						
17:30 to 17:45	0	0	0	44	0	44	12	0	12	0	0	0	80	0	80	528	35	563	0	0	0	0	0	0	25	16	14	8	23	38	27	12	163						
17:45 to 18:00	1	0	1	44	0	44	12	1	13	0	0	0	76	0	76	538	49	587	0	0	0	0	0	0	22	16	13	5	35	47	10	17	165						
18:00 to 18:15	1	0	1	45	0	45	14	0	14	0	0	0	81	1	82	503	40	543	0	0	0	0	0	0	17	16	13	14	35	25	11	12	143						
<b>PM Totals</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>387</b>	<b>1</b>	<b>388</b>	<b>98</b>	<b>4</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>653</b>	<b>2</b>	<b>655</b>	<b>4,224</b>	<b>313</b>	<b>4,537</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>120</b>	<b>82</b>	<b>87</b>	<b>218</b>	<b>243</b>	<b>99</b>	<b>85</b>	<b>1,059</b>						

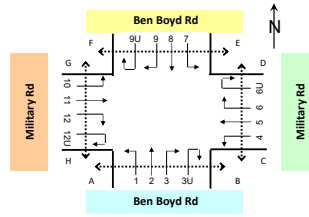
**Job No.** : AUNSW851  
**Client** : GTA Consultants (Nsw) Pty Ltd  
**Suburb** : Neutral Bay  
**Location** : 2. Military Rd / Ben Boyd Rd  
  
**Day/Date** : Thu, 13th May 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Hourly Summary



Approach	Ben Boyd Rd												Military Rd											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total
7:00 to 8:00	48	4	52	126	7	133	17	1	18	0	0	0	33	0	33	2,146	191	2,337	0	0	0	0	0	0
7:15 to 8:15	59	6	65	142	5	147	17	1	18	0	0	0	34	0	34	2,179	214	2,393	0	0	0	0	0	0
7:30 to 8:30	66	5	71	154	7	161	26	3	29	0	0	0	38	0	38	2,144	231	2,375	0	0	0	0	0	0
7:45 to 8:45	75	6	81	164	7	171	24	3	27	0	0	0	35	1	36	2,143	233	2,376	0	0	0	0	0	0
8:00 to 9:00	77	4	81	179	6	185	24	3	27	0	0	0	39	3	42	2,047	227	2,274	0	0	0	0	0	0
<b>AM Totals</b>	<b>125</b>	<b>8</b>	<b>133</b>	<b>305</b>	<b>13</b>	<b>318</b>	<b>41</b>	<b>4</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>3</b>	<b>75</b>	<b>4,193</b>	<b>418</b>	<b>4,611</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	57	1	58	170	2	172	33	1	34	0	0	0	36	3	39	1,717	144	1,861	0	0	0	0	0	0
16:30 to 17:30	43	2	45	193	1	194	27	1	28	0	0	0	41	0	41	1,715	150	1,865	0	0	0	0	0	0
16:45 to 17:45	40	1	41	205	0	205	28	1	29	0	0	0	38	0	38	1,701	145	1,846	0	0	0	0	0	0
17:00 to 18:00	41	3	44	221	1	222	22	0	22	0	0	0	43	0	43	1,699	134	1,833	0	0	0	0	0	0
17:15 to 18:15	34	3	37	217	1	218	23	0	23	0	0	0	41	1	42	1,669	122	1,791	0	0	0	0	0	0
<b>PM Totals</b>	<b>91</b>	<b>4</b>	<b>95</b>	<b>387</b>	<b>3</b>	<b>390</b>	<b>56</b>	<b>1</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>4</b>	<b>81</b>	<b>3,386</b>	<b>266</b>	<b>3,652</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Military Rd												Crossing Pedestrians														
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total						
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total
7:00 to 8:00	3	1	4	145	3	148	50	1	51	0	0	0	271	12	283	1,740	185	1,925	0	0	0	0	0	0	0	0	0	0	0	0	31	44	33	29	45	49	26	9	266
7:15 to 8:15	4	0	4	171	3	174	50	1	51	0	0	0	299	16	315	1,715	185	1,900	0	0	0	0	0	0	0	0	0	0	0	34	57	38	30	57	49	35	12	312	
7:30 to 8:30	4	0	4	193	2	195	49	3	52	0	0	0	305	13	318	1,590	185	1,775	0	0	0	0	0	0	0	0	0	0	0	44	64	30	33	69	51	40	16	347	
7:45 to 8:45	3	0	3	188	3	191	46	3	49	0	0	0	304	16	320	1,500	194	1,694	0	0	0	0	0	0	0	0	0	0	49	65	30	34	71	53	49	19	370		
8:00 to 9:00	3	0	3	181	2	183	51	4	55	0	0	0	314	17	331	1,447	196	1,643	0	0	0	0	0	0	0	0	0	0	55	62	34	45	70	52	57	23	398		
<b>AM Totals</b>	<b>6</b>	<b>1</b>	<b>7</b>	<b>326</b>	<b>5</b>	<b>331</b>	<b>101</b>	<b>5</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>585</b>	<b>29</b>	<b>614</b>	<b>3,187</b>	<b>381</b>	<b>3,568</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>106</b>	<b>67</b>	<b>74</b>	<b>115</b>	<b>101</b>	<b>83</b>	<b>32</b>	<b>664</b>		
16:15 to 17:15	9	0	9	197	0	197	51	2	53	0	0	0	337	1	338	2,120	146	2,266	0	0	0	0	0	0	0	0	0	0	45	55	38	44	96	101	37	38	454		
16:30 to 17:30	8	0	8	214	1	215	51	3	54	0	0	0	336	0	336	2,158	150	2,308	0	0	0	0	0	0	0	0	0	0	49	59	35	49	106	105	43	39	485		
16:45 to 17:45	3	0	3	216	1	217	47	3	50	0	0	0	332	0	332	2,167	149	2,316	0	0	0	0	0	0	0	0	0	0	63	58	41	47	107	123	62	45	546		
17:00 to 18:00	4	0	4	207	1	208	43	3	46	0	0	0	326	0	326	2,144	165	2,309	0	0	0	0	0	0	0	0	0	0	73	61	43	40	114	144	62	50	587		
17:15 to 18:15	3	0	3	190	1	191	47	2	49	0	0	0	316	1	317	2,104	167	2,271	0	0	0	0	0	0	0	0	0	0	80	65	44	43	122	142	62	47	605		
<b>PM Totals</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>387</b>	<b>1</b>	<b>388</b>	<b>98</b>	<b>4</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>653</b>	<b>2</b>	<b>655</b>	<b>4,224</b>	<b>313</b>	<b>4,537</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>120</b>	<b>82</b>	<b>87</b>	<b>218</b>	<b>243</b>	<b>99</b>	<b>85</b>	<b>1,059</b>			

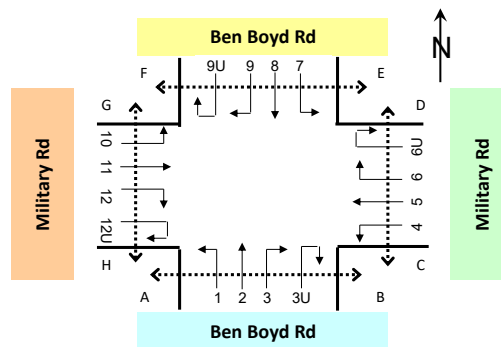
**Job No.** : AUNSW851  
**Client** : GTA Consultants (Nsw) Pty Ltd  
**Suburb** : Neutral Bay  
**Location** : 2. Military Rd / Ben Boyd Rd  
  
**Day/Date** : Thu, 13th May 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
Peak Hour Summary



Approach	Ben Boyd Rd			Military Rd			Ben Boyd Rd			Military Rd			Grand Total
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:15 to 8:15	218	12	230	2,213	214	2,427	225	4	229	2,014	201	2,215	5,101
PM 16:30 to 17:30	263	4	267	1,756	150	1,906	273	4	277	2,494	150	2,644	5,094

Approach	Ben Boyd Rd			Military Rd			Ben Boyd Rd			Military Rd			Grand Total
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	191	12	203	2,179	191	2,370	198	5	203	2,011	197	2,208	4,584
7:15 to 8:15	218	12	230	2,213	214	2,427	225	4	229	2,014	201	2,215	5,101
7:30 to 8:30	246	15	261	2,182	231	2,413	246	5	251	1,895	198	2,093	5,018
7:45 to 8:45	263	16	279	2,178	234	2,412	237	6	243	1,804	210	2,014	4,948
8:00 to 9:00	280	13	293	2,086	230	2,316	235	6	241	1,761	213	1,974	4,824
<b>AM Totals</b>	<b>471</b>	<b>25</b>	<b>496</b>	<b>4,265</b>	<b>421</b>	<b>4,686</b>	<b>433</b>	<b>11</b>	<b>444</b>	<b>3,772</b>	<b>410</b>	<b>4,182</b>	<b>9,808</b>
16:15 to 17:15	260	4	264	1,753	147	1,900	257	2	259	2,457	147	2,604	5,027
16:30 to 17:30	263	4	267	1,756	150	1,906	273	4	277	2,494	150	2,644	5,094
16:45 to 17:45	273	2	275	1,739	145	1,884	266	4	270	2,499	149	2,648	5,077
17:00 to 18:00	284	4	288	1,742	134	1,876	254	4	258	2,470	165	2,635	5,057
17:15 to 18:15	274	4	278	1,710	123	1,833	240	3	243	2,420	168	2,588	4,942
<b>PM Totals</b>	<b>534</b>	<b>8</b>	<b>542</b>	<b>3,463</b>	<b>270</b>	<b>3,733</b>	<b>497</b>	<b>5</b>	<b>502</b>	<b>4,877</b>	<b>315</b>	<b>5,192</b>	<b>9,969</b>

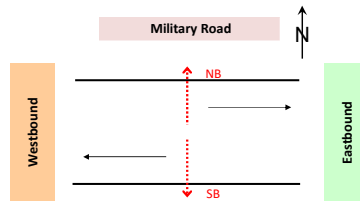
**Job No.** : AUNSW851  
**Client** : GTA Consultants (Nsw) Pty Ltd  
**Suburb** : Neutral Bay  
**Location** : 2. Military Rd / Ben Boyd Rd  
  
**Day/Date** : Thu, 13th May 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians								
	Time Period	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 7:15	5	6	4	7	10	10	2	2	
7:15 to 7:30	6	7	13	4	8	9	4	0	
7:30 to 7:45	12	14	9	9	14	13	11	4	
7:45 to 8:00	8	17	7	9	13	17	9	3	
8:00 to 8:15	8	19	9	8	22	10	11	5	
8:15 to 8:30	16	14	5	7	20	11	9	4	
8:30 to 8:45	17	15	9	10	16	15	20	7	
8:45 to 9:00	14	14	11	20	12	16	17	7	
<b>AM Totals</b>	<b>86</b>	<b>106</b>	<b>67</b>	<b>74</b>	<b>115</b>	<b>101</b>	<b>83</b>	<b>32</b>	
16:15 to 16:30	12	13	7	11	19	28	8	5	
16:30 to 16:45	11	17	8	10	22	20	8	6	
16:45 to 17:00	12	13	11	12	28	26	10	12	
17:00 to 17:15	10	12	12	11	27	27	11	15	
17:15 to 17:30	16	17	4	16	29	32	14	6	
17:30 to 17:45	25	16	14	8	23	38	27	12	
17:45 to 18:00	22	16	13	5	35	47	10	17	
18:00 to 18:15	17	16	13	14	35	25	11	12	
<b>PM Totals</b>	<b>125</b>	<b>120</b>	<b>82</b>	<b>87</b>	<b>218</b>	<b>243</b>	<b>99</b>	<b>85</b>	



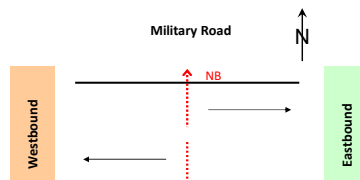
Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 2. Military Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Mid-block Count  
 : 15 mins Data



Classifications  
 Class 1: Lights  
 Class 2: Heavies

Approach	Military Road						Pedestrians		
	Westbound			Eastbound			NB	SB	Total
Direction	Lights	Heavies	Total	Lights	Heavies	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	NB	SB	Total
7:00 to 7:15	541	37	578	451	52	503	10	10	20
7:15 to 7:30	540	55	595	419	56	475	13	11	24
7:30 to 7:45	553	72	625	470	56	526	15	10	25
7:45 to 8:00	560	54	614	389	48	437	13	17	30
8:00 to 8:15	555	64	619	430	52	482	11	16	27
8:15 to 8:30	520	66	586	436	58	494	20	23	43
8:30 to 8:45	546	67	613	395	43	438	25	12	37
8:45 to 9:00	527	45	572	373	54	427	23	36	59
<b>AM Totals</b>	<b>4,342</b>	<b>460</b>	<b>4,802</b>	<b>3,363</b>	<b>419</b>	<b>3,782</b>	<b>130</b>	<b>135</b>	<b>265</b>
16:15 to 16:30	441	41	482	474	34	508	28	38	66
16:30 to 16:45	442	38	480	554	38	592	21	16	37
16:45 to 17:00	410	39	449	535	29	564	28	38	66
17:00 to 17:15	447	30	477	547	38	585	30	17	47
17:15 to 17:30	433	27	460	527	38	565	15	39	54
17:30 to 17:45	435	30	465	523	38	561	28	32	60
17:45 to 18:00	409	29	438	526	44	570	21	28	49
18:00 to 18:15	398	18	416	565	42	607	22	21	43
<b>PM Totals</b>	<b>3,415</b>	<b>252</b>	<b>3,667</b>	<b>4,251</b>	<b>301</b>	<b>4,552</b>	<b>193</b>	<b>229</b>	<b>422</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 2. Military Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine



Description : Mid-block Count

: Hourly Summary

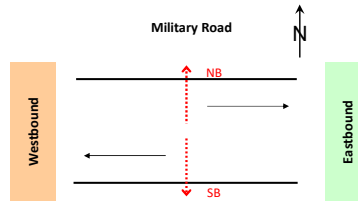


Approach	Military Road						Pedestrians		
	Westbound			Eastbound			NB	SB	Total
Time Period	Lights	Heavies	Total	Lights	Heavies	Total			
7:00 to 8:00	2,194	218	2,412	1,729	212	1,941	51	48	99
7:15 to 8:15	2,208	245	2,453	1,708	212	1,920	52	54	106
7:30 to 8:30	2,188	256	2,444	1,725	214	1,939	59	66	125
7:45 to 8:45	2,181	251	2,432	1,650	201	1,851	69	68	137
8:00 to 9:00	2,148	242	2,390	1,634	207	1,841	79	87	166
<b>AM Totals</b>	<b>4,342</b>	<b>460</b>	<b>4,802</b>	<b>3,363</b>	<b>419</b>	<b>3,782</b>	<b>130</b>	<b>135</b>	<b>265</b>
16:15 to 17:15	1,740	148	1,888	2,110	139	2,249	107	109	216
16:30 to 17:30	1,732	134	1,866	2,163	143	2,306	94	110	204
16:45 to 17:45	1,725	126	1,851	2,132	143	2,275	101	126	227
17:00 to 18:00	1,724	116	1,840	2,123	158	2,281	94	116	210
17:15 to 18:15	1,675	104	1,779	2,141	162	2,303	86	120	206
<b>PM Totals</b>	<b>3,415</b>	<b>252</b>	<b>3,667</b>	<b>4,251</b>	<b>301</b>	<b>4,552</b>	<b>193</b>	<b>229</b>	<b>422</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 2. Military Road

Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Mid-block Count

: Peak Hour Summary



Approach	Westbound			Eastbound			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:30 to 8:30	2,188	256	2,444	1,725	214	1,939	4,383
PM 16:30 to 17:30	1,732	134	1,866	2,163	143	2,306	4,172

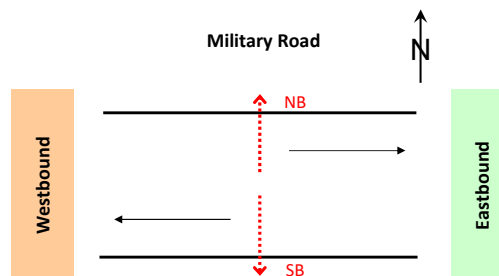
Approach	Westbound			Eastbound			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	2,194	218	2,412	1,729	212	1,941	4,353
7:15 to 8:15	2,208	245	2,453	1,708	212	1,920	4,373
7:30 to 8:30	2,188	256	2,444	1,725	214	1,939	4,383
7:45 to 8:45	2,181	251	2,432	1,650	201	1,851	4,283
8:00 to 9:00	2,148	242	2,390	1,634	207	1,841	4,231
<b>AM Totals</b>	<b>4,342</b>	<b>460</b>	<b>4,802</b>	<b>3,363</b>	<b>419</b>	<b>3,782</b>	<b>8,584</b>
16:15 to 17:15	1,740	148	1,888	2,110	139	2,249	4,137
16:30 to 17:30	1,732	134	1,866	2,163	143	2,306	4,172
16:45 to 17:45	1,725	126	1,851	2,132	143	2,275	4,126
17:00 to 18:00	1,724	116	1,840	2,123	158	2,281	4,121
17:15 to 18:15	1,675	104	1,779	2,141	162	2,303	4,082
<b>PM Totals</b>	<b>3,415</b>	<b>252</b>	<b>3,667</b>	<b>4,251</b>	<b>301</b>	<b>4,552</b>	<b>8,219</b>



**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 2. Military Road

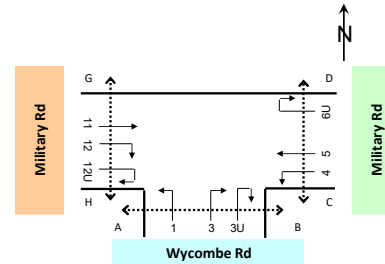
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Mid-block Count

: Pedestrian Data



Direction	Pedestrians	
	NB	SB
7:00 to 7:15	10	10
7:15 to 7:30	13	11
7:30 to 7:45	15	10
7:45 to 8:00	13	17
8:00 to 8:15	11	16
8:15 to 8:30	20	23
8:30 to 8:45	25	12
8:45 to 9:00	23	36
<b>AM Totals</b>	<b>130</b>	<b>135</b>
16:15 to 16:30	28	38
16:30 to 16:45	21	16
16:45 to 17:00	28	38
17:00 to 17:15	30	17
17:15 to 17:30	15	39
17:30 to 17:45	28	32
17:45 to 18:00	21	28
18:00 to 18:15	22	21
<b>PM Totals</b>	<b>193</b>	<b>229</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 3. Military Road / Wycombe Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



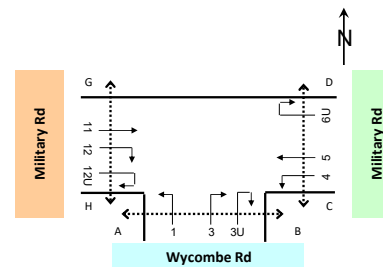
Classifications	Class 1	Class 2
	Lights	Heavies

Approach	Wycombe Rd						Military Rd											
	Direction 1 (Left Turn)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
Time Period																		
7:00 to 7:15	15	0	15	12	4	16	0	0	0	15	1	16	524	37	561	0	0	0
7:15 to 7:30	25	1	26	18	2	20	0	0	0	14	4	18	514	60	574	0	0	0
7:30 to 7:45	16	2	18	23	2	25	0	0	0	16	1	17	535	73	608	0	0	0
7:45 to 8:00	24	1	25	26	2	28	0	0	0	18	6	24	536	61	597	0	0	0
8:00 to 8:15	29	0	29	33	3	36	0	0	0	16	2	18	532	59	591	0	0	0
8:15 to 8:30	24	2	26	33	2	35	0	0	0	10	3	13	493	64	557	0	0	0
8:30 to 8:45	21	1	22	27	2	29	0	0	0	9	3	12	520	67	587	0	0	0
8:45 to 9:00	21	2	23	21	5	26	0	0	0	13	1	14	503	39	542	0	0	0
AM Totals	175	9	184	193	22	215	0	0	0	111	21	132	4,157	460	4,617	0	0	0
16:15 to 16:30	12	1	13	29	1	30	0	0	0	15	2	17	427	40	467	0	0	0
16:30 to 16:45	11	0	11	28	2	30	0	0	0	10	0	10	419	39	458	0	0	0
16:45 to 17:00	22	1	23	24	1	25	0	0	0	10	2	12	403	36	439	0	0	0
17:00 to 17:15	15	0	15	20	0	20	0	0	0	13	0	13	429	30	459	0	0	0
17:15 to 17:30	20	0	20	28	1	29	0	0	0	9	3	12	416	28	444	0	0	0
17:30 to 17:45	18	0	18	28	0	28	0	0	0	10	3	13	420	28	448	0	0	0
17:45 to 18:00	13	1	14	37	2	39	0	0	0	23	5	28	386	30	416	0	0	0
18:00 to 18:15	10	0	10	21	2	23	0	0	0	11	1	12	393	18	411	0	0	0
PM Totals	121	3	124	215	9	224	0	0	0	101	16	117	3,293	249	3,542	0	0	0

Approach	Military Rd											Crossing Pedestrians							
	Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)												
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	H to G	G to H	Total
Time Period																			
7:00 to 7:15	452	52	504	0	0	0	0	0	0	0	0	0	3	5	19	16	8	6	57
7:15 to 7:30	415	54	469	0	0	0	0	0	0	0	0	0	7	3	29	15	5	2	61

7:30 to 7:45	472	57	529	0	0	0	0	0	0	8	11	44	18	11	8	100
7:45 to 8:00	396	51	447	0	0	0	0	0	0	6	17	46	26	11	8	114
8:00 to 8:15	427	49	476	0	0	0	0	0	0	9	15	47	19	14	4	108
8:15 to 8:30	442	61	503	0	0	0	0	0	0	13	25	48	40	26	14	166
8:30 to 8:45	390	44	434	0	0	0	0	0	0	8	12	44	39	12	17	132
8:45 to 9:00	370	50	420	0	0	0	0	0	0	19	8	50	26	17	21	141
<b>AM Totals</b>	<b>3,364</b>	<b>418</b>	<b>3,782</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>96</b>	<b>327</b>	<b>199</b>	<b>104</b>	<b>80</b>	<b>879</b>
16:15 to 16:30	478	35	513	0	0	0	0	0	0	10	12	64	35	13	20	154
16:30 to 16:45	557	36	593	0	0	0	0	0	0	9	15	61	31	6	10	132
16:45 to 17:00	540	31	571	0	0	0	0	0	0	10	13	67	43	10	22	165
17:00 to 17:15	536	37	573	0	0	0	0	0	0	9	18	66	34	15	23	165
17:15 to 17:30	500	36	536	0	0	0	0	0	0	10	22	47	26	9	21	135
17:30 to 17:45	540	38	578	0	0	0	0	0	0	21	17	50	32	22	20	162
17:45 to 18:00	530	40	570	0	0	0	0	0	0	8	13	62	30	16	33	162
18:00 to 18:15	573	45	618	0	0	0	0	0	0	8	15	58	34	7	16	138
<b>PM Totals</b>	<b>4,254</b>	<b>298</b>	<b>4,552</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>125</b>	<b>475</b>	<b>265</b>	<b>98</b>	<b>165</b>	<b>1,213</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 3. Military Road / Wycombe Road  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Hourly Summary



Approach	Wycombe Rd						Military Rd											
	Direction 1 (Left Turn)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	80	4	84	79	10	89	0	0	0	63	12	75	2,109	231	2,340	0	0	0
7:15 to 8:15	94	4	98	100	9	109	0	0	0	64	13	77	2,117	253	2,370	0	0	0
7:30 to 8:30	93	5	98	115	9	124	0	0	0	60	12	72	2,096	257	2,353	0	0	0
7:45 to 8:45	98	4	102	119	9	128	0	0	0	53	14	67	2,081	251	2,332	0	0	0
8:00 to 9:00	95	5	100	114	12	126	0	0	0	48	9	57	2,048	229	2,277	0	0	0
<b>AM Totals</b>	<b>175</b>	<b>9</b>	<b>184</b>	<b>193</b>	<b>22</b>	<b>215</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111</b>	<b>21</b>	<b>132</b>	<b>4,157</b>	<b>460</b>	<b>4,617</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	60	2	62	101	4	105	0	0	0	48	4	52	1,678	145	1,823	0	0	0
16:30 to 17:30	68	1	69	100	4	104	0	0	0	42	5	47	1,667	133	1,800	0	0	0
16:45 to 17:45	75	1	76	100	2	102	0	0	0	42	8	50	1,668	122	1,790	0	0	0
17:00 to 18:00	66	1	67	113	3	116	0	0	0	55	11	66	1,651	116	1,767	0	0	0
17:15 to 18:15	61	1	62	114	5	119	0	0	0	53	12	65	1,615	104	1,719	0	0	0
<b>PM Totals</b>	<b>121</b>	<b>3</b>	<b>124</b>	<b>215</b>	<b>9</b>	<b>224</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>101</b>	<b>16</b>	<b>117</b>	<b>3,293</b>	<b>249</b>	<b>3,542</b>	<b>0</b>	<b>0</b>	<b>0</b>

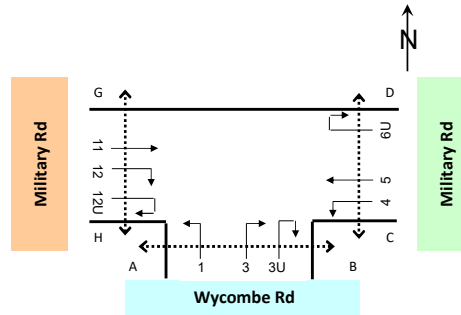
Approach	Direction	Time Period	Military Rd									Crossing Pedestrians							
			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	H to G	G to H	Total	
			Lights	Heavy's	Total	Lights	Heavy's	Total	Lights	Heavy's	Total								
7:00 to 8:00			1,735	214	1,949	0	0	0	0	0	0	0	24	36	138	75	35	24	332
7:15 to 8:15			1,710	211	1,921	0	0	0	0	0	0	30	46	166	78	41	22	383	
7:30 to 8:30			1,737	218	1,955	0	0	0	0	0	0	36	68	185	103	62	34	488	
7:45 to 8:45			1,655	205	1,860	0	0	0	0	0	0	36	69	185	124	63	43	520	
8:00 to 9:00			1,629	204	1,833	0	0	0	0	0	0	49	60	189	124	69	56	547	
<b>AM Totals</b>			<b>3,364</b>	<b>418</b>	<b>3,782</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>96</b>	<b>327</b>	<b>199</b>	<b>104</b>	<b>80</b>	<b>879</b>	
16:15 to 17:15			2,111	139	2,250	0	0	0	0	0	0	38	58	258	143	44	75	616	
16:30 to 17:30			2,133	140	2,273	0	0	0	0	0	0	38	68	241	134	40	76	597	
16:45 to 17:45			2,116	142	2,258	0	0	0	0	0	0	50	70	230	135	56	86	627	
17:00 to 18:00			2,106	151	2,257	0	0	0	0	0	0	48	70	225	122	62	97	624	
17:15 to 18:15			2,143	159	2,302	0	0	0	0	0	0	47	67	217	122	54	90	597	
<b>PM Totals</b>			<b>4,254</b>	<b>298</b>	<b>4,552</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>125</b>	<b>475</b>	<b>265</b>	<b>98</b>	<b>165</b>	<b>1,213</b>	





Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 3. Military Road / Wycombe Road

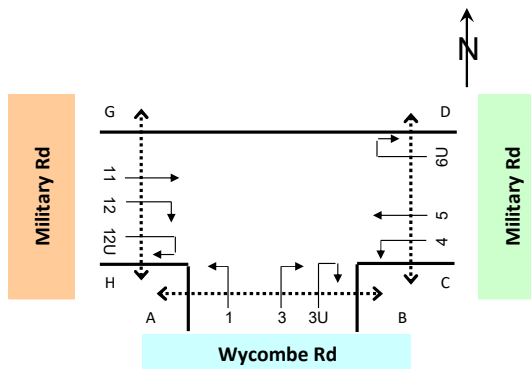
Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary



Approach	Wycombe Rd			Military Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:30 to 8:30	208	14	222	2,156	269	2,425	1,737	218	1,955	4,602
PM 16:30 to 17:30	168	5	173	1,709	138	1,847	2,133	140	2,273	4,293

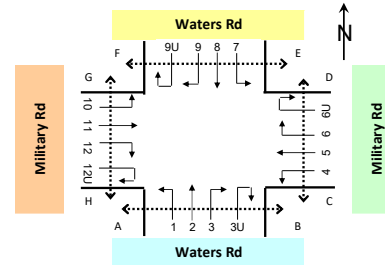
Approach	Wycombe Rd			Military Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	159	14	173	2,172	243	2,415	1,735	214	1,949	4,537
7:15 to 8:15	194	13	207	2,181	266	2,447	1,710	211	1,921	4,575
7:30 to 8:30	208	14	222	2,156	269	2,425	1,737	218	1,955	4,602
7:45 to 8:45	217	13	230	2,134	265	2,399	1,655	205	1,860	4,489
8:00 to 9:00	209	17	226	2,096	238	2,334	1,629	204	1,833	4,393
<b>AM Totals</b>	<b>368</b>	<b>31</b>	<b>399</b>	<b>4,268</b>	<b>481</b>	<b>4,749</b>	<b>3,364</b>	<b>418</b>	<b>3,782</b>	<b>8,930</b>
16:15 to 17:15	161	6	167	1,726	149	1,875	2,111	139	2,250	4,292
16:30 to 17:30	168	5	173	1,709	138	1,847	2,133	140	2,273	4,293
16:45 to 17:45	175	3	178	1,710	130	1,840	2,116	142	2,258	4,276
17:00 to 18:00	179	4	183	1,706	127	1,833	2,106	151	2,257	4,273
17:15 to 18:15	175	6	181	1,668	116	1,784	2,143	159	2,302	4,267
<b>PM Totals</b>	<b>336</b>	<b>12</b>	<b>348</b>	<b>3,394</b>	<b>265</b>	<b>3,659</b>	<b>4,254</b>	<b>298</b>	<b>4,552</b>	<b>8,559</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 3. Military Road / Wycombe Road  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians								
	Time Period	B to A	A to B	D to C	C to D	H to G	G to H		
	7:00 to 7:15	3	5	19	16	8	6		
	7:15 to 7:30	7	3	29	15	5	2		
	7:30 to 7:45	8	11	44	18	11	8		
	7:45 to 8:00	6	17	46	26	11	8		
	8:00 to 8:15	9	15	47	19	14	4		
	8:15 to 8:30	13	25	48	40	26	14		
	8:30 to 8:45	8	12	44	39	12	17		
	8:45 to 9:00	19	8	50	26	17	21		
	<b>AM Totals</b>	<b>73</b>	<b>96</b>	<b>327</b>	<b>199</b>	<b>104</b>	<b>80</b>		
	16:15 to 16:30	10	12	64	35	13	20		
	16:30 to 16:45	9	15	61	31	6	10		
	16:45 to 17:00	10	13	67	43	10	22		
	17:00 to 17:15	9	18	66	34	15	23		
	17:15 to 17:30	10	22	47	26	9	21		
	17:30 to 17:45	21	17	50	32	22	20		
	17:45 to 18:00	8	13	62	30	16	33		
	18:00 to 18:15	8	15	58	34	7	16		
	<b>PM Totals</b>	<b>85</b>	<b>125</b>	<b>475</b>	<b>265</b>	<b>98</b>	<b>165</b>		

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 4. Military Road / Waters Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



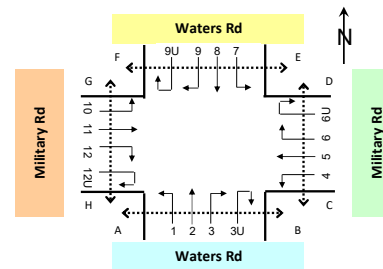
Classifications	Class 1 Lights	Class 2 Heavies
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Approach	Waters Rd												Military Rd														
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	14	1	15	0	0	0	0	0	0	0	0	0	3	1	4	513	33	546	0	0	0	0	0	0			
7:15 to 7:30	8	2	10	0	0	0	0	0	0	0	0	0	12	1	13	539	66	605	0	0	0	0	0	0			
7:30 to 7:45	17	2	19	0	0	0	0	0	0	0	0	0	5	0	5	536	70	606	0	0	0	0	0	0			
7:45 to 8:00	6	3	9	0	0	0	0	0	0	0	0	0	14	0	14	547	62	609	0	0	0	0	0	0			
8:00 to 8:15	14	4	18	0	0	0	0	0	0	0	0	0	9	0	9	530	58	588	0	0	0	0	0	0			
8:15 to 8:30	8	5	13	0	0	0	0	0	0	0	0	0	8	0	8	492	60	552	0	0	0	0	0	0			
8:30 to 8:45	10	1	11	0	0	0	0	0	0	0	0	0	11	0	11	525	64	589	0	0	0	0	0	0			
8:45 to 9:00	10	1	11	0	0	0	0	0	0	0	0	0	8	0	8	503	44	547	0	0	0	0	0	0			
<b>AM Totals</b>	<b>87</b>	<b>19</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>2</b>	<b>72</b>	<b>4,185</b>	<b>457</b>	<b>4,642</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
16:15 to 16:30	25	2	27	0	0	0	0	0	0	0	0	0	13	0	13	425	42	467	0	0	0	0	0	0			
16:30 to 16:45	16	2	18	0	0	0	0	0	0	0	0	0	17	0	17	424	38	462	0	0	0	0	0	0			
16:45 to 17:00	23	1	24	0	0	0	0	0	0	0	0	0	19	0	19	390	40	430	0	0	0	0	0	0			
17:00 to 17:15	19	0	19	0	0	0	0	0	0	0	0	0	9	0	9	470	32	502	0	0	0	0	0	0			
17:15 to 17:30	23	2	25	0	0	0	0	0	0	0	0	0	12	1	13	363	30	393	0	0	0	0	0	0			
17:30 to 17:45	25	1	26	0	0	0	0	0	0	0	0	0	14	0	14	395	32	427	0	0	0	0	0	0			
17:45 to 18:00	20	1	21	0	0	0	0	0	0	0	0	0	7	0	7	350	32	382	0	0	0	0	0	0			
18:00 to 18:15	21	0	21	0	0	0	0	0	0	0	0	0	8	0	8	395	19	414	0	0	0	0	0	0			
<b>PM Totals</b>	<b>172</b>	<b>9</b>	<b>181</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>99</b>	<b>1</b>	<b>100</b>	<b>3,212</b>	<b>265</b>	<b>3,477</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			

Approach	Waters Rd												Military Rd												Crossing Pedestrians											
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	10	1	11	0	0	0	0	0	0	0	0	0	17	0	17	447	53	500	0	0	0	0	0	0	0	19	1	3	7	0	0	0	0	30		
7:15 to 7:30	14	2	16	0	0	0	0	0	0	0	0	0	13	1	14	430	53	483	0	0	0	0	0	0	0	22	7	3	5	0	0	0	0	37		

7:30 to 7:45	18	1	19	0	0	0	0	0	0	0	0	0	17	1	18	468	57	525	0	0	0	0	0	0	0	56	8	8	8	0	0	0	0	80
7:45 to 8:00	31	0	31	0	0	0	0	0	0	0	0	0	21	0	21	396	52	448	0	0	0	0	0	0	0	21	4	9	14	0	0	0	0	48
8:00 to 8:15	32	0	32	0	0	0	0	0	0	0	0	0	17	0	17	446	56	502	0	0	0	0	0	0	0	24	3	18	9	0	0	0	0	54
8:15 to 8:30	25	1	26	0	0	0	0	0	0	0	0	0	23	1	24	453	64	517	0	0	0	0	0	0	0	11	1	10	8	0	0	0	0	30
8:30 to 8:45	12	3	15	0	0	0	0	0	0	0	0	0	19	2	21	398	45	443	0	0	0	0	0	0	0	50	7	7	13	0	0	0	0	77
8:45 to 9:00	18	2	20	0	0	0	0	0	0	0	0	0	22	0	22	368	56	424	0	0	0	0	0	0	0	53	7	8	17	0	0	0	0	85
<b>AM Totals</b>	<b>160</b>	<b>10</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>149</b>	<b>5</b>	<b>154</b>	<b>3,406</b>	<b>436</b>	<b>3,842</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>256</b>	<b>38</b>	<b>66</b>	<b>81</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>441</b>	
16:15 to 16:30	32	0	32	0	0	0	0	0	0	0	0	0	21	0	21	511	34	545	0	0	0	0	0	0	0	16	20	15	18	0	0	0	0	69
16:30 to 16:45	37	0	37	0	0	0	0	0	0	0	0	0	26	0	26	540	40	580	0	0	0	0	0	0	0	30	20	9	14	0	0	0	0	73
16:45 to 17:00	35	0	35	0	0	0	0	0	0	0	0	0	23	1	24	541	31	572	0	0	0	0	0	0	0	27	21	15	17	0	0	0	0	80
17:00 to 17:15	39	0	39	0	0	0	0	0	0	0	0	0	19	0	19	535	38	573	0	0	0	0	0	0	0	20	21	18	20	0	0	0	0	79
17:15 to 17:30	37	0	37	0	0	0	0	0	0	0	0	0	18	0	18	509	37	546	0	0	0	0	0	0	0	19	17	11	18	0	0	0	0	65
17:30 to 17:45	38	0	38	0	0	0	0	0	0	0	0	0	22	0	22	540	36	576	0	0	0	0	0	0	0	16	21	17	0	0	0	0	0	54
17:45 to 18:00	29	0	29	0	0	0	0	0	0	0	0	0	34	2	36	530	42	572	0	0	0	0	0	0	0	20	22	16	14	0	0	0	0	72
18:00 to 18:15	34	0	34	0	0	0	0	0	0	0	0	0	37	0	37	563	47	610	0	0	0	0	0	0	0	26	12	34	9	0	0	0	0	81
<b>PM Totals</b>	<b>281</b>	<b>0</b>	<b>281</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200</b>	<b>3</b>	<b>203</b>	<b>4,269</b>	<b>305</b>	<b>4,574</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>154</b>	<b>135</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>573</b>	

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 4. Military Road / Waters Road  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary

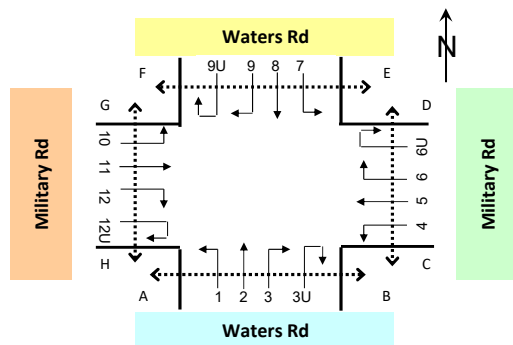


Approach	Waters Rd									Military Rd																	
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	45	8	53	0	0	0	0	0	0	0	0	0	34	2	36	2,135	231	2,366	0	0	0	0	0	0	0		
7:15 to 8:15	45	11	56	0	0	0	0	0	0	0	0	0	40	1	41	2,152	256	2,408	0	0	0	0	0	0	0		
7:30 to 8:30	45	14	59	0	0	0	0	0	0	0	0	0	36	0	36	2,105	250	2,355	0	0	0	0	0	0	0		
7:45 to 8:45	38	13	51	0	0	0	0	0	0	0	0	0	42	0	42	2,094	244	2,338	0	0	0	0	0	0	0		
8:00 to 9:00	42	11	53	0	0	0	0	0	0	0	0	0	36	0	36	2,050	226	2,276	0	0	0	0	0	0	0		
<b>AM Totals</b>	<b>87</b>	<b>19</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>2</b>	<b>72</b>	<b>4,185</b>	<b>457</b>	<b>4,642</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
16:15 to 17:15	83	5	88	0	0	0	0	0	0	0	0	0	58	0	58	1,709	152	1,861	0	0	0	0	0	0	0		
16:30 to 17:30	81	5	86	0	0	0	0	0	0	0	0	0	57	1	58	1,647	140	1,787	0	0	0	0	0	0	0		
16:45 to 17:45	90	4	94	0	0	0	0	0	0	0	0	0	54	1	55	1,618	134	1,752	0	0	0	0	0	0	0		
17:00 to 18:00	87	4	91	0	0	0	0	0	0	0	0	0	42	1	43	1,578	126	1,704	0	0	0	0	0	0	0		
17:15 to 18:15	89	4	93	0	0	0	0	0	0	0	0	0	41	1	42	1,503	113	1,616	0	0	0	0	0	0	0		
<b>PM Totals</b>	<b>172</b>	<b>9</b>	<b>181</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>99</b>	<b>1</b>	<b>100</b>	<b>3,212</b>	<b>265</b>	<b>3,477</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

Approach	Waters Rd												Military Rd								Crossing Pedestrians															
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)										Direction 12U (U Turn)							
	Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 8:00	73	4	77	0	0	0	0	0	0	0	0	0	68	2	70	1,741	215	1,956	0	0	0	0	0	0	0	118	20	23	34	0	0	0	0	0	195	
7:15 to 8:15	95	3	98	0	0	0	0	0	0	0	0	0	68	2	70	1,740	218	1,958	0	0	0	0	0	0	0	123	22	38	36	0	0	0	0	0	219	
7:30 to 8:30	106	2	108	0	0	0	0	0	0	0	0	0	78	2	80	1,763	229	1,992	0	0	0	0	0	0	0	112	16	45	39	0	0	0	0	0	212	
7:45 to 8:45	100	4	104	0	0	0	0	0	0	0	0	0	80	3	83	1,693	217	1,910	0	0	0	0	0	0	0	106	15	44	44	0	0	0	0	0	209	
8:00 to 9:00	87	6	93	0	0	0	0	0	0	0	0	0	81	3	84	1,665	221	1,886	0	0	0	0	0	0	0	138	18	43	47	0	0	0	0	0	246	
<b>AM Totals</b>	<b>160</b>	<b>10</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>149</b>	<b>5</b>	<b>154</b>	<b>3,406</b>	<b>436</b>	<b>3,842</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>256</b>	<b>38</b>	<b>66</b>	<b>81</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>441</b>	
16:15 to 17:15	143	0	143	0	0	0	0	0	0	0	0	0	89	1	90	2,127	143	2,270	0	0	0	0	0	0	0	93	82	57	69	0	0	0	0	0	301	
16:30 to 17:30	148	0	148	0	0	0	0	0	0	0	0	0	86	1	87	2,125	146	2,271	0	0	0	0	0	0	0	96	79	53	69	0	0	0	0	0	297	
16:45 to 17:45	149	0	149	0	0	0	0	0	0	0	0	0	82	1	83	2,125	142	2,267	0	0	0	0	0	0	0	82	80	61	55	0	0	0	0	0	278	
17:00 to 18:00	143	0	143	0	0	0	0	0	0	0	0	0	93	2	95	2,114	153	2,267	0	0	0	0	0	0	0	75	81	62	52	0	0	0	0	0	270	
17:15 to 18:15	138	0	138	0	0	0	0	0	0	0	0	0	111	2	113	2,142	162	2,304	0	0	0	0	0	0	0	81	72	78	41	0	0	0	0	0	272	
<b>PM Totals</b>	<b>281</b>	<b>0</b>	<b>281</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200</b>	<b>3</b>	<b>203</b>	<b>4,269</b>	<b>305</b>	<b>4,574</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>154</b>	<b>135</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>573</b>	



**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 4. Military Road / Waters Road  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary

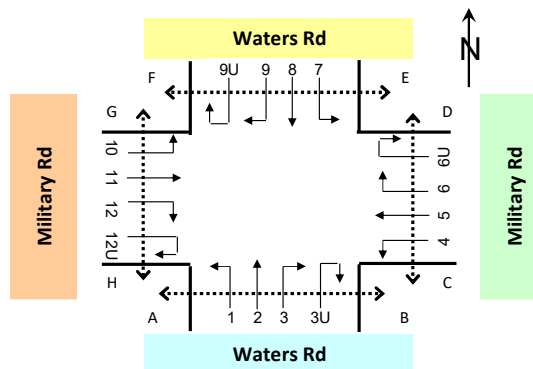


Approach	Waters Rd			Military Rd			Waters Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:15 to 8:15	45	11	56	2,192	257	2,449	95	3	98	1,808	220	2,028	4,631
PM 16:15 to 17:15	83	5	88	1,767	152	1,919	143	0	143	2,216	144	2,360	4,510

Approach	Waters Rd			Military Rd			Waters Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	45	8	53	2,169	233	2,402	73	4	77	1,809	217	2,026	4,558
7:15 to 8:15	45	11	56	2,192	257	2,449	95	3	98	1,808	220	2,028	4,631
7:30 to 8:30	45	14	59	2,141	250	2,391	106	2	108	1,841	231	2,072	4,630
7:45 to 8:45	38	13	51	2,136	244	2,380	100	4	104	1,773	220	1,993	4,528
8:00 to 9:00	42	11	53	2,086	226	2,312	87	6	93	1,746	224	1,970	4,428
<b>AM Totals</b>	<b>87</b>	<b>19</b>	<b>106</b>	<b>4,255</b>	<b>459</b>	<b>4,714</b>	<b>160</b>	<b>10</b>	<b>170</b>	<b>3,555</b>	<b>441</b>	<b>3,996</b>	<b>8,986</b>
16:15 to 17:15	83	5	88	1,767	152	1,919	143	0	143	2,216	144	2,360	4,510
16:30 to 17:30	81	5	86	1,704	141	1,845	148	0	148	2,211	147	2,358	4,437
16:45 to 17:45	90	4	94	1,672	135	1,807	149	0	149	2,207	143	2,350	4,400
17:00 to 18:00	87	4	91	1,620	127	1,747	143	0	143	2,207	155	2,362	4,343
17:15 to 18:15	89	4	93	1,544	114	1,658	138	0	138	2,253	164	2,417	4,306
<b>PM Totals</b>	<b>172</b>	<b>9</b>	<b>181</b>	<b>3,311</b>	<b>266</b>	<b>3,577</b>	<b>281</b>	<b>0</b>	<b>281</b>	<b>4,469</b>	<b>308</b>	<b>4,777</b>	<b>8,816</b>



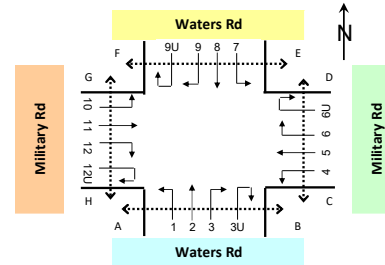
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 4. Military Road / Waters Road  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians								
	Time Period	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 7:15	19	1	3	7	0	0	0	0	0
7:15 to 7:30	22	7	3	5	0	0	0	0	0
7:30 to 7:45	56	8	8	8	0	0	0	0	0
7:45 to 8:00	21	4	9	14	0	0	0	0	0
8:00 to 8:15	24	3	18	9	0	0	0	0	0
8:15 to 8:30	11	1	10	8	0	0	0	0	0
8:30 to 8:45	50	7	7	13	0	0	0	0	0
8:45 to 9:00	53	7	8	17	0	0	0	0	0
<b>AM Totals</b>	<b>256</b>	<b>38</b>	<b>66</b>	<b>81</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	16	20	15	18	0	0	0	0	0
16:30 to 16:45	30	20	9	14	0	0	0	0	0
16:45 to 17:00	27	21	15	17	0	0	0	0	0
17:00 to 17:15	20	21	18	20	0	0	0	0	0
17:15 to 17:30	19	17	11	18	0	0	0	0	0
17:30 to 17:45	16	21	17	0	0	0	0	0	0
17:45 to 18:00	20	22	16	14	0	0	0	0	0
18:00 to 18:15	26	12	34	9	0	0	0	0	0
<b>PM Totals</b>	<b>174</b>	<b>154</b>	<b>135</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 4. Military Road / Waters Road  
 Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data

Classifications  
 Class 1 Lights  
 Class 2 Heavies

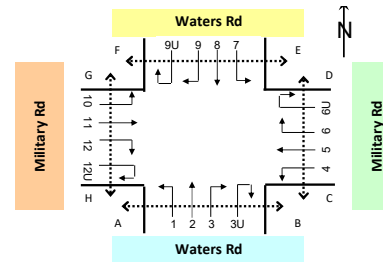


Approach	Waters Rd												Military Rd											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
11:45 to 12:00	39	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 to 12:15	47	1	48	0	0	0	0	0	0	0	0	0	0	19	1	20	449	9	458	0	0	0	0	
12:15 to 12:30	38	3	41	0	0	0	0	0	0	0	0	0	10	0	10	427	18	445	0	0	0	0		
12:30 to 12:45	31	1	32	0	0	0	0	0	0	0	0	0	15	0	15	428	13	441	0	0	0	0		
12:45 to 13:00	34	0	34	0	0	0	0	0	0	0	0	0	8	0	8	402	12	414	0	0	0	0		
13:00 to 13:15	40	0	40	0	0	0	0	0	0	0	0	0	20	0	20	397	13	410	0	0	0	0		
13:15 to 13:30	31	1	32	0	0	0	0	0	0	0	0	0	10	0	10	455	15	470	0	0	0	0		
13:30 to 13:45	27	0	27	0	0	0	0	0	0	0	0	0	10	1	11	477	17	494	0	0	0	0		
<b>Total</b>	<b>287</b>	<b>6</b>	<b>293</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>2</b>	<b>109</b>	<b>3,491</b>	<b>97</b>	<b>3,588</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>		

Approach	Waters Rd												Military Rd												Crossing Pedestrians										
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total								
11:45 to 12:00	25	0	25	0	0	0	0	0	0	0	0	0	25	1	26	518	15	533	0	0	0	0	0	0	0	0	0	0	23	20	43				
12:00 to 12:15	47	0	47	0	0	0	0	0	0	0	0	0	32	0	32	526	10	536	0	0	0	0	0	0	0	0	0	39	19	58					
12:15 to 12:30	48	0	48	0	0	0	0	0	0	0	0	0	25	1	26	499	18	517	0	0	0	0	0	0	0	0	24	15	39						
12:30 to 12:45	38	0	38	0	0	0	0	0	0	0	0	0	27	0	27	533	9	542	0	0	0	0	0	0	0	0	27	19	46						
12:45 to 13:00	30	2	32	0	0	0	0	0	0	0	0	0	23	0	23	563	17	580	0	0	0	0	0	0	0	0	28	15	43						
13:00 to 13:15	40	0	40	0	0	0	0	0	0	0	0	0	27	0	27	539	10	549	0	0	0	0	0	0	0	40	22	62							
13:15 to 13:30	41	0	41	0	0	0	0	0	0	0	0	0	30	0	30	489	15	504	0	0	0	0	0	0	0	32	20	52							
13:30 to 13:45	41	1	42	0	0	0	0	0	0	0	0	0	32	0	32	545	13	558	0	0	0	0	0	0	0	22	17	39							
<b>Total</b>	<b>310</b>	<b>3</b>	<b>313</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>221</b>	<b>2</b>	<b>223</b>	<b>4,212</b>	<b>107</b>	<b>4,319</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>235</b>	<b>147</b>	<b>382</b>						

▲

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 4. Military Road / Waters Road  
 Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary

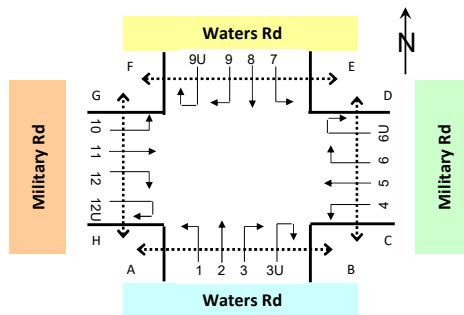


Approach	Waters Rd												Military Rd														
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
	11:45 to 12:45	155	5	160	0	0	0	0	0	0	0	0	0	59	1	60	1,760	40	1,800	2	0	2	0	0	0	0	0
12:00 to 13:00	150	5	155	0	0	0	0	0	0	0	0	0	52	1	53	1,706	52	1,758	0	0	0	0	0	0	0	0	0
12:15 to 13:15	143	4	147	0	0	0	0	0	0	0	0	0	53	0	53	1,654	56	1,710	0	0	0	0	0	0	0	0	0
12:30 to 13:30	136	2	138	0	0	0	0	0	0	0	0	0	53	0	53	1,682	53	1,735	0	0	0	0	0	0	0	0	0
12:45 to 13:45	132	1	133	0	0	0	0	0	0	0	0	0	48	1	49	1,731	57	1,788	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>287</b>	<b>6</b>	<b>293</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>2</b>	<b>109</b>	<b>3,491</b>	<b>97</b>	<b>3,588</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Waters Rd												Military Rd								Crossing Pedestrians															
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total									
	11:45 to 12:45	158	0	158	0	0	0	0	0	0	0	0	0	109	2	111	2,076	52	2,128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	73	186
12:00 to 13:00	163	2	165	0	0	0	0	0	0	0	0	0	107	1	108	2,121	54	2,175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118	68	186	
12:15 to 13:15	156	2	158	0	0	0	0	0	0	0	0	0	102	1	103	2,134	54	2,188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	71	190	
12:30 to 13:30	149	2	151	0	0	0	0	0	0	0	0	0	107	0	107	2,124	51	2,175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	127	76	203	
12:45 to 13:45	152	3	155	0	0	0	0	0	0	0	0	0	112	0	112	2,136	55	2,191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	74	196	
<b>Total</b>	<b>310</b>	<b>3</b>	<b>313</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>221</b>	<b>2</b>	<b>223</b>	<b>4,212</b>	<b>107</b>	<b>4,319</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>235</b>	<b>147</b>	<b>382</b>	



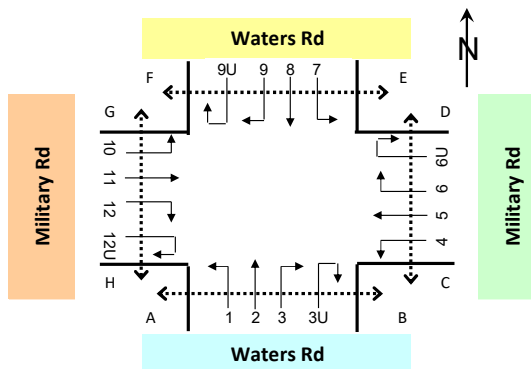
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 4. Military Road / Waters Road  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



Approach	Waters Rd			Military Rd			Waters Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
12:45 to 13:45	132	1	133	1,779	58	1,837	152	3	155	2,248	55	2,303	4,428

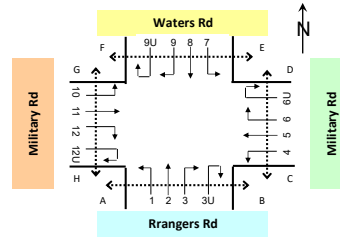
Approach	Waters Rd			Military Rd			Waters Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
11:45 to 12:45	155	5	160	1,821	41	1,862	158	0	158	2,185	54	2,239	4,419
12:00 to 13:00	150	5	155	1,758	53	1,811	163	2	165	2,228	55	2,283	4,414
12:15 to 13:15	143	4	147	1,707	56	1,763	156	2	158	2,236	55	2,291	4,359
12:30 to 13:30	136	2	138	1,735	53	1,788	149	2	151	2,231	51	2,282	4,359
12:45 to 13:45	132	1	133	1,779	58	1,837	152	3	155	2,248	55	2,303	4,428
<b>Total</b>	<b>287</b>	<b>6</b>	<b>293</b>	<b>3,600</b>	<b>99</b>	<b>3,699</b>	<b>310</b>	<b>3</b>	<b>313</b>	<b>4,433</b>	<b>109</b>	<b>4,542</b>	<b>8,847</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 4. Military Road / Waters Road  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
11:45 to 12:00	0	0	0	0	0	0	23	20
12:00 to 12:15	0	0	0	0	0	0	39	19
12:15 to 12:30	0	0	0	0	0	0	24	15
12:30 to 12:45	0	0	0	0	0	0	27	19
12:45 to 13:00	0	0	0	0	0	0	28	15
13:00 to 13:15	0	0	0	0	0	0	40	22
13:15 to 13:30	0	0	0	0	0	0	32	20
13:30 to 13:45	0	0	0	0	0	0	22	17
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>235</b>	<b>147</b>

Job No. : AUNSW851  
 Client : GTA Consultants (Nsw) Pty Ltd  
 Suburb : Neutral Bay  
 Location : 1. Military Rd / Waters Rd / Rangiers Rd  
 Day/Date : Thu, 13th May 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



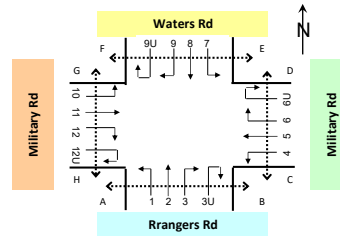
Classifications	Class 1	Class 2
	Lights	Heavies

Approach	Rangiers Rd												Military Rd											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	8	1	9	0	0	0	0	0	0	0	0	0	9	1	10	501	44	545	0	0	0	0	0	0
7:15 to 7:30	7	2	9	0	0	0	0	0	0	0	0	0	16	0	16	576	47	623	0	0	0	0	0	0
7:30 to 7:45	15	1	16	0	0	0	0	0	0	0	0	0	8	0	8	560	60	620	0	0	0	0	0	0
7:45 to 8:00	5	4	9	0	0	0	0	0	0	0	0	0	12	0	12	588	48	636	0	0	0	0	0	0
8:00 to 8:15	5	3	8	0	0	0	0	0	0	0	0	0	14	1	15	552	57	609	0	0	0	0	0	0
8:15 to 8:30	5	4	9	0	0	0	0	0	0	0	0	0	7	1	8	574	62	636	0	0	0	0	0	0
8:30 to 8:45	13	4	17	0	0	0	0	0	0	0	0	0	5	0	5	531	48	579	0	0	0	0	0	0
8:45 to 9:00	8	2	10	0	0	0	0	0	0	0	0	0	12	1	13	545	60	605	0	0	0	0	0	0
<b>AM Totals</b>	<b>66</b>	<b>21</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>83</b>	<b>4</b>	<b>87</b>	<b>4,427</b>	<b>426</b>	<b>4,853</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	41	1	42	0	0	0	0	0	0	0	0	0	7	0	7	416	33	449	0	0	0	0	0	0
16:30 to 16:45	24	3	27	0	0	0	0	0	0	0	0	0	9	0	9	391	36	427	0	0	0	0	0	0
16:45 to 17:00	22	1	23	0	0	0	0	0	0	0	0	0	21	1	22	451	38	489	0	0	0	0	0	0
17:00 to 17:15	20	0	20	0	0	0	0	0	0	0	0	0	9	0	9	431	36	467	0	0	0	0	0	0
17:15 to 17:30	25	0	25	0	0	0	0	0	0	0	0	0	13	0	13	417	39	456	0	0	0	0	0	0
17:30 to 17:45	13	0	13	0	0	0	0	0	0	0	0	0	14	0	14	443	34	477	0	0	0	0	0	0
17:45 to 18:00	20	0	20	0	0	0	0	0	0	0	0	0	17	0	17	466	26	492	0	0	0	0	0	0
18:00 to 18:15	22	0	22	0	0	0	0	0	0	0	0	0	10	0	10	410	28	438	0	0	0	0	0	0
<b>PM Totals</b>	<b>187</b>	<b>5</b>	<b>192</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>1</b>	<b>101</b>	<b>3,425</b>	<b>270</b>	<b>3,695</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Waters Rd												Military Rd												Crossing Pedestrians														
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total						
Time Period	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total						
7:00 to 7:15	16	0	16	0	0	0	0	0	0	0	0	0	14	0	14	458	57	515	0	0	0	0	0	0	0	0	0	0	0	0	0	3	28	0	0	0	0	37	
7:15 to 7:30	12	3	15	0	0	0	0	0	0	0	0	0	15	2	17	467	53	520	0	0	0	0	0	0	0	0	0	0	0	0	11	45	0	0	5	7	0	0	68
7:30 to 7:45	10	2	12	0	0	0	0	0	0	0	0	0	6	2	8	476	50	526	0	0	0	0	0	0	0	0	0	0	0	9	48	0	0	6	5	0	0	68	
7:45 to 8:00	33	2	35	0	0	0	0	0	0	0	0	0	20	0	20	427	48	475	0	0	0	0	0	0	0	0	0	0	13	64	0	0	7	12	0	0	96		
8:00 to 8:15	32	0	32	0	0	0	0	0	0	0	0	0	24	0	24	383	42	425	0	0	0	0	0	0	0	0	0	0	16	73	0	0	11	20	0	0	120		
8:15 to 8:30	38	2	40	0	0	0	0	0	0	0	0	0	14	1	15	334	55	389	0	0	0	0	0	0	0	0	0	0	15	87	0	0	10	9	0	0	121		
8:30 to 8:45	20	0	20	0	0	0	0	0	0	0	0	0	15	0	15	376	52	428	0	0	0	0	0	0	0	0	0	0	9	76	0	0	13	9	0	0	107		
8:45 to 9:00	24	1	25	0	0	0	0	0	0	0	0	0	21	1	22	426	57	483	0	0	0	0	0	0	0	0	0	0	10	79	0	0	12	5	1	0	107		
<b>AM Totals</b>	<b>185</b>	<b>10</b>	<b>195</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>129</b>	<b>6</b>	<b>135</b>	<b>3,347</b>	<b>414</b>	<b>3,761</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>68</b>	<b>69</b>	<b>1</b>	<b>0</b>	<b>724</b>		
16:15 to 16:30	38	0	38	0	0	0	0	0	0	0	0	0	21	2	23	538	38	576	0	0	0	0	0	0	0	0	0	0	22	30	0	0	24	11	0	0	87		
16:30 to 16:45	30	0	30	0	0	0	0	0	0	0	0	0	25	0	25	522	35	557	0	0	0	0	0	0	0	0	0	0	18	44	0	0	21	18	0	1	102		
16:45 to 17:00	37	0	37	0	0	0	0	0	0	0	0	0	27	1	28	584	38	622	0	0	0	0	0	0	0	0	0	0	18	27	0	0	17	17	0	0	79		
17:00 to 17:15	24	0	24	0	0	0	0	0	0	0	0	0	24	2	26	550	38	588	0	0	0	0	0	0	0	0	0	0	14	21	0	0	20	22	0	0	77		
17:15 to 17:30	38	0	38	0	0	0	0	0	0	0	0	0	10	0	10	592	44	636	0	0	0	0	0	0	0	0	0	0	26	25	0	0	5	8	0	0	64		
17:30 to 17:45	31	1	32	0	0	0	0	0	0	0	0	0	24	0	24	559	36	595	0	0	0	0	0	0	0	0	0	0	41	20	0	0	3	13	0	0	77		
17:45 to 18:00	30	0	30	0	0	0	0	0	0	0	0	0	17	0	17	563	49	612	0	0	0	0	0	0	0	0	0	0	19	26	0	0	11	13	0	0	69		
18:00 to 18:15	26	0	26	0	0	0	0	0	0	0	0	0	26	0	26	534	59	593	0	0	0	0	0	0	0	0	0	0	22	14	0	0	12	11	0	0	59		
<b>PM Totals</b>	<b>254</b>	<b>1</b>	<b>255</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>5</b>	<b>179</b>	<b>4,442</b>	<b>337</b>	<b>4,779</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>207</b>	<b>0</b>	<b>0</b>	<b>113</b>	<b>113</b>	<b>0</b>	<b>1</b>	<b>614</b>			



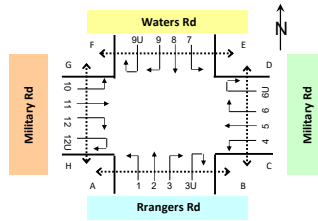
Job No. : AUNSW851  
 Client : GTA Consultants (Nsw) Pty Ltd  
 Suburb : Neutral Bay  
 Location : 1. Military Rd / Waters Rd / Rrangers Rd  
 Day/Date : Thu, 13th May 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary



Approach	Rrangers Rd												Military Rd														
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	35	8	43	0	0	0	0	0	0	0	0	0	45	1	46	2,225	199	2,424	0	0	0	0	0	0	0		
7:15 to 8:15	32	10	42	0	0	0	0	0	0	0	0	0	50	1	51	2,276	212	2,488	0	0	0	0	0	0	0		
7:30 to 8:30	30	12	42	0	0	0	0	0	0	0	0	0	41	2	43	2,274	227	2,501	0	0	0	0	0	0	0		
7:45 to 8:45	28	15	43	0	0	0	0	0	0	0	0	0	38	2	40	2,245	215	2,460	0	0	0	0	0	0	0		
8:00 to 9:00	31	13	44	0	0	0	0	0	0	0	0	0	38	3	41	2,202	227	2,429	0	0	0	0	0	0	0		
<b>AM Totals</b>	<b>66</b>	<b>21</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>83</b>	<b>4</b>	<b>87</b>	<b>4,427</b>	<b>426</b>	<b>4,853</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
16:15 to 17:15	107	5	112	0	0	0	0	0	0	0	0	0	46	1	47	1,689	143	1,832	0	0	0	0	0	0	0		
16:30 to 17:30	91	4	95	0	0	0	0	0	0	0	0	0	52	1	53	1,690	149	1,839	0	0	0	0	0	0	0		
16:45 to 17:45	80	1	81	0	0	0	0	0	0	0	0	0	57	1	58	1,742	147	1,889	0	0	0	0	0	0	0		
17:00 to 18:00	78	0	78	0	0	0	0	0	0	0	0	0	53	0	53	1,757	135	1,892	0	0	0	0	0	0	0		
17:15 to 18:15	80	0	80	0	0	0	0	0	0	0	0	0	54	0	54	1,736	127	1,863	0	0	0	0	0	0	0		
<b>PM Totals</b>	<b>187</b>	<b>5</b>	<b>192</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>1</b>	<b>101</b>	<b>3,425</b>	<b>270</b>	<b>3,695</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

Approach	Waters Rd												Military Rd												Crossing Pedestrians														
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total						
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	71	7	78	0	0	0	0	0	0	0	0	0	55	4	59	1,828	208	2,036	0	0	0	0	0	0	0	36	185	0	0	22	26	0	0	269					
7:15 to 8:15	87	7	94	0	0	0	0	0	0	0	0	0	65	4	69	1,753	193	1,946	0	0	0	0	0	0	0	49	230	0	0	29	44	0	0	352					
7:30 to 8:30	113	6	119	0	0	0	0	0	0	0	0	0	64	3	67	1,620	195	1,815	0	0	0	0	0	0	0	53	272	0	0	34	46	0	0	405					
7:45 to 8:45	123	4	127	0	0	0	0	0	0	0	0	0	73	1	74	1,520	197	1,717	0	0	0	0	0	0	0	53	300	0	0	41	50	0	0	444					
8:00 to 9:00	114	3	117	0	0	0	0	0	0	0	0	0	74	2	76	1,519	206	1,725	0	0	0	0	0	0	0	50	315	0	0	46	43	1	0	455					
<b>AM Totals</b>	<b>185</b>	<b>10</b>	<b>195</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>129</b>	<b>6</b>	<b>135</b>	<b>3,347</b>	<b>414</b>	<b>3,761</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>68</b>	<b>69</b>	<b>1</b>	<b>0</b>	<b>724</b>						
16:15 to 17:15	129	0	129	0	0	0	0	0	0	0	0	0	97	5	102	2,194	149	2,343	0	0	0	0	0	0	0	72	122	0	0	82	68	0	1	345					
16:30 to 17:30	129	0	129	0	0	0	0	0	0	0	0	0	86	3	89	2,248	155	2,403	0	0	0	0	0	0	0	76	117	0	0	63	65	0	1	322					
16:45 to 17:45	130	1	131	0	0	0	0	0	0	0	0	0	85	3	88	2,285	156	2,441	0	0	0	0	0	0	0	99	93	0	0	45	60	0	0	297					
17:00 to 18:00	123	1	124	0	0	0	0	0	0	0	0	0	75	2	77	2,264	167	2,431	0	0	0	0	0	0	0	100	92	0	0	39	56	0	0	287					
17:15 to 18:15	125	1	126	0	0	0	0	0	0	0	0	0	77	0	77	2,248	188	2,436	0	0	0	0	0	0	0	108	85	0	0	31	45	0	0	269					
<b>PM Totals</b>	<b>254</b>	<b>1</b>	<b>255</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>5</b>	<b>179</b>	<b>4,442</b>	<b>337</b>	<b>4,779</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>207</b>	<b>0</b>	<b>0</b>	<b>113</b>	<b>113</b>	<b>0</b>	<b>1</b>	<b>614</b>						

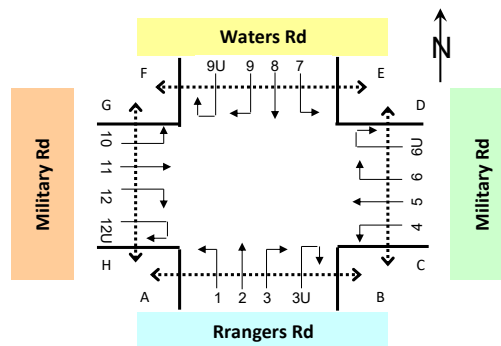
Job No. : AUNSW851  
 Client : GTA Consultants (Nsw) Pty Ltd  
 Suburb : Neutral Bay  
 Location : 1. Military Rd / Waters Rd / Rrangers Rd  
 Day/Date : Thu, 13th May 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary



Approach	Rrangers Rd			Military Rd			Waters Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:15 to 8:15	32	10	42	2,326	213	2,539	87	7	94	1,818	197	2,015	4,690
PM 16:45 to 17:45	80	1	81	1,799	148	1,947	130	1	131	2,370	159	2,529	4,688

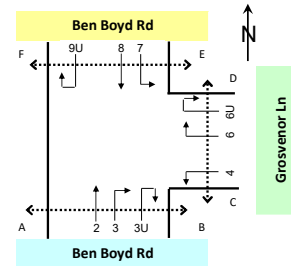
Approach	Rrangers Rd			Military Rd			Waters Rd			Military Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	35	8	43	2,270	200	2,470	71	7	78	1,883	212	2,095	4,686
7:15 to 8:15	32	10	42	2,326	213	2,539	87	7	94	1,818	197	2,015	4,690
7:30 to 8:30	30	12	42	2,315	229	2,544	113	6	119	1,684	198	1,882	4,587
7:45 to 8:45	28	15	43	2,283	217	2,500	123	4	127	1,593	198	1,791	4,461
8:00 to 9:00	31	13	44	2,240	230	2,470	114	3	117	1,593	208	1,801	4,432
<b>AM Totals</b>	<b>66</b>	<b>21</b>	<b>87</b>	<b>4,510</b>	<b>430</b>	<b>4,940</b>	<b>185</b>	<b>10</b>	<b>195</b>	<b>3,476</b>	<b>420</b>	<b>3,896</b>	<b>9,118</b>
16:15 to 17:15	107	5	112	1,735	144	1,879	129	0	129	2,291	154	2,445	4,565
16:30 to 17:30	91	4	95	1,742	150	1,892	129	0	129	2,334	158	2,492	4,608
16:45 to 17:45	80	1	81	1,799	148	1,947	130	1	131	2,370	159	2,529	4,688
17:00 to 18:00	78	0	78	1,810	135	1,945	123	1	124	2,339	169	2,508	4,655
17:15 to 18:15	80	0	80	1,790	127	1,917	125	1	126	2,325	188	2,513	4,636
<b>PM Totals</b>	<b>187</b>	<b>5</b>	<b>192</b>	<b>3,525</b>	<b>271</b>	<b>3,796</b>	<b>254</b>	<b>1</b>	<b>255</b>	<b>4,616</b>	<b>342</b>	<b>4,958</b>	<b>9,201</b>

**Job No.** : AUNSW851  
**Client** : GTA Consultants (Nsw) Pty Ltd  
**Suburb** : Neutral Bay  
**Location** : 1. Military Rd / Waters Rd / Rangers Rd  
  
**Day/Date** : Thu, 13th May 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	Time Period	B to A	A to B	D to C	C to D	F to E	E to F	H to G
7:00 to 7:15	3	28	0	0	4	2	0	0
7:15 to 7:30	11	45	0	0	5	7	0	0
7:30 to 7:45	9	48	0	0	6	5	0	0
7:45 to 8:00	13	64	0	0	7	12	0	0
8:00 to 8:15	16	73	0	0	11	20	0	0
8:15 to 8:30	15	87	0	0	10	9	0	0
8:30 to 8:45	9	76	0	0	13	9	0	0
8:45 to 9:00	10	79	0	0	12	5	1	0
<b>AM Totals</b>	<b>86</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>68</b>	<b>69</b>	<b>1</b>	<b>0</b>
16:15 to 16:30	22	30	0	0	24	11	0	0
16:30 to 16:45	18	44	0	0	21	18	0	1
16:45 to 17:00	18	27	0	0	17	17	0	0
17:00 to 17:15	14	21	0	0	20	22	0	0
17:15 to 17:30	26	25	0	0	5	8	0	0
17:30 to 17:45	41	20	0	0	3	13	0	0
17:45 to 18:00	19	26	0	0	11	13	0	0
18:00 to 18:15	22	14	0	0	12	11	0	0
<b>PM Totals</b>	<b>180</b>	<b>207</b>	<b>0</b>	<b>0</b>	<b>113</b>	<b>113</b>	<b>0</b>	<b>1</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 5. Ben Boyd Road / Grosvenor Lane  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



Classifications	Class 1	Class 2
	Lights	Heavies

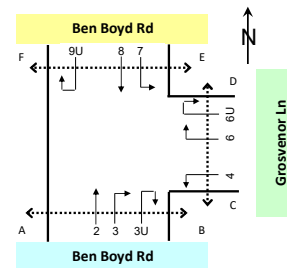
Approach	Ben Boyd Rd												Grosvenor Ln					
	Direction	Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 6 (Right Turn)	Direction 6U (U Turn)			
		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total	
Time Period																		
7:00 to 7:15	88	6	94	10	1	11	0	0	0	0	0	0	0	0	0	0	0	
7:15 to 7:30	78	3	81	25	0	25	2	0	2	0	0	0	0	0	0	0	0	
7:30 to 7:45	79	3	82	18	0	18	0	0	0	0	0	0	0	0	0	0	0	
7:45 to 8:00	101	5	106	23	1	24	0	0	0	0	0	0	0	0	0	0	0	
8:00 to 8:15	106	1	107	24	1	25	1	0	1	0	0	0	0	0	0	0	0	
8:15 to 8:30	108	5	113	27	0	27	0	1	1	0	0	0	0	0	0	0	0	
8:30 to 8:45	103	5	108	22	0	22	0	0	0	0	0	0	0	0	0	0	0	
8:45 to 9:00	112	2	114	24	1	25	0	0	0	0	0	0	0	0	0	0	0	
AM Totals	775	30	805	173	4	177	3	1	4	0	0	0	0	0	0	0	0	
16:15 to 16:30	85	1	86	28	0	28	2	0	2	0	0	0	0	0	0	0	0	
16:30 to 16:45	107	0	107	20	0	20	0	0	0	0	0	0	0	0	0	0	0	
16:45 to 17:00	96	3	99	17	0	17	0	0	0	0	0	0	0	0	0	0	0	
17:00 to 17:15	99	0	99	32	0	32	0	0	0	0	0	0	0	0	0	0	0	
17:15 to 17:30	115	1	116	35	0	35	1	0	1	0	0	0	0	0	0	0	0	
17:30 to 17:45	120	2	122	21	0	21	2	0	2	0	0	0	0	0	0	0	0	
17:45 to 18:00	117	2	119	21	0	21	2	0	2	0	0	0	0	0	0	0	0	
18:00 to 18:15	108	1	109	18	0	18	0	0	0	0	0	0	0	0	0	0	0	
PM Totals	847	10	857	192	0	192	7	0	7	0	0	0	0	0	0	0	0	

Approach	Ben Boyd Rd								
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
Time Period									
7:00 to 7:15	1	0	1	32	1	33	0	0	0
7:15 to 7:30	1	0	1	38	0	38	0	0	0

Crossing Pedestrians							Total
B to A	A to B	D to C	C to D	F to E	E to F		
0	0	3	4	0	0		7
0	0	3	6	0	0		9

7:30 to 7:45	1	1	2	55	1	56	0	0	0	0	0	7	9	0	0	16
7:45 to 8:00	1	0	1	58	2	60	0	0	0	0	0	14	2	0	0	16
8:00 to 8:15	2	0	2	57	2	59	0	0	0	0	0	8	7	0	0	15
8:15 to 8:30	5	0	5	52	3	55	0	0	0	0	0	14	7	0	0	21
8:30 to 8:45	3	0	3	40	1	41	0	0	0	0	0	4	8	0	0	12
8:45 to 9:00	4	0	4	44	2	46	0	0	0	0	0	17	4	0	0	21
<b>AM Totals</b>	<b>18</b>	<b>1</b>	<b>19</b>	<b>376</b>	<b>12</b>	<b>388</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>117</b>
16:15 to 16:30	2	0	2	60	0	60	0	0	0	0	0	5	6	0	0	11
16:30 to 16:45	3	0	3	54	0	54	0	0	0	0	0	8	7	0	0	15
16:45 to 17:00	1	0	1	55	0	55	0	0	0	0	0	10	6	0	0	16
17:00 to 17:15	2	0	2	54	0	54	0	0	0	0	0	6	13	0	0	19
17:15 to 17:30	0	0	0	43	3	46	0	0	0	0	0	16	8	0	0	24
17:30 to 17:45	3	0	3	51	2	53	0	0	0	0	0	7	19	0	0	26
17:45 to 18:00	3	0	3	71	3	74	0	0	0	0	0	5	8	0	0	13
18:00 to 18:15	18	0	18	58	0	58	0	0	0	0	0	7	9	0	0	16
<b>PM Totals</b>	<b>32</b>	<b>0</b>	<b>32</b>	<b>446</b>	<b>8</b>	<b>454</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>140</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 5. Ben Boyd Road / Grosvenor Lane  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Hourly Summary

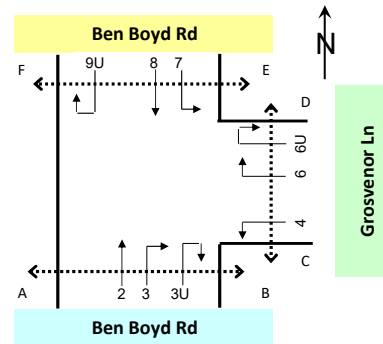


Approach	Ben Boyd Rd									Grosvenor Ln								
	Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	346	17	363	76	2	78	2	0	2	0	0	0	0	0	0	0	0	0
7:15 to 8:15	364	12	376	90	2	92	3	0	3	0	0	0	0	0	0	0	0	0
7:30 to 8:30	394	14	408	92	2	94	1	1	2	0	0	0	0	0	0	0	0	0
7:45 to 8:45	418	16	434	96	2	98	1	1	2	0	0	0	0	0	0	0	0	0
8:00 to 9:00	429	13	442	97	2	99	1	1	2	0	0	0	0	0	0	0	0	0
<b>AM Totals</b>	<b>775</b>	<b>30</b>	<b>805</b>	<b>173</b>	<b>4</b>	<b>177</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	387	4	391	97	0	97	2	0	2	0	0	0	0	0	0	0	0	0
16:30 to 17:30	417	4	421	104	0	104	1	0	1	0	0	0	0	0	0	0	0	0
16:45 to 17:45	430	6	436	105	0	105	3	0	3	0	0	0	0	0	0	0	0	0
17:00 to 18:00	451	5	456	109	0	109	5	0	5	0	0	0	0	0	0	0	0	0
17:15 to 18:15	460	6	466	95	0	95	5	0	5	0	0	0	0	0	0	0	0	0
<b>PM Totals</b>	<b>847</b>	<b>10</b>	<b>857</b>	<b>192</b>	<b>0</b>	<b>192</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd									Crossing Pedestrians						
Direction	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9U (U Turn)									
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	Total
7:00 to 8:00	4	1	5	183	4	187	0	0	0	0	0	27	21	0	0	48
7:15 to 8:15	5	1	6	208	5	213	0	0	0	0	0	32	24	0	0	56
7:30 to 8:30	9	1	10	222	8	230	0	0	0	0	0	43	25	0	0	68
7:45 to 8:45	11	0	11	207	8	215	0	0	0	0	0	40	24	0	0	64
8:00 to 9:00	14	0	14	193	8	201	0	0	0	0	0	43	26	0	0	69
<b>AM Totals</b>	<b>18</b>	<b>1</b>	<b>19</b>	<b>376</b>	<b>12</b>	<b>388</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>117</b>
16:15 to 17:15	8	0	8	223	0	223	0	0	0	0	0	29	32	0	0	61
16:30 to 17:30	6	0	6	206	3	209	0	0	0	0	0	40	34	0	0	74
16:45 to 17:45	6	0	6	203	5	208	0	0	0	0	0	39	46	0	0	85
17:00 to 18:00	8	0	8	219	8	227	0	0	0	0	0	34	48	0	0	82
17:15 to 18:15	24	0	24	223	8	231	0	0	0	0	0	35	44	0	0	79
<b>PM Totals</b>	<b>32</b>	<b>0</b>	<b>32</b>	<b>446</b>	<b>8</b>	<b>454</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>140</b>



**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 5. Ben Boyd Road / Grosvenor Lane  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



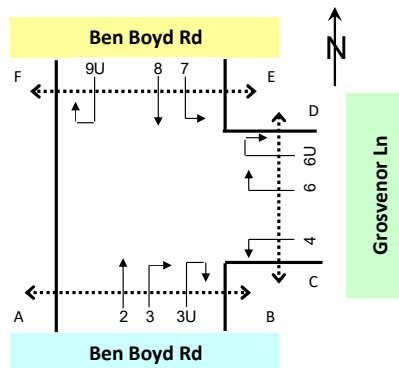
Approach	Ben Boyd Rd			Grosvenor Ln			Ben Boyd Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:45 to 8:45	515	19	534	0	0	0	218	8	226	760
PM 17:15 to 18:15	560	6	566	0	0	0	247	8	255	821

Approach	Ben Boyd Rd			Grosvenor Ln			Ben Boyd Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	424	19	443	0	0	0	187	5	192	635
7:15 to 8:15	457	14	471	0	0	0	213	6	219	690
7:30 to 8:30	487	17	504	0	0	0	231	9	240	744
7:45 to 8:45	515	19	534	0	0	0	218	8	226	760
8:00 to 9:00	527	16	543	0	0	0	207	8	215	758
<b>AM Totals</b>	<b>951</b>	<b>35</b>	<b>986</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>394</b>	<b>13</b>	<b>407</b>	<b>1,393</b>
16:15 to 17:15	486	4	490	0	0	0	231	0	231	721
16:30 to 17:30	522	4	526	0	0	0	212	3	215	741
16:45 to 17:45	538	6	544	0	0	0	209	5	214	758
17:00 to 18:00	565	5	570	0	0	0	227	8	235	805
17:15 to 18:15	560	6	566	0	0	0	247	8	255	821
<b>PM Totals</b>	<b>1,046</b>	<b>10</b>	<b>1,056</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>478</b>	<b>8</b>	<b>486</b>	<b>1,542</b>



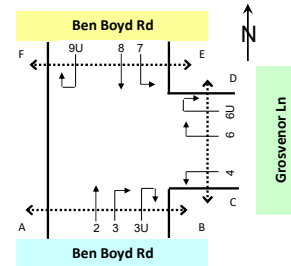
Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 5. Ben Boyd Road / Grosvenor Lane

Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Pedestrian Data



Direction	Pedestrians					
Time Period	B to A	A to B	D to C	C to D	F to E	E to F
7:00 to 7:15	0	0	3	4	0	0
7:15 to 7:30	0	0	3	6	0	0
7:30 to 7:45	0	0	7	9	0	0
7:45 to 8:00	0	0	14	2	0	0
8:00 to 8:15	0	0	8	7	0	0
8:15 to 8:30	0	0	14	7	0	0
8:30 to 8:45	0	0	4	8	0	0
8:45 to 9:00	0	0	17	4	0	0
<b>AM Totals</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>47</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	0	0	5	6	0	0
16:30 to 16:45	0	0	8	7	0	0
16:45 to 17:00	0	0	10	6	0	0
17:00 to 17:15	0	0	6	13	0	0
17:15 to 17:30	0	0	16	8	0	0
17:30 to 17:45	0	0	7	19	0	0
17:45 to 18:00	0	0	5	8	0	0
18:00 to 18:15	0	0	7	9	0	0
<b>PM Totals</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>76</b>	<b>0</b>	<b>0</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 5. Ben Boyd Road / Grosvenor Lane  
 Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



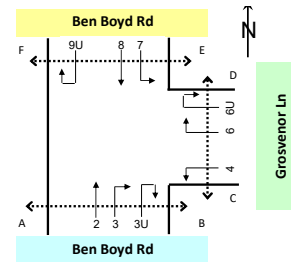
Classifications	Class 1	Class 2
	Lights	Heavies

Approach	Ben Boyd Rd												Grosvenor Ln					
	Direction	Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 6 (Right Turn)	Direction 6U (U Turn)			
		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total	
11:45 to 12:00	80	2	82	22	0	22	1	0	1	0	0	0	0	0	0	0		
12:00 to 12:15	99	1	100	23	0	23	0	0	0	0	0	0	0	0	0	0		
12:15 to 12:30	111	1	112	24	0	24	1	0	1	0	0	0	0	0	0	0		
12:30 to 12:45	97	0	97	24	0	24	0	0	0	0	0	0	0	0	0	0		
12:45 to 13:00	104	2	106	22	0	22	0	0	0	0	0	0	0	0	0	0		
13:00 to 13:15	107	0	107	29	0	29	2	0	2	0	0	0	0	0	0	0		
13:15 to 13:30	106	0	106	19	0	19	0	0	0	0	0	0	0	0	0	0		
13:30 to 13:45	87	1	88	23	0	23	2	0	2	0	0	0	0	0	0	0		
<b>Total</b>	<b>791</b>	<b>7</b>	<b>798</b>	<b>186</b>	<b>0</b>	<b>186</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

Approach	Ben Boyd Rd									Crossing Pedestrians							
	Direction	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	Total
		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total							
11:45 to 12:00	4	0	4	55	1	56	0	0	0	1	4	10	10	0	0	25	
12:00 to 12:15	3	0	3	56	1	57	0	0	0	2	1	19	1	0	1	24	
12:15 to 12:30	4	0	4	75	0	75	1	0	1	2	0	23	9	0	1	35	
12:30 to 12:45	3	0	3	59	1	60	1	0	1	1	2	11	7	5	7	33	
12:45 to 13:00	6	0	6	69	0	69	0	0	0	4	1	12	15	5	8	45	
13:00 to 13:15	3	0	3	61	1	62	0	0	0	1	1	23	14	1	5	45	
13:15 to 13:30	9	0	9	57	0	57	0	0	0	2	0	7	17	4	5	35	
13:30 to 13:45	3	0	3	56	0	56	1	0	1	2	1	12	10	2	4	31	
<b>Total</b>	<b>35</b>	<b>0</b>	<b>35</b>	<b>488</b>	<b>4</b>	<b>492</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>15</b>	<b>10</b>	<b>117</b>	<b>83</b>	<b>17</b>	<b>31</b>	<b>273</b>	

^

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 5. Ben Boyd Road / Grosvenor Lane  
 Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary



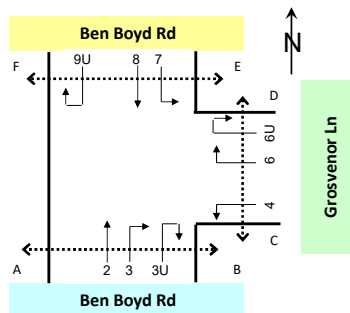
Approach	Ben Boyd Rd												Grosvenor Ln					
	Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
11:45 to 12:45	387	4	391	93	0	93	2	0	2	0	0	0	0	0	0	0	0	0
12:00 to 13:00	411	4	415	93	0	93	1	0	1	0	0	0	0	0	0	0	0	0
12:15 to 13:15	419	3	422	99	0	99	3	0	3	0	0	0	0	0	0	0	0	0
12:30 to 13:30	414	2	416	94	0	94	2	0	2	0	0	0	0	0	0	0	0	0
12:45 to 13:45	404	3	407	93	0	93	4	0	4	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>791</b>	<b>7</b>	<b>798</b>	<b>186</b>	<b>0</b>	<b>186</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd									Crossing Pedestrians						
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	Total
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total							
11:45 to 12:45	14	0	14	245	3	248	2	0	2	6	7	63	27	5	9	117
12:00 to 13:00	16	0	16	259	2	261	2	0	2	9	4	65	32	10	17	137
12:15 to 13:15	16	0	16	264	2	266	2	0	2	8	4	69	45	11	21	158
12:30 to 13:30	21	0	21	246	2	248	1	0	1	8	4	53	53	15	25	158
12:45 to 13:45	21	0	21	243	1	244	1	0	1	9	3	54	56	12	22	156
<b>Total</b>	<b>35</b>	<b>0</b>	<b>35</b>	<b>488</b>	<b>4</b>	<b>492</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>15</b>	<b>10</b>	<b>117</b>	<b>83</b>	<b>17</b>	<b>31</b>	<b>273</b>



Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 5. Ben Boyd Road / Grosvenor Lane

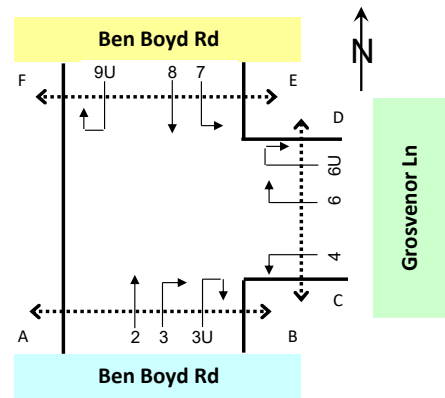
Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary



Approach	Ben Boyd Rd			Grosvenor Ln			Ben Boyd Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
12:15 to 13:15	521	3	524	0	0	0	282	2	284	808

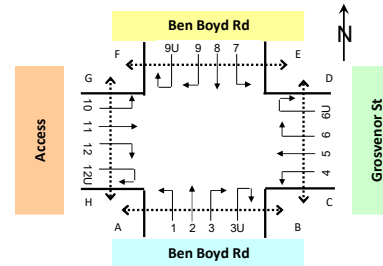
Approach	Ben Boyd Rd			Grosvenor Ln			Ben Boyd Rd			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
11:45 to 12:45	482	4	486	0	0	0	261	3	264	750
12:00 to 13:00	505	4	509	0	0	0	277	2	279	788
12:15 to 13:15	521	3	524	0	0	0	282	2	284	808
12:30 to 13:30	510	2	512	0	0	0	268	2	270	782
12:45 to 13:45	501	3	504	0	0	0	265	1	266	770
<b>Total</b>	<b>983</b>	<b>7</b>	<b>990</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>526</b>	<b>4</b>	<b>530</b>	<b>1,520</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 5. Ben Boyd Road / Grosvenor Lane  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians					
	B to A	A to B	D to C	C to D	F to E	E to F
11:45 to 12:00	1	4	10	10	0	0
12:00 to 12:15	2	1	19	1	0	1
12:15 to 12:30	2	0	23	9	0	1
12:30 to 12:45	1	2	11	7	5	7
12:45 to 13:00	4	1	12	15	5	8
13:00 to 13:15	1	1	23	14	1	5
13:15 to 13:30	2	0	7	17	4	5
13:30 to 13:45	2	1	12	10	2	4
<b>Total</b>	<b>15</b>	<b>10</b>	<b>117</b>	<b>83</b>	<b>17</b>	<b>31</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 6. Ben Boyd Road / Grosvenor Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



Classifications	Class 1	Class 2
	Lights	Heavies

Approach	Ben Boyd Rd												Grosvenor St														
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	3	0	3	62	7	69	26	0	26	0	0	0	17	0	17	4	0	4	8	0	8	0	0	0	0		
7:15 to 7:30	5	0	5	54	2	56	13	3	16	0	0	0	22	0	22	2	0	2	17	0	17	0	0	0	0		
7:30 to 7:45	4	0	4	59	2	61	15	1	16	0	0	0	20	0	20	0	0	0	14	0	14	0	0	0	0		
7:45 to 8:00	5	2	7	66	3	69	29	0	29	0	0	0	28	1	29	4	0	4	15	0	15	0	0	0	0		
8:00 to 8:15	7	0	7	70	0	70	27	2	29	0	0	0	36	2	38	2	0	2	11	0	11	0	0	0	0		
8:15 to 8:30	9	1	10	88	1	89	24	1	25	0	0	0	26	1	27	4	0	4	17	0	17	0	0	0	0		
8:30 to 8:45	4	2	6	71	7	78	28	1	29	0	0	0	19	0	19	2	0	2	9	0	9	0	0	0	0		
8:45 to 9:00	5	0	5	74	1	75	30	1	31	0	0	0	25	1	26	1	0	1	3	1	4	0	0	0	0		
<b>AM Totals</b>	<b>42</b>	<b>5</b>	<b>47</b>	<b>544</b>	<b>23</b>	<b>567</b>	<b>192</b>	<b>9</b>	<b>201</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>193</b>	<b>5</b>	<b>198</b>	<b>19</b>	<b>0</b>	<b>19</b>	<b>94</b>	<b>1</b>	<b>95</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
16:15 to 16:30	9	0	9	58	1	59	30	0	30	0	0	0	37	0	37	3	0	3	10	0	10	0	0	0	0		
16:30 to 16:45	3	0	3	71	0	71	30	0	30	0	0	0	37	0	37	2	0	2	16	1	17	0	0	0	0		
16:45 to 17:00	6	0	6	69	1	70	23	2	25	0	0	0	30	0	30	5	0	5	16	0	16	0	0	0	0		
17:00 to 17:15	1	0	1	79	0	79	26	0	26	0	0	0	35	0	35	1	0	1	7	0	7	0	0	0	0		
17:15 to 17:30	5	0	5	82	1	83	25	0	25	0	0	0	29	3	32	3	0	3	15	1	16	0	0	0	0		
17:30 to 17:45	4	0	4	79	2	81	34	0	34	0	0	0	37	0	37	0	0	0	6	0	6	0	0	0	0		
17:45 to 18:00	3	0	3	80	2	82	40	0	40	0	0	0	51	0	51	3	0	3	16	0	16	0	0	0	0		
18:00 to 18:15	4	0	4	58	0	58	38	1	39	0	0	0	52	0	52	1	0	1	9	0	9	0	0	0	0		
<b>PM Totals</b>	<b>35</b>	<b>0</b>	<b>35</b>	<b>576</b>	<b>7</b>	<b>583</b>	<b>246</b>	<b>3</b>	<b>249</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>308</b>	<b>3</b>	<b>311</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>95</b>	<b>2</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

Approach	Ben Boyd Rd												Access				Crossing Pedestrians																			
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	0	0	0	18	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7			
7:15 to 7:30	1	0	1	26	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13			



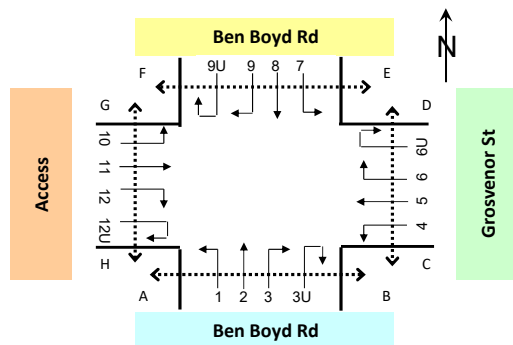


Approach	Ben Boyd Rd												Access								Crossing Pedestrians													
Direction	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)												
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total	
7:00 to 8:00	2	0	2	113	1	114	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	3	8	14	5	1	0	7	39
7:15 to 8:15	3	0	3	118	1	119	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	3	7	14	4	3	5	11	49	
7:30 to 8:30	2	0	2	122	1	123	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	7	15	4	3	7	14	55	
7:45 to 8:45	3	0	3	111	1	112	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	7	14	3	4	7	14	52	
8:00 to 9:00	5	0	5	104	2	106	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	8	15	4	8	7	13	56	
<b>AM Totals</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>217</b>	<b>3</b>	<b>220</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>16</b>	<b>29</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>20</b>	<b>95</b>	
16:15 to 17:15	7	0	7	87	1	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	16	11	1	1	2	6	38	
16:30 to 17:30	7	0	7	76	1	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	12	1	1	2	7	31	
16:45 to 17:45	8	0	8	78	3	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	18	14	2	5	3	5	48	
17:00 to 18:00	12	0	12	82	4	86	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	14	2	5	2	4	50	
17:15 to 18:15	13	0	13	82	4	86	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	26	17	1	4	4	5	57	
<b>PM Totals</b>	<b>20</b>	<b>0</b>	<b>20</b>	<b>169</b>	<b>5</b>	<b>174</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>42</b>	<b>28</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>11</b>	<b>95</b>	



Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 6. Ben Boyd Road / Grosvenor Street

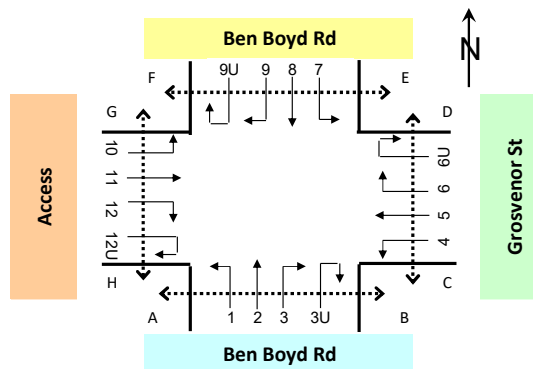
Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary



Approach	Ben Boyd Rd			Grosvenor St			Ben Boyd Rd			Access			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:45 to 8:45	428	20	448	173	4	177	115	1	116	0	0	0	741
PM 17:15 to 18:15	452	6	458	222	4	226	96	4	100	1	0	1	785

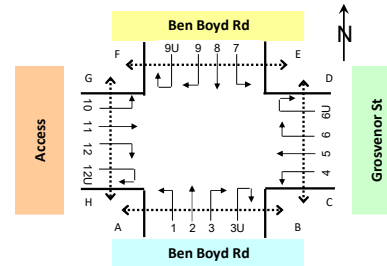
Approach	Ben Boyd Rd			Grosvenor St			Ben Boyd Rd			Access			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	341	20	361	151	1	152	115	1	116	1	0	1	630
7:15 to 8:15	354	15	369	171	3	174	121	1	122	1	0	1	666
7:30 to 8:30	403	13	416	177	4	181	125	1	126	0	0	0	723
7:45 to 8:45	428	20	448	173	4	177	115	1	116	0	0	0	741
8:00 to 9:00	437	17	454	155	5	160	110	2	112	0	0	0	726
<b>AM Totals</b>	<b>778</b>	<b>37</b>	<b>815</b>	<b>306</b>	<b>6</b>	<b>312</b>	<b>225</b>	<b>3</b>	<b>228</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1,356</b>
16:15 to 17:15	405	4	409	199	1	200	94	1	95	0	0	0	704
16:30 to 17:30	420	4	424	196	5	201	83	1	84	0	0	0	709
16:45 to 17:45	433	6	439	184	4	188	86	3	89	0	0	0	716
17:00 to 18:00	458	5	463	203	4	207	95	4	99	0	0	0	769
17:15 to 18:15	452	6	458	222	4	226	96	4	100	1	0	1	785
<b>PM Totals</b>	<b>857</b>	<b>10</b>	<b>867</b>	<b>421</b>	<b>5</b>	<b>426</b>	<b>190</b>	<b>5</b>	<b>195</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1,489</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 6. Ben Boyd Road / Grosvenor Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 7:15	0	0	2	2	2	0	0	1
7:15 to 7:30	0	0	4	5	2	1	0	1
7:30 to 7:45	1	1	2	4	1	0	0	2
7:45 to 8:00	0	2	0	3	0	0	0	3
8:00 to 8:15	1	0	1	2	1	2	5	5
8:15 to 8:30	0	0	4	6	2	1	2	4
8:30 to 8:45	0	0	2	3	0	1	0	2
8:45 to 9:00	0	0	1	4	1	4	0	2
<b>AM Totals</b>	<b>2</b>	<b>3</b>	<b>16</b>	<b>29</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>20</b>
16:15 to 16:30	0	0	10	4	0	0	1	1
16:30 to 16:45	0	0	1	3	0	0	0	2
16:45 to 17:00	0	1	2	2	0	0	1	2
17:00 to 17:15	0	0	3	2	1	1	0	1
17:15 to 17:30	0	0	1	5	0	0	1	2
17:30 to 17:45	0	0	12	5	1	4	1	0
17:45 to 18:00	0	0	7	2	0	0	0	1
18:00 to 18:15	0	0	6	5	0	0	2	2
<b>PM Totals</b>	<b>0</b>	<b>1</b>	<b>42</b>	<b>28</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>11</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 6. Ben Boyd Road / Grosvenor Street  
 Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



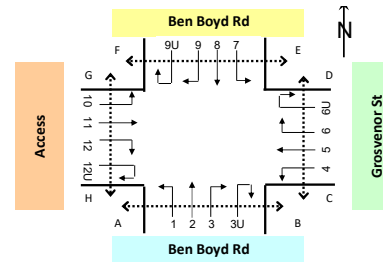
Classifications	Class 1 Lights	Class 2 Heavies
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Approach	Ben Boyd Rd												Grosvenor St											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
11:45 to 12:00	4	0	4	51	2	53	29	0	29	0	0	0	42	0	42	5	0	5	13	0	13	0	0	0
12:00 to 12:15	0	0	0	68	1	69	31	0	31	0	0	0	32	0	32	4	0	4	12	0	12	0	0	0
12:15 to 12:30	4	0	4	77	1	78	32	0	32	0	0	0	44	1	45	1	0	1	9	0	9	0	0	0
12:30 to 12:45	3	0	3	62	1	63	32	0	32	1	0	1	42	0	42	1	0	1	13	0	13	0	0	0
12:45 to 13:00	4	0	4	71	2	73	31	0	31	0	0	0	51	0	51	0	0	0	11	0	11	0	0	0
13:00 to 13:15	5	0	5	71	0	71	31	0	31	0	0	0	40	0	40	0	0	0	13	0	13	0	0	0
13:15 to 13:30	5	0	5	72	0	72	23	0	23	1	0	1	35	0	35	3	0	3	12	0	12	0	0	0
13:30 to 13:45	3	0	3	53	1	54	32	0	32	0	0	0	41	0	41	3	0	3	9	0	9	0	0	0
<b>Total</b>	<b>28</b>	<b>0</b>	<b>28</b>	<b>525</b>	<b>8</b>	<b>533</b>	<b>241</b>	<b>0</b>	<b>241</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>327</b>	<b>1</b>	<b>328</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>92</b>	<b>0</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Access								Crossing Pedestrians																		
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total						
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total												
11:45 to 12:00	1	0	1	20	1	21	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	11	1	0	4	8	34
12:00 to 12:15	4	0	4	33	1	34	1	0	1	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	0	1	2	1	3	2	2	3	14	28					
12:15 to 12:30	4	0	4	21	0	21	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	4	2	4	4	0	1	6	15	36						
12:30 to 12:45	2	0	2	20	0	20	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	2	5	1	4	1	3	10	8	34						
12:45 to 13:00	3	0	3	29	0	29	1	0	1	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	1	10	6	1	3	4	8	34						
13:00 to 13:15	1	0	1	20	1	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	6	4	1	1	9	8	33						
13:15 to 13:30	2	0	2	22	0	22	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	4	7	0	3	10	14	41						
13:30 to 13:45	1	0	1	22	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	1	3	1	1	7	13	37						
<b>Total</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>187</b>	<b>3</b>	<b>190</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>24</b>	<b>34</b>	<b>42</b>	<b>7</b>	<b>14</b>	<b>53</b>	<b>88</b>	<b>277</b>						

▲

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 6. Ben Boyd Road / Grosvenor Street  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
 : Hourly Summary



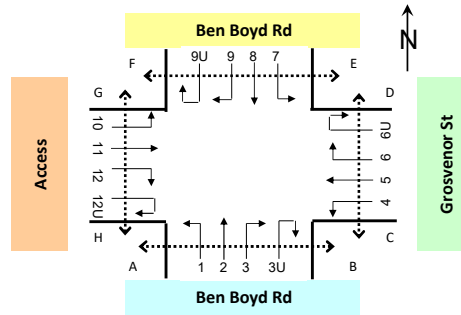
Approach	Ben Boyd Rd												Grosvenor St																	
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)								
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total			
	11:45 to 12:45	11	0	11	258	5	263	124	0	124	1	0	1	160	1	161	11	0	11	47	0	47	0	0	0	0	0	0	0	0
12:00 to 13:00	11	0	11	278	5	283	126	0	126	1	0	1	169	1	170	6	0	6	45	0	45	0	0	0	0	0	0	0	0	0
12:15 to 13:15	16	0	16	281	4	285	126	0	126	1	0	1	177	1	178	2	0	2	46	0	46	0	0	0	0	0	0	0	0	0
12:30 to 13:30	17	0	17	276	3	279	117	0	117	2	0	2	168	0	168	4	0	4	49	0	49	0	0	0	0	0	0	0	0	0
12:45 to 13:45	17	0	17	267	3	270	117	0	117	1	0	1	167	0	167	6	0	6	45	0	45	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>28</b>	<b>0</b>	<b>28</b>	<b>525</b>	<b>8</b>	<b>533</b>	<b>241</b>	<b>0</b>	<b>241</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>327</b>	<b>1</b>	<b>328</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>92</b>	<b>0</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Access								Crossing Pedestrians																		
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)		Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total							
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
	11:45 to 12:45	11	0	11	94	2	96	1	0	1	0	0	0	2	0	2	1	0	1	4	0	4	0	0	0	0	0	0	7	12	13	22	4	6	23	45	132		
12:00 to 13:00	13	0	13	103	1	104	2	0	2	0	0	0	2	0	2	1	0	1	5	0	5	0	0	0	0	0	0	8	10	16	17	4	9	23	45	132			
12:15 to 13:15	10	0	10	90	1	91	1	0	1	0	0	0	2	0	2	0	0	0	4	0	4	0	0	0	0	0	0	9	10	21	18	3	8	29	39	137			
12:30 to 13:30	8	0	8	91	1	92	2	0	2	0	0	0	3	0	3	0	0	0	2	0	2	0	0	0	0	0	0	5	11	21	21	3	10	33	38	142			
12:45 to 13:45	7	0	7	93	1	94	2	0	2	0	0	0	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	8	12	21	20	3	8	30	43	145			
<b>Total</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>187</b>	<b>3</b>	<b>190</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>24</b>	<b>34</b>	<b>42</b>	<b>7</b>	<b>14</b>	<b>53</b>	<b>88</b>	<b>277</b>			



Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 6. Ben Boyd Road / Grosvenor Street

Day/Date : Sat, 20 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary

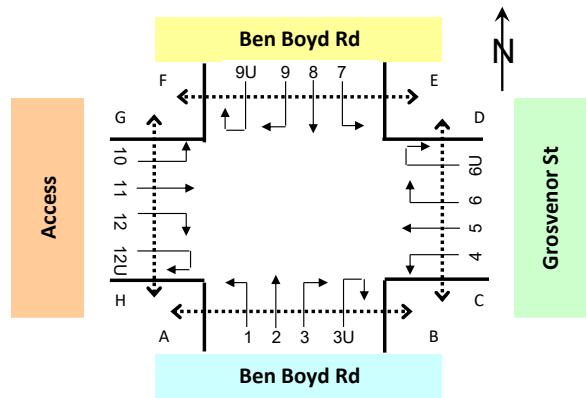


Approach	Ben Boyd Rd			Grosvenor St			Ben Boyd Rd			Access			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
12:00 to 13:00	416	5	421	220	1	221	118	1	119	8	0	8	769

Approach	Ben Boyd Rd			Grosvenor St			Ben Boyd Rd			Access			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
11:45 to 12:45	394	5	399	218	1	219	106	2	108	7	0	7	733
12:00 to 13:00	416	5	421	220	1	221	118	1	119	8	0	8	769
12:15 to 13:15	424	4	428	225	1	226	101	1	102	6	0	6	762
12:30 to 13:30	412	3	415	221	0	221	101	1	102	5	0	5	743
12:45 to 13:45	402	3	405	218	0	218	102	1	103	3	0	3	729
<b>Total</b>	<b>796</b>	<b>8</b>	<b>804</b>	<b>436</b>	<b>1</b>	<b>437</b>	<b>208</b>	<b>3</b>	<b>211</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>1,462</b>

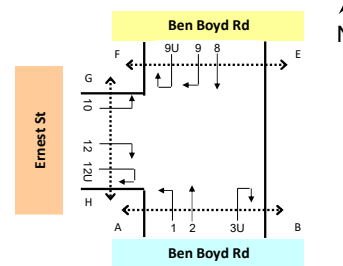


**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 6. Ben Boyd Road / Grosvenor Street  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
11:45 to 12:00	0	3	7	11	1	0	4	8
12:00 to 12:15	1	2	1	3	2	2	3	14
12:15 to 12:30	4	2	4	4	0	1	6	15
12:30 to 12:45	2	5	1	4	1	3	10	8
12:45 to 13:00	1	1	10	6	1	3	4	8
13:00 to 13:15	2	2	6	4	1	1	9	8
13:15 to 13:30	0	3	4	7	0	3	10	14
13:30 to 13:45	5	6	1	3	1	1	7	13
<b>Total</b>	<b>15</b>	<b>24</b>	<b>34</b>	<b>42</b>	<b>7</b>	<b>14</b>	<b>53</b>	<b>88</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 7. Ben Boyd Road / Ernest Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
 : 15 mins Data



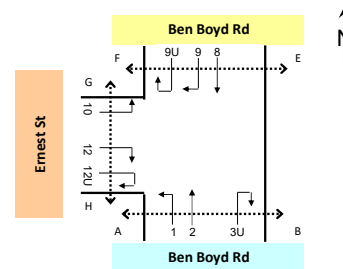
Classifications	Class 1	Class 2
	Lights	Heavies

Approach	Ben Boyd Rd								
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	14	3	17	48	3	51	0	0	0
7:15 to 7:30	23	1	24	46	1	47	0	0	0
7:30 to 7:45	26	0	26	52	1	53	0	0	0
7:45 to 8:00	27	1	28	49	1	50	0	0	0
8:00 to 8:15	30	0	30	61	0	61	0	0	0
8:15 to 8:30	42	0	42	68	2	70	0	0	0
8:30 to 8:45	24	4	28	54	3	57	0	0	0
8:45 to 9:00	19	1	20	59	1	60	0	0	0
<b>AM Totals</b>	<b>205</b>	<b>10</b>	<b>215</b>	<b>437</b>	<b>12</b>	<b>449</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	29	1	30	44	0	44	0	0	0
16:30 to 16:45	25	0	25	57	0	57	0	0	0
16:45 to 17:00	28	1	29	51	0	51	0	0	0
17:00 to 17:15	30	1	31	57	0	57	0	0	0
17:15 to 17:30	29	1	30	56	0	56	0	0	0
17:30 to 17:45	22	1	23	74	2	76	0	0	0
17:45 to 18:00	33	2	35	63	0	63	0	0	0
18:00 to 18:15	27	0	27	44	0	44	1	0	1
<b>PM Totals</b>	<b>223</b>	<b>7</b>	<b>230</b>	<b>446</b>	<b>2</b>	<b>448</b>	<b>1</b>	<b>0</b>	<b>1</b>

Approach	Ben Boyd Rd												Ernest St						Crossing Pedestrians											
	Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	F to E	E to F	H to G	G to H	Total					
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total												
7:00 to 7:15	16	0	16	282	5	287	0	0	0	93	9	102	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	2	8	10
7:15 to 7:30	23	0	23	345	5	350	0	0	0	89	9	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	19	27

7:30 to 7:45	36	1	37	403	4	407	0	0	0	96	11	107	0	0	0	0	1	1	0	0	4	22	28
7:45 to 8:00	34	0	34	389	2	391	0	0	0	105	4	109	0	0	0	0	1	2	0	0	8	21	32
8:00 to 8:15	25	0	25	420	4	424	0	0	0	102	7	109	0	0	0	0	0	0	0	0	8	32	40
8:15 to 8:30	28	1	29	425	6	431	0	0	0	119	12	131	0	0	0	0	8	0	0	0	11	26	45
8:30 to 8:45	25	1	26	434	4	438	0	0	0	114	5	119	0	0	0	0	0	1	0	0	8	16	25
8:45 to 9:00	28	1	29	332	7	339	0	0	0	110	8	118	0	0	0	0	0	0	0	0	10	25	35
<b>AM Totals</b>	<b>215</b>	<b>4</b>	<b>219</b>	<b>3,030</b>	<b>37</b>	<b>3,067</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>828</b>	<b>65</b>	<b>893</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>169</b>	<b>242</b>
16:15 to 16:30	29	0	29	175	3	178	0	0	0	239	0	239	0	0	0	0	0	0	0	0	13	6	19
16:30 to 16:45	17	0	17	170	6	176	0	0	0	296	3	299	0	0	0	0	2	4	0	0	7	7	20
16:45 to 17:00	27	0	27	155	2	157	0	0	0	293	3	296	0	0	0	0	2	1	0	0	12	9	24
17:00 to 17:15	19	0	19	153	2	155	0	0	0	304	1	305	0	0	0	0	5	1	0	0	18	12	36
17:15 to 17:30	22	0	22	142	3	145	0	0	0	353	4	357	0	0	0	0	1	2	0	0	25	7	35
17:30 to 17:45	20	0	20	158	3	161	0	0	0	307	1	308	0	0	0	0	0	1	0	0	21	5	27
17:45 to 18:00	37	2	39	131	2	133	0	0	0	359	0	359	0	0	0	0	6	2	0	0	27	18	53
18:00 to 18:15	17	0	17	163	3	166	0	0	0	318	2	320	0	0	0	0	7	3	0	0	20	18	48
<b>PM Totals</b>	<b>188</b>	<b>2</b>	<b>190</b>	<b>1,247</b>	<b>24</b>	<b>1,271</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,469</b>	<b>14</b>	<b>2,483</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>82</b>	<b>262</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 7. Ben Boyd Road / Ernest Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary

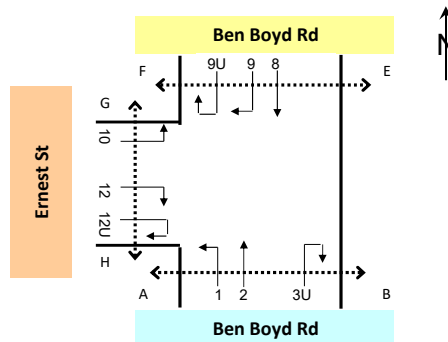


Approach	Ben Boyd Rd								
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	90	5	95	195	6	201	0	0	0
7:15 to 8:15	106	2	108	208	3	211	0	0	0
7:30 to 8:30	125	1	126	230	4	234	0	0	0
7:45 to 8:45	123	5	128	232	6	238	0	0	0
8:00 to 9:00	115	5	120	242	6	248	0	0	0
<b>AM Totals</b>	<b>205</b>	<b>10</b>	<b>215</b>	<b>437</b>	<b>12</b>	<b>449</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	112	3	115	209	0	209	0	0	0
16:30 to 17:30	112	3	115	221	0	221	0	0	0
16:45 to 17:45	109	4	113	238	2	240	0	0	0
17:00 to 18:00	114	5	119	250	2	252	0	0	0
17:15 to 18:15	111	4	115	237	2	239	1	0	1
<b>PM Totals</b>	<b>223</b>	<b>7</b>	<b>230</b>	<b>446</b>	<b>2</b>	<b>448</b>	<b>1</b>	<b>0</b>	<b>1</b>

Approach	Ben Boyd Rd									Ernest St						Crossing Pedestrians									
Direction	Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 12 (Right Turn)			Direction 12U (U Turn)									
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B					
																					F to E	E to F	H to G	G to H	Total
7:00 to 8:00	109	1	110	1,419	16	1,435	0	0	0	383	33	416	0	0	0	0	0	0	4	4	0	0	19	70	97
7:15 to 8:15	118	1	119	1,557	15	1,572	0	0	0	392	31	423	0	0	0	0	0	0	4	4	0	0	25	94	127
7:30 to 8:30	123	2	125	1,637	16	1,653	0	0	0	422	34	456	0	0	0	0	0	0	10	3	0	0	31	101	145
7:45 to 8:45	112	2	114	1,668	16	1,684	0	0	0	440	28	468	0	0	0	0	0	0	9	3	0	0	35	95	142
8:00 to 9:00	106	3	109	1,611	21	1,632	0	0	0	445	32	477	0	0	0	0	0	0	8	1	0	0	37	99	145
<b>AM Totals</b>	<b>215</b>	<b>4</b>	<b>219</b>	<b>3,030</b>	<b>37</b>	<b>3,067</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>828</b>	<b>65</b>	<b>893</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>169</b>	<b>242</b>
16:15 to 17:15	92	0	92	653	13	666	0	0	0	1,132	7	1,139	0	0	0	0	0	0	9	6	0	0	50	34	99
16:30 to 17:30	85	0	85	620	13	633	0	0	0	1,246	11	1,257	0	0	0	0	0	0	10	8	0	0	62	35	115
16:45 to 17:45	88	0	88	608	10	618	0	0	0	1,257	9	1,266	0	0	0	0	0	0	8	5	0	0	76	33	122
17:00 to 18:00	98	2	100	584	10	594	0	0	0	1,323	6	1,329	0	0	0	0	0	0	12	6	0	0	91	42	151
17:15 to 18:15	96	2	98	594	11	605	0	0	0	1,337	7	1,344	0	0	0	0	0	0	14	8	0	0	93	48	163
<b>PM Totals</b>	<b>188</b>	<b>2</b>	<b>190</b>	<b>1,247</b>	<b>24</b>	<b>1,271</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,469</b>	<b>14</b>	<b>2,483</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>82</b>	<b>262</b>



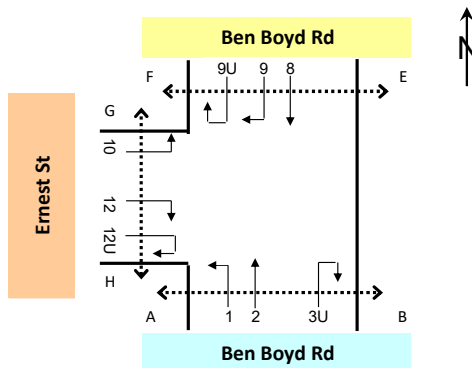
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 7. Ben Boyd Road / Ernest Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



Approach	Ben Boyd Rd			Ben Boyd Rd			Ernest St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:45 to 8:45	355	11	366	1,780	18	1,798	440	28	468	2,632
PM 17:15 to 18:15	349	6	355	690	13	703	1,337	7	1,344	2,402

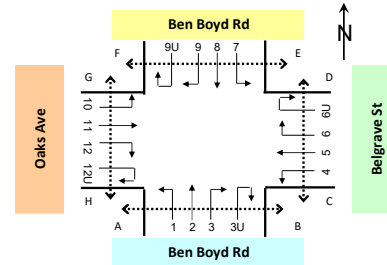
Approach	Ben Boyd Rd			Ben Boyd Rd			Ernest St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	285	11	296	1,528	17	1,545	383	33	416	2,257
7:15 to 8:15	314	5	319	1,675	16	1,691	392	31	423	2,433
7:30 to 8:30	355	5	360	1,760	18	1,778	422	34	456	2,594
7:45 to 8:45	355	11	366	1,780	18	1,798	440	28	468	2,632
8:00 to 9:00	357	11	368	1,717	24	1,741	445	32	477	2,586
<b>AM Totals</b>	<b>642</b>	<b>22</b>	<b>664</b>	<b>3,245</b>	<b>41</b>	<b>3,286</b>	<b>828</b>	<b>65</b>	<b>893</b>	<b>4,843</b>
16:15 to 17:15	321	3	324	745	13	758	1,132	7	1,139	2,221
16:30 to 17:30	333	3	336	705	13	718	1,246	11	1,257	2,311
16:45 to 17:45	347	6	353	696	10	706	1,257	9	1,266	2,325
17:00 to 18:00	364	7	371	682	12	694	1,323	6	1,329	2,394
17:15 to 18:15	349	6	355	690	13	703	1,337	7	1,344	2,402
<b>PM Totals</b>	<b>670</b>	<b>9</b>	<b>679</b>	<b>1,435</b>	<b>26</b>	<b>1,461</b>	<b>2,469</b>	<b>14</b>	<b>2,483</b>	<b>4,623</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 7. Ben Boyd Road / Ernest Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians						
	Time Period	B to A	A to B	F to E	E to F	H to G	G to H
	7:00 to 7:15	0	0	0	0	2	8
	7:15 to 7:30	2	1	0	0	5	19
	7:30 to 7:45	1	1	0	0	4	22
	7:45 to 8:00	1	2	0	0	8	21
	8:00 to 8:15	0	0	0	0	8	32
	8:15 to 8:30	8	0	0	0	11	26
	8:30 to 8:45	0	1	0	0	8	16
	8:45 to 9:00	0	0	0	0	10	25
	<b>AM Totals</b>	<b>12</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>169</b>
	16:15 to 16:30	0	0	0	0	13	6
	16:30 to 16:45	2	4	0	0	7	7
	16:45 to 17:00	2	1	0	0	12	9
	17:00 to 17:15	5	1	0	0	18	12
	17:15 to 17:30	1	2	0	0	25	7
	17:30 to 17:45	0	1	0	0	21	5
	17:45 to 18:00	6	2	0	0	27	18
	18:00 to 18:15	7	3	0	0	20	18
	<b>PM Totals</b>	<b>23</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>82</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 8. Ben Boyd Road / Oaks Avenue  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



Classifications	Class 1	Class 2
	Lights	Heavies

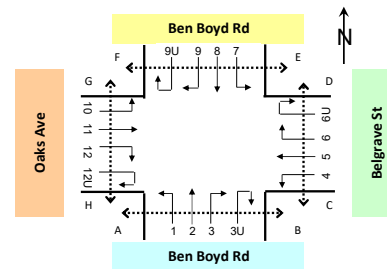
Approach	Ben Boyd Rd												Belgrave St											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	0	0	0	17	0	17	124	12	136	0	0	0	297	5	302	0	0	0	0	0	0	0	0	
7:15 to 7:30	0	0	0	15	0	15	117	10	127	0	0	0	365	5	370	0	0	0	0	0	0	0	0	
7:30 to 7:45	0	0	0	14	2	16	136	10	146	0	0	0	432	5	437	0	0	0	0	0	0	0	0	
7:45 to 8:00	0	0	0	14	1	15	142	5	147	0	0	0	420	2	422	0	0	0	0	0	0	0	0	
8:00 to 8:15	0	0	0	16	0	16	143	5	148	0	0	0	443	5	448	0	0	0	1	0	1	0	0	
8:15 to 8:30	0	0	0	24	1	25	165	13	178	0	0	0	446	7	453	0	0	0	0	0	0	0	0	
8:30 to 8:45	0	0	0	23	1	24	145	7	152	0	0	0	453	5	458	0	0	0	0	0	0	0	0	
8:45 to 9:00	0	0	0	12	0	12	160	9	169	0	0	0	358	8	366	0	0	0	0	0	0	0	0	
<b>AM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>135</b>	<b>5</b>	<b>140</b>	<b>1,132</b>	<b>71</b>	<b>1,203</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,214</b>	<b>42</b>	<b>3,256</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	
16:15 to 16:30	0	0	0	26	0	26	259	0	259	0	0	0	198	4	202	0	0	0	0	0	0	0	0	
16:30 to 16:45	0	0	0	19	0	19	332	3	335	0	0	0	182	5	187	0	0	0	0	0	0	0	0	
16:45 to 17:00	0	0	0	22	0	22	326	3	329	0	0	0	180	2	182	0	0	0	0	0	0	0	0	
17:00 to 17:15	0	0	0	22	0	22	333	2	335	0	0	0	171	2	173	0	0	0	0	0	0	0	0	
17:15 to 17:30	0	0	0	25	0	25	384	4	388	0	0	0	160	3	163	0	0	0	0	0	0	0	0	
17:30 to 17:45	0	0	0	33	2	35	353	1	354	0	0	0	176	4	180	0	0	0	0	0	0	0	0	
17:45 to 18:00	0	0	0	29	0	29	386	0	386	0	0	0	165	4	169	0	0	0	0	0	0	0	0	
18:00 to 18:15	0	0	0	20	0	20	345	2	347	0	0	0	176	3	179	0	0	0	0	0	0	0	0	
<b>PM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>196</b>	<b>2</b>	<b>198</b>	<b>2,718</b>	<b>15</b>	<b>2,733</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,408</b>	<b>27</b>	<b>1,435</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Approach	Ben Boyd Rd												Oaks Ave				Crossing Pedestrians																			
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	3	0	3	0	0	0	0	0	0	0	0	0	1	0	1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3				
7:15 to 7:30	3	0	3	3	0	3	0	0	0	0	0	0	6	0	6	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4				



7:30 to 7:45	1	0	1	6	0	6	0	0	0	0	0	4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3
7:45 to 8:00	2	0	2	3	0	3	0	0	0	0	0	8	0	8	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	27	5	0	0	32
8:00 to 8:15	4	0	4	3	1	4	0	0	0	1	0	1	2	0	2	4	0	4	0	0	0	0	0	0	0	0	1	0	0	1	8	0	0	10	
8:15 to 8:30	6	0	6	4	0	4	0	0	0	0	0	8	0	8	2	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5	
8:30 to 8:45	5	0	5	6	0	6	0	0	0	0	0	4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5		
8:45 to 9:00	6	0	6	4	0	4	0	0	0	0	0	6	0	6	5	1	6	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4		
<b>AM Totals</b>	<b>30</b>	<b>0</b>	<b>30</b>	<b>29</b>	<b>1</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>39</b>	<b>0</b>	<b>39</b>	<b>21</b>	<b>1</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>32</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>66</b>	
16:15 to 16:30	1	0	1	3	0	3	0	0	0	0	0	3	0	3	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4		
16:30 to 16:45	4	0	4	5	0	5	0	0	0	0	0	6	0	6	5	0	5	0	0	0	0	0	0	0	0	0	0	0	3	1	1	5			
16:45 to 17:00	3	0	3	2	0	2	0	0	0	0	0	6	0	6	3	0	3	0	0	0	0	0	0	0	0	0	1	0	2	3	0	0	6		
17:00 to 17:15	0	0	0	0	0	0	0	0	0	0	0	5	0	5	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:15 to 17:30	2	0	2	3	0	3	0	0	0	0	0	6	0	6	5	0	5	1	0	1	0	0	0	0	0	1	0	1	2	2	0	0	6		
17:30 to 17:45	5	0	5	2	1	3	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	1	0	7		
17:45 to 18:00	8	0	8	3	0	3	0	0	0	0	0	7	0	7	2	0	2	0	0	0	0	0	0	0	0	0	0	0	10	5	0	0	15		
18:00 to 18:15	6	0	6	5	0	5	0	0	0	0	0	9	0	9	4	0	4	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	6		
<b>PM Totals</b>	<b>29</b>	<b>0</b>	<b>29</b>	<b>23</b>	<b>1</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>44</b>	<b>23</b>	<b>0</b>	<b>23</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>21</b>	<b>20</b>	<b>2</b>	<b>3</b>	<b>49</b>		

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 8. Ben Boyd Road / Oaks Avenue  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary

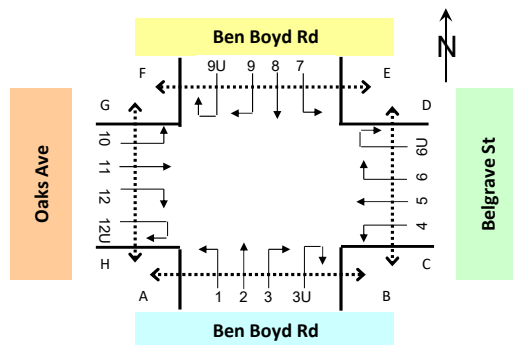


Approach	Ben Boyd Rd									Belgrave St																						
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)										
Time Period	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total		
7:00 to 8:00	0	0	0	60	3	63	519	37	556	0	0	0	1,514	17	1,531	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 to 8:15	0	0	0	59	3	62	538	30	568	0	0	0	1,660	17	1,677	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0		
7:30 to 8:30	0	0	0	68	4	72	586	33	619	0	0	0	1,741	19	1,760	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0		
7:45 to 8:45	0	0	0	77	3	80	595	30	625	0	0	0	1,762	19	1,781	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0		
8:00 to 9:00	0	0	0	75	2	77	613	34	647	0	0	0	1,700	25	1,725	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0		
<b>AM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>135</b>	<b>5</b>	<b>140</b>	<b>1,132</b>	<b>71</b>	<b>1,203</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,214</b>	<b>42</b>	<b>3,256</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	0	0	0	89	0	89	1,250	8	1,258	0	0	0	731	13	744	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30 to 17:30	0	0	0	88	0	88	1,375	12	1,387	0	0	0	693	12	705	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45 to 17:45	0	0	0	102	2	104	1,396	10	1,406	0	0	0	687	11	698	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 to 18:00	0	0	0	109	2	111	1,456	7	1,463	0	0	0	672	13	685	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15 to 18:15	0	0	0	107	2	109	1,468	7	1,475	0	0	0	677	14	691	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>PM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>196</b>	<b>2</b>	<b>198</b>	<b>2,718</b>	<b>15</b>	<b>2,733</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,408</b>	<b>27</b>	<b>1,435</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Ben Boyd Rd												Oaks Ave								Crossing Pedestrians														
Direction	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)													
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total		
7:00 to 8:00	9	0	9	12	0	12	0	0	0	0	0	0	19	0	19	9	0	9	0	0	0	0	0	0	0	0	0	0	2	0	30	10	0	0	42
7:15 to 8:15	10	0	10	15	1	16	0	0	0	1	0	1	20	0	20	10	0	10	0	0	0	0	0	0	0	0	1	1	0	31	16	0	0	49	
7:30 to 8:30	13	0	13	16	1	17	0	0	0	1	0	1	22	0	22	10	0	10	0	0	0	0	0	0	0	2	1	0	29	18	0	0	50		
7:45 to 8:45	17	0	17	16	1	17	0	0	0	1	0	1	22	0	22	10	0	10	0	0	0	0	0	0	0	2	0	0	28	22	0	0	52		
8:00 to 9:00	21	0	21	17	1	18	0	0	0	1	0	1	20	0	20	12	1	13	0	0	0	0	0	0	0	2	0	0	2	20	0	0	24		
<b>AM Totals</b>	<b>30</b>	<b>0</b>	<b>30</b>	<b>29</b>	<b>1</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>39</b>	<b>0</b>	<b>39</b>	<b>21</b>	<b>1</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>32</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>66</b>		
16:15 to 17:15	8	0	8	10	0	10	0	0	0	0	0	0	20	0	20	12	0	12	1	0	1	0	0	0	0	0	1	0	2	8	1	3	15		
16:30 to 17:30	9	0	9	10	0	10	0	0	0	0	0	0	23	0	23	15	0	15	2	0	2	0	0	0	0	1	1	1	4	8	1	1	17		
16:45 to 17:45	10	0	10	7	1	8	0	0	0	0	0	0	19	0	19	10	0	10	2	0	2	0	0	0	0	1	1	1	8	7	1	0	19		
17:00 to 18:00	15	0	15	8	1	9	0	0	0	0	0	0	20	0	20	9	0	9	2	0	2	0	0	0	0	1	0	1	16	9	1	0	28		
17:15 to 18:15	21	0	21	13	1	14	0	0	0	0	0	0	24	0	24	11	0	11	1	0	1	0	0	0	0	1	0	1	19	12	1	0	34		
<b>PM Totals</b>	<b>29</b>	<b>0</b>	<b>29</b>	<b>23</b>	<b>1</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>44</b>	<b>23</b>	<b>0</b>	<b>23</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>21</b>	<b>20</b>	<b>2</b>	<b>3</b>	<b>49</b>			



**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 8. Ben Boyd Road / Oaks Avenue  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary

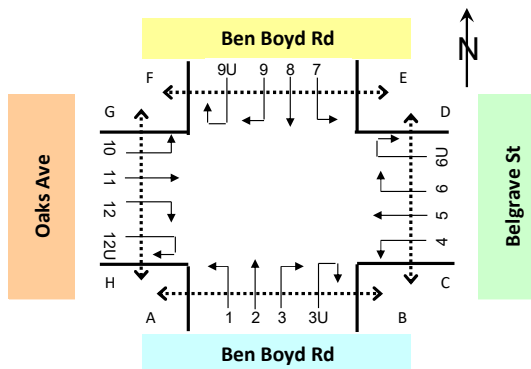


Approach	Ben Boyd Rd			Belgrave St			Ben Boyd Rd			Oaks Ave			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:45 to 8:45	672	33	705	1,763	19	1,782	34	1	35	32	0	32	2,554
PM 17:15 to 18:15	1,575	9	1,584	677	14	691	34	1	35	36	0	36	2,346

Approach	Ben Boyd Rd			Belgrave St			Ben Boyd Rd			Oaks Ave			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	579	40	619	1,514	17	1,531	21	0	21	28	0	28	2,199
7:15 to 8:15	597	33	630	1,661	17	1,678	26	1	27	30	0	30	2,365
7:30 to 8:30	654	37	691	1,742	19	1,761	30	1	31	32	0	32	2,515
7:45 to 8:45	672	33	705	1,763	19	1,782	34	1	35	32	0	32	2,554
8:00 to 9:00	688	36	724	1,701	25	1,726	39	1	40	32	1	33	2,523
<b>AM Totals</b>	<b>1,267</b>	<b>76</b>	<b>1,343</b>	<b>3,215</b>	<b>42</b>	<b>3,257</b>	<b>60</b>	<b>1</b>	<b>61</b>	<b>60</b>	<b>1</b>	<b>61</b>	<b>4,722</b>
16:15 to 17:15	1,339	8	1,347	731	13	744	18	0	18	33	0	33	2,142
16:30 to 17:30	1,463	12	1,475	693	12	705	19	0	19	40	0	40	2,239
16:45 to 17:45	1,498	12	1,510	687	11	698	17	1	18	31	0	31	2,257
17:00 to 18:00	1,565	9	1,574	672	13	685	23	1	24	31	0	31	2,314
17:15 to 18:15	1,575	9	1,584	677	14	691	34	1	35	36	0	36	2,346
<b>PM Totals</b>	<b>2,914</b>	<b>17</b>	<b>2,931</b>	<b>1,408</b>	<b>27</b>	<b>1,435</b>	<b>52</b>	<b>1</b>	<b>53</b>	<b>69</b>	<b>0</b>	<b>69</b>	<b>4,488</b>

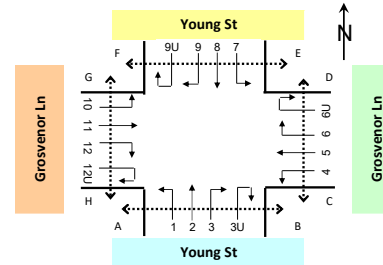
Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 8. Ben Boyd Road / Oaks Avenue

Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Pedestrian Data



Direction	Pedestrians							
	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 7:15	0	0	1	0	0	2	0	0
7:15 to 7:30	0	0	0	0	2	2	0	0
7:30 to 7:45	0	0	1	0	1	1	0	0
7:45 to 8:00	0	0	0	0	27	5	0	0
8:00 to 8:15	0	1	0	0	1	8	0	0
8:15 to 8:30	0	1	0	0	0	4	0	0
8:30 to 8:45	0	0	0	0	0	5	0	0
8:45 to 9:00	0	0	0	0	1	3	0	0
<b>AM Totals</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>32</b>	<b>30</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	0	0	0	0	0	2	0	2
16:30 to 16:45	0	0	0	0	0	3	1	1
16:45 to 17:00	0	0	1	0	2	3	0	0
17:00 to 17:15	0	0	0	0	0	0	0	0
17:15 to 17:30	0	1	0	1	2	2	0	0
17:30 to 17:45	0	0	0	0	4	2	1	0
17:45 to 18:00	0	0	0	0	10	5	0	0
18:00 to 18:15	0	0	0	0	3	3	0	0
<b>PM Totals</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>21</b>	<b>20</b>	<b>2</b>	<b>3</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 9. Young Street / Grosvenor Lane  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



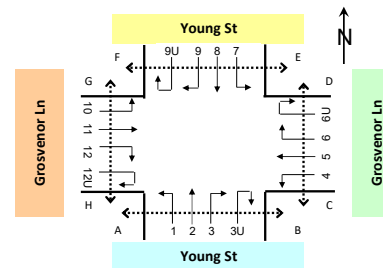
Classifications	Class 1 Lights	Class 2 Heavies
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Approach	Young St												Grosvenor Ln														
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 to 7:30	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 to 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 to 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:00 to 8:15	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 to 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 to 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 to 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
AM Totals	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16:15 to 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16:30 to 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16:45 to 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:00 to 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:15 to 17:30	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:30 to 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:45 to 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
18:00 to 18:15	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Totals	0	0	0	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Approach	Young St												Grosvenor Ln												Crossing Pedestrians											
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	18	1	19	1	0	1	0	0	0	0	0	0	8	0	8	9	1	10	0	0	0	0	0	0	0	1	6	14	2	0	1	5	4	33		
7:15 to 7:30	16	3	19	0	0	0	0	0	0	0	0	0	3	0	3	17	0	17	0	0	0	0	0	0	0	6	2	27	12	1	0	4	3	55		

7:30 to 7:45	20	0	20	1	0	1	0	0	0	0	0	0	7	0	7	10	1	11	0	0	0	0	0	0	0	4	5	23	14	0	0	2	6	54
7:45 to 8:00	19	0	19	0	1	1	0	0	0	0	0	0	15	0	15	8	0	8	0	0	0	0	0	0	8	12	35	16	0	1	4	2	78	
8:00 to 8:15	20	1	21	1	0	1	0	0	0	0	0	0	17	0	17	11	2	13	0	0	0	0	0	0	16	12	40	16	1	1	6	5	97	
8:15 to 8:30	20	0	20	0	0	0	0	0	0	0	0	0	18	0	18	15	0	15	0	0	0	0	0	0	9	6	29	14	0	0	5	7	70	
8:30 to 8:45	15	3	18	0	0	0	0	0	0	0	0	0	16	0	16	10	0	10	0	0	0	0	0	0	15	11	25	13	5	1	12	6	88	
8:45 to 9:00	23	5	28	2	0	2	0	0	0	0	0	0	18	1	19	10	0	10	0	0	0	0	0	0	17	6	23	24	0	0	6	9	85	
<b>AM Totals</b>	<b>151</b>	<b>13</b>	<b>164</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>102</b>	<b>1</b>	<b>103</b>	<b>90</b>	<b>4</b>	<b>94</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>60</b>	<b>216</b>	<b>111</b>	<b>7</b>	<b>4</b>	<b>44</b>	<b>42</b>	<b>560</b>	
16:15 to 16:30	22	0	22	0	0	0	0	0	0	0	0	0	21	0	21	15	0	15	0	0	0	0	0	0	27	18	4	8	2	0	25	26	110	
16:30 to 16:45	19	0	19	0	0	0	0	0	0	1	0	1	18	0	18	14	0	14	0	0	0	0	0	0	12	21	2	0	5	0	15	19	74	
16:45 to 17:00	18	2	20	0	0	0	0	0	0	0	0	0	16	0	16	10	0	10	0	0	0	0	0	0	11	14	3	3	0	1	15	15	62	
17:00 to 17:15	23	0	23	0	0	0	0	0	0	1	0	1	18	0	18	8	0	8	0	0	0	0	0	0	15	8	4	5	0	0	23	11	66	
17:15 to 17:30	29	1	30	0	0	0	0	0	0	1	0	1	22	0	22	23	1	24	0	0	0	0	0	0	7	13	13	9	2	0	20	19	83	
17:30 to 17:45	30	0	30	0	0	0	0	0	0	0	0	0	18	0	18	16	0	16	0	0	0	0	0	0	8	14	4	4	0	0	23	12	65	
17:45 to 18:00	28	1	29	1	0	1	0	0	0	0	0	0	26	0	26	12	0	12	0	0	0	0	0	0	15	9	12	8	0	0	12	8	64	
18:00 to 18:15	29	0	29	0	0	0	0	0	0	0	0	0	34	0	34	14	0	14	0	0	0	0	0	0	11	8	21	11	1	0	14	12	78	
<b>PM Totals</b>	<b>198</b>	<b>4</b>	<b>202</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>173</b>	<b>0</b>	<b>173</b>	<b>112</b>	<b>1</b>	<b>113</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>105</b>	<b>63</b>	<b>48</b>	<b>10</b>	<b>1</b>	<b>147</b>	<b>122</b>	<b>602</b>		

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 9. Young Street / Grosvenor Lane  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary



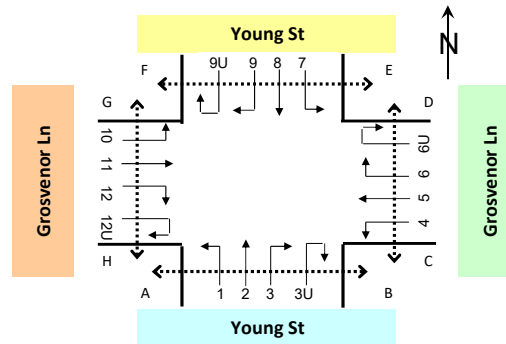
Approach	Young St									Grosvenor Ln																	
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)					
Time Period	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total
7:00 to 8:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 to 8:15	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 to 8:30	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 to 8:45	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:00 to 9:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>AM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
16:15 to 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16:30 to 17:30	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16:45 to 17:45	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:00 to 18:00	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:15 to 18:15	0	0	0	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>PM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

Approach	Young St												Grosvenor Ln												Crossing Pedestrians											
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)														
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total
7:00 to 8:00	73	4	77	2	1	3	0	0	0	0	0	0	33	0	33	44	2	46	0	0	0	0	0	0	0	19	25	99	44	1	2	15	15	220		
7:15 to 8:15	75	4	79	2	1	3	0	0	0	0	0	0	42	0	42	46	3	49	0	0	0	0	0	0	0	34	31	125	58	2	2	16	16	284		
7:30 to 8:30	79	1	80	2	1	3	0	0	0	0	0	0	57	0	57	44	3	47	0	0	0	0	0	0	0	37	35	127	60	1	2	17	20	299		
7:45 to 8:45	74	4	78	1	1	2	0	0	0	0	0	0	66	0	66	44	2	46	0	0	0	0	0	0	0	48	41	129	59	6	3	27	20	333		
8:00 to 9:00	78	9	87	3	0	3	0	0	0	0	0	0	69	1	70	46	2	48	0	0	0	0	0	0	0	57	35	117	67	6	2	29	27	340		
<b>AM Totals</b>	<b>151</b>	<b>13</b>	<b>164</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>102</b>	<b>1</b>	<b>103</b>	<b>90</b>	<b>4</b>	<b>94</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>60</b>	<b>216</b>	<b>111</b>	<b>7</b>	<b>4</b>	<b>44</b>	<b>42</b>	<b>560</b>		
16:15 to 17:15	82	2	84	0	0	0	0	0	0	2	0	2	73	0	73	47	0	47	0	0	0	0	0	0	0	65	61	13	16	7	1	78	71	312		
16:30 to 17:30	89	3	92	0	0	0	0	0	0	3	0	3	74	0	74	55	1	56	0	0	0	0	0	0	0	45	56	22	17	7	1	73	64	285		
16:45 to 17:45	100	3	103	0	0	0	0	0	0	2	0	2	74	0	74	57	1	58	0	0	0	0	0	0	0	41	49	24	21	2	1	81	57	276		
17:00 to 18:00	110	2	112	1	0	1	0	0	0	2	0	2	84	0	84	59	1	60	0	0	0	0	0	0	0	45	44	33	26	2	0	78	50	278		
17:15 to 18:15	116	2	118	1	0	1	0	0	0	1	0	1	100	0	100	65	1	66	0	0	0	0	0	0	0	41	44	50	32	3	0	69	51	290		
<b>PM Totals</b>	<b>198</b>	<b>4</b>	<b>202</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>173</b>	<b>0</b>	<b>173</b>	<b>112</b>	<b>1</b>	<b>113</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>105</b>	<b>63</b>	<b>48</b>	<b>10</b>	<b>1</b>	<b>147</b>	<b>122</b>	<b>602</b>			





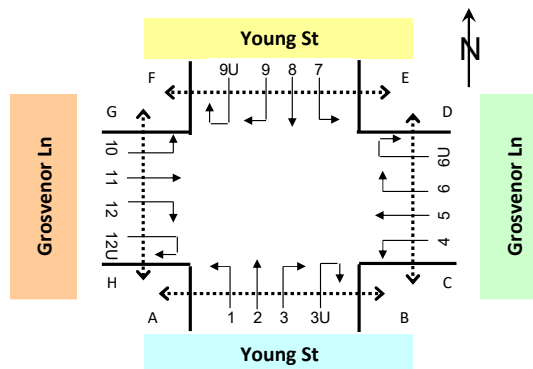
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 9. Young Street / Grosvenor Lane  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



Approach	Young St			Grosvenor Ln			Young St			Grosvenor Ln			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 8:00 to 9:00	0	1	1	0	0	0	81	9	90	115	3	118	209
PM 17:15 to 18:15	3	0	3	0	0	0	118	2	120	165	1	166	289

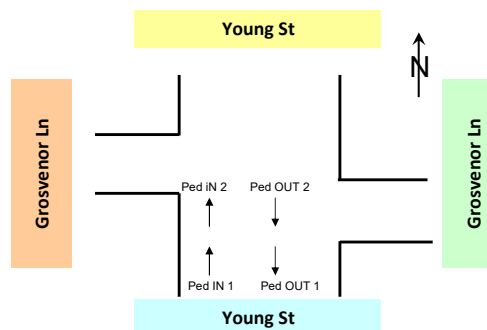
Approach	Young St			Grosvenor Ln			Young St			Grosvenor Ln			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	1	0	1	0	0	0	75	5	80	77	2	79	160
7:15 to 8:15	1	1	2	0	0	0	77	5	82	88	3	91	175
7:30 to 8:30	0	1	1	0	0	0	81	2	83	101	3	104	188
7:45 to 8:45	0	1	1	0	0	0	75	5	80	110	2	112	193
8:00 to 9:00	0	1	1	0	0	0	81	9	90	115	3	118	209
<b>AM Totals</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>156</b>	<b>14</b>	<b>170</b>	<b>192</b>	<b>5</b>	<b>197</b>	<b>369</b>
16:15 to 17:15	0	0	0	0	0	0	84	2	86	120	0	120	206
16:30 to 17:30	2	0	2	0	0	0	92	3	95	129	1	130	227
16:45 to 17:45	2	0	2	0	0	0	102	3	105	131	1	132	239
17:00 to 18:00	2	0	2	0	0	0	113	2	115	143	1	144	261
17:15 to 18:15	3	0	3	0	0	0	118	2	120	165	1	166	289
<b>PM Totals</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>202</b>	<b>4</b>	<b>206</b>	<b>285</b>	<b>1</b>	<b>286</b>	<b>495</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 9. Young Street / Grosvenor Lane  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	Time Period	B to A	A to B	D to C	C to D	F to E	E to F	H to G
7:00 to 7:15	1	6	14	2	0	1	5	4
7:15 to 7:30	6	2	27	12	1	0	4	3
7:30 to 7:45	4	5	23	14	0	0	2	6
7:45 to 8:00	8	12	35	16	0	1	4	2
8:00 to 8:15	16	12	40	16	1	1	6	5
8:15 to 8:30	9	6	29	14	0	0	5	7
8:30 to 8:45	15	11	25	13	5	1	12	6
8:45 to 9:00	17	6	23	24	0	0	6	9
<b>AM Totals</b>	<b>76</b>	<b>60</b>	<b>216</b>	<b>111</b>	<b>7</b>	<b>4</b>	<b>44</b>	<b>42</b>
16:15 to 16:30	27	18	4	8	2	0	25	26
16:30 to 16:45	12	21	2	0	5	0	15	19
16:45 to 17:00	11	14	3	3	0	1	15	15
17:00 to 17:15	15	8	4	5	0	0	23	11
17:15 to 17:30	7	13	13	9	2	0	20	19
17:30 to 17:45	8	14	4	4	0	0	23	12
17:45 to 18:00	15	9	12	8	0	0	12	8
18:00 to 18:15	11	8	21	11	1	0	14	12
<b>PM Totals</b>	<b>106</b>	<b>105</b>	<b>63</b>	<b>48</b>	<b>10</b>	<b>1</b>	<b>147</b>	<b>122</b>

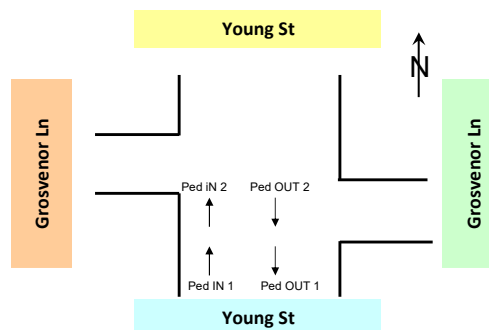
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 9. Young Street / Grosvenor Lane  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Mid-block Count  
 : Pedestrian Data



Approach	Pedestrians											
	IN 1			OUT 1			IN 2			OUT 2		
Time Period	Peds	Cyclists	Total	Peds	Cyclists	Total	Peds	Cyclists	Total	Peds	Cyclists	Total
7:00 to 7:15	18	0	18	17	0	17	18	0	18	20	0	20
7:15 to 7:30	21	0	21	27	0	27	22	0	22	27	0	27
7:30 to 7:45	21	0	21	28	0	28	23	0	23	30	0	30
7:45 to 8:00	18	0	18	23	0	23	21	0	21	32	0	32
8:00 to 8:15	21	0	21	62	0	62	23	0	23	62	0	62
8:15 to 8:30	44	0	44	45	0	45	36	0	36	89	1	90
8:30 to 8:45	32	0	32	38	0	38	33	0	33	47	1	48
8:45 to 9:00	38	0	38	47	0	47	36	0	36	49	0	49
9:00 to 9:15	55	0	55	38	0	38	42	0	42	50	0	50
9:15 to 9:30	36	0	36	32	0	32	48	0	48	44	0	44
9:30 to 9:45	23	1	24	25	0	25	32	0	32	33	0	33
9:45 to 10:00	38	0	38	27	0	27	37	0	37	34	0	34
10:00 to 10:15	36	1	37	28	0	28	48	1	49	49	1	50
10:15 to 10:30	33	1	34	30	2	32	42	1	43	40	2	42
10:30 to 10:45	39	0	39	23	0	23	42	0	42	34	0	34
10:45 to 11:00	39	0	39	37	1	38	55	1	56	53	2	55
11:00 to 11:15	48	1	49	25	0	25	42	2	44	34	0	34
11:15 to 11:30	27	1	28	40	1	41	36	0	36	55	1	56
11:30 to 11:45	42	0	42	51	0	51	41	0	41	37	0	37
11:45 to 12:00	35	0	35	34	0	34	44	0	44	42	1	43

12:00 to 12:15	42	0	42	27	0	27	35	0	35	35	0	35
12:15 to 12:30	49	0	49	31	0	31	60	0	60	38	0	38
12:30 to 12:45	37	0	37	38	0	38	51	0	51	52	0	52
12:45 to 13:00	40	0	40	30	0	30	41	0	41	43	0	43
13:00 to 13:15	59	1	60	61	1	62	43	2	45	51	1	52
13:15 to 13:30	39	0	39	25	1	26	46	0	46	34	1	35
13:30 to 13:45	46	0	46	39	0	39	40	0	40	38	0	38
13:45 to 14:00	47	0	47	34	0	34	48	0	48	30	0	30
14:00 to 14:15	29	0	29	29	0	29	31	0	31	31	0	31
14:15 to 14:30	29	0	29	31	0	31	38	0	38	39	0	39
14:30 to 14:45	29	0	29	31	0	31	45	0	45	43	0	43
14:45 to 15:00	30	1	31	30	0	30	34	1	35	38	0	38
15:00 to 15:15	45	1	46	38	0	38	47	0	47	42	0	42
15:15 to 15:30	46	0	46	30	0	30	53	1	54	35	0	35
15:30 to 15:45	40	1	41	37	1	38	46	1	47	41	1	42
15:45 to 16:00	39	0	39	28	0	28	49	0	49	35	0	35
16:00 to 16:15	41	0	41	45	0	45	50	0	50	55	0	55
16:15 to 16:30	55	0	55	51	0	51	60	1	61	52	2	54
16:30 to 16:45	54	0	54	38	0	38	55	0	55	40	1	41
16:45 to 17:00	51	0	51	29	0	29	48	1	49	33	2	35
17:00 to 17:15	52	0	52	40	0	40	49	1	50	34	0	34
17:15 to 17:30	36	0	36	42	0	42	42	0	42	40	0	40
17:30 to 17:45	42	0	42	23	0	23	44	0	44	23	0	23
17:45 to 18:00	29	0	29	33	0	33	26	0	26	32	0	32
18:00 to 18:15	46	0	46	38	0	38	42	0	42	39	0	39
18:15 to 18:30	46	1	47	29	0	29	49	2	51	34	0	34
18:30 to 18:45	43	0	43	46	0	46	38	0	38	51	0	51
18:45 to 19:00	45	0	45	24	0	24	43	0	43	24	0	24
<b>12hrs Totals</b>	<b>1,850</b>	<b>10</b>	<b>1,860</b>	<b>1,654</b>	<b>7</b>	<b>1,661</b>	<b>1,974</b>	<b>15</b>	<b>1,989</b>	<b>1,943</b>	<b>17</b>	<b>1,960</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 9. Young Street / Grosvenor Lane  
  
**Day/Date** : Sat, 20 Feb 2021  
**Weather** : Fine  
**Description** : Classified Mid-block Count  
 : Pedestrian Data



Approach	Pedestrians											
	IN 1			OUT 1			IN 2			OUT 2		
Time Period	Peds	Cyclists	Total	Peds	Cyclists	Total	Peds	Cyclists	Total	Peds	Cyclists	Total
7:00 to 7:15	4	0	4	8	0	8	6	0	6	11	0	11
7:15 to 7:30	9	0	9	5	0	5	14	0	14	11	0	11
7:30 to 7:45	16	0	16	7	0	7	16	0	16	13	0	13
7:45 to 8:00	15	0	15	15	0	15	15	0	15	19	0	19
8:00 to 8:15	26	1	27	11	0	11	32	1	33	17	0	17
8:15 to 8:30	27	0	27	14	0	14	23	0	23	17	0	17
8:30 to 8:45	13	0	13	25	0	25	22	0	22	42	0	42
8:45 to 9:00	30	1	31	23	0	23	33	1	34	45	0	45
9:00 to 9:15	38	0	38	30	0	30	51	1	52	48	0	48
9:15 to 9:30	54	0	54	23	1	24	67	0	67	59	1	60
9:30 to 9:45	38	0	38	17	0	17	49	0	49	30	1	31
9:45 to 10:00	54	0	54	35	1	36	57	0	57	63	0	63
10:00 to 10:15	45	0	45	26	0	26	56	0	56	58	0	58
10:15 to 10:30	56	0	56	28	0	28	57	0	57	50	0	50
10:30 to 10:45	41	0	41	29	0	29	59	0	59	59	0	59
10:45 to 11:00	49	0	49	50	0	50	56	0	56	58	0	58
11:00 to 11:15	40	0	40	33	0	33	60	0	60	58	0	58
11:15 to 11:30	38	0	38	35	0	35	44	0	44	43	0	43
11:30 to 11:45	58	2	60	39	0	39	73	1	74	57	1	58
11:45 to 12:00	59	0	59	53	1	54	56	0	56	45	1	46

12:00 to 12:15	68	1	69	51	0	51	65	1	66	48	0	48
12:15 to 12:30	57	1	58	53	0	53	51	1	52	54	0	54
12:30 to 12:45	69	0	69	88	0	88	60	0	60	63	1	64
12:45 to 13:00	46	0	46	45	1	46	47	0	47	45	1	46
13:00 to 13:15	43	0	43	35	0	35	43	0	43	36	0	36
13:15 to 13:30	27	1	28	38	0	38	26	0	26	38	0	38
13:30 to 13:45	46	1	47	36	0	36	45	2	47	34	0	34
13:45 to 14:00	48	0	48	22	0	22	42	0	42	35	0	35
14:00 to 14:15	39	1	40	32	1	33	42	1	43	48	1	49
14:15 to 14:30	51	0	51	33	0	33	51	0	51	42	0	42
14:30 to 14:45	35	0	35	26	1	27	33	0	33	43	0	43
14:45 to 15:00	48	0	48	46	0	46	44	0	44	53	0	53
15:00 to 15:15	42	0	42	26	0	26	34	0	34	27	0	27
15:15 to 15:30	32	0	32	31	0	31	33	0	33	32	0	32
15:30 to 15:45	33	0	33	25	1	26	30	0	30	22	1	23
15:45 to 16:00	35	0	35	30	0	30	29	0	29	33	0	33
16:00 to 16:15	23	0	23	27	1	28	24	0	24	30	1	31
16:15 to 16:30	29	0	29	35	0	35	41	0	41	27	0	27
16:30 to 16:45	22	0	22	25	0	25	24	0	24	30	0	30
16:45 to 17:00	25	0	25	33	0	33	21	0	21	29	0	29
17:00 to 17:15	40	0	40	36	0	36	43	0	43	21	0	21
17:15 to 17:30	17	0	17	37	0	37	41	0	41	33	0	33
17:30 to 17:45	30	0	30	46	0	46	35	0	35	44	0	44
17:45 to 18:00	49	2	51	34	1	35	44	2	46	34	1	35
18:00 to 18:15	32	1	33	27	0	27	37	1	38	36	0	36
18:15 to 18:30	41	0	41	28	0	28	32	0	32	33	0	33
18:30 to 18:45	23	0	23	26	0	26	17	0	17	22	0	22
18:45 to 19:00	24	1	25	18	2	20	21	1	22	16	2	18
<b>12hrs Totals</b>	<b>1,784</b>	<b>13</b>	<b>1,797</b>	<b>1,495</b>	<b>11</b>	<b>1,506</b>	<b>1,901</b>	<b>13</b>	<b>1,914</b>	<b>1,811</b>	<b>12</b>	<b>1,823</b>

**Client** GTA Consultants (Nsw) Pty Ltd  
**Location** Young St  
**Date** Thu, 13th May 2021  
**Survey Time** 07:00-19:00 (12hours)  
**Description** Young St Pedestrian Survey





Client GTA Consultants (Nsw) Pty Ltd  
 Location Ped 1 - Young St Plaza at Military Rd  
 Date Thu, 13th May 2021  
 Survey Time 07:00-19:00 (12hours)  
 Description Young St Pedestrian Survey



[15mins interval]			
Approach	Young St Plaza at Military Rd		
	Ped 1		Total
Time Period	IN	OUT	
7:00 to 7:15	9	14	23
7:15 to 7:30	12	34	46
7:30 to 7:45	24	25	49
7:45 to 8:00	16	27	43
8:00 to 8:15	29	39	68
8:15 to 8:30	33	44	77
8:30 to 8:45	35	47	82
8:45 to 9:00	30	33	63
9:00 to 9:15	36	36	72
9:15 to 9:30	41	34	75
9:30 to 9:45	32	32	64
9:45 to 10:00	36	35	71
10:00 to 10:15	40	32	72
10:15 to 10:30	24	24	48
10:30 to 10:45	37	34	71
10:45 to 11:00	33	27	60
11:00 to 11:15	41	42	83
11:15 to 11:30	36	24	60
11:30 to 11:45	35	28	63
11:45 to 12:00	35	36	71
12:00 to 12:15	34	42	76
12:15 to 12:30	44	44	88
12:30 to 12:45	44	36	80
12:45 to 13:00	53	41	94
13:00 to 13:15	42	47	89
13:15 to 13:30	57	53	110
13:30 to 13:45	46	46	92
13:45 to 14:00	40	38	78
14:00 to 14:15	39	30	69
14:15 to 14:30	32	41	73
14:30 to 14:45	41	34	75
14:45 to 15:00	28	23	51
15:00 to 15:15	39	37	76
15:15 to 15:30	39	29	68
15:30 to 15:45	45	37	82
15:45 to 16:00	55	29	84
16:00 to 16:15	41	47	88
16:15 to 16:30	50	48	98
16:30 to 16:45	38	36	74
16:45 to 17:00	40	23	63
17:00 to 17:15	33	24	57
17:15 to 17:30	49	41	90
17:30 to 17:45	47	33	80
17:45 to 18:00	54	37	91
18:00 to 18:15	39	20	59
18:15 to 18:30	48	41	89
18:30 to 18:45	48	30	78
18:45 to 19:00	40	41	81
<b>12hrs Total</b>	<b>1,819</b>	<b>1,675</b>	<b>3,494</b>

[Hourly Summary]				
Approach	Young St Plaza at Military Rd			
	Ped 1		Total	Grand Total
Time Period	IN	OUT		
7:00 to 8:00	61	100	161	161
7:15 to 8:15	81	125	206	206
7:30 to 8:30	102	135	237	237
7:45 to 8:45	113	157	270	270
8:00 to 9:00	127	163	290	290
8:15 to 9:15	134	160	294	294
8:30 to 9:30	142	150	292	292
8:45 to 9:45	139	135	274	274
9:00 to 10:00	145	137	282	282
9:15 to 10:15	149	133	282	282
9:30 to 10:30	132	123	255	255
9:45 to 10:45	137	125	262	262
10:00 to 11:00	134	117	251	251
10:15 to 11:15	135	127	262	262
10:30 to 11:30	147	127	274	274
10:45 to 11:45	145	121	266	266
11:00 to 12:00	147	130	277	277
11:15 to 12:15	140	130	270	270
11:30 to 12:30	148	150	298	298
11:45 to 12:45	157	158	315	315
12:00 to 13:00	175	163	338	338
12:15 to 13:15	183	168	351	351
12:30 to 13:30	196	177	373	373
12:45 to 13:45	198	187	385	385
13:00 to 14:00	185	184	369	369
13:15 to 14:15	182	167	349	349
13:30 to 14:30	157	155	312	312
13:45 to 14:45	152	143	295	295
14:00 to 15:00	140	128	268	268
14:15 to 15:15	140	135	275	275
14:30 to 15:30	147	123	270	270
14:45 to 15:45	151	126	277	277
15:00 to 16:00	178	132	310	310
15:15 to 16:15	180	142	322	322
15:30 to 16:30	191	161	352	352
15:45 to 16:45	184	160	344	344
16:00 to 17:00	169	154	323	323
16:15 to 17:15	161	131	292	292
16:30 to 17:30	160	124	284	284
16:45 to 17:45	169	121	290	290
17:00 to 18:00	183	135	318	318
17:15 to 18:15	189	131	320	320
17:30 to 18:30	188	131	319	319
17:45 to 18:45	189	128	317	317
18:00 to 19:00	175	132	307	307
<b>12hrs Total</b>	<b>1,819</b>	<b>1,675</b>	<b>3,494</b>	<b>3,494</b>

[Peak Hr Summary]				
Approach	Young St Plaza at Military Rd			
	Ped 1		Total	Grand Total
Time Period	IN	OUT		
AM 8:15 to 9:15	134	160	294	294
PM 12:45 to 13:45	198	187	385	385

Client GTA Consultants (Nsw) Pty Ltd  
 Location Ped 2 - Young St Plaza at Grosvenor Lane  
 Date Thu, 13th May 2021  
 Survey Time 07:00-19:00 (12hours)  
 Description Young St Pedestrian Survey

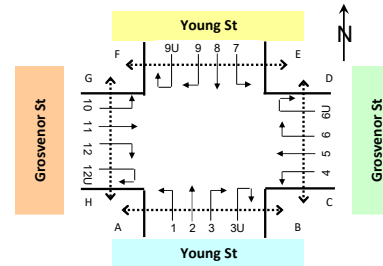


[15mins interval]				
Approach	Young St Plaza at Grosvenor Ln			Total
	Ped 2		Total	
Time Period	IN	OUT		
7:00 to 7:15	21	13	34	
7:15 to 7:30	37	15	52	
7:30 to 7:45	29	26	55	
7:45 to 8:00	35	28	63	
8:00 to 8:15	37	31	68	
8:15 to 8:30	52	33	85	
8:30 to 8:45	52	39	91	
8:45 to 9:00	48	35	83	
9:00 to 9:15	47	41	88	
9:15 to 9:30	52	36	88	
9:30 to 9:45	38	31	69	
9:45 to 10:00	43	38	81	
10:00 to 10:15	37	49	86	
10:15 to 10:30	22	28	50	
10:30 to 10:45	27	32	59	
10:45 to 11:00	28	37	65	
11:00 to 11:15	49	41	90	
11:15 to 11:30	35	48	83	
11:30 to 11:45	32	39	71	
11:45 to 12:00	40	37	77	
12:00 to 12:15	58	41	99	
12:15 to 12:30	63	49	112	
12:30 to 12:45	45	57	102	
12:45 to 13:00	50	52	102	
13:00 to 13:15	62	59	121	
13:15 to 13:30	45	56	101	
13:30 to 13:45	56	44	100	
13:45 to 14:00	37	45	82	
14:00 to 14:15	45	42	87	
14:15 to 14:30	37	31	68	
14:30 to 14:45	35	44	79	
14:45 to 15:00	32	32	64	
15:00 to 15:15	39	43	82	
15:15 to 15:30	35	46	81	
15:30 to 15:45	38	53	91	
15:45 to 16:00	31	53	84	
16:00 to 16:15	43	45	88	
16:15 to 16:30	45	42	87	
16:30 to 16:45	32	39	71	
16:45 to 17:00	41	45	86	
17:00 to 17:15	29	44	73	
17:15 to 17:30	58	46	104	
17:30 to 17:45	25	50	75	
17:45 to 18:00	44	59	103	
18:00 to 18:15	26	37	63	
18:15 to 18:30	49	55	104	
18:30 to 18:45	36	49	85	
18:45 to 19:00	33	45	78	
<b>12hrs Total</b>	<b>1,930</b>	<b>1,980</b>	<b>3,910</b>	

[Hourly Summary]				
Approach	Young St Plaza at Grosvenor Ln			Grand Total
	Ped 2		Total	
Time Period	IN	OUT		Total
7:00 to 8:00	122	82	204	204
7:15 to 8:15	138	100	238	238
7:30 to 8:30	153	118	271	271
7:45 to 8:45	176	131	307	307
8:00 to 9:00	189	138	327	327
8:15 to 9:15	199	148	347	347
8:30 to 9:30	199	151	350	350
8:45 to 9:45	185	143	328	328
9:00 to 10:00	180	146	326	326
9:15 to 10:15	170	154	324	324
9:30 to 10:30	140	146	286	286
9:45 to 10:45	129	147	276	276
10:00 to 11:00	114	146	260	260
10:15 to 11:15	126	138	264	264
10:30 to 11:30	139	158	297	297
10:45 to 11:45	144	165	309	309
11:00 to 12:00	156	165	321	321
11:15 to 12:15	165	165	330	330
11:30 to 12:30	193	166	359	359
11:45 to 12:45	206	184	390	390
12:00 to 13:00	216	199	415	415
12:15 to 13:15	220	217	437	437
12:30 to 13:30	202	224	426	426
12:45 to 13:45	213	211	424	424
13:00 to 14:00	200	204	404	404
13:15 to 14:15	183	187	370	370
13:30 to 14:30	175	162	337	337
13:45 to 14:45	154	162	316	316
14:00 to 15:00	149	149	298	298
14:15 to 15:15	143	150	293	293
14:30 to 15:30	141	165	306	306
14:45 to 15:45	144	174	318	318
15:00 to 16:00	143	195	338	338
15:15 to 16:15	147	197	344	344
15:30 to 16:30	157	193	350	350
15:45 to 16:45	151	179	330	330
16:00 to 17:00	161	171	332	332
16:15 to 17:15	147	170	317	317
16:30 to 17:30	160	174	334	334
16:45 to 17:45	153	185	338	338
17:00 to 18:00	156	199	355	355
17:15 to 18:15	153	192	345	345
17:30 to 18:30	144	201	345	345
17:45 to 18:45	155	200	355	355
18:00 to 19:00	144	186	330	330
<b>12hrs Total</b>	<b>1,930</b>	<b>1,980</b>	<b>3,910</b>	<b>3,910</b>

[Peak Hr Summary]				
Approach	Young St Plaza at Grosvenor Ln			Grand Total
	Ped 2		Total	
Time Period	IN	OUT		Total
AM 8:30 to 9:30	199	151	350	350
PM 12:15 to 13:15	220	217	437	437

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 10. Young Street / Grosvenor Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



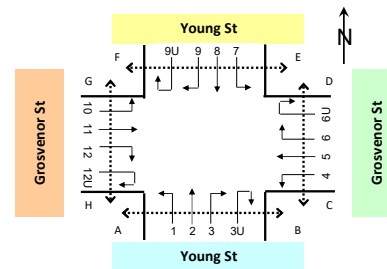
Classifications	Class 1	Class 2
	Lights	Heavies

Approach	Young St												Grosvenor St											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	5	0	5	2	0	2	0	0	0	0	0	0	3	0	3	12	0	12	11	0	11	0	0	0
7:15 to 7:30	3	0	3	0	0	0	2	0	2	0	0	0	0	2	2	23	0	23	19	1	20	0	0	0
7:30 to 7:45	2	0	2	2	0	2	2	0	2	0	0	0	4	0	4	22	0	22	21	0	21	1	0	1
7:45 to 8:00	7	0	7	9	0	9	1	0	1	0	0	0	2	1	3	26	0	26	15	0	15	0	0	0
8:00 to 8:15	5	0	5	6	0	6	7	0	7	1	0	1	5	0	5	35	2	37	37	0	37	0	0	0
8:15 to 8:30	7	0	7	10	0	10	3	0	3	0	0	0	2	0	2	22	2	24	15	0	15	3	0	3
8:30 to 8:45	6	0	6	11	0	11	1	0	1	0	0	0	2	1	3	13	0	13	12	0	12	1	0	1
8:45 to 9:00	5	0	5	8	1	9	3	0	3	0	0	0	4	1	5	15	2	17	9	0	9	0	0	0
<b>AM Totals</b>	<b>40</b>	<b>0</b>	<b>40</b>	<b>48</b>	<b>1</b>	<b>49</b>	<b>19</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>22</b>	<b>5</b>	<b>27</b>	<b>168</b>	<b>6</b>	<b>174</b>	<b>139</b>	<b>1</b>	<b>140</b>	<b>5</b>	<b>0</b>	<b>5</b>
16:15 to 16:30	7	0	7	8	0	8	5	0	5	0	0	0	7	0	7	31	0	31	31	0	31	1	0	1
16:30 to 16:45	14	0	14	7	0	7	2	0	2	0	0	0	3	0	3	32	1	33	28	0	28	1	0	1
16:45 to 17:00	7	0	7	11	0	11	1	0	1	0	0	0	3	1	4	31	0	31	21	0	21	3	0	3
17:00 to 17:15	7	0	7	12	0	12	3	0	3	0	0	0	4	0	4	25	0	25	24	0	24	2	0	2
17:15 to 17:30	10	0	10	15	0	15	3	0	3	1	0	1	3	0	3	26	3	29	22	0	22	0	0	0
17:30 to 17:45	6	0	6	10	0	10	1	0	1	0	0	0	0	0	0	32	0	32	29	0	29	2	0	2
17:45 to 18:00	16	0	16	11	0	11	6	0	6	0	0	0	2	1	3	38	0	38	26	0	26	3	0	3
18:00 to 18:15	13	0	13	16	0	16	4	0	4	0	0	0	3	0	3	26	0	26	21	0	21	1	0	1
<b>PM Totals</b>	<b>80</b>	<b>0</b>	<b>80</b>	<b>90</b>	<b>0</b>	<b>90</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>25</b>	<b>2</b>	<b>27</b>	<b>241</b>	<b>4</b>	<b>245</b>	<b>202</b>	<b>0</b>	<b>202</b>	<b>13</b>	<b>0</b>	<b>13</b>

Approach	Young St												Grosvenor St												Crossing Pedestrians											
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	9	0	9	10	0	10	12	0	12	2	0	2	10	0	10	16	0	16	6	1	7	5	0	5	4	4	7	4	0	0	4	5	28			
7:15 to 7:30	14	0	14	12	0	12	14	0	14	0	0	0	2	0	2	10	0	10	4	1	5	2	0	2	7	14	15	7	0	1	0	15	59			

7:30 to 7:45	6	0	6	16	0	16	4	1	5	1	0	1	9	0	9	13	1	14	2	0	2	2	0	2	4	7	9	3	1	3	1	10	38
7:45 to 8:00	21	0	21	17	0	17	18	0	18	1	0	1	10	0	10	18	0	18	1	0	1	0	1	1	9	8	21	2	0	3	3	5	51
8:00 to 8:15	17	1	18	14	0	14	15	0	15	4	0	4	6	0	6	24	0	24	3	1	4	1	0	1	7	14	12	5	1	3	2	16	60
8:15 to 8:30	15	0	15	10	0	10	16	3	19	0	0	0	7	0	7	11	0	11	4	0	4	0	0	0	8	15	19	9	3	5	5	17	81
8:30 to 8:45	21	0	21	14	2	16	15	0	15	2	0	2	12	0	12	24	1	25	1	1	2	0	0	0	6	13	15	7	4	1	3	11	60
8:45 to 9:00	15	0	15	18	2	20	12	1	13	2	0	2	11	0	11	17	0	17	5	1	6	3	0	3	8	12	22	6	4	2	2	13	69
<b>AM Totals</b>	<b>118</b>	<b>1</b>	<b>119</b>	<b>111</b>	<b>4</b>	<b>115</b>	<b>106</b>	<b>5</b>	<b>111</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>67</b>	<b>0</b>	<b>67</b>	<b>133</b>	<b>2</b>	<b>135</b>	<b>26</b>	<b>5</b>	<b>31</b>	<b>13</b>	<b>1</b>	<b>14</b>	<b>53</b>	<b>87</b>	<b>120</b>	<b>43</b>	<b>13</b>	<b>18</b>	<b>20</b>	<b>92</b>	<b>446</b>
16:15 to 16:30	20	1	21	11	0	11	16	0	16	1	0	1	7	0	7	28	0	28	3	0	3	6	0	6	7	8	11	16	2	2	6	12	64
16:30 to 16:45	11	0	11	11	0	11	13	0	13	2	0	2	9	0	9	23	0	23	6	0	6	3	0	3	8	11	8	14	2	1	5	9	58
16:45 to 17:00	16	0	16	11	0	11	13	0	13	3	1	4	8	0	8	21	0	21	8	1	9	1	0	1	7	5	9	12	1	1	7	7	49
17:00 to 17:15	17	0	17	13	0	13	18	0	18	0	1	1	7	0	7	15	0	15	6	0	6	1	0	1	15	4	7	11	3	1	13	2	56
17:15 to 17:30	19	0	19	19	1	20	12	1	13	1	0	1	9	0	9	27	0	27	5	0	5	3	0	3	10	11	15	10	4	0	6	9	65
17:30 to 17:45	26	0	26	18	0	18	11	0	11	1	0	1	10	0	10	26	0	26	12	0	12	4	0	4	15	7	3	10	3	6	11	3	58
17:45 to 18:00	17	0	17	20	0	20	11	0	11	0	0	0	11	0	11	23	0	23	9	0	9	4	0	4	11	9	12	4	2	5	6	6	55
18:00 to 18:15	23	0	23	13	0	13	25	0	25	1	0	1	12	0	12	29	0	29	11	0	11	6	1	7	22	8	1	8	1	5	11	9	65
<b>PM Totals</b>	<b>149</b>	<b>1</b>	<b>150</b>	<b>116</b>	<b>1</b>	<b>117</b>	<b>119</b>	<b>1</b>	<b>120</b>	<b>9</b>	<b>2</b>	<b>11</b>	<b>73</b>	<b>0</b>	<b>73</b>	<b>192</b>	<b>0</b>	<b>192</b>	<b>60</b>	<b>1</b>	<b>61</b>	<b>28</b>	<b>1</b>	<b>29</b>	<b>95</b>	<b>63</b>	<b>66</b>	<b>85</b>	<b>18</b>	<b>21</b>	<b>65</b>	<b>57</b>	<b>470</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 10. Young Street / Grosvenor Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary



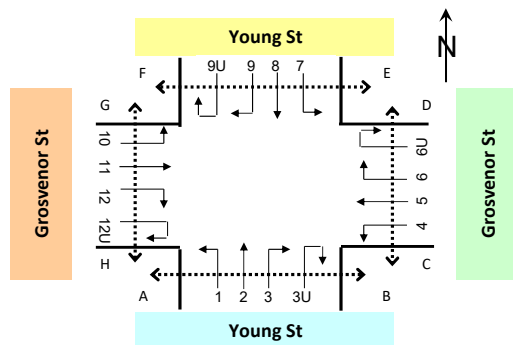
Approach	Young St									Grosvenor St																							
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)											
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	17	0	17	13	0	13	5	0	5	0	0	0	9	3	12	83	0	83	66	1	67	1	0	1	17	0	17	13	0	13	5	0	5
7:15 to 8:15	17	0	17	17	0	17	12	0	12	1	0	1	11	3	14	106	2	108	92	1	93	1	0	1	17	0	17	13	0	13	5	0	5
7:30 to 8:30	21	0	21	27	0	27	13	0	13	1	0	1	13	1	14	105	4	109	88	0	88	4	0	4	17	0	17	13	0	13	5	0	5
7:45 to 8:45	25	0	25	36	0	36	12	0	12	1	0	1	11	2	13	96	4	100	79	0	79	4	0	4	17	0	17	13	0	13	5	0	5
8:00 to 9:00	23	0	23	35	1	36	14	0	14	1	0	1	13	2	15	85	6	91	73	0	73	4	0	4	17	0	17	13	0	13	5	0	5
<b>AM Totals</b>	<b>40</b>	<b>0</b>	<b>40</b>	<b>48</b>	<b>1</b>	<b>49</b>	<b>19</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>22</b>	<b>5</b>	<b>27</b>	<b>168</b>	<b>6</b>	<b>174</b>	<b>139</b>	<b>1</b>	<b>140</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>0</b>	<b>5</b>
16:15 to 17:15	35	0	35	38	0	38	11	0	11	0	0	0	17	1	18	119	1	120	104	0	104	7	0	7	17	0	17	13	0	13	5	0	5
16:30 to 17:30	38	0	38	45	0	45	9	0	9	1	0	1	13	1	14	114	4	118	95	0	95	6	0	6	17	0	17	13	0	13	5	0	5
16:45 to 17:45	30	0	30	48	0	48	8	0	8	1	0	1	10	1	11	114	3	117	96	0	96	7	0	7	17	0	17	13	0	13	5	0	5
17:00 to 18:00	39	0	39	48	0	48	13	0	13	1	0	1	9	1	10	121	3	124	101	0	101	7	0	7	17	0	17	13	0	13	5	0	5
17:15 to 18:15	45	0	45	52	0	52	14	0	14	1	0	1	8	1	9	122	3	125	98	0	98	6	0	6	17	0	17	13	0	13	5	0	5
<b>PM Totals</b>	<b>80</b>	<b>0</b>	<b>80</b>	<b>90</b>	<b>0</b>	<b>90</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>25</b>	<b>2</b>	<b>27</b>	<b>241</b>	<b>4</b>	<b>245</b>	<b>202</b>	<b>0</b>	<b>202</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>0</b>	<b>5</b>

Approach	Young St												Grosvenor St								Crossing Pedestrians												
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)										Direction 12U (U Turn)				
	Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 8:00	50	0	50	55	0	55	48	1	49	4	0	4	31	0	31	57	1	58	13	2	15	9	1	10	24	33	52	16	1	7	8	35	176
7:15 to 8:15	58	1	59	59	0	59	51	1	52	6	0	6	27	0	27	65	1	66	10	2	12	5	1	6	27	43	57	17	2	10	6	46	208
7:30 to 8:30	59	1	60	57	0	57	53	4	57	6	0	6	32	0	32	66	1	67	10	1	11	3	1	4	28	44	61	19	5	14	11	48	230
7:45 to 8:45	74	1	75	55	2	57	64	3	67	7	0	7	35	0	35	77	1	78	9	2	11	1	1	2	30	50	67	23	8	12	13	49	252
8:00 to 9:00	68	1	69	56	4	60	58	4	62	8	0	8	36	0	36	76	1	77	13	3	16	4	0	4	29	54	68	27	12	11	12	57	270
<b>AM Totals</b>	<b>118</b>	<b>1</b>	<b>119</b>	<b>111</b>	<b>4</b>	<b>115</b>	<b>106</b>	<b>5</b>	<b>111</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>67</b>	<b>0</b>	<b>67</b>	<b>133</b>	<b>2</b>	<b>135</b>	<b>26</b>	<b>5</b>	<b>31</b>	<b>13</b>	<b>1</b>	<b>14</b>	<b>53</b>	<b>87</b>	<b>120</b>	<b>43</b>	<b>13</b>	<b>18</b>	<b>20</b>	<b>92</b>	<b>446</b>
16:15 to 17:15	64	1	65	46	0	46	60	0	60	6	2	8	31	0	31	87	0	87	23	1	24	11	0	11	37	28	35	53	8	5	31	30	227
16:30 to 17:30	63	0	63	54	1	55	56	1	57	6	2	8	33	0	33	86	0	86	25	1	26	8	0	8	40	31	39	47	10	3	31	27	228
16:45 to 17:45	78	0	78	61	1	62	54	1	55	5	2	7	34	0	34	89	0	89	31	1	32	9	0	9	47	27	34	43	11	8	37	21	228
17:00 to 18:00	79	0	79	70	1	71	52	1	53	2	1	3	37	0	37	91	0	91	32	0	32	12	0	12	51	31	37	35	12	12	36	20	234
17:15 to 18:15	85	0	85	70	1	71	59	1	60	3	0	3	42	0	42	105	0	105	37	0	37	17	1	18	58	35	31	32	10	16	34	27	243
<b>PM Totals</b>	<b>149</b>	<b>1</b>	<b>150</b>	<b>116</b>	<b>1</b>	<b>117</b>	<b>119</b>	<b>1</b>	<b>120</b>	<b>9</b>	<b>2</b>	<b>11</b>	<b>73</b>	<b>0</b>	<b>73</b>	<b>192</b>	<b>0</b>	<b>192</b>	<b>60</b>	<b>1</b>	<b>61</b>	<b>28</b>	<b>1</b>	<b>29</b>	<b>95</b>	<b>63</b>	<b>66</b>	<b>85</b>	<b>18</b>	<b>21</b>	<b>65</b>	<b>57</b>	<b>470</b>



Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 10. Young Street / Grosvenor Street

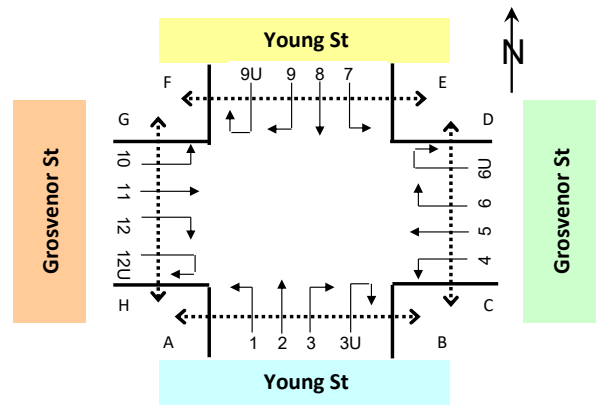
Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary



Approach	Young St			Grosvenor St			Young St			Grosvenor St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:45 to 8:45	74	0	74	190	6	196	200	6	206	122	4	126	602
PM 17:15 to 18:15	112	0	112	234	4	238	217	2	219	201	1	202	771

Approach	Young St			Grosvenor St			Young St			Grosvenor St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	35	0	35	159	4	163	157	1	158	110	4	114	470
7:15 to 8:15	47	0	47	210	6	216	174	2	176	107	4	111	550
7:30 to 8:30	62	0	62	210	5	215	175	5	180	111	3	114	571
7:45 to 8:45	74	0	74	190	6	196	200	6	206	122	4	126	602
8:00 to 9:00	73	1	74	175	8	183	190	9	199	129	4	133	589
<b>AM Totals</b>	<b>108</b>	<b>1</b>	<b>109</b>	<b>334</b>	<b>12</b>	<b>346</b>	<b>347</b>	<b>10</b>	<b>357</b>	<b>239</b>	<b>8</b>	<b>247</b>	<b>1,059</b>
16:15 to 17:15	84	0	84	247	2	249	176	3	179	152	1	153	665
16:30 to 17:30	93	0	93	228	5	233	179	4	183	152	1	153	662
16:45 to 17:45	87	0	87	227	4	231	198	4	202	163	1	164	684
17:00 to 18:00	101	0	101	238	4	242	203	3	206	172	0	172	721
17:15 to 18:15	112	0	112	234	4	238	217	2	219	201	1	202	771
<b>PM Totals</b>	<b>196</b>	<b>0</b>	<b>196</b>	<b>481</b>	<b>6</b>	<b>487</b>	<b>393</b>	<b>5</b>	<b>398</b>	<b>353</b>	<b>2</b>	<b>355</b>	<b>1,436</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 10. Young Street / Grosvenor Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data

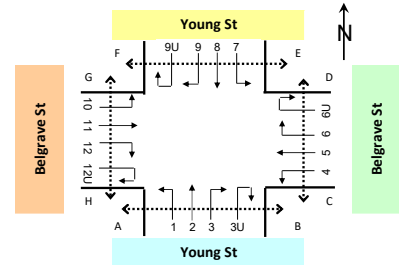


Direction	Pedestrians							
	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 7:15	4	4	7	4	0	0	4	5
7:15 to 7:30	7	14	15	7	0	1	0	15
7:30 to 7:45	4	7	9	3	1	3	1	10
7:45 to 8:00	9	8	21	2	0	3	3	5
8:00 to 8:15	7	14	12	5	1	3	2	16
8:15 to 8:30	8	15	19	9	3	5	5	17
8:30 to 8:45	6	13	15	7	4	1	3	11
8:45 to 9:00	8	12	22	6	4	2	2	13
<b>AM Totals</b>	<b>53</b>	<b>87</b>	<b>120</b>	<b>43</b>	<b>13</b>	<b>18</b>	<b>20</b>	<b>92</b>
16:15 to 16:30	7	8	11	16	2	2	6	12
16:30 to 16:45	8	11	8	14	2	1	5	9
16:45 to 17:00	7	5	9	12	1	1	7	7
17:00 to 17:15	15	4	7	11	3	1	13	2
17:15 to 17:30	10	11	15	10	4	0	6	9
17:30 to 17:45	15	7	3	10	3	6	11	3
17:45 to 18:00	11	9	12	4	2	5	6	6



18:00 to 18:15	22	8	1	8	1	5	11	9
<b>PM Totals</b>	<b>95</b>	<b>63</b>	<b>66</b>	<b>85</b>	<b>18</b>	<b>21</b>	<b>65</b>	<b>57</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 11. Young Street / Belgrave Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data



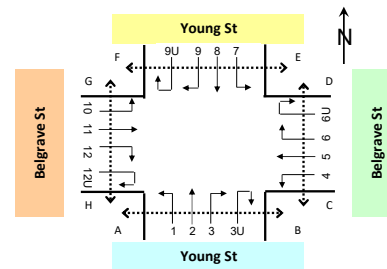
Classifications	Class 1 Lights	Class 2 Heavies
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Approach	Young St												Belgrave St											
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	24	0	24	15	0	15	11	0	11	0	0	0	11	0	11	397	4	401	18	0	18	0	0	0
7:15 to 7:30	17	0	17	16	0	16	8	0	8	0	0	0	9	0	9	424	7	431	17	0	17	0	0	0
7:30 to 7:45	13	0	13	13	0	13	6	0	6	0	0	0	13	0	13	428	5	433	35	0	35	0	0	0
7:45 to 8:00	9	0	9	15	0	15	4	0	4	0	0	0	10	1	11	325	6	331	28	1	29	0	0	0
8:00 to 8:15	12	0	12	18	0	18	6	1	7	0	0	0	13	0	13	349	6	355	18	0	18	0	0	0
8:15 to 8:30	9	0	9	12	0	12	7	0	7	0	0	0	15	1	16	253	5	258	18	1	19	0	0	0
8:30 to 8:45	16	0	16	10	0	10	5	0	5	0	0	0	8	0	8	224	6	230	26	2	28	0	0	0
8:45 to 9:00	11	2	13	16	0	16	6	1	7	0	0	0	15	0	15	200	7	207	22	0	22	0	0	0
<b>AM Totals</b>	<b>111</b>	<b>2</b>	<b>113</b>	<b>115</b>	<b>0</b>	<b>115</b>	<b>53</b>	<b>2</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>94</b>	<b>2</b>	<b>96</b>	<b>2,600</b>	<b>46</b>	<b>2,646</b>	<b>182</b>	<b>4</b>	<b>186</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	17	0	17	20	0	20	9	0	9	0	0	0	5	0	5	135	3	138	18	0	18	0	0	0
16:30 to 16:45	17	0	17	27	0	27	11	0	11	0	0	0	8	0	8	150	5	155	29	0	29	0	0	0
16:45 to 17:00	13	0	13	30	0	30	7	0	7	0	0	0	8	0	8	143	2	145	23	0	23	0	0	0
17:00 to 17:15	14	0	14	23	0	23	9	0	9	0	0	0	16	0	16	137	3	140	21	0	21	0	0	0
17:15 to 17:30	14	0	14	29	0	29	4	0	4	0	0	0	13	0	13	125	5	130	17	0	17	0	0	0
17:30 to 17:45	18	0	18	29	0	29	7	0	7	0	0	0	12	0	12	114	2	116	20	0	20	0	0	0
17:45 to 18:00	19	0	19	19	0	19	4	0	4	0	0	0	15	0	15	115	6	121	10	0	10	0	0	0
18:00 to 18:15	20	0	20	24	0	24	8	0	8	0	0	0	16	1	17	100	1	101	13	0	13	0	0	0
<b>PM Totals</b>	<b>132</b>	<b>0</b>	<b>132</b>	<b>201</b>	<b>0</b>	<b>201</b>	<b>59</b>	<b>0</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>1</b>	<b>94</b>	<b>1,019</b>	<b>27</b>	<b>1,046</b>	<b>151</b>	<b>0</b>	<b>151</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Young St												Belgrave St												Crossing Pedestrians											
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H	Total			
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	3	0	3	25	0	25	18	0	18	0	0	0	9	1	10	116	2	118	10	1	11	0	0	0	0	0	0	0	0	0	0	0	0	40		
7:15 to 7:30	2	0	2	24	0	24	13	0	13	0	0	0	13	2	15	140	10	150	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	34		

7:30 to 7:45	3	0	3	26	0	26	9	0	9	0	0	0	5	2	7	116	4	120	12	1	13	0	0	0	1	4	14	9	0	1	4	9	42
7:45 to 8:00	2	0	2	21	1	22	15	2	17	0	0	0	14	0	14	145	7	152	13	2	15	0	0	0	1	0	17	5	2	0	2	9	36
8:00 to 8:15	7	0	7	27	1	28	12	1	13	0	0	0	15	2	17	126	9	135	9	0	9	0	0	0	1	0	10	3	1	1	5	7	28
8:15 to 8:30	6	0	6	21	1	22	10	0	10	0	0	0	8	0	8	134	3	137	12	1	13	0	0	0	1	2	5	6	1	0	3	15	33
8:30 to 8:45	3	0	3	21	0	21	10	0	10	0	0	0	11	0	11	118	7	125	9	2	11	0	0	0	0	2	3	5	0	0	4	6	20
8:45 to 9:00	7	0	7	17	0	17	8	0	8	0	0	0	9	0	9	118	6	124	8	0	8	0	0	0	0	0	2	9	0	0	3	2	16
<b>AM Totals</b>	<b>33</b>	<b>0</b>	<b>33</b>	<b>182</b>	<b>3</b>	<b>185</b>	<b>95</b>	<b>3</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>84</b>	<b>7</b>	<b>91</b>	<b>1,013</b>	<b>48</b>	<b>1,061</b>	<b>82</b>	<b>7</b>	<b>89</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>84</b>	<b>48</b>	<b>7</b>	<b>4</b>	<b>21</b>	<b>73</b>	<b>249</b>
16:15 to 16:30	4	0	4	25	0	25	9	0	9	0	0	0	7	0	7	335	3	338	19	2	21	0	0	0	0	0	10	7	0	0	5	6	28
16:30 to 16:45	8	0	8	21	0	21	4	0	4	0	0	0	15	0	15	308	1	309	17	0	17	0	0	0	0	1	2	8	2	0	9	3	25
16:45 to 17:00	3	0	3	26	0	26	11	1	12	0	0	0	20	0	20	344	0	344	13	0	13	0	0	0	0	0	6	5	0	0	5	4	20
17:00 to 17:15	7	1	8	20	0	20	15	0	15	0	0	0	8	0	8	305	2	307	16	0	16	0	0	0	0	0	4	9	1	0	6	3	23
17:15 to 17:30	3	0	3	23	0	23	6	1	7	0	0	0	9	0	9	316	0	316	19	0	19	0	0	0	1	0	7	4	1	0	4	9	26
17:30 to 17:45	4	0	4	23	0	23	10	0	10	0	0	0	15	0	15	219	1	220	19	0	19	0	0	0	0	1	3	8	0	0	5	3	20
17:45 to 18:00	3	0	3	22	0	22	10	0	10	0	0	0	14	0	14	216	0	216	15	0	15	0	0	0	0	0	4	8	0	0	12	7	31
18:00 to 18:15	2	0	2	30	0	30	6	0	6	0	0	0	7	0	7	162	0	162	10	0	10	0	0	0	0	1	1	6	0	0	5	10	23
<b>PM Totals</b>	<b>34</b>	<b>1</b>	<b>35</b>	<b>190</b>	<b>0</b>	<b>190</b>	<b>71</b>	<b>2</b>	<b>73</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>95</b>	<b>0</b>	<b>95</b>	<b>2,205</b>	<b>7</b>	<b>2,212</b>	<b>128</b>	<b>2</b>	<b>130</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>37</b>	<b>55</b>	<b>4</b>	<b>0</b>	<b>51</b>	<b>45</b>	<b>196</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 11. Young Street / Belgrave Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary

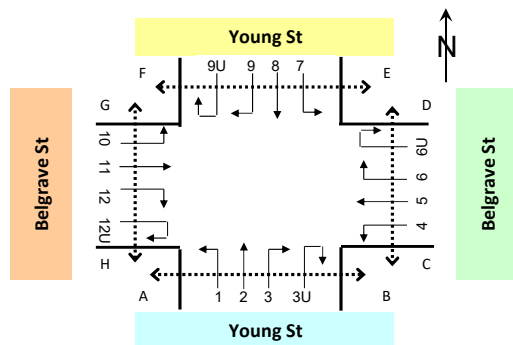


Approach	Young St									Belgrave St																						
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6 (Right Turn)			Direction 6U (U Turn)										
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total		
7:00 to 8:00	63	0	63	59	0	59	29	0	29	0	0	0	43	1	44	1,574	22	1,596	98	1	99	0	0	0	0	0	0	0	0	0	0	
7:15 to 8:15	51	0	51	62	0	62	24	1	25	0	0	0	45	1	46	1,526	24	1,550	98	1	99	0	0	0	0	0	0	0	0	0	0	
7:30 to 8:30	43	0	43	58	0	58	23	1	24	0	0	0	51	2	53	1,355	22	1,377	99	2	101	0	0	0	0	0	0	0	0	0	0	
7:45 to 8:45	46	0	46	55	0	55	22	1	23	0	0	0	46	2	48	1,151	23	1,174	90	4	94	0	0	0	0	0	0	0	0	0	0	
8:00 to 9:00	48	2	50	56	0	56	24	2	26	0	0	0	51	1	52	1,026	24	1,050	84	3	87	0	0	0	0	0	0	0	0	0	0	
<b>AM Totals</b>	<b>111</b>	<b>2</b>	<b>113</b>	<b>115</b>	<b>0</b>	<b>115</b>	<b>53</b>	<b>2</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>94</b>	<b>2</b>	<b>96</b>	<b>2,600</b>	<b>46</b>	<b>2,646</b>	<b>182</b>	<b>4</b>	<b>186</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	61	0	61	100	0	100	36	0	36	0	0	0	37	0	37	565	13	578	91	0	91	0	0	0	0	0	0	0	0	0	0	
16:30 to 17:30	58	0	58	109	0	109	31	0	31	0	0	0	45	0	45	555	15	570	90	0	90	0	0	0	0	0	0	0	0	0	0	
16:45 to 17:45	59	0	59	111	0	111	27	0	27	0	0	0	49	0	49	519	12	531	81	0	81	0	0	0	0	0	0	0	0	0	0	
17:00 to 18:00	65	0	65	100	0	100	24	0	24	0	0	0	56	0	56	491	16	507	68	0	68	0	0	0	0	0	0	0	0	0	0	0
17:15 to 18:15	71	0	71	101	0	101	23	0	23	0	0	0	56	1	57	454	14	468	60	0	60	0	0	0	0	0	0	0	0	0	0	0
<b>PM Totals</b>	<b>132</b>	<b>0</b>	<b>132</b>	<b>201</b>	<b>0</b>	<b>201</b>	<b>59</b>	<b>0</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>1</b>	<b>94</b>	<b>1,019</b>	<b>27</b>	<b>1,046</b>	<b>151</b>	<b>0</b>	<b>151</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Young St												Belgrave St								Crossing Pedestrians														
	Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)			Direction 12 (Right Turn)										Direction 12U (U Turn)						
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	F to E	E to F	H to G	G to H
7:00 to 8:00	10	0	10	96	1	97	55	2	57	0	0	0	41	5	46	517	23	540	44	4	48	0	0	0	2	4	64	25	5	3	6	43	152		
7:15 to 8:15	14	0	14	98	2	100	49	3	52	0	0	0	47	6	53	527	30	557	43	3	46	0	0	0	3	4	58	21	3	3	11	37	140		
7:30 to 8:30	18	0	18	95	3	98	46	3	49	0	0	0	42	4	46	521	23	544	46	4	50	0	0	0	4	6	46	23	4	2	14	40	139		
7:45 to 8:45	18	0	18	90	3	93	47	3	50	0	0	0	48	2	50	523	26	549	43	5	48	0	0	0	3	4	35	19	4	1	14	37	117		
8:00 to 9:00	23	0	23	86	2	88	40	1	41	0	0	0	43	2	45	496	25	521	38	3	41	0	0	0	2	4	20	23	2	1	15	30	97		
<b>AM Totals</b>	<b>33</b>	<b>0</b>	<b>33</b>	<b>182</b>	<b>3</b>	<b>185</b>	<b>95</b>	<b>3</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>84</b>	<b>7</b>	<b>91</b>	<b>1,013</b>	<b>48</b>	<b>1,061</b>	<b>82</b>	<b>7</b>	<b>89</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>84</b>	<b>48</b>	<b>7</b>	<b>4</b>	<b>21</b>	<b>73</b>	<b>249</b>		
16:15 to 17:15	22	1	23	92	0	92	39	1	40	0	0	0	50	0	50	1,292	6	1,298	65	2	67	0	0	0	0	1	22	29	3	0	25	16	96		
16:30 to 17:30	21	1	22	90	0	90	36	2	38	0	0	0	52	0	52	1,273	3	1,276	65	0	65	0	0	0	1	1	19	26	4	0	24	19	94		
16:45 to 17:45	17	1	18	92	0	92	42	2	44	0	0	0	52	0	52	1,184	3	1,187	67	0	67	0	0	0	1	1	20	26	2	0	20	19	89		
17:00 to 18:00	17	1	18	88	0	88	41	1	42	0	0	0	46	0	46	1,056	3	1,059	69	0	69	0	0	0	1	1	18	29	2	0	27	22	100		
17:15 to 18:15	12	0	12	98	0	98	32	1	33	0	0	0	45	0	45	913	1	914	63	0	63	0	0	0	1	2	15	26	1	0	26	29	100		
<b>PM Totals</b>	<b>34</b>	<b>1</b>	<b>35</b>	<b>190</b>	<b>0</b>	<b>190</b>	<b>71</b>	<b>2</b>	<b>73</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>95</b>	<b>0</b>	<b>95</b>	<b>2,205</b>	<b>7</b>	<b>2,212</b>	<b>128</b>	<b>2</b>	<b>130</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>37</b>	<b>55</b>	<b>4</b>	<b>0</b>	<b>51</b>	<b>45</b>	<b>196</b>		



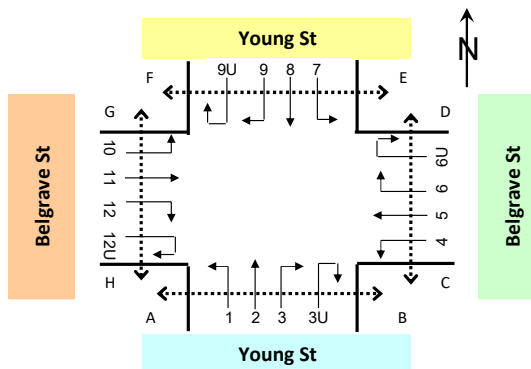
Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 11. Young Street / Belgrave Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Peak Hour Summary



Approach	Young St			Belgrave St			Young St			Belgrave St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:00 to 8:00	151	0	151	1,715	24	1,739	161	3	164	602	32	634	2,688
PM 16:15 to 17:15	197	0	197	693	13	706	153	2	155	1,407	8	1,415	2,473

Approach	Young St			Belgrave St			Young St			Belgrave St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	151	0	151	1,715	24	1,739	161	3	164	602	32	634	2,688
7:15 to 8:15	137	1	138	1,669	26	1,695	161	5	166	617	39	656	2,655
7:30 to 8:30	124	1	125	1,505	26	1,531	159	6	165	609	31	640	2,461
7:45 to 8:45	123	1	124	1,287	29	1,316	155	6	161	614	33	647	2,248
8:00 to 9:00	128	4	132	1,161	28	1,189	149	3	152	577	30	607	2,080
<b>AM Totals</b>	<b>279</b>	<b>4</b>	<b>283</b>	<b>2,876</b>	<b>52</b>	<b>2,928</b>	<b>310</b>	<b>6</b>	<b>316</b>	<b>1,179</b>	<b>62</b>	<b>1,241</b>	<b>4,768</b>
16:15 to 17:15	197	0	197	693	13	706	153	2	155	1,407	8	1,415	2,473
16:30 to 17:30	198	0	198	690	15	705	147	3	150	1,390	3	1,393	2,446
16:45 to 17:45	197	0	197	649	12	661	151	3	154	1,303	3	1,306	2,318
17:00 to 18:00	189	0	189	615	16	631	146	2	148	1,171	3	1,174	2,142
17:15 to 18:15	195	0	195	570	15	585	142	1	143	1,021	1	1,022	1,945
<b>PM Totals</b>	<b>392</b>	<b>0</b>	<b>392</b>	<b>1,263</b>	<b>28</b>	<b>1,291</b>	<b>295</b>	<b>3</b>	<b>298</b>	<b>2,428</b>	<b>9</b>	<b>2,437</b>	<b>4,418</b>

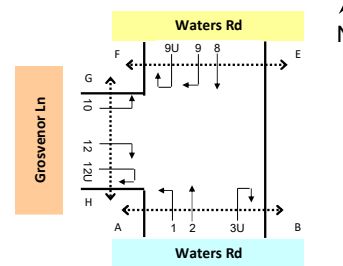
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 11. Young Street / Belgrave Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	Time Period	B to A	A to B	D to C	C to D	F to E	E to F	H to G
7:00 to 7:15	0	0	16	7	3	1	0	13
7:15 to 7:30	0	0	17	4	0	1	0	12
7:30 to 7:45	1	4	14	9	0	1	4	9
7:45 to 8:00	1	0	17	5	2	0	2	9
8:00 to 8:15	1	0	10	3	1	1	5	7
8:15 to 8:30	1	2	5	6	1	0	3	15
8:30 to 8:45	0	2	3	5	0	0	4	6
8:45 to 9:00	0	0	2	9	0	0	3	2
<b>AM Totals</b>	<b>4</b>	<b>8</b>	<b>84</b>	<b>48</b>	<b>7</b>	<b>4</b>	<b>21</b>	<b>73</b>
16:15 to 16:30	0	0	10	7	0	0	5	6
16:30 to 16:45	0	1	2	8	2	0	9	3
16:45 to 17:00	0	0	6	5	0	0	5	4
17:00 to 17:15	0	0	4	9	1	0	6	3
17:15 to 17:30	1	0	7	4	1	0	4	9
17:30 to 17:45	0	1	3	8	0	0	5	3
17:45 to 18:00	0	0	4	8	0	0	12	7
18:00 to 18:15	0	1	1	6	0	0	5	10
<b>PM Totals</b>	<b>1</b>	<b>3</b>	<b>37</b>	<b>55</b>	<b>4</b>	<b>0</b>	<b>51</b>	<b>45</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 12. Waters Road / Grosvenor Lane  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
 : 15 mins Data

**Classifications**  
 Class 1 : Lights  
 Class 2 : Heavies



Approach	Waters Rd								
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	0	0	0	17	0	17	0	0	0
7:15 to 7:30	0	0	0	10	4	14	0	0	0
7:30 to 7:45	0	0	0	16	0	16	0	0	0
7:45 to 8:00	0	0	0	21	1	22	1	0	1
8:00 to 8:15	1	0	1	17	0	17	0	0	0
8:15 to 8:30	0	0	0	23	1	24	0	0	0
8:30 to 8:45	0	0	0	18	2	20	0	0	0
8:45 to 9:00	0	0	0	24	0	24	0	0	0
<b>AM Totals</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>146</b>	<b>8</b>	<b>154</b>	<b>1</b>	<b>0</b>	<b>1</b>
16:15 to 16:30	0	0	0	22	0	22	0	0	0
16:30 to 16:45	0	0	0	25	1	26	1	0	1
16:45 to 17:00	0	0	0	19	1	20	0	0	0
17:00 to 17:15	0	0	0	24	0	24	0	0	0
17:15 to 17:30	0	0	0	18	0	18	0	0	0
17:30 to 17:45	0	0	0	22	0	22	0	0	0
17:45 to 18:00	0	0	0	31	1	32	1	0	1
18:00 to 18:15	0	0	0	37	0	37	0	0	0
<b>PM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>198</b>	<b>3</b>	<b>201</b>	<b>2</b>	<b>0</b>	<b>2</b>

Approach	Waters Rd												Grosvenor Ln						Crossing Pedestrians																
	Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A		A to B		F to E			E to F			H to G			G to H			Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	F to E	E to F	H to G	G to H	Total							
7:00 to 7:15	8	0	8	0	0	0	0	0	8	0	8	2	2	4	0	0	0	0	0	0	0	0	1	1	1	8	7	18							
7:15 to 7:30	8	0	8	0	0	0	0	0	11	1	12	6	1	7	0	0	0	0	0	0	0	0	2	3	8	12	25								

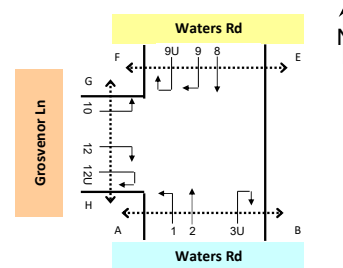


7:30 to 7:45	12	1	13	0	0	0	3	0	3	12	0	12
7:45 to 8:00	26	0	26	0	0	0	0	0	0	15	1	16
8:00 to 8:15	26	0	26	0	0	0	0	0	0	41	4	45
8:15 to 8:30	24	0	24	0	0	0	0	0	0	40	2	42
8:30 to 8:45	11	0	11	0	0	0	2	0	2	48	0	48
8:45 to 9:00	12	0	12	0	0	0	2	1	3	30	2	32
<b>AM Totals</b>	<b>127</b>	<b>1</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>205</b>	<b>10</b>	<b>215</b>
16:15 to 16:30	30	0	30	0	0	0	0	0	0	30	0	30
16:30 to 16:45	36	0	36	0	0	0	0	0	0	22	1	23
16:45 to 17:00	24	0	24	0	0	0	3	0	3	14	0	14
17:00 to 17:15	24	0	24	0	0	0	1	0	1	26	0	26
17:15 to 17:30	21	0	21	0	0	0	0	0	0	16	2	18
17:30 to 17:45	26	0	26	0	0	0	1	0	1	23	0	23
17:45 to 18:00	12	0	12	0	0	0	5	0	5	20	0	20
18:00 to 18:15	23	0	23	0	0	0	1	0	1	20	0	20
<b>PM Totals</b>	<b>196</b>	<b>0</b>	<b>196</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>171</b>	<b>3</b>	<b>174</b>

6	0	6	0	0	0	1	2
6	0	6	0	0	0	2	1
4	0	4	0	0	0	4	1
5	1	6	0	0	0	1	1
2	3	5	0	0	0	0	1
3	2	5	0	0	0	8	4
<b>34</b>	<b>9</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>11</b>
6	0	6	0	0	0	2	2
13	0	13	1	0	1	1	6
7	0	7	0	0	0	3	4
15	0	15	0	0	0	1	1
15	0	15	0	0	0	1	3
13	0	13	0	0	0	3	3
10	0	10	0	0	0	3	0
15	0	15	0	0	0	2	2
<b>94</b>	<b>0</b>	<b>94</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>21</b>

1	1	6	13	24
4	1	7	19	34
6	3	13	24	51
6	3	12	13	36
6	3	4	20	34
4	5	11	14	46
<b>30</b>	<b>20</b>	<b>69</b>	<b>122</b>	<b>268</b>
5	1	6	12	28
3	0	7	12	29
9	8	10	11	45
5	1	9	12	29
2	3	17	9	35
3	4	13	13	39
5	0	11	16	35
1	3	12	4	24
<b>33</b>	<b>20</b>	<b>85</b>	<b>89</b>	<b>264</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 12. Waters Road / Grosvenor Lane  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary

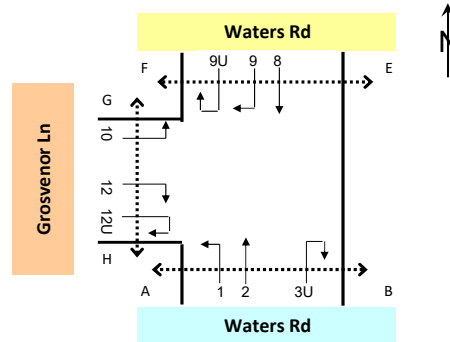


Approach	Waters Rd								
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	0	0	0	64	5	69	1	0	1
7:15 to 8:15	1	0	1	64	5	69	1	0	1
7:30 to 8:30	1	0	1	77	2	79	1	0	1
7:45 to 8:45	1	0	1	79	4	83	1	0	1
8:00 to 9:00	1	0	1	82	3	85	0	0	0
<b>AM Totals</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>146</b>	<b>8</b>	<b>154</b>	<b>1</b>	<b>0</b>	<b>1</b>
16:15 to 17:15	0	0	0	90	2	92	1	0	1
16:30 to 17:30	0	0	0	86	2	88	1	0	1
16:45 to 17:45	0	0	0	83	1	84	0	0	0
17:00 to 18:00	0	0	0	95	1	96	1	0	1
17:15 to 18:15	0	0	0	108	1	109	1	0	1
<b>PM Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>198</b>	<b>3</b>	<b>201</b>	<b>2</b>	<b>0</b>	<b>2</b>

Approach	Waters Rd									Grosvenor Ln									Crossing Pedestrians								
Direction	Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A		A to B						
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	F to E	E to F	H to G	G to H	Total		
7:00 to 8:00	54	1	55	0	0	0	3	0	3	46	2	48	20	3	23	0	0	0	3	4	8	6	29	51	101		
7:15 to 8:15	72	1	73	0	0	0	3	0	3	79	6	85	22	1	23	0	0	0	7	4	13	8	34	68	134		
7:30 to 8:30	88	1	89	0	0	0	3	0	3	108	7	115	21	1	22	0	0	0	8	5	17	8	38	69	145		
7:45 to 8:45	87	0	87	0	0	0	2	0	2	144	7	151	17	4	21	0	0	0	7	4	22	10	36	76	155		
8:00 to 9:00	73	0	73	0	0	0	4	1	5	159	8	167	14	6	20	0	0	0	13	7	22	14	40	71	167		
<b>AM Totals</b>	<b>127</b>	<b>1</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>205</b>	<b>10</b>	<b>215</b>	<b>34</b>	<b>9</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>11</b>	<b>30</b>	<b>20</b>	<b>69</b>	<b>122</b>	<b>268</b>		
16:15 to 17:15	114	0	114	0	0	0	4	0	4	92	1	93	41	0	41	1	0	1	7	13	22	10	32	47	131		
16:30 to 17:30	105	0	105	0	0	0	4	0	4	78	3	81	50	0	50	1	0	1	6	14	19	12	43	44	138		
16:45 to 17:45	95	0	95	0	0	0	5	0	5	79	2	81	50	0	50	0	0	0	8	11	19	16	49	45	148		
17:00 to 18:00	83	0	83	0	0	0	7	0	7	85	2	87	53	0	53	0	0	0	8	7	15	8	50	50	138		
17:15 to 18:15	82	0	82	0	0	0	7	0	7	79	2	81	53	0	53	0	0	0	9	8	11	10	53	42	133		
<b>PM Totals</b>	<b>196</b>	<b>0</b>	<b>196</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>171</b>	<b>3</b>	<b>174</b>	<b>94</b>	<b>0</b>	<b>94</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>21</b>	<b>33</b>	<b>20</b>	<b>85</b>	<b>89</b>	<b>264</b>		



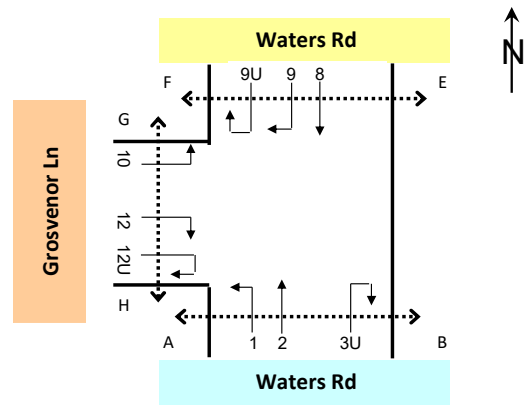
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 12. Waters Road / Grosvenor Lane  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



Approach	Waters Rd			Waters Rd			Grosvenor Ln			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 8:00 to 9:00	83	3	86	77	1	78	173	14	187	351
PM 16:15 to 17:15	91	2	93	118	0	118	134	1	135	346

Approach	Waters Rd			Waters Rd			Grosvenor Ln			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	65	5	70	57	1	58	66	5	71	199
7:15 to 8:15	66	5	71	75	1	76	101	7	108	255
7:30 to 8:30	79	2	81	91	1	92	129	8	137	310
7:45 to 8:45	81	4	85	89	0	89	161	11	172	346
8:00 to 9:00	83	3	86	77	1	78	173	14	187	351
<b>AM Totals</b>	<b>148</b>	<b>8</b>	<b>156</b>	<b>134</b>	<b>2</b>	<b>136</b>	<b>239</b>	<b>19</b>	<b>258</b>	<b>550</b>
16:15 to 17:15	91	2	93	118	0	118	134	1	135	346
16:30 to 17:30	87	2	89	109	0	109	129	3	132	330
16:45 to 17:45	83	1	84	100	0	100	129	2	131	315
17:00 to 18:00	96	1	97	90	0	90	138	2	140	327
17:15 to 18:15	109	1	110	89	0	89	132	2	134	333
<b>PM Totals</b>	<b>200</b>	<b>3</b>	<b>203</b>	<b>207</b>	<b>0</b>	<b>207</b>	<b>266</b>	<b>3</b>	<b>269</b>	<b>679</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 12. Waters Road / Grosvenor Lane  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data

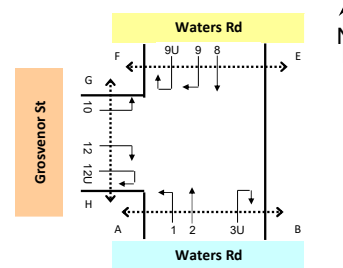


Direction	Pedestrians						
	Time Period	B to A	A to B	F to E	E to F	H to G	G to H
7:00 to 7:15	0	1	1	1	8	7	
7:15 to 7:30	0	0	2	3	8	12	
7:30 to 7:45	1	2	1	1	6	13	
7:45 to 8:00	2	1	4	1	7	19	
8:00 to 8:15	4	1	6	3	13	24	
8:15 to 8:30	1	1	6	3	12	13	
8:30 to 8:45	0	1	6	3	4	20	
8:45 to 9:00	8	4	4	5	11	14	
<b>AM Totals</b>	<b>16</b>	<b>11</b>	<b>30</b>	<b>20</b>	<b>69</b>	<b>122</b>	
16:15 to 16:30	2	2	5	1	6	12	
16:30 to 16:45	1	6	3	0	7	12	
16:45 to 17:00	3	4	9	8	10	11	
17:00 to 17:15	1	1	5	1	9	12	
17:15 to 17:30	1	3	2	3	17	9	
17:30 to 17:45	3	3	3	4	13	13	
17:45 to 18:00	3	0	5	0	11	16	

18:00 to 18:15	2	2	1	3	12	4
<b>PM Totals</b>	<b>16</b>	<b>21</b>	<b>33</b>	<b>20</b>	<b>85</b>	<b>89</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 13. Waters Road / Grosvenor Street  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
 : 15 mins Data

Classifications	Class 1	Class 2
	Lights	Heavies



Approach	Waters Rd								
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	12	0	12	12	0	12	0	0	0
7:15 to 7:30	9	0	9	15	1	16	0	0	0
7:30 to 7:45	15	0	15	18	0	18	0	0	0
7:45 to 8:00	16	2	18	17	0	17	0	0	0
8:00 to 8:15	15	3	18	13	1	14	0	0	0
8:15 to 8:30	29	3	32	37	1	38	0	0	0
8:30 to 8:45	30	1	31	38	0	38	0	0	0
8:45 to 9:00	31	3	34	23	1	24	0	0	0
<b>AM Totals</b>	<b>157</b>	<b>12</b>	<b>169</b>	<b>173</b>	<b>4</b>	<b>177</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	25	0	25	25	0	25	0	0	0
16:30 to 16:45	28	1	29	21	1	22	0	0	0
16:45 to 17:00	19	1	20	20	0	20	0	0	0
17:00 to 17:15	25	0	25	27	0	27	0	0	0
17:15 to 17:30	23	2	25	17	0	17	0	0	0
17:30 to 17:45	26	0	26	25	0	25	0	0	0
17:45 to 18:00	31	2	33	27	0	27	0	0	0
18:00 to 18:15	38	0	38	28	0	28	0	0	0
<b>PM Totals</b>	<b>215</b>	<b>6</b>	<b>221</b>	<b>190</b>	<b>1</b>	<b>191</b>	<b>0</b>	<b>0</b>	<b>0</b>

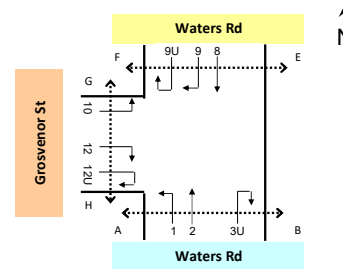
Approach	Waters Rd												Grosvenor St						Crossing Pedestrians						
	Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	F to E	E to F	H to G	G to H	Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total							
7:00 to 7:15	3	0	3	20	0	20	0	0	0	5	0	5	6	0	6	0	0	0	9	12	1	1	3	3	29
7:15 to 7:30	3	0	3	21	0	21	0	0	0	15	0	15	8	0	8	0	0	0	16	16	0	0	1	3	36

7:30 to 7:45	5	0	5	22	0	22	0	0	0	6	0	6
7:45 to 8:00	10	0	10	42	1	43	0	0	0	18	0	18
8:00 to 8:15	23	1	24	58	0	58	0	0	0	27	0	27
8:15 to 8:30	7	0	7	38	0	38	0	0	0	14	0	14
8:30 to 8:45	3	0	3	28	0	28	0	0	0	8	0	8
8:45 to 9:00	3	0	3	19	0	19	0	0	0	14	0	14
<b>AM Totals</b>	<b>57</b>	<b>1</b>	<b>58</b>	<b>248</b>	<b>1</b>	<b>249</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>0</b>	<b>107</b>
16:15 to 16:30	7	0	7	26	0	26	0	0	0	25	0	25
16:30 to 16:45	6	0	6	16	0	16	0	0	0	26	0	26
16:45 to 17:00	7	0	7	14	0	14	0	0	0	21	0	21
17:00 to 17:15	10	0	10	27	0	27	0	0	0	21	0	21
17:15 to 17:30	6	0	6	23	0	23	0	0	0	26	0	26
17:30 to 17:45	4	1	5	16	0	16	0	0	0	29	0	29
17:45 to 18:00	6	0	6	19	0	19	0	0	0	24	0	24
18:00 to 18:15	7	0	7	25	0	25	0	0	0	24	0	24
<b>PM Totals</b>	<b>53</b>	<b>1</b>	<b>54</b>	<b>166</b>	<b>0</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>196</b>	<b>0</b>	<b>196</b>

8	1	9	0	0	0	15	23
15	0	15	0	0	0	24	20
12	0	12	0	0	0	32	60
19	0	19	0	0	0	22	15
13	0	13	0	0	0	20	13
14	0	14	0	0	0	13	15
<b>95</b>	<b>1</b>	<b>96</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>151</b>	<b>174</b>
26	0	26	0	0	0	21	18
21	0	21	0	0	0	20	10
24	0	24	0	0	0	16	23
13	0	13	0	0	0	23	18
19	0	19	0	0	0	9	17
23	0	23	0	0	0	14	13
15	0	15	0	0	0	16	23
17	0	17	0	0	0	12	24
<b>158</b>	<b>0</b>	<b>158</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>131</b>	<b>146</b>

1	0	1	3	43
2	0	2	15	63
1	1	2	8	104
1	0	2	9	49
0	0	1	2	36
2	0	1	2	33
<b>8</b>	<b>2</b>	<b>13</b>	<b>45</b>	<b>393</b>
0	1	5	3	48
0	0	5	1	36
0	1	2	5	47
1	0	3	7	52
1	0	2	0	29
0	0	4	2	33
1	0	1	8	49
0	1	9	1	47
<b>3</b>	<b>3</b>	<b>31</b>	<b>27</b>	<b>341</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 13. Waters Road / Grosvenor Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : Hourly Summary



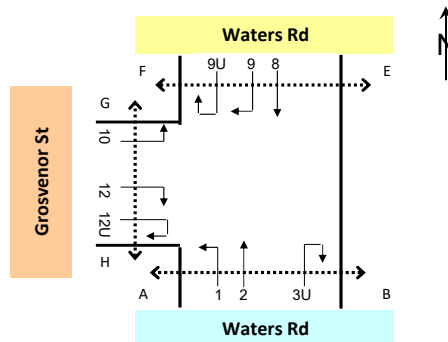
Approach	Waters Rd								
	Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3U (U Turn)		
Time Period	Lights	Heavyies	Total	Lights	Heavyies	Total	Lights	Heavyies	Total
7:00 to 8:00	52	2	54	62	1	63	0	0	0
7:15 to 8:15	55	5	60	63	2	65	0	0	0
7:30 to 8:30	75	8	83	85	2	87	0	0	0
7:45 to 8:45	90	9	99	105	2	107	0	0	0
8:00 to 9:00	105	10	115	111	3	114	0	0	0
<b>AM Totals</b>	<b>157</b>	<b>12</b>	<b>169</b>	<b>173</b>	<b>4</b>	<b>177</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	97	2	99	93	1	94	0	0	0
16:30 to 17:30	95	4	99	85	1	86	0	0	0
16:45 to 17:45	93	3	96	89	0	89	0	0	0
17:00 to 18:00	105	4	109	96	0	96	0	0	0
17:15 to 18:15	118	4	122	97	0	97	0	0	0
<b>PM Totals</b>	<b>215</b>	<b>6</b>	<b>221</b>	<b>190</b>	<b>1</b>	<b>191</b>	<b>0</b>	<b>0</b>	<b>0</b>



Approach	Waters Rd									Grosvenor St						Crossing Pedestrians											
Direction	Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A		A to B						
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	F to E	E to F	H to G	G to H	Total		
7:00 to 8:00	21	0	21	105	1	106	0	0	0	44	0	44	37	1	38	0	0	0	64	71	4	1	7	24	171		
7:15 to 8:15	41	1	42	143	1	144	0	0	0	66	0	66	43	1	44	0	0	0	87	119	4	1	6	29	246		
7:30 to 8:30	45	1	46	160	1	161	0	0	0	65	0	65	54	1	55	0	0	0	93	118	5	1	7	35	259		
7:45 to 8:45	43	1	44	166	1	167	0	0	0	67	0	67	59	0	59	0	0	0	98	108	4	1	7	34	252		
8:00 to 9:00	36	1	37	143	0	143	0	0	0	63	0	63	58	0	58	0	0	0	87	103	4	1	6	21	222		
<b>AM Totals</b>	<b>57</b>	<b>1</b>	<b>58</b>	<b>248</b>	<b>1</b>	<b>249</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>0</b>	<b>107</b>	<b>95</b>	<b>1</b>	<b>96</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>151</b>	<b>174</b>	<b>8</b>	<b>2</b>	<b>13</b>	<b>45</b>	<b>393</b>		
16:15 to 17:15	30	0	30	83	0	83	0	0	0	93	0	93	84	0	84	0	0	0	80	69	1	2	15	16	183		
16:30 to 17:30	29	0	29	80	0	80	0	0	0	94	0	94	77	0	77	0	0	0	68	68	2	1	12	13	164		
16:45 to 17:45	27	1	28	80	0	80	0	0	0	97	0	97	79	0	79	0	0	0	62	71	2	1	11	14	161		
17:00 to 18:00	26	1	27	85	0	85	0	0	0	100	0	100	70	0	70	0	0	0	62	71	3	0	10	17	163		
17:15 to 18:15	23	1	24	83	0	83	0	0	0	103	0	103	74	0	74	0	0	0	51	77	2	1	16	11	158		
<b>PM Totals</b>	<b>53</b>	<b>1</b>	<b>54</b>	<b>166</b>	<b>0</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>196</b>	<b>0</b>	<b>196</b>	<b>158</b>	<b>0</b>	<b>158</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>131</b>	<b>146</b>	<b>3</b>	<b>3</b>	<b>31</b>	<b>27</b>	<b>341</b>		



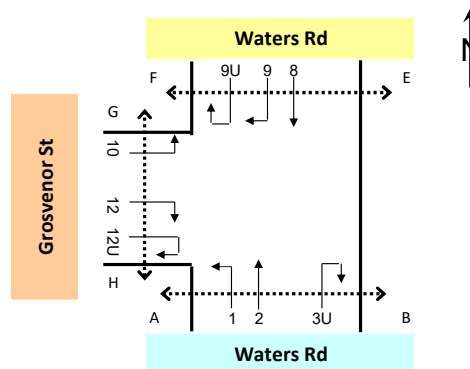
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 13. Waters Road / Grosvenor Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



Approach	Waters Rd			Waters Rd			Grosvenor St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:45 to 8:45	195	11	206	209	2	211	126	0	126	543
PM 17:15 to 18:15	215	4	219	106	1	107	177	0	177	503

Approach	Waters Rd			Waters Rd			Grosvenor St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	114	3	117	126	1	127	81	1	82	326
7:15 to 8:15	118	7	125	184	2	186	109	1	110	421
7:30 to 8:30	160	10	170	205	2	207	119	1	120	497
7:45 to 8:45	195	11	206	209	2	211	126	0	126	543
8:00 to 9:00	216	13	229	179	1	180	121	0	121	530
<b>AM Totals</b>	<b>330</b>	<b>16</b>	<b>346</b>	<b>305</b>	<b>2</b>	<b>307</b>	<b>202</b>	<b>1</b>	<b>203</b>	<b>856</b>
16:15 to 17:15	190	3	193	113	0	113	177	0	177	483
16:30 to 17:30	180	5	185	109	0	109	171	0	171	465
16:45 to 17:45	182	3	185	107	1	108	176	0	176	469
17:00 to 18:00	201	4	205	111	1	112	170	0	170	487
17:15 to 18:15	215	4	219	106	1	107	177	0	177	503
<b>PM Totals</b>	<b>405</b>	<b>7</b>	<b>412</b>	<b>219</b>	<b>1</b>	<b>220</b>	<b>354</b>	<b>0</b>	<b>354</b>	<b>986</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 13. Waters Road / Grosvenor Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data

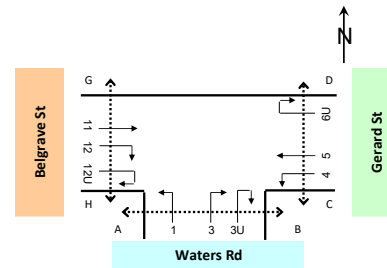


Direction	Pedestrians					
	B to A	A to B	F to E	E to F	H to G	G to H
7:00 to 7:15	9	12	1	1	3	3
7:15 to 7:30	16	16	0	0	1	3
7:30 to 7:45	15	23	1	0	1	3
7:45 to 8:00	24	20	2	0	2	15
8:00 to 8:15	32	60	1	1	2	8
8:15 to 8:30	22	15	1	0	2	9
8:30 to 8:45	20	13	0	0	1	2
8:45 to 9:00	13	15	2	0	1	2
<b>AM Totals</b>	<b>151</b>	<b>174</b>	<b>8</b>	<b>2</b>	<b>13</b>	<b>45</b>
16:15 to 16:30	21	18	0	1	5	3
16:30 to 16:45	20	10	0	0	5	1
16:45 to 17:00	16	23	0	1	2	5
17:00 to 17:15	23	18	1	0	3	7
17:15 to 17:30	9	17	1	0	2	0
17:30 to 17:45	14	13	0	0	4	2
17:45 to 18:00	16	23	1	0	1	8

18:00 to 18:15	12	24		0	1	9	1
<b>PM Totals</b>	<b>131</b>	<b>146</b>		<b>3</b>	<b>3</b>	<b>31</b>	<b>27</b>

Job No. : N6198  
 Client : GTA  
 Suburb : Neutral Bay  
 Location : 14. Waters Road / Belgrave Street  
 Day/Date : Thu, 18 Feb 2021  
 Weather : Fine  
 Description : Classified Intersection Count  
 : 15 mins Data

Classifications	Class 1 Lights	Class 2 Heavies
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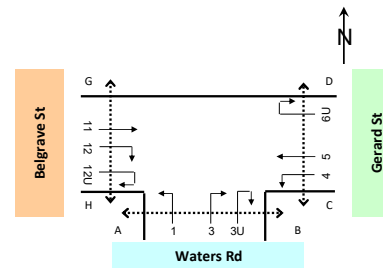


Approach	Waters Rd						Gerard St											
	Direction 1 (Left Turn)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6U (U Turn)		
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15	6	0	6	15	0	15	0	0	0	22	0	22	312	5	317	0	0	0
7:15 to 7:30	7	0	7	22	1	23	0	0	0	27	0	27	389	4	393	0	0	0
7:30 to 7:45	11	0	11	14	0	14	0	0	0	25	0	25	418	6	424	0	0	0
7:45 to 8:00	16	0	16	21	0	21	0	0	0	55	1	56	407	1	408	0	0	0
8:00 to 8:15	13	1	14	35	0	35	0	0	0	86	1	87	404	5	409	0	0	0
8:15 to 8:30	21	1	22	25	0	25	0	0	0	45	0	45	448	4	452	0	0	0
8:30 to 8:45	19	0	19	22	0	22	0	0	0	32	0	32	443	8	451	0	0	0
8:45 to 9:00	10	1	11	24	0	24	0	0	0	21	0	21	354	7	361	0	0	0
<b>AM Totals</b>	<b>103</b>	<b>3</b>	<b>106</b>	<b>178</b>	<b>1</b>	<b>179</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>313</b>	<b>2</b>	<b>315</b>	<b>3,175</b>	<b>40</b>	<b>3,215</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 16:30	15	0	15	37	0	37	0	0	0	36	0	36	174	4	178	0	0	0
16:30 to 16:45	12	1	13	37	0	37	0	0	0	19	0	19	176	4	180	0	0	0
16:45 to 17:00	11	0	11	29	0	29	0	0	0	23	0	23	163	1	164	0	0	0
17:00 to 17:15	9	0	9	42	0	42	0	0	0	31	0	31	173	2	175	0	0	0
17:15 to 17:30	8	0	8	33	0	33	0	0	0	24	0	24	146	3	149	0	0	0
17:30 to 17:45	16	0	16	36	0	36	0	0	0	22	1	23	182	4	186	0	0	0
17:45 to 18:00	16	0	16	36	0	36	0	0	0	23	0	23	145	2	147	0	0	0
18:00 to 18:15	16	0	16	28	0	28	0	0	0	29	0	29	159	3	162	0	0	0
<b>PM Totals</b>	<b>103</b>	<b>1</b>	<b>104</b>	<b>278</b>	<b>0</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>207</b>	<b>1</b>	<b>208</b>	<b>1,318</b>	<b>23</b>	<b>1,341</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Belgrave St									Crossing Pedestrians						
	Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)									
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	B to A	A to B	D to C	C to D	H to G	G to H	Total
7:00 to 7:15	107	9	116	0	0	0	0	0	0	1	2	23	2	0	0	28
7:15 to 7:30	106	8	114	0	0	0	0	0	0	3	3	17	0	0	0	23

7:30 to 7:45	125	10	135	0	0	0	0	0	0	4	4	23	7	0	0	38
7:45 to 8:00	122	4	126	0	0	0	0	0	0	3	1	65	9	0	0	78
8:00 to 8:15	135	2	137	0	0	0	0	0	0	4	15	70	2	0	0	91
8:15 to 8:30	145	12	157	0	0	0	0	0	0	2	5	33	8	0	0	48
8:30 to 8:45	130	3	133	0	0	0	0	0	0	2	5	9	5	0	0	21
8:45 to 9:00	142	9	151	0	0	0	0	0	0	1	0	8	9	0	0	18
<b>AM Totals</b>	<b>1,012</b>	<b>57</b>	<b>1,069</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>35</b>	<b>248</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>345</b>
16:15 to 16:30	239	0	239	0	0	0	0	0	0	0	1	20	10	0	0	31
16:30 to 16:45	310	3	313	0	0	0	0	0	0	6	1	8	3	0	0	18
16:45 to 17:00	304	1	305	0	0	0	0	0	0	2	5	20	9	0	0	36
17:00 to 17:15	311	1	312	0	0	0	0	0	0	2	4	17	3	0	0	26
17:15 to 17:30	364	2	366	0	0	0	0	0	0	4	2	3	16	0	0	25
17:30 to 17:45	309	1	310	0	0	0	0	0	0	4	4	5	9	0	0	22
17:45 to 18:00	334	4	338	1	0	1	0	0	0	1	3	6	10	0	0	20
18:00 to 18:15	323	3	326	0	0	0	0	0	0	2	2	2	16	0	0	22
<b>PM Totals</b>	<b>2,494</b>	<b>15</b>	<b>2,509</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>22</b>	<b>81</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>200</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 14. Waters Road / Belgrave Street  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Hourly Summary



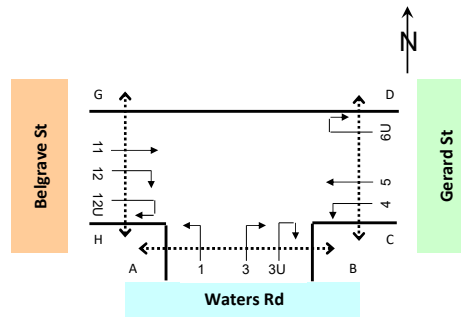
Approach	Waters Rd						Gerard St											
	Direction 1 (Left Turn)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6U (U Turn)		
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 8:00	40	0	40	72	1	73	0	0	0	129	1	130	1,526	16	1,542	0	0	0
7:15 to 8:15	47	1	48	92	1	93	0	0	0	193	2	195	1,618	16	1,634	0	0	0
7:30 to 8:30	61	2	63	95	0	95	0	0	0	211	2	213	1,677	16	1,693	0	0	0
7:45 to 8:45	69	2	71	103	0	103	0	0	0	218	2	220	1,702	18	1,720	0	0	0
8:00 to 9:00	63	3	66	106	0	106	0	0	0	184	1	185	1,649	24	1,673	0	0	0
<b>AM Totals</b>	<b>103</b>	<b>3</b>	<b>106</b>	<b>178</b>	<b>1</b>	<b>179</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>313</b>	<b>2</b>	<b>315</b>	<b>3,175</b>	<b>40</b>	<b>3,215</b>	<b>0</b>	<b>0</b>	<b>0</b>
16:15 to 17:15	47	1	48	145	0	145	0	0	0	109	0	109	686	11	697	0	0	0
16:30 to 17:30	40	1	41	141	0	141	0	0	0	97	0	97	658	10	668	0	0	0
16:45 to 17:45	44	0	44	140	0	140	0	0	0	100	1	101	664	10	674	0	0	0
17:00 to 18:00	49	0	49	147	0	147	0	0	0	100	1	101	646	11	657	0	0	0
17:15 to 18:15	56	0	56	133	0	133	0	0	0	98	1	99	632	12	644	0	0	0
<b>PM Totals</b>	<b>103</b>	<b>1</b>	<b>104</b>	<b>278</b>	<b>0</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>207</b>	<b>1</b>	<b>208</b>	<b>1,318</b>	<b>23</b>	<b>1,341</b>	<b>0</b>	<b>0</b>	<b>0</b>

Approach	Direction	Time Period	Belgrave St									Crossing Pedestrians						
			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)			B to A	A to B	D to C	C to D	H to G	G to H	Total
			Lights	Heavy's	Total	Lights	Heavy's	Total	Lights	Heavy's	Total							
7:00 to 8:00			460	31	491	0	0	0	0	0	0	11	10	128	18	0	0	167
7:15 to 8:15			488	24	512	0	0	0	0	0	0	14	23	175	18	0	0	230
7:30 to 8:30			527	28	555	0	0	0	0	0	0	13	25	191	26	0	0	255
7:45 to 8:45			532	21	553	0	0	0	0	0	0	11	26	177	24	0	0	238
8:00 to 9:00			552	26	578	0	0	0	0	0	0	9	25	120	24	0	0	178
<b>AM Totals</b>			<b>1,012</b>	<b>57</b>	<b>1,069</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>35</b>	<b>248</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>345</b>
16:15 to 17:15			1,164	5	1,169	0	0	0	0	0	0	10	11	65	25	0	0	111
16:30 to 17:30			1,289	7	1,296	0	0	0	0	0	0	14	12	48	31	0	0	105
16:45 to 17:45			1,288	5	1,293	0	0	0	0	0	0	12	15	45	37	0	0	109
17:00 to 18:00			1,318	8	1,326	1	0	1	0	0	0	11	13	31	38	0	0	93
17:15 to 18:15			1,330	10	1,340	1	0	1	0	0	0	11	11	16	51	0	0	89
<b>PM Totals</b>			<b>2,494</b>	<b>15</b>	<b>2,509</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>22</b>	<b>81</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>200</b>





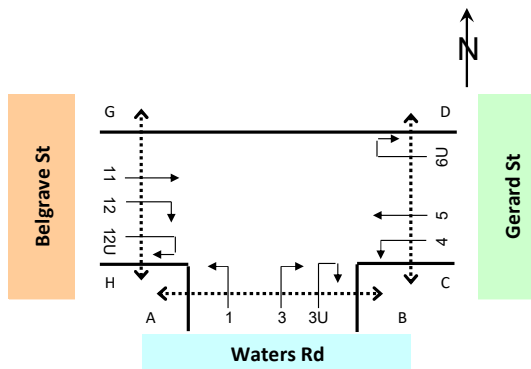
**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 14. Waters Road / Belgrave Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Peak Hour Summary



Approach	Waters Rd			Gerard St			Belgrave St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
AM 7:45 to 8:45	172	2	174	1,920	20	1,940	532	21	553	2,667
PM 17:00 to 18:00	196	0	196	746	12	758	1,319	8	1,327	2,281

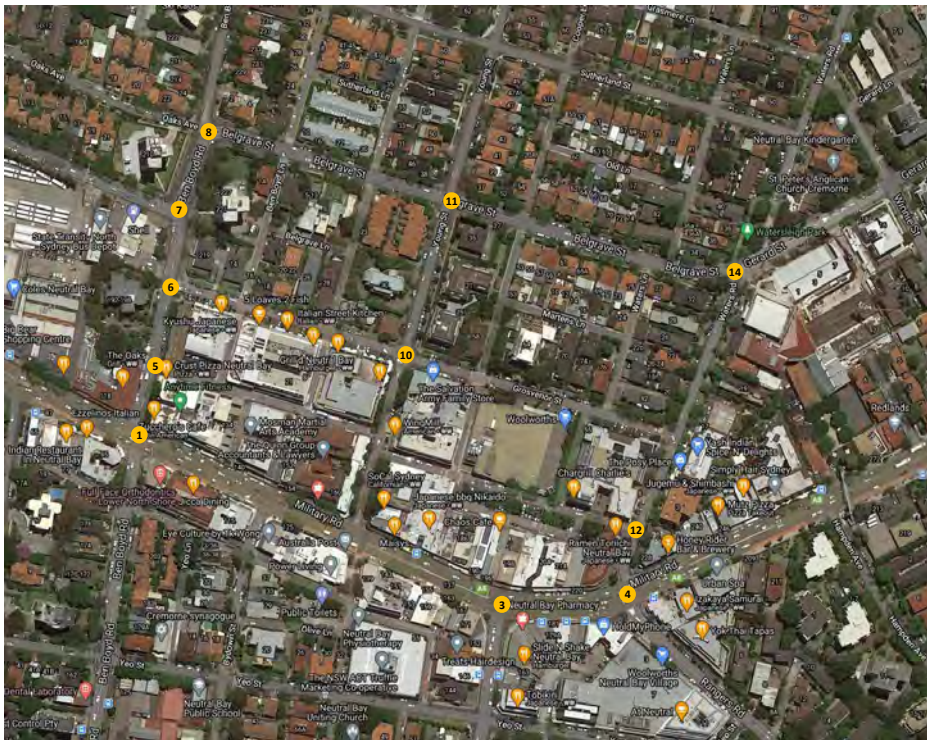
Approach	Waters Rd			Gerard St			Belgrave St			Grand Total
	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 8:00	112	1	113	1,655	17	1,672	460	31	491	2,276
7:15 to 8:15	139	2	141	1,811	18	1,829	488	24	512	2,482
7:30 to 8:30	156	2	158	1,888	18	1,906	527	28	555	2,619
7:45 to 8:45	172	2	174	1,920	20	1,940	532	21	553	2,667
8:00 to 9:00	169	3	172	1,833	25	1,858	552	26	578	2,608
<b>AM Totals</b>	<b>281</b>	<b>4</b>	<b>285</b>	<b>3,488</b>	<b>42</b>	<b>3,530</b>	<b>1,012</b>	<b>57</b>	<b>1,069</b>	<b>4,884</b>
16:15 to 17:15	192	1	193	795	11	806	1,164	5	1,169	2,168
16:30 to 17:30	181	1	182	755	10	765	1,289	7	1,296	2,243
16:45 to 17:45	184	0	184	764	11	775	1,288	5	1,293	2,252
17:00 to 18:00	196	0	196	746	12	758	1,319	8	1,327	2,281
17:15 to 18:15	189	0	189	730	13	743	1,331	10	1,341	2,273
<b>PM Totals</b>	<b>381</b>	<b>1</b>	<b>382</b>	<b>1,525</b>	<b>24</b>	<b>1,549</b>	<b>2,495</b>	<b>15</b>	<b>2,510</b>	<b>4,441</b>

**Job No.** : N6198  
**Client** : GTA  
**Suburb** : Neutral Bay  
**Location** : 14. Waters Road / Belgrave Street  
  
**Day/Date** : Thu, 18 Feb 2021  
**Weather** : Fine  
**Description** : Classified Intersection Count  
: Pedestrian Data



Direction	Pedestrians							
	Time Period	B to A	A to B	D to C	C to D		H to G	G to H
	7:00 to 7:15	1	2	23	2		0	0
	7:15 to 7:30	3	3	17	0		0	0
	7:30 to 7:45	4	4	23	7		0	0
	7:45 to 8:00	3	1	65	9		0	0
	8:00 to 8:15	4	15	70	2		0	0
	8:15 to 8:30	2	5	33	8		0	0
	8:30 to 8:45	2	5	9	5		0	0
	8:45 to 9:00	1	0	8	9		0	0
	<b>AM Totals</b>	<b>20</b>	<b>35</b>	<b>248</b>	<b>42</b>		<b>0</b>	<b>0</b>
	16:15 to 16:30	0	1	20	10		0	0
	16:30 to 16:45	6	1	8	3		0	0
	16:45 to 17:00	2	5	20	9		0	0
	17:00 to 17:15	2	4	17	3		0	0
	17:15 to 17:30	4	2	3	16		0	0
	17:30 to 17:45	4	4	5	9		0	0
	17:45 to 18:00	1	3	6	10		0	0
	18:00 to 18:15	2	2	2	16		0	0
	<b>PM Totals</b>	<b>21</b>	<b>22</b>	<b>81</b>	<b>76</b>		<b>0</b>	<b>0</b>

Client GTA  
 Date Thursday, 18th February 2021  
 Survey Time 07:00-09:00 & 16:15-18:15 (4 hours)  
 Description Queue Length Surveys



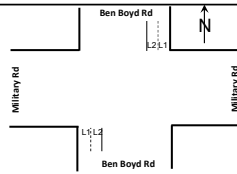
[Location]

1. Military Road / Ben Boyd Road
3. Military Road / Wycombe Road
4. Military Road / Waters Road
5. Ben Boyd Road / Grosvenor Lane
6. Ben Boyd Road / Grosvenor Street
7. Ben Boyd Road / Ernest Street
8. Ben Boyd Road / Oaks Avenue
10. Young Street / Grosvenor Street
11. Young Street / Belgrave Street
12. Waters Road / Grosvenor Lane
14. Waters Road / Belgrave Street

[Survey date]

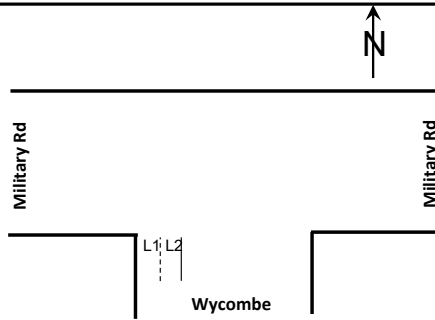
Thursday, 18th February 2021

**Client** GTA  
**Location** 1. Military Road / Ben Boyd Road  
**Date** Thursday, 18th February 2021  
**Survey Time** 07:00-09:00 & 16:15-18:15 (4 hours)  
**Description** Queue Length Surveys



AM	North Leg (Ben Boyd Rd)				AM	South Leg (Ben Boyd Rd)				PM	North Leg (Ben Boyd Rd)				PM	South Leg (Ben Boyd Rd)				
	Lane 1		Lane 2			Lane 1		Lane 2			Lane 1		Lane 2			Lane 1		Lane 2		
	Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy	
7:01:24	2	0	1	1	7:02:15	8	0	4	0	16:16:03	5	0	3	0	16:16:55	1	0	8	0	
7:03:46	4	0	3	0	7:04:43	2	1	5	1	16:18:20	4	0	1	0	16:19:12	4	0	9	0	
7:06:08	2	0	3	0	7:06:56	6	0	1	0	16:20:32	4	0	1	0	16:21:34	6	0	4	0	
7:08:22	2	0	2	0	7:09:14	3	0	6	0	16:22:23	3	0	3	0	16:23:16	6	0	6	0	
7:10:48	5	0	5	0	7:11:40	0	0	3	1	16:24:49	4	0	5	0	16:25:39	12	0	4	0	
7:13:09	0	0	3	0	7:11:46	1	0	0	0	16:27:10	5	0	5	0	16:28:10	10	0	4	0	
7:15:28	2	0	3	0	7:14:00	1	0	2	1	16:29:25	5	0	5	0	16:30:16	0	0	9	0	
7:17:43	1	0	3	0	7:16:19	0	0	6	0	16:31:45	4	0	5	0	16:30:23	9	0	0	0	
7:20:06	1	0	0	0	7:16:29	4	0	0	0	16:34:09	4	0	5	0	16:32:35	12	0	4	0	
7:22:27	2	0	3	0	7:18:32	0	0	5	0	16:36:29	2	0	6	0	16:35:01	7	0	6	0	
7:24:41	3	0	3	0	7:18:40	2	0	0	0	16:38:45	5	0	5	0	16:37:20	5	0	7	0	
7:27:07	3	0	3	0	7:20:58	0	0	6	0	16:41:03	6	0	4	0	16:39:35	3	0	4	0	
7:29:22	5	0	5	0	7:21:08	8	0	0	0	16:43:20	5	0	2	0	16:41:56	8	0	3	1	
7:31:47	5	0	2	0	7:21:19	3	0	11	1	16:45:30	2	0	3	0	16:44:12	0	0	2	0	
7:34:07	3	0	3	0	7:25:32	3	0	3	0	16:47:47	4	0	3	0	16:44:21	1	0	0	0	
7:36:23	5	0	5	0	7:27:58	4	0	5	0	16:50:02	4	0	2	0	16:46:23	6	0	7	0	
7:38:46	1	0	4	0	7:30:16	3	0	2	0	16:52:26	4	0	3	0	16:50:56	5	1	13	1	
7:41:01	5	0	1	0	7:32:37	0	0	6	0	16:54:47	2	0	4	0	16:53:20	1	1	5	0	
7:43:25	2	0	1	0	7:32:44	3	0	0	0	16:57:03	3	4	0	5	0	16:55:38	5	0	4	0
7:45:44	3	0	5	0	7:35:02	3	0	2	1	16:59:27	3	0	4	0	16:57:55	5	0	0	0	
7:48:08	2	0	2	0	7:37:16	3	0	3	0	17:01:43	3	0	5	0	16:58:08	0	0	3	0	
7:50:27	4	1	4	0	7:39:38	6	0	2	0	17:04:05	5	0	5	0	17:00:18	10	0	5	1	
7:52:44	4	1	4	0	7:41:59	3	0	7	0	17:06:23	4	0	5	0	17:02:35	2	0	1	0	
7:55:07	5	0	5	0	7:44:21	6	0	3	0	17:08:46	5	0	4	0	17:04:55	3	0	8	0	
7:57:23	5	0	5	0	7:46:35	9	0	4	0	17:11:03	3	0	4	0	17:07:15	3	0	8	0	
7:59:43	4	0	5	0	7:49:00	3	0	10	0	17:13:25	4	0	2	0	17:09:39	6	0	5	0	
8:02:04	4	0	5	0	7:51:19	8	1	5	0	17:15:44	2	0	2	0	17:11:55	4	0	7	0	
8:04:24	5	0	3	0	7:53:36	0	1	6	1	17:18:03	4	0	4	0	17:14:14	2	0	4	0	
8:06:43	5	0	2	0	7:55:58	3	0	17	0	17:20:25	3	0	2	0	17:16:34	7	0	3	0	
8:09:07	1	0	3	0	7:58:15	10	0	13	0	17:22:41	1	0	1	0	17:18:58	1	0	2	0	
8:11:23	5	0	5	0	8:00:32	3	0	7	0	17:25:02	4	0	2	0	17:21:15	2	0	5	0	
8:13:46	3	1	2	1	8:02:56	2	0	13	0	17:27:23	3	0	3	1	17:23:35	1	0	6	0	
8:16:04	4	0	1	1	8:05:16	6	0	3	0	17:29:42	5	1	4	0	17:25:55	9	0	9	0	
8:18:25	3	1	3	1	8:07:48	5	0	5	0	17:32:03	2	0	5	0	17:28:14	4	0	6	0	
8:20:46	5	0	4	0	8:09:53	5	0	11	1	17:34:25	5	0	4	0	17:30:34	6	0	3	0	
8:23:04	6	0	4	0	8:12:15	3	0	10	0	17:36:44	5	0	5	0	17:32:53	2	0	10	0	
8:25:24	1	1	5	0	8:14:35	3	0	4	0	17:39:03	5	0	5	0	17:35:14	8	0	4	0	
8:27:44	5	1	3	0	8:16:55	5	0	9	1	17:41:23	3	0	4	1	17:37:35	2	0	11	1	
8:30:05	2	0	4	0	8:19:15	0	0	4	0	17:43:43	4	1	3	1	17:39:36	3	0	4	0	
8:32:23	3	0	4	1	8:19:26	15	0	0	0	17:46:02	5	0	4	0	17:42:15	5	0	11	0	
8:34:44	2	0	4	1	8:21:34	2	0	11	0	17:48:23	6	0	3	1	17:44:37	5	0	3	0	
8:37:05	5	0	5	0	8:23:55	4	0	8	1	17:50:44	6	0	3	0	17:46:55	3	0	5	0	
8:39:24	6	0	5	0	8:26:15	3	1	9	0	17:53:07	6	0	4	0	17:49:15	1	0	7	1	
8:41:43	0	0	3	0	8:28:34	3	1	6	0	17:55:23	5	0	4	0	17:51:34	10	0	0	0	
8:44:06	2	0	2	0	8:30:54	5	0	9	2	17:57:44	4	0	5	0	17:53:50	0	0	8	0	
8:46:25	5	0	2	0	8:33:17	10	0	4	0	18:00:02	5	0	5	0	17:56:15	9	1	2	0	
8:48:45	2	0	2	1	8:35:34	5	0	12	0	18:02:27	5	0	5	0	17:58:35	3	1	14	0	
8:51:04	5	0	2	1	8:38:05	12	0	3	0	18:04:47	5	0	5	0	18:00:54	3	0	9	0	
8:53:24	4	0	2	0	8:40:15	7	0	12	0	18:07:05	6	0	5	0	18:03:18	15	0	11	0	
8:55:44	5	0	2	0	8:42:35	2	0	5	0	18:09:23	5	0	5	0	18:07:55	4	0	10	0	
8:58:06	5	0	5	0	8:44:58	11	1	4	0	18:11:42	5	0	6	0	18:10:15	6	0	10	0	
MAX	6	1	5	1	8:47:15	0	0	2	0	18:14:04	5	0	5	0	18:12:33	7	1	6	0	
MIN	0	0	0	0	8:47:27	9	1	0	0	MAX	6	1	6	1	18:14:56	8	0	9	0	
					8:48:35	0	0	6	0	MIN	1	0	1	0	MAX	15	1	14	1	
					8:48:47	4	0	0	0						MIN	0	0	0	0	
					8:51:55	2	0	9	1											
					8:54:16	9	0	6	0											
					8:56:35	5	0	3	0											
					8:58:57	3	0	6	0											
					MAX	15	1	17	2											
					MIN	0	0	0	0											
						11		13												

**Client** GTA  
**Location** 3. Military Road / Wycombe Road  
**Date** Thursday, 18th February 2021  
**Survey Time** 07:00-09:00 & 16:15-18:15 (4 hours)  
**Description** Queue Length Surveys



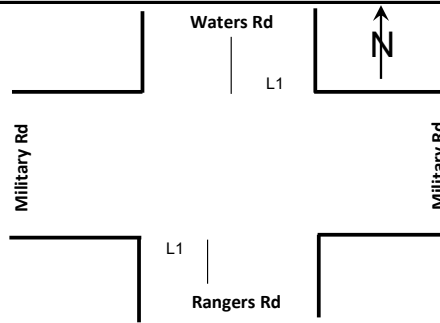
AM	South Leg (Wycombe Rd)			
	Lane 1		Lane 2	
	Light	Heavy	Light	Heavy
7:01:09	3	0	2	2
7:03:29	3	0	3	0
7:05:54	3	0	0	0
7:08:15	2	0	3	1
7:10:26	2	0	0	0
7:12:54	0	0	2	0
7:15:05	1	0	1	0
7:17:26	2	0	3	1
7:19:50	1	0	1	0
7:22:07	6	0	4	0
7:24:33	4	0	3	0
7:26:48	3	0	4	1
7:29:13	4	1	3	0
7:31:23	2	0	4	1
7:33:47	2	0	6	0
7:36:14	3	0	3	0
7:38:31	3	1	0	0
7:40:51	1	1	4	1
7:43:18	1	0	5	0
7:45:30	4	0	4	0
7:47:44	2	0	5	0
7:50:13	4	1	4	0
7:52:33	2	1	5	0
7:54:44	4	0	5	0
7:57:13	5	0	1	0
7:59:29	6	0	3	1
8:01:49	5	0	6	0
8:04:08	5	0	7	0
8:06:29	5	0	4	1
8:08:49	5	1	6	0
8:11:09	5	0	2	1
8:13:30	5	0	7	0
8:15:51	4	0	5	0
8:18:08	4	1	6	0
8:20:32	4	0	2	0
8:22:50	1	0	5	0
8:25:10	3	1	4	0
8:27:29	4	0	4	1
8:29:52	5	0	5	0
8:32:09	6	0	5	0
8:34:29	3	1	4	0
8:36:50	0	0	2	1
8:39:10	3	0	5	0
8:41:30	4	0	6	0
8:43:49	4	0	5	1
8:46:09	2	1	3	1
8:48:30	3	0	3	1

PM	South Leg (Wycombe Rd)			
	Lane 1		Lane 2	
	Light	Heavy	Light	Heavy
16:16:28	0	0	3	0
16:18:46	2	0	4	0
16:21:05	1	2	4	0
16:23:15	4	0	6	0
16:25:08	1	0	4	0
16:27:36	1	0	5	0
16:29:55	4	0	6	0
16:32:12	1	0	5	0
16:34:30	1	0	5	0
16:36:46	6	1	5	0
16:39:11	0	0	4	0
16:41:33	1	0	4	0
16:43:42	2	0	4	1
16:46:04	2	0	3	0
16:48:14	4	0	2	0
16:50:35	2	1	4	0
16:52:50	4	0	3	1
16:55:12	5	0	4	0
16:57:33	3	0	6	0
16:59:52	3	0	1	0
17:02:12	2	0	4	0
17:04:29	3	0	5	0
17:06:49	2	0	2	1
17:09:06	2	0	3	0
17:11:33	3	0	3	0
17:13:48	3	0	4	0
17:16:10	3	0	3	0
17:18:27	2	0	4	0
17:20:41	4	0	4	0
17:23:08	3	0	1	0
17:25:28	4	0	4	0
17:27:45	2	0	4	1
17:30:08	2	0	7	0
17:32:27	2	0	6	0
17:34:49	5	0	5	0
17:37:09	1	0	5	0
17:39:29	3	0	4	0
17:41:49	5	0	4	0
17:44:11	2	0	5	0
17:46:30	2	0	4	0
17:48:51	4	0	5	0
17:51:11	6	1	1	2
17:53:27	2	0	4	0
17:55:52	1	0	7	0
17:58:07	1	0	8	0
18:00:29	2	0	3	0
18:02:50	2	0	5	0

8:50:50	1	0	1	1
8:53:05	2	0	4	0
8:55:22	7	1	2	0
8:57:51	3	0	5	0
<b>MAX</b>	7	1	7	2
<b>MIN</b>	0	0	0	0
	6		6.4	

18:05:13	2	1	4	0
18:07:33	1	0	7	0
18:09:54	5	0	1	0
18:12:08	1	0	1	1
18:14:33	1	0	3	0
<b>MAX</b>	6	2	8	2
<b>MIN</b>	0	0	1	0
	5.35		7	

**Client** GTA  
**Location** 4. Military Road / Waters Road  
**Date** Thursday, 18th February 2021  
**Survey Time** 07:00-09:00 & 16:15-18:15 (4 hours)  
**Description** Queue Length Surveys



AM	North Leg (Waters Rd)		South Leg (Rangers Rd)	
	Lane 1		Lane 1	
	Light	Heavy	Light	Heavy
7:00 to 7:05	0	0	1	0
7:05 to 7:10	1	1	0	1
7:10 to 7:15	3	0	1	0
7:15 to 7:20	1	1	1	0
7:20 to 7:25	4	0	0	1
7:25 to 7:30	2	0	0	1
7:30 to 7:35	4	0	2	1
7:35 to 7:40	3	0	1	0
7:40 to 7:45	1	0	2	0
7:45 to 7:50	3	0	1	0
7:50 to 7:55	4	0	0	0
7:55 to 8:00	4	0	0	0
8:00 to 8:05	4	0	1	0
8:05 to 8:10	3	0	1	0
8:10 to 8:15	3	0	0	1
8:15 to 8:20	2	1	1	0
8:20 to 8:25	8	0	0	1
8:25 to 8:30	7	0	2	1
8:30 to 8:35	3	0	0	1
8:35 to 8:40	3	0	1	0
8:40 to 8:45	2	0	2	0
8:45 to 8:50	4	0	1	0
8:50 to 8:55	4	0	0	0
8:55 to 9:00	3	0	0	1
<b>MAX</b>	8	1	2	1
<b>MIN</b>	0	0	0	0

7.75

2

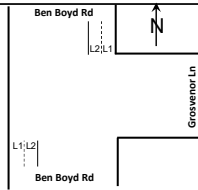
PM	North Leg (Waters Rd)		South Leg (Rangers Rd)	
	Lane 1		Lane 1	
	Light	Heavy	Light	Heavy
16:15 to 16:20	3	0	5	0
16:20 to 16:25	6	0	2	0
16:25 to 16:30	6	0	1	0
16:30 to 16:35	5	0	1	0
16:35 to 16:40	5	0	2	1
16:40 to 16:45	7	0	4	0
16:45 to 16:50	6	0	2	0
16:50 to 16:55	3	0	0	1
16:55 to 17:00	3	0	1	0
17:00 to 17:05	3	0	2	0
17:05 to 17:10	6	0	1	0
17:10 to 17:15	5	0	3	0
17:15 to 17:20	2	0	2	0
17:20 to 17:25	4	0	1	1
17:25 to 17:30	4	0	2	0
17:30 to 17:35	4	0	1	0
17:35 to 17:40	4	0	7	0
17:40 to 17:45	2	0	3	1
17:45 to 17:50	4	0	1	1
17:50 to 17:55	4	0	1	0
17:55 to 18:00	1	0	3	0
18:00 to 18:05	6	0	2	0
18:05 to 18:10	6	0	2	0
18:10 to 18:15	3	0	2	0
<b>MAX</b>	7	0	7	1
<b>MIN</b>	1	0	0	0

6.75

6.5

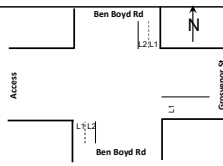


**Client** GTA  
**Location** 5, Ben Boyd Road / Grosvenor Lane  
**Date** Thursday, 18th February 2021  
**Survey Time** 07:00-09:00 & 16:15-18:15 (4 hours)  
**Description** Queue Length Surveys



AM	North Leg (Ben Boyd Rd)				South Leg (Ben Boyd Rd)				PM	North Leg (Ben Boyd Rd)				South Leg (Ben Boyd Rd)			
	Lane 1		Lane 2		Lane 1		Lane 2			Lane 1		Lane 2		Lane 1		Lane 2	
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
7:00 to 7:05	0	0	0	0	0	0	0	0	16:15 to 16:20	7	0	1	0	0	0	1	0
7:05 to 7:10	0	0	0	0	0	0	0	0	16:20 to 16:25	1	0	0	0	0	0	2	0
7:10 to 7:15	0	0	0	0	0	0	0	0	16:25 to 16:30	4	0	3	0	0	0	3	0
7:15 to 7:20	0	0	0	0	2	0	1	0	16:30 to 16:35	3	0	3	0	0	0	2	0
7:20 to 7:25	0	0	0	0	0	0	0	0	16:35 to 16:40	4	0	4	0	0	0	0	0
7:25 to 7:30	0	0	0	0	0	0	0	0	16:40 to 16:45	4	0	1	0	1	0	2	0
7:30 to 7:35	1	0	1	0	0	0	0	0	16:45 to 16:50	0	0	0	0	0	0	2	0
7:35 to 7:40	0	0	1	0	0	0	0	0	16:50 to 16:55	1	0	0	0	0	0	1	0
7:40 to 7:45	1	0	0	0	0	0	2	0	16:55 to 17:00	3	0	0	0	0	0	1	0
7:45 to 7:50	0	0	0	0	0	0	1	1	17:00 to 17:05	0	0	4	0	0	0	2	0
7:50 to 7:55	5	0	0	0	0	0	1	0	17:05 to 17:10	4	0	4	0	0	0	4	0
7:55 to 8:00	3	0	2	0	1	0	3	0	17:10 to 17:15	0	0	0	0	0	0	2	0
8:00 to 8:05	4	0	2	0	0	0	2	0	17:15 to 17:20	0	0	0	1	0	0	2	0
8:05 to 8:10	3	0	0	0	0	0	1	0	17:20 to 17:25	1	0	0	0	0	0	1	0
8:10 to 8:15	6	0	0	0	1	0	1	0	17:25 to 17:30	0	0	0	0	0	0	2	0
8:15 to 8:20	6	0	1	1	1	0	0	0	17:30 to 17:35	1	0	0	0	0	0	1	0
8:20 to 8:25	4	0	2	1	0	0	3	0	17:35 to 17:40	2	0	3	0	0	0	2	0
8:25 to 8:30	0	0	1	0	0	0	4	1	17:40 to 17:45	2	0	2	0	1	0	3	0
8:30 to 8:35	0	0	0	0	0	0	2	1	17:45 to 17:50	4	0	0	0	0	0	1	0
8:35 to 8:40	5	0	1	0	0	0	0	0	17:50 to 17:55	3	0	1	0	0	0	1	0
8:40 to 8:45	3	0	1	0	0	0	2	0	17:55 to 18:00	6	0	2	0	0	0	0	0
8:45 to 8:50	0	0	0	0	0	0	0	0	18:00 to 18:05	7	0	1	0	0	0	3	0
8:50 to 8:55	1	0	0	0	0	0	3	0	18:05 to 18:10	4	0	4	0	0	0	1	0
8:55 to 9:00	1	0	0	0	0	0	3	0	18:10 to 18:15	2	0	6	0	0	0	0	0
<b>MAX</b>	6	0	2	1	2	0	4	1	<b>MAX</b>	7	0	6	1	1	0	4	0
<b>MIN</b>	0	0	0	0	0	0	0	0	<b>MIN</b>	0	0	0	0	0	0	0	0
	6		2		1.75		3.75			7		5.5		1		3.75	

Client: GTA  
 Location: 6. Ben Boyd Road / Grosvenor Street  
 Date: Thursday, 18th February 2021  
 Survey Time: 07:00-09:00 & 16:15-18:15 (4 hours)  
 Description: Queue Length Surveys

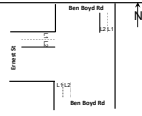


AM	North Leg (Ben Boyd Rd)				South Leg (Ben Boyd Rd)				East Leg (Grosvenor St)	
	Lane 1		Lane 2		Lane 1		Lane 2		Lane 1	
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
7:00 to 7:05	0	0	0	0	0	0	0	0	1	0
7:05 to 7:10	0	0	0	0	0	0	0	0	1	0
7:10 to 7:15	0	0	0	0	0	0	0	0	0	0
7:15 to 7:20	0	0	0	0	0	0	0	0	0	0
7:20 to 7:25	0	0	0	0	0	0	0	0	2	0
7:25 to 7:30	0	0	0	0	2	0	0	0	2	0
7:30 to 7:35	0	0	0	0	0	0	0	0	2	0
7:35 to 7:40	0	0	0	0	0	0	0	0	1	0
7:40 to 7:45	0	0	0	0	0	0	0	0	2	0
7:45 to 7:50	0	0	0	0	0	1	0	0	1	0
7:50 to 7:55	0	0	0	0	2	0	0	0	7	0
7:55 to 8:00	0	0	0	0	3	0	0	0	4	0
8:00 to 8:05	0	0	0	0	0	0	0	0	3	0
8:05 to 8:10	0	0	0	0	0	0	0	0	1	0
8:10 to 8:15	0	0	0	0	3	0	0	0	4	0
8:15 to 8:20	0	0	0	0	6	0	0	0	6	0
8:20 to 8:25	0	0	0	0	1	0	0	0	4	0
8:25 to 8:30	0	0	0	0	0	0	0	0	1	0
8:30 to 8:35	0	0	0	0	3	0	1	0	3	0
8:35 to 8:40	0	0	0	0	1	0	2	0	4	0
8:40 to 8:45	0	0	0	0	3	0	0	0	1	0
8:45 to 8:50	0	0	0	0	3	0	1	0	1	0
8:50 to 8:55	0	0	0	0	3	0	0	0	2	0
8:55 to 9:00	0	0	0	0	0	0	2	0	2	0
MAX	0	0	0	0	6	1	2	0	7	0
MIN	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	5.25	2	6.75			

PM	North Leg (Ben Boyd Rd)				South Leg (Ben Boyd Rd)				East Leg (Grosvenor St)				
	Lane 1		Lane 2		Lane 1		Lane 2		Lane 1				
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy			
16:15 to 16:20	0	0	0	0	0	0	0	0	1	0			
16:20 to 16:25	0	0	0	0	0	0	0	0	0	4	0		
16:25 to 16:30	0	0	0	0	0	0	0	0	0	4	0		
16:30 to 16:35	0	0	0	0	0	0	0	1	0	0	4	0	
16:35 to 16:40	0	0	0	0	0	0	0	0	1	0	1	0	
16:40 to 16:45	0	0	0	0	0	0	0	0	0	0	1	0	
16:45 to 16:50	0	0	0	0	0	0	0	0	0	0	3	0	
16:50 to 16:55	0	0	0	0	0	0	0	3	0	0	5	0	
16:55 to 17:00	0	0	0	0	0	0	0	4	0	0	3	0	
17:00 to 17:05	0	0	0	0	0	0	0	3	0	0	2	0	
17:05 to 17:10	0	0	0	0	0	0	0	0	0	1	2	0	
17:10 to 17:15	0	0	0	0	0	0	0	0	0	0	2	0	
17:15 to 17:20	0	0	0	0	0	0	0	1	0	2	1	0	
17:20 to 17:25	0	0	0	0	0	0	0	0	0	0	3	0	
17:25 to 17:30	0	0	0	0	0	0	0	2	0	0	2	1	
17:30 to 17:35	0	0	0	0	0	0	0	3	0	1	0	4	0
17:35 to 17:40	0	0	0	0	0	0	0	1	0	0	0	2	0
17:40 to 17:45	0	0	0	0	0	0	0	2	0	3	0	2	0
17:45 to 17:50	0	0	0	0	0	0	0	0	0	2	0	7	0
17:50 to 17:55	0	0	0	0	0	0	0	1	0	1	0	2	0
17:55 to 18:00	0	0	0	0	1	0	0	1	0	1	0	3	0
18:00 to 18:05	0	0	0	0	0	0	0	0	0	1	0	8	0
18:05 to 18:10	0	0	0	0	0	0	0	0	0	2	0	6	0
18:10 to 18:15	0	0	0	0	0	0	0	3	0	1	0	2	0
MAX	0	0	0	0	1	0	4	0	3	0	8	1	0
MIN	0	0	0	0	0	0	0	0	0	0	0	1	0
	0	0	0	0	0.75	3.75	2.75	7.75					

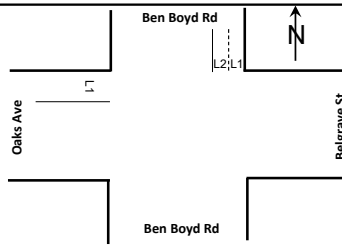
Client: CITA  
 Location: 7. Ben Boyd Road / Ernad Street  
 Date: Thursday, 18th February 2021  
 Survey Time: 07:00:00 (8:30:15) (4 hours)  
 Description: Closure Length Survey



AM	North Leg (Ben Boyd Rd)				AM	South Leg (Ben Boyd Rd)				AM	West Leg (Ernad St)			
	Lane 1		Lane 2			Lane 1		Lane 2			Lane 1		Lane 2	
	Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy
700:31	1	0	1	0	700:42	1	0	2	0	700:09	1	0	2	1
700:31	0	0	2	0	700:51	2	0	1	0	700:50	0	1	0	0
700:19	1	0	1	0	700:28	0	0	1	1	700:20	0	0	2	0
700:45	0	0	1	0	700:50	2	0	2	0	700:51	1	1	0	0
712:30	1	0	1	0	700:45	1	0	2	0	700:47	0	0	4	0
714:01	0	0	1	0	700:58	2	2	4	0	710:31	0	0	4	0
715:00	1	0	0	0	700:07	1	0	4	0	710:05	1	1	2	0
710:48	4	0	0	0	700:18	3	0	2	0	710:19	0	0	5	0
720:25	1	0	0	0	700:36	2	0	3	1	710:44	1	0	1	0
721:38	1	0	0	0	712:08	2	0	4	0	710:52	0	0	1	0
721:58	0	0	2	0	721:28	1	1	2	1	720:31	0	0	1	0
722:58	2	1	0	0	714:55	2	0	4	0	720:28	1	0	0	0
726:08	4	0	8	0	710:20	4	0	2	0	710:58	1	0	4	0
726:11	4	0	5	0	710:36	2	0	1	0	710:20	1	0	5	0
720:29	1	0	3	0	710:51	2	0	2	0	710:46	0	0	2	0
720:40	0	1	0	0	720:08	0	0	1	0	710:51	0	0	1	1
720:29	10	0	8	0	721:28	2	0	4	0	721:42	1	0	1	0
721:39	4	0	0	0	721:02	4	0	0	0	720:58	0	0	2	0
725:11	0	0	1	0	724:20	2	0	6	0	720:41	0	0	1	0
726:44	0	0	4	0	721:43	3	1	4	0	720:10	0	0	3	0
727:06	1	0	0	0	727:07	2	0	0	0	721:41	0	0	1	1
740:01	2	0	6	0	726:41	3	0	5	0	720:11	0	0	2	1
740:31	4	0	0	0	720:11	2	0	5	0	720:42	0	0	2	0
744:00	0	0	1	0	731:40	2	0	2	0	730:09	0	0	2	0
744:40	0	0	6	0	721:13	0	0	2	0	720:56	0	0	2	0
747:20	1	0	0	0	730:45	1	0	4	0	740:58	0	0	2	0
748:00	0	0	3	0	730:11	1	0	2	0	740:29	4	0	1	0
750:32	0	0	2	0	727:44	5	0	4	1	740:58	0	0	2	0
752:24	4	0	2	0	730:18	4	0	3	0	740:43	0	0	3	0
752:58	3	0	6	0	740:51	1	0	4	0	740:58	1	0	5	0
756:38	1	0	4	0	740:21	4	0	1	0	740:50	1	0	1	0
756:58	1	0	0	0	740:51	1	0	4	0	751:02	1	0	4	0
758:08	1	0	4	0	746:52	1	1	5	0	750:12	0	0	5	0
800:07	4	0	3	0	748:24	2	0	2	0	750:08	2	0	6	0
801:43	6	0	0	0	750:03	3	0	3	1	750:20	0	0	5	0
802:51	0	0	6	0	749:46	2	0	2	0	750:08	0	0	1	0
805:03	5	0	5	0	750:28	4	0	4	1	800:46	0	0	1	0
805:39	4	0	0	0	750:56	4	0	4	0	800:07	0	0	2	0
806:15	1	0	1	0	755:13	1	0	4	0	800:04	0	0	5	0
806:59	1	0	2	0	757:11	3	0	2	0	806:39	0	0	2	0
811:24	2	0	1	0	759:35	4	0	3	0	808:10	0	0	9	0
813:11	4	0	0	0	800:19	6	0	10	0	809:57	1	0	2	1
814:46	2	0	1	0	805:51	4	0	10	0	811:50	0	0	1	0
816:21	2	0	2	0	804:30	2	0	4	0	811:15	0	0	2	0
817:16	0	0	3	0	806:05	4	0	9	0	814:06	0	0	5	1
819:36	0	0	2	0	807:46	2	0	2	0	810:21	2	0	2	0
821:14	1	0	1	0	809:26	2	0	2	0	811:57	0	0	3	0
822:47	4	0	7	0	811:09	0	0	3	0	813:37	0	0	2	0
824:34	1	0	1	0	812:48	5	0	6	0	821:36	0	0	1	0
825:17	0	0	0	0	814:24	7	0	1	0	821:09	0	0	4	0
827:59	9	0	4	0	815:53	7	0	6	0	824:34	1	0	8	1
829:35	2	0	8	0	817:21	10	0	1	0	826:36	0	0	2	0
831:06	1	1	7	0	819:01	10	0	1	0	827:08	1	0	4	1
832:39	2	1	4	0	819:40	5	0	7	1	829:35	1	0	3	0
834:11	0	0	8	0	821:18	9	0	1	0	831:04	0	0	2	0
836:18	2	0	1	0	822:58	5	0	5	0	832:40	0	0	3	0
837:51	0	0	3	0	824:44	6	0	10	0	834:39	0	0	4	1
839:22	4	1	4	0	827:26	5	0	8	1	836:39	3	0	4	1
841:00	0	0	2	0	829:01	6	0	11	0	837:50	1	0	2	0
842:44	6	0	11	0	830:37	2	0	2	0	839:34	2	0	5	0
846:05	9	0	2	0	832:02	1	0	1	0	840:17	2	0	6	0
850:00	1	0	4	0	834:04	3	1	8	1	841:43	0	0	2	0
851:58	10	0	9	0	835:48	2	1	6	2	844:26	5	0	5	1
853:46	0	0	5	0	837:22	6	0	2	0	846:04	2	0	0	0
855:44	5	2	7	0	839:04	5	0	8	0	847:54	1	0	3	0
MAX	14	2	11	0	840:37	5	0	3	0	850:04	0	0	1	0
MIN	0	0	0	0	841:64	2	0	1	0	851:50	0	0	1	0
					843:55	2	0	8	1	853:47	1	0	5	0
					845:33	3	0	2	0	855:43	0	0	4	0
					847:20	2	0	8	0	857:21	0	0	1	0
					849:08	1	0	12	0	859:08	1	0	1	0
					851:23	1	1	4	0	MAX	5	1	9	1
					853:19	3	0	7	0	MIN	10	0	6	0
					855:12	1	1	8	0					
					856:54	4	0	3	0					
					858:40	5	0	2	0					
					MAX	10	2	12	2					
					MIN	0	0	0	0					

PM	North Leg (Ben Boyd Rd)				PM	South Leg (Ben Boyd Rd)				PM	West Leg (Ernad St)			
	Lane 1		Lane 2			Lane 1		Lane 2			Lane 1		Lane 2	
	Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy
1615:21	0	0	7	0	1616:10	4	0	7	0	1615:23	0	0	1	0
1617:00	0	0	4	0	1617:42	3	0	2	0	1617:50	1	1	0	0
1618:07	0	0	4	0	1618:56	2	0	2	0	1618:10	0	0	1	0
1619:18	0	0	1	0	1620:01	0	0	1	0	1620:59	0	0	10	0
1620:38	0	0	5	0	1621:42	5	0	1	0	1622:05	0	0	1	0
1622:03	0	0	5	0	1623:07	5	0	3	0	1623:30	0	0	1	0
1623:30	1	1	1	0	1624:35	4	0	5	0	1623:50	0	0	0	0
1624:19	1	0	2	0	1625:14	2	0	3	0	1625:10	4	0	3	0
1625:34	2	0	0	0	1626:18	3	0	1	0	1626:21	5	0	1	0
1626:21	0	0	8	0	1626:28	2	0	1	0	1626:35	0	0	2	0
1627:31	0	0	6	0	1626:46	0	0	2	0	1626:46	1	0	1	0
1628:46	2	0	5	0	1630:00	1	0	0	0	1630:02	0	0	2	0
1631:12	1	0	1	0	1632:22	5	0	4	0	1631:11	0	0	2	0
1632:40	1	0	3	0	1633:43	2	0	3	0	1632:48	1	0	0	0
1633:14	1	0	0	0	1634:40	0	0	5	0	1633:55	2	0	1	0
1633:51	0	0	2	0	1635:14	4	0	6	0	1635:00	0	0	0	0
1635:00	0	0	2	0	1637:23	5	0	3	0	1636:19	0	0	1	0
1636:14	0	0	1	0	1638:14	2	0	3	0	1637:46	1	0	2	0
1638:36	0	0	6	0	1640:00	2	0	2	1	1638:56	1	0	2	0
1640:26	0	0	4	0	1642:21	2	0	4	0	1640:29	3	0	0	0
1641:47	2	0	2	0	1643:46	2	0	3	1	1641:41	0	0	0	0
1643:03	0	0	3	0	1644:14	2	0	6	0	1643:03	2	0	1	0
1644:17	0	0	1	1	1645:44	4	0	3	0	1644:17	0	0	1	0
1647:13	0	0	1	1	1647:13	4	0	5	0	1646:08	6	0	4	0
1648:56	0	0	5	0	1649:07	2	0	6	0	1647:56	1	0	0	0
1650:13	0	0	3	0	1650:05	2	0	6	0	1648:57	1	0	1	0
1651:11	1	0	6	0	1651:30	2	0	2	0	1649:33	0	0	1	0
1652:09	0	0	7	0										

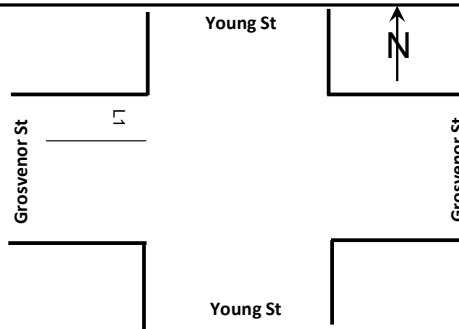
**Client** GTA  
**Location** 8. Ben Boyd Road / Oaks Avenue  
**Date** Thursday, 18th February 2021  
**Survey Time** 07:00-09:00 & 16:15-18:15 (4 hours)  
**Description** Queue Length Surveys



AM	North Leg (Ben Boyd Rd)				West Leg (Oaks Ave)	
	Lane 1		Lane 2		Lane 1	
	Light	Heavy	Light	Heavy	Light	Heavy
7:00 to 7:05	0	1	0	0	1	0
7:05 to 7:10	0	0	0	0	0	0
7:10 to 7:15	0	0	0	0	0	0
7:15 to 7:20	0	0	0	0	0	0
7:20 to 7:25	0	0	1	0	1	0
7:25 to 7:30	0	0	0	0	1	0
7:30 to 7:35	0	0	1	0	0	0
7:35 to 7:40	0	0	1	0	1	0
7:40 to 7:45	0	0	1	0	0	0
7:45 to 7:50	0	0	1	0	1	0
7:50 to 7:55	1	0	1	0	2	0
7:55 to 8:00	0	0	0	0	0	0
8:00 to 8:05	0	0	0	0	0	0
8:05 to 8:10	0	0	1	0	0	0
8:10 to 8:15	0	0	2	1	0	0
8:15 to 8:20	2	0	0	0	0	0
8:20 to 8:25	2	0	2	0	1	0
8:25 to 8:30	1	0	1	0	0	0
8:30 to 8:35	0	0	2	0	0	0
8:35 to 8:40	0	0	4	0	0	0
8:40 to 8:45	2	0	0	0	2	0
8:45 to 8:50	0	0	1	0	0	0
8:50 to 8:55	1	0	1	0	0	0
8:55 to 9:00	0	0	1	0	2	0
<b>MAX</b>	2	1	4	1	2	0
<b>MIN</b>	0	0	0	0	0	0
	2		3.5		2	

PM	North Leg (Ben Boyd Rd)				West Leg (Oaks Ave)	
	Lane 1		Lane 2		Lane 1	
	Light	Heavy	Light	Heavy	Light	Heavy
16:15 to 16:20	1	0	1	0	0	0
16:20 to 16:25	0	0	0	0	1	0
16:25 to 16:30	0	0	1	0	2	0
16:30 to 16:35	0	0	2	0	2	0
16:35 to 16:40	1	0	1	0	2	0
16:40 to 16:45	1	0	0	0	0	0
16:45 to 16:50	1	0	0	0	0	0
16:50 to 16:55	1	0	0	0	0	0
16:55 to 17:00	0	0	0	0	2	0
17:00 to 17:05	0	0	0	0	0	0
17:05 to 17:10	1	0	0	0	1	0
17:10 to 17:15	1	0	0	0	1	0
17:15 to 17:20	0	0	1	0	1	0
17:20 to 17:25	0	0	1	0	1	0
17:25 to 17:30	1	0	2	0	2	0
17:30 to 17:35	2	0	1	0	0	0
17:35 to 17:40	0	0	1	0	1	0
17:40 to 17:45	0	0	0	1	0	0
17:45 to 17:50	1	0	3	0	1	0
17:50 to 17:55	2	0	3	0	0	0
17:55 to 18:00	1	0	3	0	1	0
18:00 to 18:05	1	0	1	0	4	0
18:05 to 18:10	2	0	2	0	1	0
18:10 to 18:15	1	0	2	0	1	0
<b>MAX</b>	2	0	3	1	4	0
<b>MIN</b>	0	0	0	0	0	0
	2		3		3.5	

**Client** GTA  
**Location** 10. Young Street / Grosvenor Street  
**Date** Thursday, 18th February 2021  
**Survey Time** 07:00-09:00 & 16:15-18:15 (4 hours)  
**Description** Queue Length Surveys



AM	West Leg (Grosvenor St)	
	Lane 1	
	Light	Heavy
7:00 to 7:05	0	0
7:05 to 7:10	1	0
7:10 to 7:15	0	0
7:15 to 7:20	0	0
7:20 to 7:25	0	0
7:25 to 7:30	0	0
7:30 to 7:35	1	0
7:35 to 7:40	1	0
7:40 to 7:45	1	0
7:45 to 7:50	1	0
7:50 to 7:55	1	0
7:55 to 8:00	1	0
8:00 to 8:05	1	0
8:05 to 8:10	1	0
8:10 to 8:15	2	0
8:15 to 8:20	1	0
8:20 to 8:25	1	0
8:25 to 8:30	0	0
8:30 to 8:35	1	0
8:35 to 8:40	1	0
8:40 to 8:45	1	0
8:45 to 8:50	0	0
8:50 to 8:55	0	0
8:55 to 9:00	2	0
<b>MAX</b>	2	0
<b>MIN</b>	0	0

2

PM	West Leg (Grosvenor St)	
	Lane 1	
	Light	Heavy
16:15 to 16:20	1	0
16:20 to 16:25	2	0
16:25 to 16:30	1	0
16:30 to 16:35	1	0
16:35 to 16:40	1	0
16:40 to 16:45	2	0
16:45 to 16:50	1	0
16:50 to 16:55	1	0
16:55 to 17:00	2	0
17:00 to 17:05	1	0
17:05 to 17:10	0	0
17:10 to 17:15	0	0
17:15 to 17:20	2	0
17:20 to 17:25	1	0
17:25 to 17:30	2	0
17:30 to 17:35	1	0
17:35 to 17:40	2	0
17:40 to 17:45	2	0
17:45 to 17:50	2	0
17:50 to 17:55	1	0
17:55 to 18:00	3	0
18:00 to 18:05	2	0
18:05 to 18:10	2	0
18:10 to 18:15	1	0
<b>MAX</b>	3	0
<b>MIN</b>	0	0

2.75



Client: 114  
Location: 11, Young Street / Brighton Street  
Date: Thursday, 10th June 2021  
Survey Time: 10:00 AM - 10:00 AM (10:00 AM)  
Description: General layout plan



Table with columns for AM, FM, and BM points, including bearings, distances, and coordinates. The table is organized into four main sections: AM (Northings, Eastings, Westings, Southings), FM (Northings, Eastings, Westings, Southings), and BM (Northings, Eastings, Westings, Southings). Each section contains a grid of data points with their respective coordinates and bearings.

<b>Client</b>	GTA	
<b>Location</b>	12. Waters Road / Grosvenor Lane	
<b>Date</b>	Thursday, 18th February 2021	
<b>Survey Time</b>	07:00-09:00 & 16:15-18:15 (4 hours)	
<b>Description</b>	Queue Length Surveys	



AM	North Leg (Waters Rd)		PM	North Leg (Waters Rd)	
	Lane 1			Lane 1	
	Light	Heavy		Light	Heavy
7:00 to 7:05	0	0	16:15 to 16:20	0	0
7:05 to 7:10	0	0	16:20 to 16:25	0	0
7:10 to 7:15	0	0	16:25 to 16:30	0	0
7:15 to 7:20	0	0	16:30 to 16:35	0	0
7:20 to 7:25	0	0	16:35 to 16:40	0	0
7:25 to 7:30	0	0	16:40 to 16:45	2	0
7:30 to 7:35	0	0	16:45 to 16:50	0	0
7:35 to 7:40	0	0	16:50 to 16:55	0	0
7:40 to 7:45	0	0	16:55 to 17:00	0	0
7:45 to 7:50	0	0	17:00 to 17:05	0	0
7:50 to 7:55	0	0	17:05 to 17:10	1	0
7:55 to 8:00	0	0	17:10 to 17:15	0	0
8:00 to 8:05	0	0	17:15 to 17:20	0	0
8:05 to 8:10	1	0	17:20 to 17:25	0	0
8:10 to 8:15	0	0	17:25 to 17:30	0	0
8:15 to 8:20	0	0	17:30 to 17:35	0	0
8:20 to 8:25	0	0	17:35 to 17:40	0	0
8:25 to 8:30	2	0	17:40 to 17:45	0	0
8:30 to 8:35	0	0	17:45 to 17:50	1	0
8:35 to 8:40	0	0	17:50 to 17:55	0	0
8:40 to 8:45	0	0	17:55 to 18:00	0	0
8:45 to 8:50	0	0	18:00 to 18:05	1	0
8:50 to 8:55	0	0	18:05 to 18:10	2	0
8:55 to 9:00	0	0	18:10 to 18:15	0	0
<b>MAX</b>	2	0	<b>MAX</b>	2	0
<b>MIN</b>	0	0	<b>MIN</b>	0	0

Client: CMA  
 Location: 14, Waters Road / Belgrove Street  
 Date: Thursday, 18th February 2021  
 Survey Time: 07:00 AM to 10:15 AM (3 hours)  
 Description: Closure Length Survey

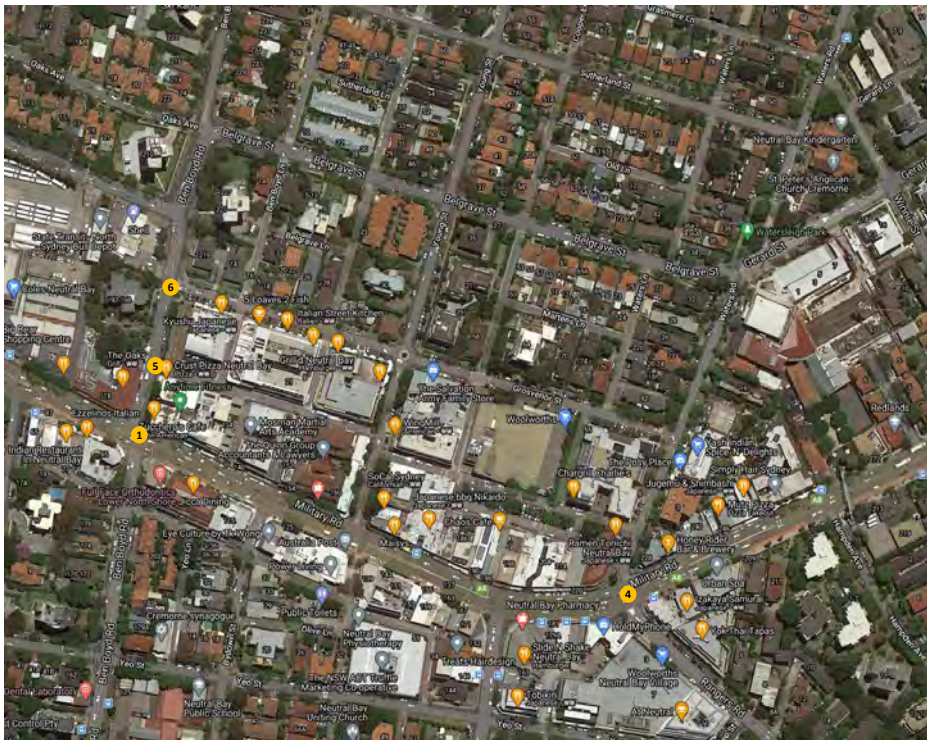


AM	South Leg (Waters Rd)				AM	East Leg (Belgrove St)				AM	West Leg (Belgrove St)			
	Level 1		Level 2			Level 1		Level 2			Level 1		Level 2	
	Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy
700.19	0	0	2	0	700.16	0	0	2	0	700.17	2	1	3	0
700.22	0	0	2	0	700.45	0	0	1	0	700.22	0	0	4	0
700.08	0	0	1	0	700.20	0	0	2	0	700.19	1	0	1	0
700.41	0	0	1	0	700.00	0	0	0	0	700.00	0	0	2	0
710.11	1	0	0	0	707.42	0	0	0	0	708.22	0	0	5	0
711.02	2	0	1	0	708.54	1	0	0	0	709.24	0	0	1	0
711.14	0	0	1	0	710.05	2	0	1	0	711.02	1	0	2	0
714.29	1	0	3	0	711.10	1	0	1	0	712.29	1	0	3	0
714.40	0	0	4	0	713.14	1	0	4	0	713.13	0	0	1	0
715.50	0	0	2	0	714.34	1	0	2	0	715.12	0	0	11	0
715.10	0	0	2	0	715.54	0	0	2	0	715.22	0	0	3	0
719.48	1	0	3	0	717.12	1	0	0	0	719.08	0	0	2	0
720.07	1	0	3	0	718.11	1	0	3	0	720.25	0	0	5	0
720.31	0	0	4	0	719.05	1	0	3	0	721.05	0	0	5	0
720.55	0	0	3	0	721.10	0	0	4	0	721.17	0	0	2	0
720.23	0	0	2	1	722.30	1	0	3	0	724.40	1	0	6	1
726.53	0	0	1	0	724.05	0	0	4	1	726.07	0	0	4	0
726.13	1	0	2	0	725.58	2	0	1	0	727.22	2	0	3	0
728.22	0	0	1	0	726.04	1	0	1	0	728.04	0	0	5	0
729.44	0	0	1	0	726.25	0	0	2	0	729.20	0	0	4	0
729.26	0	0	2	0	729.09	0	0	2	0	730.10	0	0	4	0
730.50	2	0	1	0	731.10	2	0	1	0	731.39	0	0	3	0
730.50	0	0	1	0	730.00	0	0	1	0	730.07	0	0	4	0
732.15	3	0	1	0	734.29	0	0	1	0	734.07	0	0	4	0
734.48	0	0	1	0	734.58	0	0	1	0	735.02	0	0	4	0
740.15	0	0	2	0	737.28	0	0	1	0	739.00	0	0	7	0
741.10	4	0	0	0	738.49	0	0	2	0	740.54	0	0	15	0
742.06	1	0	0	0	740.15	4	0	0	0	742.24	0	0	4	0
746.11	1	0	3	0	741.44	1	0	0	0	744.11	0	0	7	1
746.47	0	0	3	0	743.02	1	0	2	0	745.40	0	0	3	0
746.25	1	0	0	0	745.09	2	0	0	0	747.20	0	0	5	0
746.10	2	0	1	0	746.41	2	0	0	0	748.55	0	0	4	0
751.12	0	0	1	0	748.16	0	0	1	0	750.30	0	0	2	0
752.49	0	0	1	0	749.54	1	0	2	0	752.08	0	0	7	1
752.42	0	0	1	0	750.24	0	0	1	0	753.17	0	0	5	0
753.16	0	0	3	0	752.18	0	0	1	0	753.16	0	0	2	0
757.08	2	0	4	0	753.07	0	0	3	0	754.07	0	0	6	0
758.10	4	0	2	0	758.09	4	0	4	0	758.22	0	0	3	0
802.00	2	0	2	0	757.73	2	0	4	0	801.12	0	0	6	0
802.30	0	0	3	0	759.31	2	0	4	0	801.51	0	0	4	0
802.44	0	0	4	0	800.12	1	0	2	0	802.17	0	0	3	0
808.11	1	0	3	0	809.10	1	0	3	0	809.09	2	0	10	0
808.18	0	0	3	0	809.12	1	0	6	0	809.10	0	0	17	0
808.48	1	0	2	0	808.00	0	0	3	0	808.00	0	0	8	0
807.32	0	0	8	0	807.46	1	0	5	0	806.47	0	0	9	0
809.04	1	0	6	0	809.27	1	0	5	0	807.20	0	0	6	0
812.02	1	0	6	0	812.08	2	0	4	0	810.04	0	0	6	0
812.20	1	0	6	0	812.35	2	1	4	0	810.08	1	0	1	0
813.13	4	1	3	0	813.02	1	0	5	0	811.42	0	0	4	0
813.20	1	0	5	0	813.17	1	0	2	0	813.13	0	0	3	0
814.54	1	0	2	0	813.22	3	0	2	0	814.40	0	0	1	0
814.41	3	0	0	0	813.02	2	0	5	0	813.56	0	0	11	0
816.10	1	0	5	0	814.11	1	0	2	0	816.00	0	0	4	0
817.17	2	1	4	0	814.02	1	0	4	0	817.22	0	0	3	1
819.00	1	0	4	0	814.42	0	0	4	0	819.00	0	0	2	0
820.59	2	0	3	0	827.21	1	0	2	0	824.40	0	0	1	1
824.00	0	0	2	0	826.07	2	0	0	0	825.07	0	0	2	0
826.19	2	0	1	0	826.40	0	0	0	0	826.02	0	0	9	1
831.10	4	0	3	0	830.23	3	0	3	0	829.40	0	0	6	1
832.40	3	0	3	0	831.00	2	0	6	0	832.22	0	0	5	0
832.20	2	0	6	0	831.39	1	0	0	0	831.32	0	0	5	0
837.00	1	0	0	0	832.00	3	0	2	0	831.08	0	0	6	1
838.37	2	0	2	0	838.55	2	0	2	0	837.54	0	0	5	0
841.68	2	0	2	0	840.20	2	0	1	0	839.04	2	0	7	0
841.48	1	0	1	0	841.24	2	0	4	0	841.07	0	0	4	0
843.29	3	0	2	0	841.54	1	0	3	0	841.13	0	0	2	0
845.11	2	0	2	0	841.80	1	0	0	0	841.81	0	0	5	0
846.51	1	0	1	0	841.40	1	0	4	0	840.14	0	0	8	0
848.18	1	0	1	0	848.11	3	0	1	0	848.18	0	0	2	0
851.00	1	0	1	0	851.45	1	0	1	0	850.30	0	0	6	0
851.00	0	0	1	0	851.24	0	0	4	0	851.24	0	0	4	0
854.53	0	0	4	0	854.12	0	0	4	0	854.12	1	0	9	0
856.18	0	0	4	0	856.53	2	0	2	0	856.53	2	0	6	0
858.30	2	0	1	0	858.22	2	0	2	0	857.20	0	0	5	0
857.46	1	0	2	0	MAX	4	1	6	1	MAX	3	1	15	1
MAX	4	1	6	1	MAX	0	0	0	0	MAX	0	0	0	0
MAX	5	0	0	0	MAX	3	0	5	0	MAX	12	11		

PM	South Leg (Waters Rd)				PM	East Leg (Belgrove St)				PM	West Leg (Belgrove St)			
	Level 1		Level 2			Level 1		Level 2			Level 1		Level 2	
	Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy
1015.29	2	0	7	0	1015.35	1	0	5	0	1015.14	0	0	1	0
1016.32	1	0	5	0	1016.32	1	0	3	0	1016.31	1	0	2	0
1018.09	1	0	3	0	1018.09	0	0	3	0	1018.43	1	0	1	0
1019.21	0	0	2	0	1019.21	0	0	1	0	1019.01	0	0	2	0
1020.42	2	0	1	0	1020.42	0	0	5	0	1020.43	0	0	1	0
1022.12	0	0	5	0	1022.12	0	0	4	0	1022.06	1	0	1	0
1023.10	0	0	6	0	1023.10	1	0	4	0	1023.41	0	0	1	0
1025.05	1	0	9	0	1025.04	5	0	3	0	1025.06	2	0	2	0
1026.31	4	0	5	0	1026.31	2	0	3	0	1026.07	0	0	1	0
1027.35	2	0	2	0	1027.35	0	0	1	0	1028.26	0	0	1	0
1028.51	0	0	1	0	1028.51	1	0	5	0	1028.38	1	0	1	0
1030.15	1	0	5	0	1030.15	1	0	4	0	1030.04	0	0	1	0
1031.27	1	0	3	0	1031.27	0	0	4	0	1031.02	2	0	2	0
1032.05	0	0	4	0	1032.05	1	0	4	0	1032.25	2	0	1	0
1033.56	1	0	4	0	1033.56	0	0	3	0	1034.50	1	0	0	0
1034.05	0	0	3	0	1034.05	0	0	5	0	1034.52	0	0	2	0
1036.16	0	0	3	0	1036.16	0	0	5	0	1036.40	2	0	1	0
1037.41	0	0	3	0	1037.41	2	0	2	0	1036.51	4	0	0	0
1039.04	2	0	1	0	1039.04	0	0	1	0	1036.12	0	0	1	0
1040.25	0	0	1	0	1040.25	2	0	3	0	1037.54	0	0	1	0
1041.00	2	0	3	0	1041.00	4	1	4	0	1038.37	0	0	3	0
1043.17	2	1	3	0	1043.17	0	0	4	0	1039.00	1	0	2	0
1044.51	0	0	3	0	1044.51	1	0	2	0	1043.11	8	0	4	0
1046.14	0	0	2	0	1046.14	1	0	1	0	1050.51	2	0	3	0
1047.56	1	0	1	0	1047.56	1	0	4	0	1049.46	1	0	0	0
1048.07	0	0	1	0	1048.07	0	0	4	0	1049.11	0	0	2	0
1049.07	0	0	1	0	1049.07	0	0	3	0	1050.42	0			



Client GTA  
Date Saturday, 20th February 2021  
Survey Time 11:45-13:45 (2 hours)  
Description Queue Length Surveys



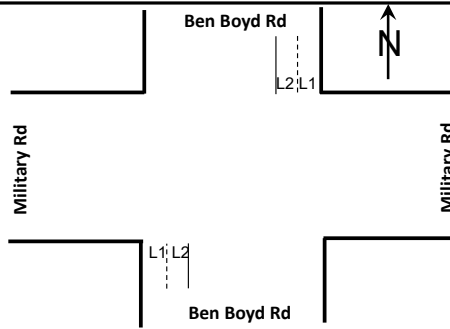
[Location]

- 1. Military Road / Ben Boyd Road
- 4. Military Road / Waters Road
- 5. Ben Boyd Road / Grosvenor Lane
- 6. Ben Boyd Road / Grosvenor Street

[Survey date]

Saturday, 20th February 2021

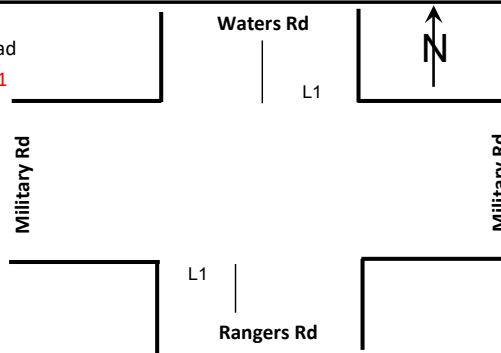
**Client** GTA  
**Location** 1. Military Road / Ben Boyd Road  
**Date** Saturday, 20th February 2021  
**Survey Time** 11:45-13:45 (2 hours)  
**Description** Queue Length Surveys



TIME	North Leg (Ben Boyd Rd)				TIME	South Leg (Ben Boyd Rd)			
	Lane 1		Lane 2			Lane 1		Lane 2	
	Light	Heavy	Light	Heavy		Light	Heavy	Light	Heavy
11:45:10	3	0	5	0	11:45:15	11	0	5	0
11:47:20	3	0	6	0	11:47:22	2	0	9	0
11:49:45	6	0	5	1	11:49:50	5	0	7	0
11:53:01	6	0	4	0	11:53:02	4	0	9	0
11:54:57	6	0	3	0	11:55:12	9	0	1	0
12:03:32	6	0	6	0	12:02:59	7	0	22	0
12:04:48	7	0	4	0	12:05:53	8	0	11	0
12:08:16	6	0	4	0	12:08:19	23	1	16	0
12:10:48	6	0	3	0	12:10:50	19	1	4	0
12:12:52	6	0	5	0	12:12:55	6	0	3	0
12:15:20	0	0	6	0	12:15:22	12	1	3	0
12:18:22	6	0	6	0	12:18:25	9	0	3	0
12:20:16	6	0	1	0	12:20:19	2	0	12	0
12:22:07	6	0	1	0	12:22:14	25	0	12	0
12:24:25	6	0	1	0	12:24:29	16	0	3	0
12:26:50	6	0	5	0	12:26:53	13	0	1	0
12:30:28	6	0	3	0	12:30:30	12	0	3	0
12:32:08	6	0	3	1	12:32:10	5	0	4	0
12:34:30	5	0	4	0	12:34:35	7	0	5	0
12:36:50	1	0	4	0	12:36:53	5	0	5	0
12:39:11	2	0	4	0	12:39:12	10	0	5	0
12:41:32	3	0	4	0	12:41:35	5	0	4	0
12:43:48	5	0	3	0	12:43:49	4	0	6	0
12:45:57	5	0	1	0	12:45:58	10	1	4	0
12:48:34	5	0	5	0	12:48:42	5	0	20	0
12:50:16	7	0	6	0	12:50:18	13	0	3	0
12:51:58	2	0	5	0	12:52:04	20	0	6	0
12:54:23	6	0	5	0	12:54:26	6	0	18	0
12:56:53	5	0	8	0	12:56:55	12	0	16	0
12:58:23	6	0	4	0	12:58:28	5	0	19	0
13:00:03	6	0	3	0	13:00:15	21	0	4	0
13:01:34	6	0	3	0	13:01:38	5	0	23	0
13:03:05	4	0	4	0	13:03:10	8	0	24	0
13:04:45	5	0	7	1	13:04:49	22	0	4	0
13:07:15	3	0	5	0	13:07:18	6	0	23	0
13:09:39	8	0	8	0	13:09:41	5	0	22	0
13:12:00	3	0	5	0	13:12:03	3	0	20	1
13:15:13	4	0	6	0	13:15:04	1	0	24	1
13:18:10	2	0	6	0	13:18:10	7	0	23	0
13:19:58	0	0	5	0	13:20:01	4	0	13	0
13:22:28	4	0	6	0	13:22:30	3	0	16	0
13:24:37	5	0	6	0	13:24:39	6	0	6	0
13:27:00	4	0	3	0	13:27:02	6	0	7	0
13:29:12	5	0	3	0	13:29:18	1	0	3	0
13:31:29	3	0	1	0	13:31:35	2	0	7	0

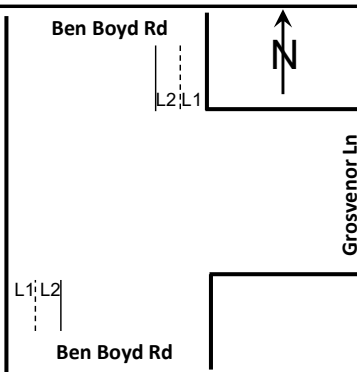
13:34:39	3	0	5	0	13:34:43	4	0	12	0
13:37:02	4	0	6	0	13:37:10	1	0	8	0
13:39:22	5	0	5	0	13:39:24	2	0	1	0
13:41:38	3	0	5	0	13:41:42	5	0	5	0
13:44:04	6	0	2	0	13:44:07	1	0	10	0
<b>MAX</b>	8	0	8	1	<b>MAX</b>	25	1	24	1
<b>MIN</b>	0	0	1	0	<b>MIN</b>	1	0	1	0

**Client** GTA  
**Location** 4. Military Road / Waters Road  
**Date** Saturday, 20th February 2021  
**Survey Time** 11:45-13:45 (2 hours)  
**Description** Queue Length Surveys



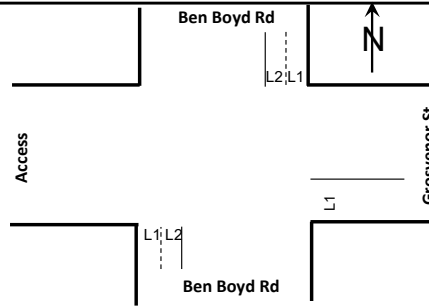
TIME	North Leg (Waters Rd)		South Leg (Rangers Rd)	
	Lane 1		Lane 1	
	Light	Heavy	Light	Heavy
11:45 to 11:50	3	0	1	0
11:50 to 11:55	4	0	2	0
11:55 to 12:00	1	0	2	0
12:00 to 12:05	2	0	4	0
12:05 to 12:10	3	0	1	1
12:10 to 12:15	2	0	3	0
12:15 to 12:20	3	0	4	0
12:20 to 12:25	3	0	3	0
12:25 to 12:30	6	0	5	0
12:30 to 12:35	2	0	3	0
12:35 to 12:40	2	0	1	0
12:40 to 12:45	4	0	2	0
12:45 to 12:50	2	0	3	0
12:50 to 12:55	3	0	4	0
12:55 to 13:00	1	0	3	0
13:00 to 13:05	1	0	9	0
13:05 to 13:10	2	0	2	0
13:10 to 13:15	3	0	3	0
13:15 to 13:20	3	0	1	0
13:20 to 13:25	3	0	3	0
13:25 to 13:30	4	0	10	0
13:30 to 13:35	2	0	1	0
13:35 to 13:40	2	0	3	0
13:40 to 13:45	7	0	2	0
<b>MAX</b>	7	0	10	1
<b>MIN</b>	1	0	1	0

**Client** GTA  
**Location** 5. Ben Boyd Road / Grosvenor Lane  
**Date** Saturday, 20th February 2021  
**Survey Time** 11:45-13:45 (2 hours)  
**Description** Queue Length Surveys



TIME	North Leg (Ben Boyd Rd)				South Leg (Ben Boyd Rd)			
	Lane 1		Lane 2		Lane 1		Lane 2	
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
11:45 to 11:50	1	0	6	1	0	0	5	0
11:50 to 11:55	1	0	8	0	0	0	5	0
11:55 to 12:00	2	0	8	0	0	0	0	0
12:00 to 12:05	1	0	8	0	0	0	5	0
12:05 to 12:10	1	0	8	0	0	0	2	0
12:10 to 12:15	0	0	8	0	0	0	4	1
12:15 to 12:20	0	0	8	0	0	0	0	0
12:20 to 12:25	0	0	8	0	0	0	7	1
12:25 to 12:30	0	0	4	0	0	0	3	0
12:30 to 12:35	0	0	3	0	0	0	6	0
12:35 to 12:40	0	0	0	0	0	0	3	0
12:40 to 12:45	0	0	7	0	0	0	2	0
12:45 to 12:50	1	0	8	0	0	0	7	1
12:50 to 12:55	1	0	8	0	0	0	3	0
12:55 to 13:00	1	0	8	0	0	0	11	0
13:00 to 13:05	0	0	8	0	0	0	3	0
13:05 to 13:10	1	0	1	0	0	0	1	0
13:10 to 13:15	0	0	8	0	0	0	0	0
13:15 to 13:20	0	0	8	0	0	0	0	0
13:20 to 13:25	3	0	8	0	0	0	6	0
13:25 to 13:30	0	0	0	0	0	0	0	0
13:30 to 13:35	0	0	5	0	0	0	5	0
13:35 to 13:40	0	0	4	0	0	0	2	0
13:40 to 13:45	0	0	2	0	0	0	4	0
<b>MAX</b>	3	0	8	1	0	0	11	1
<b>MIN</b>	0	0	0	0	0	0	0	0

**Client** GTA  
**Location** 6. Ben Boyd Road / Grosvenor Street  
**Date** Saturday, 20th February 2021  
**Survey Time** 11:45-13:45 (2 hours)  
**Description** Queue Length Surveys



TIME	North Leg (Ben Boyd Rd)				South Leg (Ben Boyd Rd)				East Leg (Grosvenor St)	
	Lane 1		Lane 2		Lane 1		Lane 2		Lane 1	
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
11:45 to 11:50	0	0	3	0	6	0	0	0	6	0
11:50 to 11:55	0	0	2	0	2	0	0	0	13	0
11:55 to 12:00	0	0	2	0	3	0	0	0	9	0
12:00 to 12:05	0	0	4	1	1	0	0	0	22	0
12:05 to 12:10	0	0	6	0	3	0	0	0	23	0
12:10 to 12:15	0	0	4	0	6	1	0	0	20	0
12:15 to 12:20	0	0	5	0	7	1	0	0	13	0
12:20 to 12:25	1	0	1	0	1	0	0	0	7	0
12:25 to 12:30	0	0	0	0	7	0	0	0	3	0
12:30 to 12:35	0	0	0	0	3	0	0	0	2	0
12:35 to 12:40	0	0	0	0	6	0	0	0	2	0
12:40 to 12:45	0	0	1	0	3	0	0	0	2	0
12:45 to 12:50	0	0	1	0	7	0	0	0	3	0
12:50 to 12:55	0	0	2	0	4	0	0	0	8	0
12:55 to 13:00	0	0	4	0	3	0	0	0	6	0
13:00 to 13:05	0	0	3	1	4	0	0	0	12	0
13:05 to 13:10	0	0	0	0	2	0	0	0	1	0
13:10 to 13:15	0	0	2	0	7	0	0	0	10	0
13:15 to 13:20	0	0	3	0	2	0	0	0	1	0
13:20 to 13:25	0	0	0	0	2	0	0	0	4	0
13:25 to 13:30	0	0	0	0	0	0	0	0	0	0
13:30 to 13:35	0	0	0	0	0	0	0	0	4	0
13:35 to 13:40	0	0	0	0	1	1	0	0	3	0
13:40 to 13:45	0	0	0	0	0	0	0	0	0	0
<b>MAX</b>	1	0	6	1	7	1	0	0	23	0
<b>MIN</b>	0	0	0	0	0	0	0	0	0	0

APPENDIX: SIDRA LAYOUTS AND  
OUTPUTS

# B.SIDRA LAYOUTS AND OUTPUTS

# B

## USER REPORT FOR NETWORK SITE

 Project: 2020 Existing Military Network - RS

Template: GTA Appendix

 Site: I-01 [I-01 2020 EX AM]

 Network: 1 [2020 Military Road EX AM]

Military Road / Ben Boyd Road  
 2020 Young Street Closure Weekday AM Peak  
 Site Category: (None)  
 Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Network User-Given Cycle Time)

**Timings based on settings in the Network Timing dialog**

**Phase Times determined by the program**

**Downstream lane blockage effects included in determining phase times**

**Green Split Priority has been specified**

**Phase Sequence: TCS 194 EX AM**

**Reference Phase: Phase B**

**Input Phase Sequence: A, B**

**Output Phase Sequence: A, B**

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
1	L2	78	9.5	78	9.5	0.622	70.6	LOS F	8.2	60.4	1.00	0.81	1.02	9.5
2	T1	181	1.7	181	1.7	0.830	71.7	LOS F	11.7	82.9	1.00	0.92	1.18	7.1
3	R2	21	0.0	21	0.0	0.830	78.0	LOS F	11.7	82.9	1.00	0.96	1.23	7.0
Approach		280	3.8	280	3.8	0.830	71.8	LOS F	11.7	82.9	1.00	0.89	1.14	7.8
East: Military Road (E)														
4	L2	21	0.0	21	0.0	0.258	6.1	LOS A	0.4	5.2	0.03	0.05	0.03	50.3
5	T1	2539	10.5	2539	10.5	0.950	18.4	LOS B	32.0	228.5	0.29	0.37	0.40	27.2
Approach		2560	10.4	2560	10.4	0.950	18.3	LOS B	32.0	228.5	0.29	0.36	0.40	25.9
North: Ben Boyd Road (N)														
7	L2	8	25.0	8	25.0	0.400	61.0	LOS E	6.7	49.0	0.95	0.76	0.95	3.1
8	T1	184	4.0	184	4.0	0.888	68.4	LOS E	6.8	49.0	0.97	0.88	1.14	8.5
9	R2	56	1.9	56	1.9	0.888	84.0	LOS F	6.8	49.0	1.00	1.02	1.38	4.4
Approach		248	4.2	248	4.2	0.888	71.7	LOS F	6.8	49.0	0.98	0.91	1.19	7.3
West: Military Road (W)														
10	L2	347	4.2	347	4.2	0.275	13.1	LOS A	8.6	62.3	0.40	0.69	0.40	17.6
11	T1	2017	11.4	2017	11.4	0.987	68.2	LOS E	96.9	744.8	1.00	1.21	1.32	4.5
Approach		2364	10.3	2364	10.3	0.987	60.1	LOS E	96.9	744.8	0.91	1.13	1.19	5.0
All Vehicles		5453	9.8	5453	9.8	0.987	41.6	LOS C	96.9	744.8	0.63	0.75	0.81	11.5

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.



 **Site: I-02 [I-02 2020 EX AM]**
 **Network: 1 [2020 Military Road EX AM]**

Military Road / Young Street

2028 Young Street Closure Weekday AM Peak

Site Category: (None)

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

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 3013 EX AM - Rev2****Reference Phase: Phase B****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

<b>Movement Performance - Vehicles</b>														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
<b>East: Military Road (E)</b>														
5	T1	2575	10.5	2575	10.5	0.946	22.3	LOS B	27.4	195.8	0.69	0.74	0.79	17.5
Approach		2575	10.5	2575	10.5	0.946	22.3	LOS B	27.4	195.8	0.69	0.74	0.79	15.5
<b>West: Military Road (W)</b>														
11	T1	2041	11.0	2041	11.0	0.802	11.3	LOS A	29.8	228.5	0.65	0.61	0.66	26.6
Approach		2041	11.0	2041	11.0	0.802	11.3	LOS A	29.8	228.5	0.65	0.61	0.66	26.6
All Vehicles		4616	10.8	4616	10.8	0.946	17.4	LOS B	29.8	228.5	0.67	0.68	0.73	19.4

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

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-03 [I-03 2020 EX AM]**
 **Network: 1 [2020 Military Road EX AM]**

Military Road / Wycombe Road

2028 Young Street Closure Weekday AM Peak

Site Category: (None)

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

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 613 EX AM - Rev2****Reference Phase: Phase B****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

<b>Movement Performance - Vehicles</b>															
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed	
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance					
<b>South: Wycombe Road (S)</b>															
1	L2	103	5.1	103	5.1	0.576	71.3	LOS F	7.0	50.9	1.00	0.79	1.00	3.6	
3	R2	131	7.3	131	7.3	0.941	94.9	LOS F	10.7	79.7	1.00	1.07	1.53	2.9	
Approach		234	6.3	234	6.3	0.941	84.5	LOS F	10.7	79.7	1.00	0.95	1.30	3.1	
<b>East: Military Road (E)</b>															
4	L2	76	16.7	76	16.7	0.067	12.3	LOS A	1.7	13.2	0.35	0.65	0.35	22.0	
5	T1	2477	10.9	2477	10.9	0.801	11.5	LOS A	15.9	114.2	0.67	0.63	0.67	18.9	
Approach		2553	11.1	2553	11.1	0.801	11.5	LOS A	15.9	114.2	0.66	0.63	0.66	18.8	
<b>West: Military Road (W)</b>															
11	T1	2058	11.2	2058	11.2	0.762	5.0	LOS A	24.9	191.3	0.34	0.32	0.34	37.3	
Approach		2058	11.2	2058	11.2	0.762	5.0	LOS A	24.9	191.3	0.34	0.32	0.34	37.3	
All Vehicles		4844	10.9	4844	10.9	0.941	12.3	LOS A	24.9	191.3	0.54	0.51	0.55	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.

 **Site: I-04 [I-04 2020 EX AM]**

**## Network: 1 [2020 Military Road EX AM]**

Military Road / Waters Road / Rangers Road  
2028 Young Street Closure Weekday AM Peak  
Site Category: (None)  
Stop (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Rangers Road (S)														
1	L2	62	23.7	62	23.7	0.176	7.6	LOS A	0.3	2.6	0.48	0.72	0.48	39.7
Approach		62	23.7	62	23.7	0.176	7.6	LOS A	0.3	2.6	0.48	0.72	0.48	39.7
East: Military Road (E)														
4	L2	38	0.0	38	0.0	0.020	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	51.0
5	T1	2479	10.6	2479	10.6	0.592	0.1	LOS A	31.4	224.8	0.00	0.00	0.00	59.8
Approach		2517	10.5	2517	10.5	0.592	0.1	NA	31.4	224.8	0.00	0.01	0.00	59.4
North: Waters Road (N)														
7	L2	114	1.9	114	1.9	0.820	63.4	LOS E	4.2	30.0	0.97	1.33	2.17	14.4
Approach		114	1.9	114	1.9	0.820	63.4	LOS E	4.2	30.0	0.97	1.33	2.17	14.4
West: Military Road (W)														
10	L2	84	2.5	84	2.5	0.601	4.8	LOS A	0.0	0.0	0.00	0.05	0.00	55.2
11	T1	2097	11.5	2097	11.5	0.601	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.2
Approach		2181	11.1	2181	11.1	0.601	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.2
All Vehicles		4874	10.7	4874	10.7	0.820	1.7	NA	31.4	224.8	0.03	0.05	0.06	54.8

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Site: I-05 [I-05 2020 EX AM]

Network: 1 [2020 Military Road EX AM]

Ben Boyd Road / Grosvenor Lane  
 2028 Young Street Closure Weekday AM Peak  
 Site Category: (None)  
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Ben Boyd Road (S)														
2	T1	429	3.4	429	3.4	0.263	0.4	LOS A	0.9	6.1	0.13	0.10	0.13	36.3
3	R2	99	2.1	99	2.1	0.263	4.3	LOS A	0.9	6.1	0.17	0.13	0.17	33.6
Approach		528	3.2	528	3.2	0.263	1.1	NA	0.9	6.1	0.14	0.11	0.14	35.8
North: Ben Boyd Road (N)														
7	L2	11	10.0	11	10.0	0.067	3.9	LOS A	0.2	1.6	0.00	0.04	0.00	46.7
8	T1	242	3.5	242	3.5	0.067	0.0	LOS A	3.9	28.1	0.00	0.02	0.00	48.4
Approach		253	3.8	253	3.8	0.067	0.2	NA	3.9	28.1	0.00	0.02	0.00	48.3
All Vehicles		781	3.4	781	3.4	0.263	0.8	NA	3.9	28.1	0.10	0.08	0.10	40.1

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-06 [I-06 2020 EX AM]**

**## Network: 1 [2020 Military Road EX AM]**

Grosvenor Lane / Young Street  
2028 Young Street Closure Weekday AM Peak  
Site Category: (None)  
Stop (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
North: Young Street (N)														
7	L2	84	1.3	84	1.3	0.046	3.9	LOS A	0.0	0.0	0.00	0.52	0.00	27.5
Approach		84	1.3	84	1.3	0.046	3.9	NA	0.0	0.0	0.00	0.52	0.00	27.5
West: Grosvenor Lane (W)														
10	L2	60	0.0	60	0.0	0.074	7.4	LOS A	0.3	2.4	0.18	0.90	0.18	29.4
11	T1	49	6.4	49	6.4	0.074	8.2	LOS A	0.3	2.4	0.18	0.90	0.18	31.9
Approach		109	2.9	109	2.9	0.074	7.8	LOS A	0.3	2.4	0.18	0.90	0.18	30.3
All Vehicles		194	2.2	194	2.2	0.074	6.1	NA	0.3	2.4	0.10	0.73	0.10	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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-07 [I-07 2028 CL AM]**
 **Network: 1 [2020 Military Road EX AM]**

Grosvenor Lane / Waters Road  
 2028 Young Street Closure Weekday AM Peak  
 Site Category: (None)  
 Stop (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Waters Road (S)														
2	T1	83	2.5	83	2.5	0.043	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		83	2.5	83	2.5	0.043	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
North: Waters Road (N)														
8	T1	95	1.1	95	1.1	0.049	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		95	1.1	95	1.1	0.049	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Grosvenor Lane (W)														
10	L2	128	5.7	128	5.7	0.124	8.0	LOS A	0.5	3.7	0.20	0.90	0.20	33.6
12	R2	23	4.5	23	4.5	0.124	8.0	LOS A	0.5	3.7	0.20	0.90	0.20	33.0
Approach		152	5.6	152	5.6	0.124	8.0	LOS A	0.5	3.7	0.20	0.90	0.20	33.5
All Vehicles		329	3.5	329	3.5	0.124	3.7	NA	0.5	3.7	0.09	0.41	0.09	37.1

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Site: I-08 [I-08 2028 CL AM]

Network: 1 [2020 Military Road EX AM]

Ben Boyd Road / Grosvenor Street  
2028 Young Street Closure Weekday AM Peak  
Site Category: (None)  
Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
1	L2	29	10.7	29	10.7	0.122	3.9	LOS A	0.0	0.0	0.00	0.10	0.00	49.2
2	T1	304	2.1	304	2.1	0.122	0.2	LOS A	0.6	4.0	0.08	0.15	0.08	42.9
3	R2	104	4.0	104	4.0	0.122	4.3	LOS A	0.6	4.0	0.23	0.26	0.23	40.5
Approach		438	3.1	438	3.1	0.122	1.4	NA	0.6	4.0	0.11	0.18	0.11	43.3
East: Grosvenor Street (E)														
4	L2	120	3.5	120	3.5	0.278	6.0	LOS A	0.9	6.6	0.32	0.62	0.32	34.6
5	T1	11	0.0	11	0.0	0.278	9.8	LOS A	0.9	6.6	0.32	0.62	0.32	49.2
6	R2	60	0.0	60	0.0	0.278	11.3	LOS A	0.9	6.6	0.32	0.62	0.32	33.6
Approach		191	2.2	191	2.2	0.278	7.9	LOS A	0.9	6.6	0.32	0.62	0.32	36.1
North: Ben Boyd Road (N)														
7	L2	2	0.0	2	0.0	0.068	3.4	LOS A	0.0	0.0	0.00	0.01	0.00	47.6
8	T1	129	0.8	129	0.8	0.068	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	49.2
Approach		132	0.8	132	0.8	0.068	0.1	NA	0.0	0.0	0.00	0.01	0.00	49.1
West: Service Station Access														
10	L2	1	0.0	1	0.0	0.005	6.1	LOS A	0.0	0.1	0.46	0.59	0.46	41.4
11	T1	1	0.0	1	0.0	0.005	8.5	LOS A	0.0	0.1	0.46	0.59	0.46	48.2
12	R2	1	0.0	1	0.0	0.005	12.1	LOS A	0.0	0.1	0.46	0.59	0.46	46.6
Approach		3	0.0	3	0.0	0.005	8.9	LOS A	0.0	0.1	0.46	0.59	0.46	45.4
All Vehicles		763	2.5	763	2.5	0.278	2.8	NA	0.9	6.6	0.14	0.26	0.14	40.8

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

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Organisation: GTA CONSULTANTS | Created: Tuesday, 23 March 2021 11:49:25 AM

Project: \\gta.com.au\projectfiles\ProjectFilesSyd\N20400-20499\N204900 Young Street Neutral Bay TIA\Modelling\2020 Existing Military Network - RS.sip8

## USER REPORT FOR NETWORK SITE

 **Project: 2020 Existing Military Network - RS**

**Template: GTA Appendix**

 **Site: I-01 [I-01 2020 EX PM]**

**## Network: 3 [2020 Military Road EX PM]**

Military Road / Ben Boyd Road

2028 Young Street Closure Weekday PM Peak

Site Category: (None)

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

**Timings based on settings in the Network Timing dialog**

**Phase Times determined by the program**

**Downstream lane blockage effects included in determining phase times**

**Green Split Priority has been specified**

**Phase Sequence: TCS 194 EX PM**

**Reference Phase: Phase B**

**Input Phase Sequence: A, B**

**Output Phase Sequence: A, B**

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
1	L2	60	0.0	60	0.0	0.568	69.5	LOS E	8.2	57.5	0.99	0.79	0.99	9.8
2	T1	203	1.6	203	1.6	0.812	69.3	LOS E	12.2	86.7	1.00	0.90	1.13	7.3
3	R2	28	3.7	28	3.7	0.812	75.8	LOS F	12.2	86.7	1.00	0.94	1.19	7.2
Approach		292	1.4	292	1.4	0.812	70.0	LOS E	12.2	86.7	1.00	0.88	1.11	7.8
East: Military Road (E)														
4	L2	38	5.6	38	5.6	0.044	8.2	LOS A	0.3	2.2	0.10	0.51	0.10	38.4
5	T1	1938	7.6	1938	7.6	0.889	10.0	LOS A	32.1	228.5	0.42	0.43	0.46	34.8
Approach		1976	7.5	1976	7.5	0.889	10.0	LOS A	32.1	228.5	0.42	0.43	0.45	34.9
North: Ben Boyd Road (N)														
7	L2	5	0.0	5	0.0	0.394	59.8	LOS E	6.9	49.0	0.94	0.76	0.94	3.1
8	T1	164	1.3	164	1.3	0.787	61.9	LOS E	6.9	49.0	0.96	0.80	1.02	9.3
9	R2	58	3.6	58	3.6	0.787	77.9	LOS F	6.8	49.0	1.00	0.91	1.22	4.6
Approach		227	1.9	227	1.9	0.787	65.9	LOS E	6.9	49.0	0.97	0.83	1.07	7.7
West: Military Road (W)														
10	L2	359	0.6	359	0.6	0.523	13.7	LOS A	20.6	148.0	0.48	0.59	0.48	19.5
11	T1	2404	6.2	2404	6.2	0.747	11.0	LOS A	40.3	297.0	0.62	0.60	0.62	19.5
Approach		2763	5.4	2763	5.4	0.747	11.4	LOS A	40.3	297.0	0.60	0.60	0.60	19.5
All Vehicles		5258	5.8	5258	5.8	0.889	16.5	LOS B	40.3	297.0	0.57	0.56	0.59	21.2

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.



 **Site: I-02 [I-02 2020 EX PM]**
 **Network: 3 [2020 Military Road EX PM]**

Military Road / Young Street

2028 Young Street Closure Weekday PM Peak

Site Category: (None)

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

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 3013 EX PM - Rev2****Reference Phase: Phase B****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

<b>Movement Performance - Vehicles</b>														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
<b>East: Military Road (E)</b>														
5	T1	1964	7.2	1964	7.2	0.763	4.6	LOS A	20.2	143.2	0.33	0.31	0.33	37.9
Approach		1964	7.2	1964	7.2	0.763	4.6	LOS A	20.2	148.9	0.33	0.31	0.33	37.9
<b>West: Military Road (W)</b>														
11	T1	2427	6.2	2427	6.2	0.565	2.8	LOS A	9.1	66.9	0.18	0.17	0.18	45.7
Approach		2427	6.2	2427	6.2	0.565	2.8	LOS A	9.1	66.9	0.18	0.17	0.18	45.7
All Vehicles		4392	6.6	4392	6.6	0.763	3.6	LOS A	20.2	148.9	0.25	0.23	0.25	42.1

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.

 **Site: I-03 [I-03 2020 EX PM]**
 **Network: 3 [2020 Military Road EX PM]**

Military Road / Wycombe Road

2028 Young Street Closure Weekday PM Peak

Site Category: (None)

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

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 613 EX PM****Reference Phase: Phase B****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

Movement Performance - Vehicles															
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed	
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance					
South: Wycombe Road (S)															
1	L2	74	2.9	74	2.9	0.459	69.2	LOS E	4.9	35.1	0.98	0.78	0.98	3.7	
3	R2	113	6.5	113	6.5	0.741	76.6	LOS F	8.0	59.4	1.00	0.86	1.14	3.4	
Approach		186	5.1	186	5.1	0.741	73.6	LOS F	8.0	59.4	0.99	0.83	1.08	3.5	
East: Military Road (E)															
4	L2	53	16.0	53	16.0	0.048	13.2	LOS A	1.2	9.6	0.36	0.64	0.36	21.2	
5	T1	1895	7.4	1895	7.4	0.706	11.6	LOS A	16.1	114.2	0.62	0.58	0.62	18.5	
Approach		1947	7.6	1947	7.6	0.706	11.7	LOS A	16.1	114.2	0.61	0.58	0.61	18.6	
West: Military Road (W)															
11	T1	2393	6.2	2393	6.2	0.708	2.8	LOS A	12.0	88.5	0.18	0.17	0.18	44.5	
Approach		2393	6.2	2393	6.2	0.708	2.8	LOS A	12.0	88.5	0.18	0.17	0.18	44.5	
All Vehicles		4526	6.7	4526	6.7	0.741	9.6	LOS A	16.1	114.2	0.40	0.37	0.41	24.8	

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.

 **Site: I-04 [I-04 2020 EX PM]**
 **Network: 3 [2020 Military Road EX PM]**

Military Road / Waters Road / Rangers Road  
 2028 Young Street Closure Weekday PM Peak  
 Site Category: (None)  
 Stop (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Rangers Road (S)														
1	L2	91	5.8	91	5.8	0.408	8.8	LOS A	0.7	5.4	0.38	0.73	0.46	38.2
Approach		91	5.8	91	5.8	0.408	8.8	LOS A	0.7	5.4	0.38	0.73	0.46	38.2
East: Military Road (E)														
4	L2	61	1.7	61	1.7	0.050	5.6	LOS A	0.0	0.0	0.00	0.39	0.00	52.8
5	T1	1881	7.8	1881	7.8	0.499	0.0	LOS A	20.1	150.1	0.00	0.01	0.00	59.6
Approach		1942	7.6	1942	7.6	0.499	0.2	NA	20.1	150.1	0.00	0.02	0.00	59.1
North: Waters Road (N)														
7	L2	156	0.0	156	0.0	0.518	18.2	LOS B	2.5	17.2	0.67	1.13	1.04	30.8
Approach		156	0.0	156	0.0	0.518	18.2	LOS B	2.5	17.2	0.67	1.13	1.04	30.8
West: Military Road (W)														
10	L2	92	1.1	92	1.1	0.282	4.7	LOS A	0.0	0.0	0.00	0.15	0.00	47.9
11	T1	2391	6.4	2391	6.4	0.807	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	58.7
Approach		2482	6.2	2482	6.2	0.807	0.2	NA	0.0	0.0	0.00	0.02	0.00	58.6
All Vehicles		4671	6.6	4671	6.6	0.807	1.0	NA	20.1	150.1	0.03	0.07	0.04	56.4

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Site: I-05 [I-05 2020 EX PM]

Network: 3 [2020 Military Road EX PM]

Ben Boyd Road / Grosvenor Lane  
 2028 Young Street Closure Weekday PM Peak  
 Site Category: (None)  
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Ben Boyd Road (S)														
2	T1	443	1.0	443	1.0	0.270	0.4	LOS A	0.9	6.3	0.13	0.10	0.13	36.7
3	R2	109	0.0	109	0.0	0.270	4.1	LOS A	0.9	6.3	0.16	0.14	0.16	33.9
Approach		553	0.8	553	0.8	0.270	1.1	NA	0.9	6.3	0.13	0.11	0.13	36.1
North: Ben Boyd Road (N)														
7	L2	6	0.0	6	0.0	0.059	3.9	LOS A	1.1	7.4	0.00	0.03	0.00	47.6
8	T1	220	1.4	220	1.4	0.059	0.0	LOS A	1.1	7.4	0.00	0.01	0.00	48.8
Approach		226	1.4	226	1.4	0.059	0.1	NA	1.1	7.4	0.00	0.02	0.00	48.8
All Vehicles		779	0.9	779	0.9	0.270	0.8	NA	1.1	7.4	0.09	0.08	0.09	40.0

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 Site: I-06 [I-06 2020 EX PM]

## Network: 3 [2020 Military Road EX PM]

Grosvenor Lane / Young Street  
2028 Young Street Closure Weekday PM Peak  
Site Category: (None)  
Stop (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
North: Young Street (N)														
7	L2	97	3.3	97	3.3	0.053	3.9	LOS A	0.0	0.0	0.00	0.52	0.00	27.5
Approach		97	3.3	97	3.3	0.053	3.9	NA	0.0	0.0	0.00	0.52	0.00	27.5
West: Grosvenor Lane (W)														
10	L2	78	0.0	78	0.0	0.090	7.4	LOS A	0.4	3.0	0.20	0.88	0.20	29.4
11	T1	59	1.8	59	1.8	0.090	8.1	LOS A	0.4	3.0	0.20	0.88	0.20	31.9
Approach		137	0.8	137	0.8	0.090	7.7	LOS A	0.4	3.0	0.20	0.88	0.20	30.3
All Vehicles		234	1.8	234	1.8	0.090	6.1	NA	0.4	3.0	0.12	0.73	0.12	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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-07 [I-07 2028 CL PM]**
 **Network: 3 [2020 Military Road EX PM]**

Grosvenor Lane / Waters Road  
 2028 Young Street Closure Weekday PM Peak  
 Site Category: (None)  
 Stop (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Waters Road (S)														
2	T1	93	2.3	93	2.3	0.048	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		93	2.3	93	2.3	0.048	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
North: Waters Road (N)														
8	T1	111	0.0	111	0.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		111	0.0	111	0.0	0.057	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Grosvenor Lane (W)														
10	L2	85	3.7	85	3.7	0.121	8.0	LOS A	0.5	3.4	0.22	0.90	0.22	33.5
12	R2	53	0.0	53	0.0	0.121	7.9	LOS A	0.5	3.4	0.22	0.90	0.22	32.9
Approach		138	2.3	138	2.3	0.121	8.0	LOS A	0.5	3.4	0.22	0.90	0.22	33.3
All Vehicles		341	1.5	341	1.5	0.121	3.2	NA	0.5	3.4	0.09	0.36	0.09	37.8

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Site: I-08 [I-08 2028 CL PM]

Network: 3 [2020 Military Road EX PM]

Ben Boyd Road / Grosvenor Street  
2028 Young Street Closure Weekday PM Peak  
Site Category: (None)  
Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
1	L2	16	0.0	16	0.0	0.121	3.9	LOS A	0.0	0.0	0.00	0.05	0.00	49.3
2	T1	319	0.7	319	0.7	0.121	0.1	LOS A	0.6	4.0	0.06	0.12	0.06	43.9
3	R2	112	1.9	112	1.9	0.121	4.1	LOS A	0.6	4.0	0.18	0.27	0.18	40.7
Approach		446	0.9	446	0.9	0.121	1.3	NA	0.6	4.0	0.09	0.16	0.09	43.2
East: Grosvenor Street (E)														
4	L2	141	2.2	141	2.2	0.291	5.8	LOS A	1.0	7.0	0.23	0.59	0.23	35.3
5	T1	12	0.0	12	0.0	0.291	9.4	LOS A	1.0	7.0	0.23	0.59	0.23	49.5
6	R2	59	3.6	59	3.6	0.291	11.3	LOS A	1.0	7.0	0.23	0.59	0.23	34.0
Approach		212	2.5	212	2.5	0.291	7.6	LOS A	1.0	7.0	0.23	0.59	0.23	36.7
North: Ben Boyd Road (N)														
7	L2	7	0.0	7	0.0	0.046	3.4	LOS A	0.0	0.0	0.00	0.04	0.00	46.9
8	T1	81	1.3	81	1.3	0.046	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	46.3
Approach		88	1.2	88	1.2	0.046	0.3	NA	0.0	0.0	0.00	0.04	0.00	46.5
West: Service Station Access														
10	L2	1	0.0	1	0.0	0.005	6.2	LOS A	0.0	0.1	0.47	0.58	0.47	41.6
11	T1	1	0.0	1	0.0	0.005	8.3	LOS A	0.0	0.1	0.47	0.58	0.47	48.3
12	R2	1	0.0	1	0.0	0.005	11.9	LOS A	0.0	0.1	0.47	0.58	0.47	46.7
Approach		3	0.0	3	0.0	0.005	8.8	LOS A	0.0	0.1	0.47	0.58	0.47	45.5
All Vehicles		749	1.4	749	1.4	0.291	3.0	NA	1.0	7.0	0.12	0.27	0.12	40.6

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

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Organisation: GTA CONSULTANTS | Created: Tuesday, 23 March 2021 11:51:39 AM

Project: \\gta.com.au\projectfiles\ProjectFilesSyd\N20400-20499\N204900 Young Street Neutral Bay TIA\Modelling\2020 Existing Military Network - RS.sip8

## USER REPORT FOR NETWORK SITE

 Project: 2020 Existing Military Network - RS

Template: GTA Appendix

 Site: I-01 [I-01 2020 EX SAT ]

 Network: 14 [2020 Military Rd EX SAT]

Military Road / Ben Boyd Road  
2018 Existing Saturday Mid-day Peak  
Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 136 seconds (Site User-Given Cycle Time)

**Timings based on settings in the Site Phasing & Timing dialog**  
**Phase Times determined by the program**  
**Downstream lane blockage effects included in determining phase times**  
**Green Split Priority has been specified**  
**Phase Sequence: TCS 194 EX SAT**  
**Reference Phase: Phase A**  
**Input Phase Sequence: A, B**  
**Output Phase Sequence: A, B**

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	Aver. Back of Queue		Prop. Queued	Effective Stop Rate	Aver. Average	
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m			Cycles	Speed km/h
South: Ben Boyd Road (S)														
1	L2	88	1.2	88	1.2	0.672	69.1	LOS E	5.7	40.1	1.00	0.83	1.05	9.7
2	T1	178	1.2	178	1.2	0.960	85.3	LOS F	8.6	60.6	1.00	1.06	1.42	6.0
3	R2	41	0.0	41	0.0	0.960	98.2	LOS F	8.6	60.6	1.00	1.15	1.57	9.5
Approach		307	1.0	307	1.0	0.960	82.4	LOS F	8.6	60.6	1.00	1.01	1.33	7.5
East: Military Road (E)														
4	L2	37	5.7	37	5.7	0.043	14.0	LOS A	0.6	4.2	0.37	0.61	0.37	31.6
5	T1	1966	2.7	1966	2.7	0.865	15.7	LOS B	30.1	215.7	0.77	0.74	0.79	28.1
Approach		2003	2.7	2003	2.7	0.865	15.7	LOS B	30.1	215.7	0.76	0.74	0.78	28.2
North: Ben Boyd Road (N)														
7	L2	21	5.0	21	5.0	0.313	60.5	LOS E	3.1	21.9	0.94	0.74	0.94	9.5
8	T1	204	0.5	204	0.5	0.845	66.7	LOS E	4.3	30.0	0.98	0.91	1.15	8.7
9	R2	53	0.0	53	0.0	0.845	73.8	LOS F	4.3	30.0	1.00	0.98	1.24	4.9
Approach		278	0.8	278	0.8	0.845	67.6	LOS E	4.3	30.0	0.98	0.91	1.15	7.9
West: Military Road (W)														
10	L2	343	0.6	343	0.6	0.319	20.4	LOS B	7.0	49.4	0.55	0.74	0.55	12.6
11	T1	2307	2.2	2307	2.2	0.816	12.5	LOS A	30.4	216.6	0.72	0.68	0.72	31.5
Approach		2651	2.0	2651	2.0	0.816	13.6	LOS A	30.4	216.6	0.70	0.69	0.70	29.1
All Vehicles		5239	2.2	5239	2.2	0.960	21.3	LOS B	30.4	216.6	0.76	0.74	0.79	22.6

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.



Site: I-05 [I-05 2020 EX SAT]

Network: 14 [2020 Military Rd EX SAT]

Ben Boyd Road / Grosvenor Lane  
 2028 Young Street Closure Saturday Mid-day Peak  
 Site Category: (None)  
 Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn v/c	Average Delay sec	Level of Service	Aver. Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
2	T1	437	1.0	437	1.0	0.318	0.5	LOS A	0.4	2.7	0.15	0.10	0.15	34.6
3	R2	98	0.0	98	0.0	0.318	4.6	LOS A	0.4	2.7	0.15	0.10	0.15	42.6
Approach		535	0.8	535	0.8	0.318	1.3	NA	0.4	2.7	0.15	0.10	0.15	38.4
North: Ben Boyd Road (N)														
7	L2	17	0.0	17	0.0	0.083	3.9	LOS A	0.0	0.0	0.00	0.07	0.00	46.5
8	T1	275	0.8	275	0.8	0.083	0.0	LOS A	4.3	30.3	0.00	0.03	0.00	47.7
Approach		292	0.7	292	0.7	0.083	0.2	NA	4.3	30.3	0.00	0.03	0.00	47.5
All Vehicles		826	0.8	826	0.8	0.318	0.9	NA	4.3	30.3	0.10	0.08	0.10	41.2

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Site: I-08 [I-08 2028 CL SAT]

Network: 14 [2020 Military Rd EX SAT]

Ben Boyd Road / Grosvenor Street  
2028 Young Street Closure Saturday Mid-day Peak  
Site Category: (None)  
Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	Aver. Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
1	L2	12	0.0	12	0.0	0.122	3.9	LOS A	0.0	0.0	0.00	0.04	0.00	49.2
2	T1	298	1.8	298	1.8	0.122	0.1	LOS A	0.2	1.7	0.06	0.11	0.06	44.1
3	R2	133	0.0	133	0.0	0.122	4.3	LOS A	0.2	1.7	0.23	0.33	0.23	39.6
Approach		442	1.2	442	1.2	0.122	1.5	NA	0.2	1.7	0.11	0.18	0.11	42.3
East: Grosvenor Street (E)														
4	L2	179	0.6	179	0.6	0.225	5.9	LOS A	0.4	2.8	0.26	0.59	0.26	36.0
5	T1	6	0.0	6	0.0	0.225	9.8	LOS A	0.4	2.8	0.26	0.59	0.26	49.9
6	R2	47	0.0	47	0.0	0.225	11.6	LOS A	0.4	2.8	0.26	0.59	0.26	34.6
Approach		233	0.5	233	0.5	0.225	7.2	LOS A	0.4	2.8	0.26	0.59	0.26	36.6
North: Ben Boyd Road (N)														
7	L2	14	0.0	14	0.0	0.064	3.4	LOS A	0.0	0.0	0.00	0.06	0.00	46.7
8	T1	109	1.0	109	1.0	0.064	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	45.2
Approach		123	0.9	123	0.9	0.064	0.4	NA	0.0	0.0	0.00	0.06	0.00	45.7
West: Service Station Access														
10	L2	2	0.0	2	0.0	0.018	6.2	LOS A	0.0	0.2	0.53	0.67	0.53	39.9
11	T1	1	0.0	1	0.0	0.018	8.7	LOS A	0.0	0.2	0.53	0.67	0.53	46.5
12	R2	5	0.0	5	0.0	0.018	12.9	LOS A	0.0	0.2	0.53	0.67	0.53	44.5
Approach		8	0.0	8	0.0	0.018	10.7	LOS A	0.0	0.2	0.53	0.67	0.53	43.5
All Vehicles		806	0.9	806	0.9	0.225	3.0	NA	0.4	2.8	0.14	0.28	0.14	40.3

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

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Organisation: GTA CONSULTANTS | Created: Tuesday, 23 March 2021 11:52:10 AM

Project: \\gta.com.au\projectfiles\ProjectFilesSyd\N20400-20499\N204900 Young Street Neutral Bay TIA\Modelling\2020 Existing Military Network - RS.sip8

## USER REPORT FOR NETWORK SITE

 Project: 2020 Existing Belgrave Network - RS

Template: GTA Appendix

 Site: I-08 [I-08 2020 EX AM]

 Network: 1 [2020 Belgrave St CL AM]

Ben Boyd Road / Grosvenor Street  
2028 Young Street Closure Weekday AM Peak  
Site Category: (None)  
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
1	L2	29	10.7	29	10.7	0.138	3.9	LOS A	0.0	0.0	0.00	0.10	0.00	49.2
2	T1	304	2.1	304	2.1	0.138	0.2	LOS A	1.3	9.7	0.07	0.15	0.07	39.3
3	R2	104	4.0	104	4.0	0.138	4.4	LOS A	1.3	9.7	0.21	0.26	0.21	31.5
Approach		438	3.1	438	3.1	0.138	1.4	NA	1.3	9.7	0.10	0.18	0.10	41.0
East: Grosvenor Street (E)														
4	L2	120	3.5	120	3.5	0.328	5.9	LOS A	1.1	7.8	0.19	0.58	0.19	33.9
5	T1	11	0.0	11	0.0	0.328	10.9	LOS A	1.1	7.8	0.19	0.58	0.19	48.9
6	R2	60	0.0	60	0.0	0.328	12.5	LOS A	1.1	7.8	0.19	0.58	0.19	34.1
Approach		191	2.2	191	2.2	0.328	8.2	LOS A	1.1	7.8	0.19	0.58	0.19	35.7
North: Ben Boyd Road (N)														
7	L2	2	0.0	2	0.0	0.034	3.4	LOS A	0.0	0.0	0.00	0.02	0.00	48.5
8	T1	129	0.8	129	0.8	0.034	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	49.6
Approach		132	0.8	132	0.8	0.034	0.1	NA	0.0	0.0	0.00	0.01	0.00	49.6
West: Service Station Access														
10	L2	1	0.0	1	0.0	0.006	6.3	LOS A	0.0	0.1	0.47	0.60	0.47	45.8
11	T1	1	0.0	1	0.0	0.006	9.2	LOS A	0.0	0.1	0.47	0.60	0.47	45.8
12	R2	1	0.0	1	0.0	0.006	13.2	LOS A	0.0	0.1	0.47	0.60	0.47	44.3
Approach		3	0.0	3	0.0	0.006	9.6	LOS A	0.0	0.1	0.47	0.60	0.47	45.3
All Vehicles		763	2.5	763	2.5	0.328	2.9	NA	1.3	9.7	0.11	0.25	0.11	39.3

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Site: I-09 [I-09 2020 EX AM]

Network: 1 [2020 Belgrave St CL AM]

Grosvenor Street / Young Street  
2028 Young Street Closure Weekday AM Peak  
Site Category: (None)  
Roundabout

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Young Street (S)														
1	L2	22	0.0	22	0.0	0.066	4.8	LOS A	0.3	2.4	0.44	0.57	0.44	23.4
2	T1	28	0.0	28	0.0	0.066	4.6	LOS A	0.3	2.4	0.44	0.57	0.44	23.4
3	R2	14	0.0	14	0.0	0.066	7.5	LOS A	0.3	2.4	0.44	0.57	0.44	23.4
3u	U	1	0.0	1	0.0	0.066	9.1	LOS A	0.3	2.4	0.44	0.57	0.44	26.3
Approach		65	0.0	65	0.0	0.066	5.4	LOS A	0.3	2.4	0.44	0.57	0.44	23.5
East: Grosvenor Street (E)														
4	L2	14	0.0	14	0.0	0.198	4.9	LOS A	1.2	8.7	0.35	0.55	0.35	35.2
5	T1	115	3.7	115	3.7	0.198	4.7	LOS A	1.2	8.7	0.35	0.55	0.35	35.7
6	R2	93	0.0	93	0.0	0.198	7.6	LOS A	1.2	8.7	0.35	0.55	0.35	35.7
6u	U	4	0.0	4	0.0	0.198	10.1	LOS A	1.2	8.7	0.35	0.55	0.35	35.7
Approach		225	1.9	225	1.9	0.198	6.0	LOS A	1.2	8.7	0.35	0.55	0.35	35.6
North: Young Street (N)														
7	L2	63	1.7	63	1.7	0.162	4.6	LOS A	0.7	5.3	0.23	0.54	0.23	29.4
8	T1	60	0.0	60	0.0	0.162	4.4	LOS A	0.7	5.3	0.23	0.54	0.23	31.3
9	R2	60	7.0	60	7.0	0.162	7.4	LOS A	0.7	5.3	0.23	0.54	0.23	29.4
9u	U	6	0.0	6	0.0	0.162	9.9	LOS A	0.7	5.3	0.23	0.54	0.23	29.4
Approach		189	2.8	189	2.8	0.162	5.6	LOS A	0.7	5.3	0.23	0.54	0.23	30.1
West: Grosvenor Street (W)														
10	L2	34	0.0	34	0.0	0.110	4.8	LOS A	0.6	4.0	0.33	0.51	0.33	35.1
11	T1	71	1.5	71	1.5	0.110	4.6	LOS A	0.6	4.0	0.33	0.51	0.33	35.1
12	R2	12	9.1	12	9.1	0.110	7.6	LOS A	0.6	4.0	0.33	0.51	0.33	34.0
12u	U	4	25.0	4	25.0	0.110	10.6	LOS A	0.6	4.0	0.33	0.51	0.33	35.1
Approach		120	2.6	120	2.6	0.110	5.2	LOS A	0.6	4.0	0.33	0.51	0.33	35.0
All Vehicles		600	2.1	600	2.1	0.198	5.6	LOS A	1.2	8.7	0.32	0.54	0.32	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.

Roundabout Capacity Model: SIDRA Standard.

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.

Site: I-10 [I-10 2020 EX AM]

Network: 1 [2020 Belgrave St CL AM]

Grosvenor Street / Waters Road  
2028 Young Street Closure Weekday AM Peak  
Site Category: (None)  
Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Waters Road (S)														
1	L2	87	9.6	87	9.6	0.116	4.7	LOS A	0.5	3.7	0.12	0.25	0.12	34.2
2	T1	92	2.3	92	2.3	0.116	0.1	LOS A	0.5	3.7	0.12	0.25	0.12	34.2
Approach		179	5.9	179	5.9	0.116	2.4	NA	0.5	3.7	0.12	0.25	0.12	34.2
North: Waters Road (S)														
8	T1	48	2.2	48	2.2	0.142	0.8	LOS A	0.6	4.5	0.30	0.45	0.30	37.0
9	R2	169	0.6	169	0.6	0.142	5.4	LOS A	0.6	4.5	0.30	0.45	0.30	32.5
Approach		218	1.0	218	1.0	0.142	4.4	NA	0.6	4.5	0.30	0.45	0.30	33.7
West: Grosvenor Street (W)														
10	L2	68	0.0	68	0.0	0.120	4.8	LOS A	0.4	3.1	0.21	0.56	0.21	36.0
12	R2	57	0.0	57	0.0	0.120	7.3	LOS A	0.4	3.1	0.21	0.56	0.21	35.6
Approach		125	0.0	125	0.0	0.120	5.9	LOS A	0.4	3.1	0.21	0.56	0.21	35.8
All Vehicles		522	2.4	522	2.4	0.142	4.1	NA	0.6	4.5	0.22	0.41	0.22	34.6

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-11 [I-11 2020 EX AM]**
 **Network: 1 [2020 Belgrave St CL AM]**

Ben Boyd Road / Ernest Street

2028 Young Street Closure Weekday AM Peak

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 95 seconds (Network User-Given Cycle Time)

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 1874 EX AM****Reference Phase: Phase A****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Ben Boyd Road (S)														
1	L2	133	0.8	133	0.8	0.631	48.4	LOS D	6.3	44.6	1.00	0.82	1.05	11.6
2	T1	246	1.7	246	1.7	0.631	38.4	LOS C	9.2	65.3	0.97	0.81	0.97	4.8
Approach		379	1.4	379	1.4	0.631	41.9	LOS C	9.2	65.3	0.98	0.81	1.00	7.8
North: Ben Boyd Road (N)														
8	T1	132	1.6	132	1.6	0.761	11.7	LOS A	10.4	73.4	0.67	0.78	0.80	11.4
9	R2	1740	1.0	1740	1.0	0.761	15.0	LOS B	10.4	73.4	0.70	0.80	0.76	24.7
Approach		1872	1.0	1872	1.0	0.761	14.7	LOS B	10.4	73.4	0.70	0.80	0.76	24.1
West: Ernest Street (W)														
10	L2	480	7.5	480	7.5	0.202	10.8	LOS A	4.1	30.8	0.40	0.66	0.40	26.3
Approach		480	7.5	480	7.5	0.202	10.8	LOS A	4.1	30.8	0.40	0.66	0.40	26.3
All Vehicles		2731	2.2	2731	2.2	0.761	17.8	LOS B	10.4	73.4	0.69	0.78	0.73	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.

Site: I-12 [I-12 2020 EX AM]

Network: 1 [2020 Belgrave St CL AM]

Ben Boyd Rd / Belgrave St  
2028 Young Street Closure Weekday AM Peak  
Site Category: (None)  
Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Ben Boyd Road (S)														
2	T1	76	5.6	76	5.6	0.108	0.0	LOS A	0.0	0.0	0.00	0.32	0.00	42.1
3	R2	652	5.3	652	5.3	0.296	3.6	LOS A	0.0	0.0	0.00	0.48	0.00	28.2
Approach		727	5.4	727	5.4	0.296	3.3	NA	0.0	0.0	0.00	0.46	0.00	30.6
East: Belgrave Street (E)														
4	L2	1853	1.1	1853	1.1	0.503	4.6	LOS A	18.6	131.7	0.00	0.53	0.00	37.2
Approach		1853	1.1	1853	1.1	0.503	4.6	NA	18.6	131.7	0.00	0.53	0.00	37.2
North: Ben Boyd Road (N)														
7	L2	14	0.0	14	0.0	0.507	37.9	LOS C	1.3	9.3	0.67	0.78	0.91	5.1
8	T1	18	5.9	18	5.9	0.507	106.0	LOS F	1.3	9.3	0.67	0.78	0.91	5.1
Approach		32	3.3	32	3.3	0.507	76.5	LOS F	1.3	9.3	0.67	0.78	0.91	5.1
West: Oaks Avenue														
10	L2	23	0.0	23	0.0	0.039	5.8	LOS A	0.2	1.2	0.17	0.54	0.17	42.4
11	T1	11	0.0	11	0.0	0.039	10.5	LOS A	0.2	1.2	0.17	0.54	0.17	40.7
Approach		34	0.0	34	0.0	0.039	7.3	LOS A	0.2	1.2	0.17	0.54	0.17	42.0
All Vehicles		2645	2.3	2645	2.3	0.507	5.1	NA	18.6	131.7	0.01	0.51	0.01	34.4

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-13 [I-13 2020 EX AM]**
 **Network: 1 [2020 Belgrave St CL AM]**

Belgrave St / Young St

2028 Young Street Closure Weekday AM Peak

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 95 seconds (Network User-Given Cycle Time)

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 1221 EX AM - Rev2****Reference Phase: Phase A****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Young Street (S)														
1	L2	45	0.0	45	0.0	0.178	44.7	LOS D	1.9	13.4	0.92	0.73	0.92	7.6
2	T1	62	1.7	62	1.7	0.325	39.5	LOS C	3.7	26.0	0.93	0.74	0.93	13.3
3	R2	24	0.0	24	0.0	0.325	44.1	LOS D	3.7	26.0	0.93	0.74	0.93	8.2
Approach		132	0.8	132	0.8	0.325	42.1	LOS C	3.7	26.0	0.93	0.74	0.93	10.5
East: Belgrave Street (E)														
4	L2	56	3.8	56	3.8	0.452	8.8	LOS A	14.5	103.3	0.29	0.28	0.29	38.7
5	T1	1449	1.6	1449	1.6	0.452	3.9	LOS A	14.5	103.3	0.26	0.28	0.26	39.0
6	R2	106	2.0	106	2.0	0.452	7.1	LOS A	2.8	19.8	0.16	0.26	0.16	41.5
Approach		1612	1.7	1612	1.7	0.452	4.3	LOS A	14.5	103.3	0.26	0.28	0.26	39.2
North: Young Street (N)														
7	L2	19	0.0	19	0.0	0.113	43.1	LOS D	1.3	9.1	0.90	0.69	0.90	8.1
8	T1	103	3.1	103	3.1	0.566	41.1	LOS C	6.4	46.1	0.96	0.78	0.96	7.9
9	R2	52	6.1	52	6.1	0.566	46.1	LOS D	6.4	46.1	0.97	0.79	0.97	7.8
Approach		174	3.6	174	3.6	0.566	42.8	LOS D	6.4	46.1	0.96	0.77	0.96	7.9
West: Belgrave Street (W)														
10	L2	48	8.7	48	8.7	0.124	9.4	LOS A	4.1	29.5	0.30	0.31	0.30	37.7
11	T1	573	4.2	573	4.2	0.614	6.8	LOS A	8.8	64.3	0.44	0.44	0.44	32.1
12	R2	53	8.0	53	8.0	0.614	13.3	LOS A	8.8	64.3	0.58	0.55	0.58	29.4
Approach		674	4.8	674	4.8	0.614	7.5	LOS A	8.8	64.3	0.44	0.44	0.44	32.4
All Vehicles		2591	2.6	2591	2.6	0.614	9.6	LOS A	14.5	103.3	0.39	0.38	0.39	30.0

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.



 **Site: I-14 [I-14 2020 EX AM]**
 **Network: 1 [2020 Belgrave St CL AM]**

Belgrave St / Waters Rd

2028 Young Street Closure Weekday AM Peak

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 95 seconds (Network User-Given Cycle Time)

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 1775 EX AM****Reference Phase: Phase A****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Waters Road (S)														
1	L2	66	3.2	66	3.2	0.217	42.1	LOS C	2.7	19.5	0.90	0.75	0.90	8.8
3a	R1	100	0.0	100	0.0	0.621	53.1	LOS D	4.8	33.6	1.00	0.81	1.07	12.3
Approach		166	1.3	166	1.3	0.621	48.7	LOS D	4.8	33.6	0.96	0.78	1.00	11.2
NorthEast: Gerard Street (NE)														
24a	L1	224	0.9	224	0.9	0.771	10.7	LOS A	18.4	129.6	0.45	0.72	0.45	25.3
26a	R1	1782	0.9	1782	0.9	0.771	8.2	LOS A	18.4	129.6	0.33	0.67	0.33	28.6
Approach		2006	0.9	2006	0.9	0.771	8.5	LOS A	18.4	129.6	0.34	0.68	0.34	28.1
West: Belgrave Street (W)														
10a	L1	584	5.0	584	5.0	0.421	8.1	LOS A	5.2	38.3	0.24	0.63	0.24	39.2
Approach		584	5.0	584	5.0	0.421	8.1	LOS A	5.2	38.3	0.24	0.63	0.24	39.2
All Vehicles		2757	1.8	2757	1.8	0.771	10.9	LOS A	18.4	129.6	0.35	0.68	0.36	28.4

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.

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Organisation: GTA CONSULTANTS | Created: Tuesday, 23 March 2021 11:53:43 AM

Project: \\gta.com.au\projectfiles\ProjectFilesSyd\N20400-20499\N204900 Young Street Neutral Bay TIA\Modelling\2020 Existing Belgrave

Network - RS.sip8

## USER REPORT FOR NETWORK SITE

 Project: 2020 Existing Belgrave Network - RS

Template: GTA Appendix

 Site: I-08 [I-08 2020 EX PM]

 Network: 2 [2020 Belgrave St CL PM]

Ben Boyd Road / Grosvenor Street  
2028 Young Street Closure Weekday PM Peak  
Site Category: (None)  
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Ben Boyd Road (S)														
1	L2	16	0.0	16	0.0	0.147	3.9	LOS A	0.0	0.0	0.00	0.04	0.00	49.3
2	T1	319	0.7	319	0.7	0.147	0.1	LOS A	0.5	3.8	0.03	0.09	0.03	43.0
3	R2	112	1.9	112	1.9	0.147	4.2	LOS A	0.5	3.8	0.19	0.35	0.19	28.9
Approach		446	0.9	446	0.9	0.147	1.3	NA	0.5	3.8	0.07	0.16	0.07	40.4
East: Grosvenor Street (E)														
4	L2	116	0.0	116	0.0	0.316	5.9	LOS A	1.0	7.2	0.24	0.60	0.24	34.0
5	T1	11	0.0	11	0.0	0.316	10.5	LOS A	1.0	7.2	0.24	0.60	0.24	48.9
6	R2	60	0.0	60	0.0	0.316	12.2	LOS A	1.0	7.2	0.24	0.60	0.24	34.1
Approach		186	0.0	186	0.0	0.316	8.2	LOS A	1.0	7.2	0.24	0.60	0.24	35.8
North: Ben Boyd Road (N)														
7	L2	7	0.0	7	0.0	0.004	3.4	LOS A	0.0	0.0	0.00	0.51	0.00	27.0
8	T1	80	0.0	80	0.0	0.041	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		87	0.0	87	0.0	0.041	0.3	NA	0.0	0.0	0.00	0.04	0.00	48.0
West: Service Station Access														
10	L2	1	0.0	1	0.0	0.006	6.6	LOS A	0.0	0.1	0.51	0.61	0.51	45.9
11	T1	1	0.0	1	0.0	0.006	9.1	LOS A	0.0	0.1	0.51	0.61	0.51	45.9
12	R2	1	0.0	1	0.0	0.006	12.8	LOS A	0.0	0.1	0.51	0.61	0.51	44.3
Approach		3	0.0	3	0.0	0.006	9.5	LOS A	0.0	0.1	0.51	0.61	0.51	45.4
All Vehicles		723	0.6	723	0.6	0.316	3.0	NA	1.0	7.2	0.11	0.26	0.11	38.6

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Site: I-09 [I-09 2020 EX PM]

Network: 2 [2020 Belgrave St CL PM]

Grosvenor Street / Young Street  
2028 Young Street Closure Weekday PM Peak  
Site Category: (None)  
Roundabout

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance m				
South: Young Street (S)														
1	L2	40	0.0	40	0.0	0.103	5.0	LOS A	0.6	3.9	0.48	0.58	0.48	23.5
2	T1	48	2.2	48	2.2	0.103	4.9	LOS A	0.6	3.9	0.48	0.58	0.48	23.5
3	R2	9	0.0	9	0.0	0.103	7.7	LOS A	0.6	3.9	0.48	0.58	0.48	23.5
3u	U	1	0.0	1	0.0	0.103	9.3	LOS A	0.6	3.9	0.48	0.58	0.48	26.4
Approach		99	1.1	99	1.1	0.103	5.3	LOS A	0.6	3.9	0.48	0.58	0.48	23.5
East: Grosvenor Street (E)														
4	L2	15	7.1	15	7.1	0.221	5.2	LOS A	1.4	9.6	0.38	0.56	0.38	34.9
5	T1	124	3.4	124	3.4	0.221	4.8	LOS A	1.4	9.6	0.38	0.56	0.38	35.5
6	R2	100	0.0	100	0.0	0.221	7.7	LOS A	1.4	9.6	0.38	0.56	0.38	35.5
6u	U	6	0.0	6	0.0	0.221	10.3	LOS A	1.4	9.6	0.38	0.56	0.38	35.5
Approach		245	2.1	245	2.1	0.221	6.2	LOS A	1.4	9.6	0.38	0.56	0.38	35.4
North: Young Street (N)														
7	L2	66	0.0	66	0.0	0.169	4.7	LOS A	0.8	5.6	0.26	0.55	0.26	29.1
8	T1	58	1.8	58	1.8	0.169	4.5	LOS A	0.8	5.6	0.26	0.55	0.26	31.0
9	R2	60	1.8	60	1.8	0.169	7.4	LOS A	0.8	5.6	0.26	0.55	0.26	29.1
9u	U	8	25.0	8	25.0	0.169	10.2	LOS A	0.8	5.6	0.26	0.55	0.26	29.1
Approach		193	2.2	193	2.2	0.169	5.7	LOS A	0.8	5.6	0.26	0.55	0.26	29.8
West: Grosvenor Street (W)														
10	L2	35	0.0	35	0.0	0.130	5.0	LOS A	0.7	4.8	0.37	0.55	0.37	34.4
11	T1	69	0.0	69	0.0	0.130	4.7	LOS A	0.7	4.8	0.37	0.55	0.37	34.4
12	R2	27	3.8	27	3.8	0.130	7.7	LOS A	0.7	4.8	0.37	0.55	0.37	33.5
12u	U	8	0.0	8	0.0	0.130	10.3	LOS A	0.7	4.8	0.37	0.55	0.37	34.4
Approach		140	0.8	140	0.8	0.130	5.7	LOS A	0.7	4.8	0.37	0.55	0.37	34.2
All Vehicles		677	1.7	677	1.7	0.221	5.8	LOS A	1.4	9.6	0.36	0.56	0.36	32.8

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.

Roundabout Capacity Model: SIDRA Standard.

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.

▼ Site: I-10 [I-10 2020 EX PM]

## Network: 2 [2020 Belgrave St CL PM]

Grosvenor Street / Waters Road  
2028 Young Street Closure Weekday PM Peak  
Site Category: (None)  
Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Waters Road (S)														
1	L2	104	4.0	104	4.0	0.124	4.6	LOS A	0.6	4.0	0.09	0.27	0.09	33.6
2	T1	91	1.2	91	1.2	0.124	0.1	LOS A	0.6	4.0	0.09	0.27	0.09	33.6
Approach		195	2.7	195	2.7	0.124	2.5	NA	0.6	4.0	0.09	0.27	0.09	33.6
North: Waters Road (S)														
8	T1	31	0.0	31	0.0	0.074	0.7	LOS A	0.3	2.2	0.28	0.41	0.28	37.6
9	R2	84	0.0	84	0.0	0.074	5.3	LOS A	0.3	2.2	0.28	0.41	0.28	33.2
Approach		115	0.0	115	0.0	0.074	4.1	NA	0.3	2.2	0.28	0.41	0.28	34.6
West: Grosvenor Street (W)														
10	L2	99	0.0	99	0.0	0.152	4.9	LOS A	0.6	4.2	0.21	0.55	0.21	36.9
12	R2	81	0.0	81	0.0	0.152	6.2	LOS A	0.6	4.2	0.21	0.55	0.21	36.2
Approach		180	0.0	180	0.0	0.152	5.4	LOS A	0.6	4.2	0.21	0.55	0.21	36.5
All Vehicles		489	1.1	489	1.1	0.152	4.0	NA	0.6	4.2	0.18	0.41	0.18	35.5

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-11 [I-11 2020 EX PM]**
 **Network: 2 [2020 Belgrave St CL PM]**

Ben Boyd Road / Ernest Street

2028 Young Street Closure Weekday PM Peak

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 87 seconds (Network User-Given Cycle Time)

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 1874 EX PM****Reference Phase: Phase A****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

<b>Movement Performance - Vehicles</b>														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
<b>South: Ben Boyd Road (S)</b>														
1	L2	121	2.6	121	2.6	0.646	46.2	LOS D	5.3	38.2	1.00	0.83	1.09	11.9
2	T1	233	0.0	233	0.0	0.646	36.7	LOS C	9.1	64.0	0.95	0.79	0.96	5.0
Approach		354	0.9	354	0.9	0.646	40.0	LOS C	9.1	64.0	0.97	0.81	1.01	8.1
<b>North: Ben Boyd Road (N)</b>														
8	T1	103	13.3	103	13.3	0.205	4.0	LOS A	2.2	16.4	0.35	0.49	0.38	20.7
9	R2	653	0.0	653	0.0	0.410	8.5	LOS A	6.8	47.6	0.34	0.61	0.35	31.5
Approach		756	1.8	756	1.8	0.410	7.9	LOS A	6.8	47.6	0.34	0.60	0.35	30.8
<b>West: Ernest Street (W)</b>														
10	L2	1323	0.9	1323	0.9	0.529	7.1	LOS A	5.1	36.1	0.20	0.60	0.20	31.3
Approach		1323	0.9	1323	0.9	0.529	7.1	LOS A	5.1	36.1	0.20	0.60	0.20	31.3
All Vehicles		2433	1.2	2433	1.2	0.646	12.1	LOS A	9.1	64.0	0.35	0.63	0.36	24.5

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.

Site: I-12 [I-12 2020 EX PM]

Network: 2 [2020 Belgrave St CL PM]

Ben Boyd Rd / Belgrave St  
2028 Young Street Closure Weekday PM Peak  
Site Category: (None)  
Giveway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Ben Boyd Road (S)														
2	T1	93	0.0	93	0.0	0.419	0.0	LOS A	0.0	0.0	0.00	0.46	0.00	39.4
3	R2	1460	0.9	1460	0.9	0.419	3.6	LOS A	0.0	0.0	0.00	0.49	0.00	28.0
Approach		1553	0.8	1553	0.8	0.419	3.4	NA	0.0	0.0	0.00	0.49	0.00	29.2
East: Belgrave Street (E)														
4	L2	729	0.0	729	0.0	0.281	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	37.3
Approach		729	0.0	729	0.0	0.281	4.6	NA	0.0	0.0	0.00	0.53	0.00	37.3
North: Ben Boyd Road (N)														
7	L2	9	0.0	9	0.0	0.121	8.5	LOS A	0.4	2.9	0.82	0.85	0.82	12.2
8	T1	11	0.0	11	0.0	0.121	43.7	LOS D	0.4	2.9	0.82	0.85	0.82	12.2
Approach		20	0.0	20	0.0	0.121	27.0	LOS B	0.4	2.9	0.82	0.85	0.82	12.2
West: Oaks Avenue														
10	L2	24	0.0	24	0.0	0.106	5.9	LOS A	0.4	2.8	0.28	0.57	0.28	34.8
11	T1	16	0.0	16	0.0	0.106	26.5	LOS B	0.4	2.8	0.28	0.57	0.28	31.4
Approach		40	0.0	40	0.0	0.106	14.0	LOS A	0.4	2.8	0.28	0.57	0.28	33.6
All Vehicles		2342	0.5	2342	0.5	0.419	4.2	NA	0.4	2.9	0.01	0.50	0.01	32.8

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

 **Site: I-13 [I-13 2020 EX PM]**
 **Network: 2 [2020 Belgrave St CL PM]**

Belgrave St / Young St

2028 Young Street Closure Weekday PM Peak

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 87 seconds (Network User-Given Cycle Time)

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program****Downstream lane blockage effects included in determining phase times****Green Split Priority has been specified****Phase Sequence: TCS 1221 EX PM****Reference Phase: Phase A****Input Phase Sequence: A, B****Output Phase Sequence: A, B**

<b>Movement Performance - Vehicles</b>														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
<b>South: Young Street (S)</b>														
1	L2	61	0.0	61	0.0	0.220	40.7	LOS C	2.4	16.5	0.92	0.74	0.92	8.2
2	T1	115	0.0	115	0.0	0.509	36.5	LOS C	5.9	41.3	0.95	0.78	0.95	14.2
3	R2	33	0.0	33	0.0	0.509	41.1	LOS C	5.9	41.3	0.95	0.78	0.95	8.8
Approach		208	0.0	208	0.0	0.509	38.5	LOS C	5.9	41.3	0.94	0.77	0.94	11.7
<b>East: Belgrave Street (E)</b>														
4	L2	47	0.0	47	0.0	0.804	17.9	LOS B	12.7	90.9	0.47	0.53	0.58	26.3
5	T1	600	2.6	600	2.6	0.804	16.1	LOS B	12.7	90.9	0.51	0.59	0.66	23.8
6	R2	95	0.0	95	0.0	0.804	31.8	LOS C	8.0	56.8	0.69	0.84	0.96	21.1
Approach		742	2.1	742	2.1	0.804	18.2	LOS B	12.7	90.9	0.53	0.62	0.69	23.4
<b>North: Young Street (N)</b>														
7	L2	23	4.5	23	4.5	0.100	38.9	LOS C	1.0	7.5	0.88	0.70	0.88	8.7
8	T1	95	0.0	95	0.0	0.501	37.3	LOS C	5.3	37.3	0.96	0.77	0.96	8.6
9	R2	40	5.3	40	5.3	0.501	42.1	LOS C	5.3	37.3	0.96	0.78	0.96	8.6
Approach		158	2.0	158	2.0	0.501	38.7	LOS C	5.3	37.3	0.95	0.76	0.95	8.6
<b>West: Belgrave Street (W)</b>														
10	L2	60	8.8	60	8.8	0.734	7.9	LOS A	11.4	81.6	0.31	0.31	0.31	40.6
11	T1	1364	1.8	1364	1.8	0.734	4.0	LOS A	11.4	81.6	0.32	0.33	0.32	37.6
12	R2	73	5.8	73	5.8	0.550	10.0	LOS A	7.3	52.2	0.34	0.36	0.34	34.5
Approach		1497	2.3	1497	2.3	0.734	4.4	LOS A	11.4	81.6	0.32	0.33	0.32	37.6
All Vehicles		2605	2.0	2605	2.0	0.804	13.2	LOS A	12.7	90.9	0.47	0.47	0.51	25.6

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.

 **Site: I-14 [I-14 2020 EX PM]**
 **Network: 2 [2020 Belgrave St CL PM]**

Belgrave St / Waters Rd

2028 Young Street Closure Weekday PM Peak

Site Category: (None)

Signals - Fixed Time Coordinated Cycle Time = 87 seconds (Network User-Given Cycle Time)

**Timings based on settings in the Network Timing dialog****Phase Times determined by the program**

Downstream lane blockage effects included in determining phase times

Green Split Priority has been specified

Phase Sequence: TCS 1775 EX PM

Reference Phase: Phase A

Input Phase Sequence: A, B

Output Phase Sequence: A, B

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows		Arrival Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed
		Total veh/h	HV %	Total veh/h	HV %				Vehicles	Distance				
South: Waters Road (S)														
1	L2	43	2.4	43	2.4	0.147	39.2	LOS C	1.6	11.5	0.89	0.72	0.89	9.4
3a	R1	148	0.0	148	0.0	0.844	54.3	LOS D	7.1	49.8	1.00	0.96	1.39	12.1
Approach		192	0.5	192	0.5	0.844	50.9	LOS D	7.1	49.8	0.98	0.91	1.28	11.6
NorthEast: Gerard Street (NE)														
24a	L1	207	0.0	207	0.0	0.175	12.4	LOS A	3.7	25.8	0.45	0.69	0.45	22.6
26a	R1	703	1.5	703	1.5	0.626	11.1	LOS A	14.0	99.5	0.51	0.73	0.51	24.2
Approach		911	1.2	911	1.2	0.626	11.4	LOS A	14.0	99.5	0.50	0.72	0.50	23.8
West: Belgrave Street (W)														
10a	L1	1364	0.5	1364	0.5	0.681	7.2	LOS A	10.2	72.0	0.23	0.64	0.23	40.8
Approach		1364	0.5	1364	0.5	0.681	7.2	LOS A	10.2	72.0	0.23	0.64	0.23	40.8
All Vehicles		2466	0.8	2466	0.8	0.844	12.1	LOS A	14.0	99.5	0.39	0.69	0.41	31.2

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.

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Organisation: GTA CONSULTANTS | Created: Tuesday, 23 March 2021 11:54:18 AM

Project: \\gta.com.au\projectfiles\ProjectFilesSyd\N20400-20499\N204900 Young Street Neutral Bay TIA\Modelling\2020 Existing Belgrave Network - RS.sip8



APPENDIX: MODEL PARAMETER  
CHANGES

# C. MODEL PARAMETER CHANGES



## Model Calibration Notes

Site 1 - 4

Site Information	Name		
	TCS Number		
	Peak Hour	8:00 - 9:00	3:00 - 4:00
Lane Geometry	Lane Utilisation	Simplified bus movements - eastbound, all bus movements are considered HVs, and westbound, presumed that bus movements match TfNSW timetables	Simplified bus movements - eastbound, all bus movements are considered HVs, and westbound, presumed that bus movements match TfNSW timetables
	Geometry	Capacity adjusted to ensure $v/c < 1.0$ , a $v/c > 1.0$ is impossible in base model	Capacity adjusted to ensure $v/c < 1.0$ , a $v/c > 1.0$ is impossible in base model
	Capacity Adjustment		
Lane Movements	Flow Proportions	Removed hardcoded flow proportions	Removed hardcoded flow proportions
	Blockage Calibration		
Pedestrians	Pedestrian Minimum Time		
	Pedestrian Maximum Time		
	Pedestrian Actuation		
Volumes	Peak Flow Factor		
	Volume adjustment	Removed growth rate	
Priorities	Priorities		
Gap Acceptance	Opposing Peds (Signals)		
	Minimum Departures		
Vehicle Movement Data	Signal Coordination		
	Start Loss		
	End Loss		
	Minimum Green		
	Maximum Green		
	Phase Actuation		
Phasing & Timing	Late Start		
	Phase Sequence	Cycle Time changed from 130s to 140s	Cycle Time changed from 130s to 140s
	Reference Phase		
	Variable Phase		
	Yellow Time		
	All-Red Time		
	Dummy Phases		
Filter Option			
Intersection	Area Factor		
	Extra Bunching		

## Model Calibration Notes

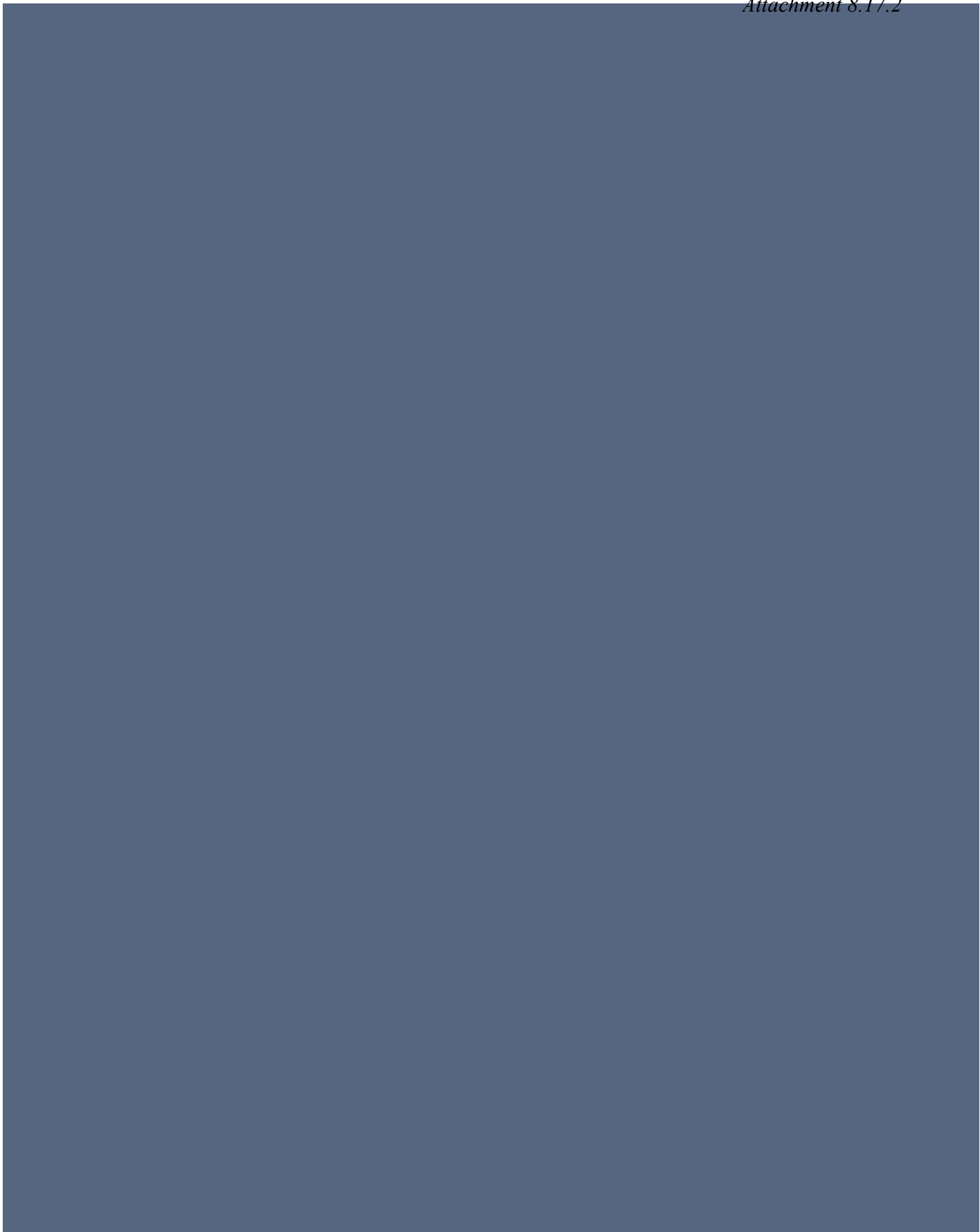
Site 5 - 10

Site Information	Name		
	TCS Number		
	Peak Hour	8:00 - 9:00	3:00 - 4:00
Lane Geometry	Lane Utilisation	Removed bus movements, replaced with HV	Removed bus movements, replaced with HV
	Geometry		
	Capacity Adjustment		
Lane Movements	Flow Proportions		
	Blockage Calibration		
Pedestrians	Pedestrian Minimum Time		
	Pedestrian Maximum Time		
	Pedestrian Actuation		
Volumes	Peak Flow Factor		
	Volume adjustment	Removed growth rate	
Priorities	Priorities		
Gap Acceptance	Opposing Peds (Signals)		
	Minimum Departures		
Vehicle Movement Data	Signal Coordination		
	Start Loss		
	End Loss		
	Minimum Green		
	Maximum Green		
	Late Start		
Phasing & Timing	Phase Sequence		
	Reference Phase		
	Variable Phase		
	Yellow Time		
	All-Red Time		
	Dummy Phases		
Intersection	Filter Option		
	Area Factor		
	Extra Bunching		

## Model Calibration Notes

Site 11 - 14

Site Information	Name		
	TCS Number		
	Peak Hour	8:00 - 9:00	3:00 - 4:00
Lane Geometry	Lane Utilisation	Removed bus movements, replaced with HV	Removed bus movements, replaced with HV
	Geometry		
	Capacity Adjustment		
Lane Movements	Flow Proportions	Removed hardcoded flow proportions	Removed hardcoded flow proportions
	Blockage Calibration		
Pedestrians	Pedestrian Minimum Time		
	Pedestrian Maximum Time		
	Pedestrian Actuation		
Volumes	Peak Flow Factor		
	Volume adjustment	Removed growth rate	Removed growth rate
Priorities	Priorities		
Gap Acceptance	Opposing Peds (Signals)		
	Minimum Departures		
Vehicle Movement Data	Signal Coordination		
	Start Loss		
	End Loss		
	Minimum Green		
	Maximum Green		
	Phase Actuation		
	Late Start		
Phasing & Timing	Phase Sequence	Cycle Time changed from 90s to 95s	Cycle Time changed from 90s to 95s
	Reference Phase		
	Variable Phase		
	Yellow Time		
	All-Red Time		
	Dummy Phases		
	Filter Option		
Intersection	Area Factor		
	Extra Bunching		



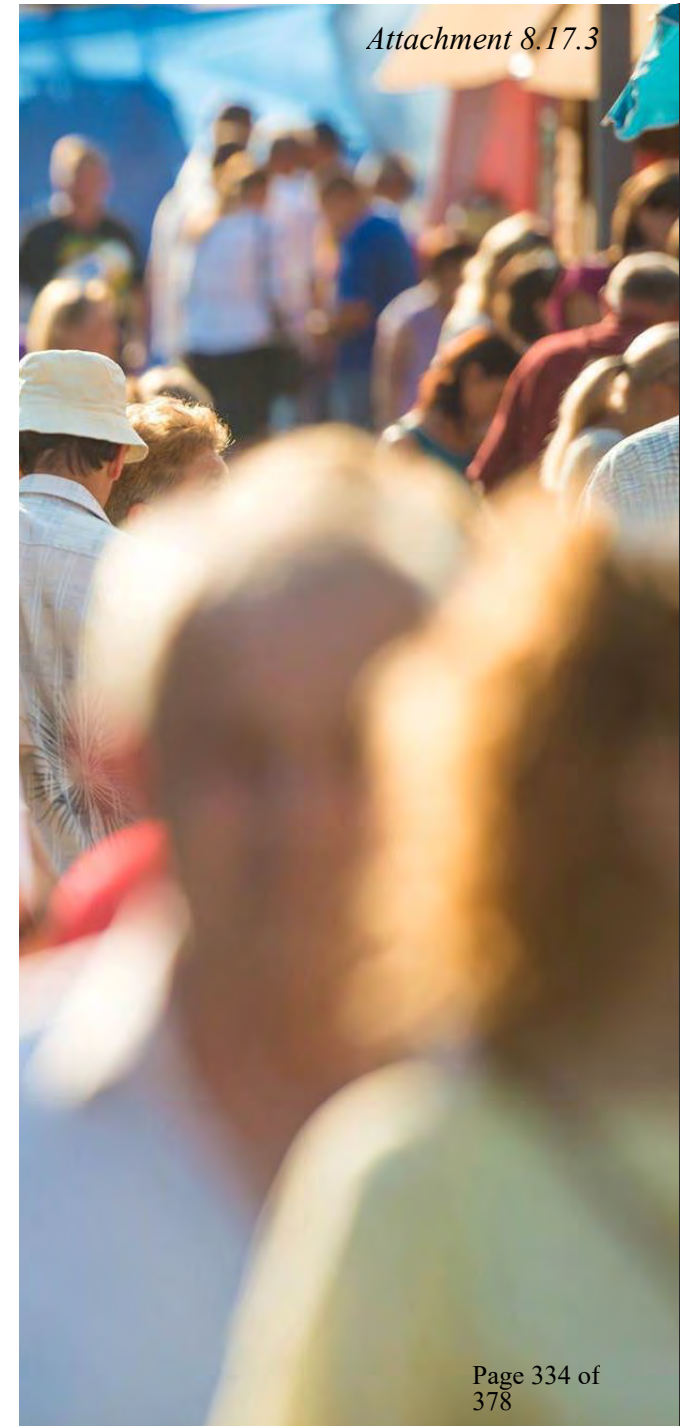


# YOUNG STREET PLAZA

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## Human Movement Data Study

Prepared for North Sydney Council  
April 2021



This report is dated **April 2021** and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (Urbis) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of **North Sydney Council** (Instructing Party) for the purpose of a **Human Movement Data Analysis** (Purpose) and not for any other purpose or use. Urbis expressly disclaims any liability to the Instructing Party who relies or purports to rely on this report for any purpose other than the Purpose and to any party other than the Instructing Party who relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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All surveys, forecasts, projections and recommendations contained in or made in relation to or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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**Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.**

**We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.**

Urbis has made all reasonable inquiries that it believes is necessary in preparing this report but it cannot be certain that all information material to the preparation of this report has been provided to it as there may be information that is not publicly available at the time of its inquiry.

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Project code	P0027135
Report number	1

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# PURPOSE AND EXECUTIVE SUMMARY

## Purpose

The purpose of this report is to measure and analyse visitation to and from Young Street Plaza in Neutral Bay. Young Street is undergoing a trial pedestrianisation, whereby the road has been converted into public open space between Military Road and Grosvenor Lane.

Urbis has been commissioned by North Sydney Council to undertake an analysis of Human Movement Data to understand changes in visitation rates, visitor profile, temporal analysis, dwell time and cross-usage as a result of the implementation of the temporary pedestrianisation of Young Street (road closure and temporary public plaza).

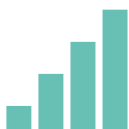
## Executive Summary



Three comparison periods were assessed – a historical period (1 year prior to activation), the three months’ pre-construction, and the activation period.



While the majority of visitation is from broader Sydney residents, the share of visitation from local residents and local workers to Young Street increased over the analysis periods.



The data sample analysed shows increased visitation to Young Street and Neutral Bay over the analysis periods. Visitation to Young Street in the activation period was 27% higher than the historical period.



During the activation period, the average dwell time for visitors to Young Street increased by 56% relative to the historical period. Visitors to Young Street also typically spent more time across Neutral Bay when compared to those who didn’t visit Young Street.



In Young Street, higher levels of visitation were observed in the afternoon and evening, relative to the historical period. Greater levels of visitation were also observed on weekdays.



The share of Young Street visitors who also visited other precincts within Neutral Bay increased between the historical and activation periods.

## METHODOLOGY & SAMPLE

### Introduction to Human Movement Data

The Human Movement Data has been sourced from the third party provider UberMedia. UberMedia's mobile location data is aggregated from a variety of high quality sources, including data from proprietary apps and locational data derived from mobile advertising. Across Australia the dataset has approximately 6 million active unique devices per month. Consequently, the dataset is seen as accurate and actionable for the purposes of this report.

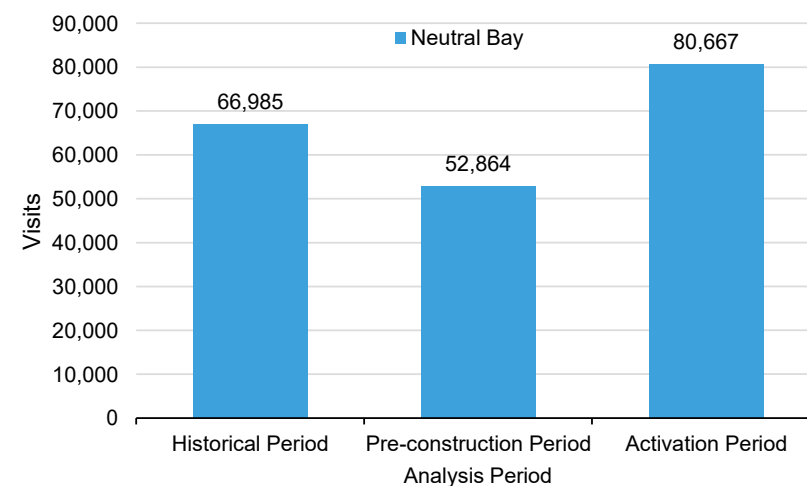
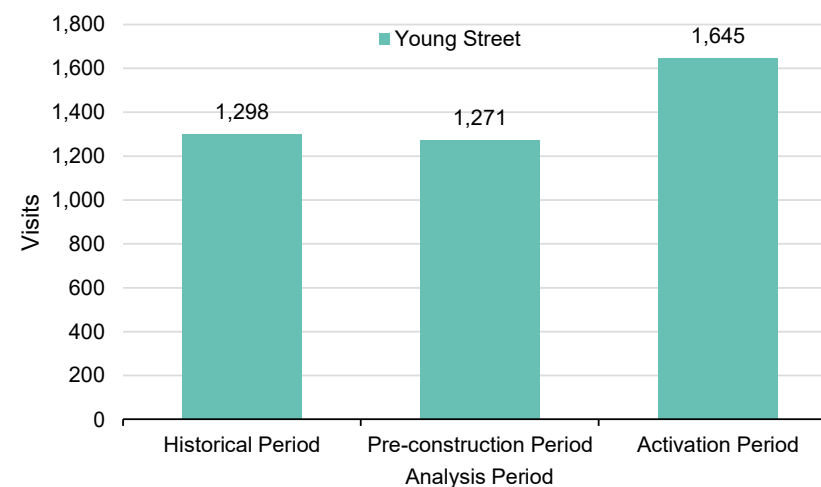
It is important to note that the apps are predominantly English speaking apps, and will have varying levels of penetration across different user groups. Some user groups, for example Chinese born residents, could potentially have lower penetration rates. It is also important to note there are limitations with specific countries when assessing international visitors, for example, penetration across China is limited due to strict privacy laws.

All data is deidentified and neither Urbis nor North Sydney Council can access personal information relating to the users.

Regarding the mobile phone ping data, key areas of note:

- Data has been analysed over the following period:
  - 23<sup>rd</sup> December 2019 to 26<sup>th</sup> March 2020 (Historical period)
  - 1<sup>st</sup> August 2020 to 31<sup>st</sup> October 2020 (Pre-construction period)
  - 23<sup>rd</sup> December 2020 to 26<sup>th</sup> March 2021 (Activation period)
- The resident and worker location of each mobile phone is derived from the device's common evening and common daytime location respectively.
- The Common Evening Location (CEL) for a device is estimated by determining where a device most frequently appears during the "non-work" hours (evening through morning and weekends). The overnight hours are defined as after 6pm and before 8am.
- The Common Daytime Location (CDL) for a device is estimated by determining where a device most frequently appears during the "work hours" (daytime on weekdays). The hours are defined as after 8am and before 6pm from Monday through Friday.
- The data sample is highlighted in the charts opposite, which outline the number of visits to the precincts.

### Data Sample



# PRECINCT MAP



# 01

---

## TEMPORAL ANALYSIS

*Attachment 8.17.3*



# VISITATION BY TIME OF DAY

## Key Findings

The charts on the right compare the visitation levels of each time period throughout the day.

There are more visits to Young Street during the activation period compared to the other periods. The change is most significant between 3pm and 9pm, though is generally higher across the day.

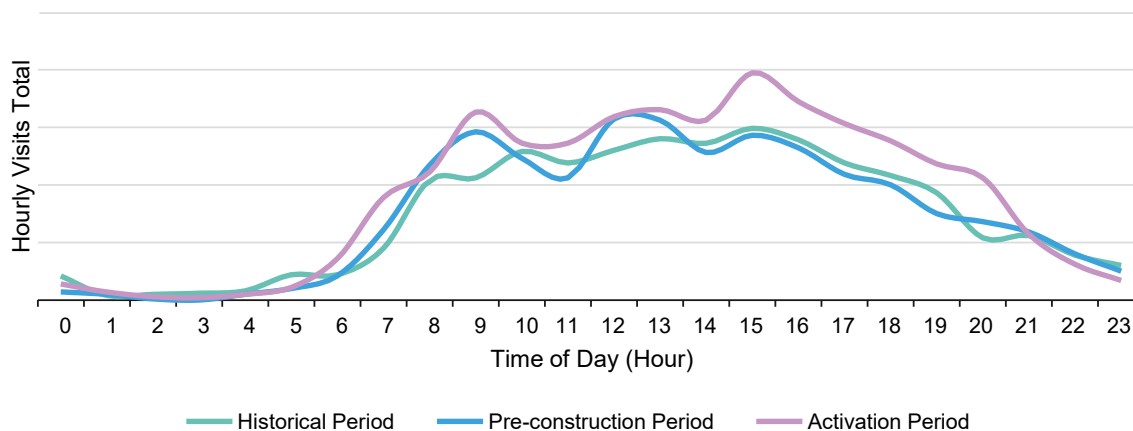
Total visits to Young Street were 27% higher during the activation period, relative to the historical period.

Similarly, visitation levels to Neutral Bay were observed to be higher during the activation period when compared with the historical period, by around 20%.

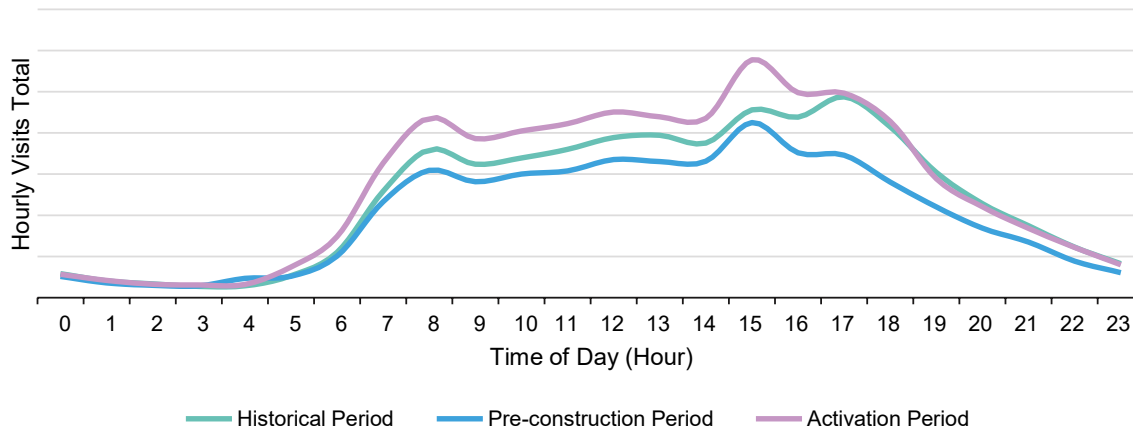
**During the activation period, total visitation to Young Street has increased by 27% and a much higher level of activity is achieved after 3pm, compared with previous time periods.**

**Neutral Bay is also achieving higher levels of visitation than the historical and pre-construction periods**

## Young Street



## Neutral Bay



## DAY OF WEEK – MOVING VOLUME

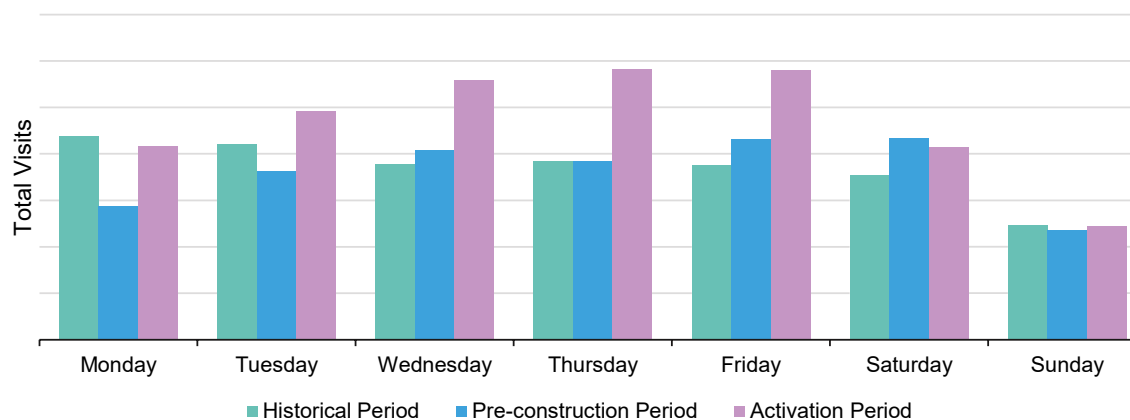
### Key Findings

The bar charts on the right represent the volume of visitations to Young Street and Neutral Bay precincts throughout the week across the same time periods.

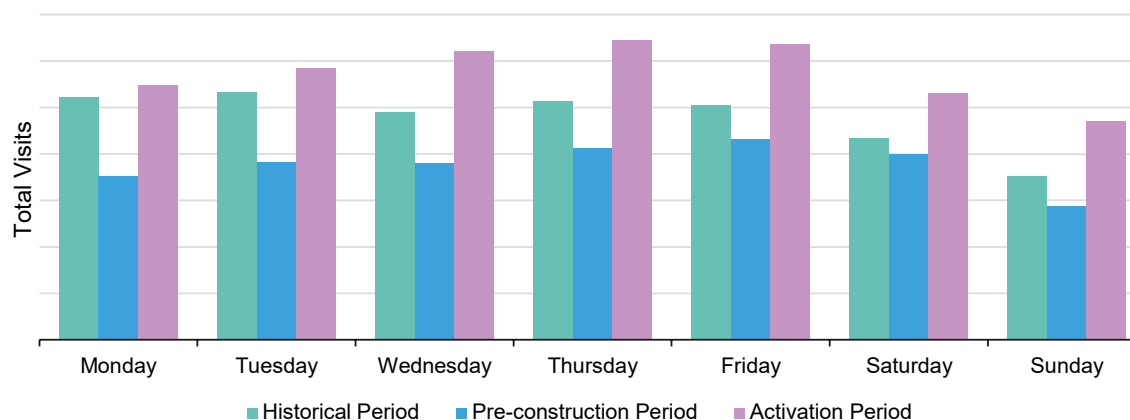
With the exception of Monday and Sunday, Young Street is observed to have significantly higher visitations during the activation period compared to the historical period.

Neutral Bay, overall, experienced a greater volume of visitations across the week.

### Young Street



### Neutral Bay



**Young Street has seen a minor increase in visitation on weekdays, though Neutral Bay more generally has seen an increase on weekends.**

## DAY OF WEEK – SHARE OF VISITATION

### Key Findings

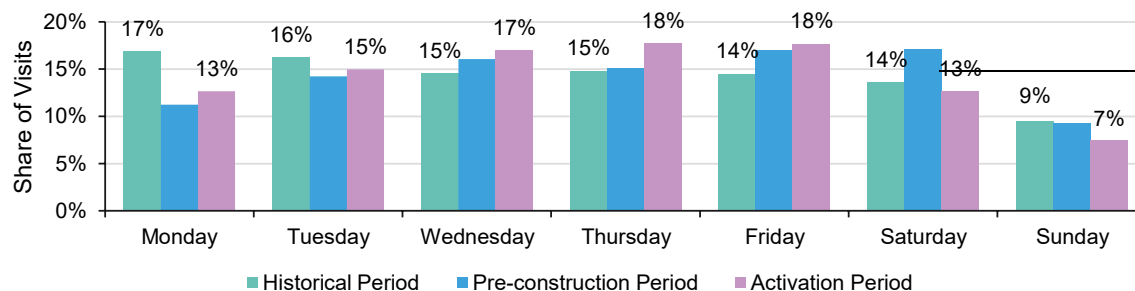
The charts opposite illustrates the distribution of visits to Young Street and Neutral Bay across week during three different time periods. The charts represent the proportion of the week each day accounts for.

The share of weekday visitation to Young Street has increased from 77% in the historical period to 80% in the activation period.

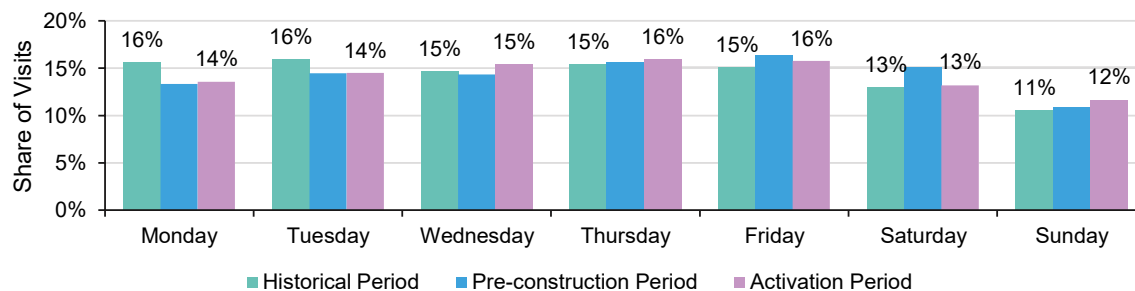
While there were more visitations to Neutral Bay during the activation period, the share of visitations occurring on weekdays decreased from 77% to 75%. Weekend visits, as a share of total, increased from 23% to 25%.

**Young Street has seen a minor increase in visitation on weekdays, though Neutral Bay more generally has seen an increase on weekends.**

### Young Street



### Neutral Bay



### Weekday vs Weekend Distribution

	Day of Week	Historical	Pre-Construction	Activation
Young Street	Weekday	77%	74%	80%
	Weekend	23%	26%	20%
Neutral Bay	Weekday	77%	74%	75%
	Weekend	23%	26%	25%

# 02

---

## VISITOR PROFILE





## CUSTOMER SEGMENTATION

Urbis has defined three distinct visitor markets for Neutral Bay, as illustrated on the map overleaf and described as follows:

- **Local Residents** are defined as those visitors that have a CEL within Neutral Bay, Cremorne, Kurraba Point, and Cremorne Point.
- **Local Workers** are defined as those visitors that have a CDL within 800m radius.
- **Other Visitors** include those visitors that do not fall within the Local Resident or Local Worker catchments, and include visitors from the remainder of Metropolitan Sydney, interstate and overseas.

The table opposite shows the visit distribution to Young Street and Neutral Bay precincts for each visitor category. Key points include:

- 25% of visitation to Young Street is from local residents, with 9% from local workers in the activation period. Both of these results are higher than the historical period, showing Young Street is drawing from a more localised market.
- Other Metropolitan Sydney residents, including surrounding LGA residents and Other Sydney Visitors, account for 65% of visits to Young Street. The share of visitors from surrounding LGAs has increased significantly between the Historical and Activation period
- Young Street achieves a higher share from the local resident and worker market relative to Neutral Bay, a trend which has been further solidified during the activation period.

**Young Street achieved 34% of visits from local residents and workers, though visitors from the remainder of Sydney account for the majority of visits.**

### Visit Distribution

	Young Street			Neutral Bay		
	Historical Period	Pre-construction Period	Activation Period	Historical Period	Pre-construction Period	Activation Period
Local Residents	23%	26%	25%	21%	24%	18%
Local Workers	4%	11%	9%	3%	4%	3%
Surrounding LGA Residents	24%	26%	31%	23%	27%	28%
<i>Other North Sydney LGA Residents</i>	5%	5%	7%	5%	5%	4%
<i>Lane Cove LGA Residents</i>	2%	4%	4%	2%	3%	3%
<i>Mosman LGA Residents</i>	9%	9%	11%	13%	15%	16%
<i>Willoughby LGA Residents</i>	9%	9%	8%	4%	5%	4%
Other Sydney Visitors	43%	35%	34%	45%	41%	49%
Intrastate Visitors	2%	1%	1%	2%	1%	1%
Interstate Visitors	2%	1%	1%	3%	1%	1%
International Visitors	1%	0%	0%	2%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

# VISITOR SEGMENTS



# YOUNG STREET VISITOR ANALYSIS (SHARE)

## Key Findings

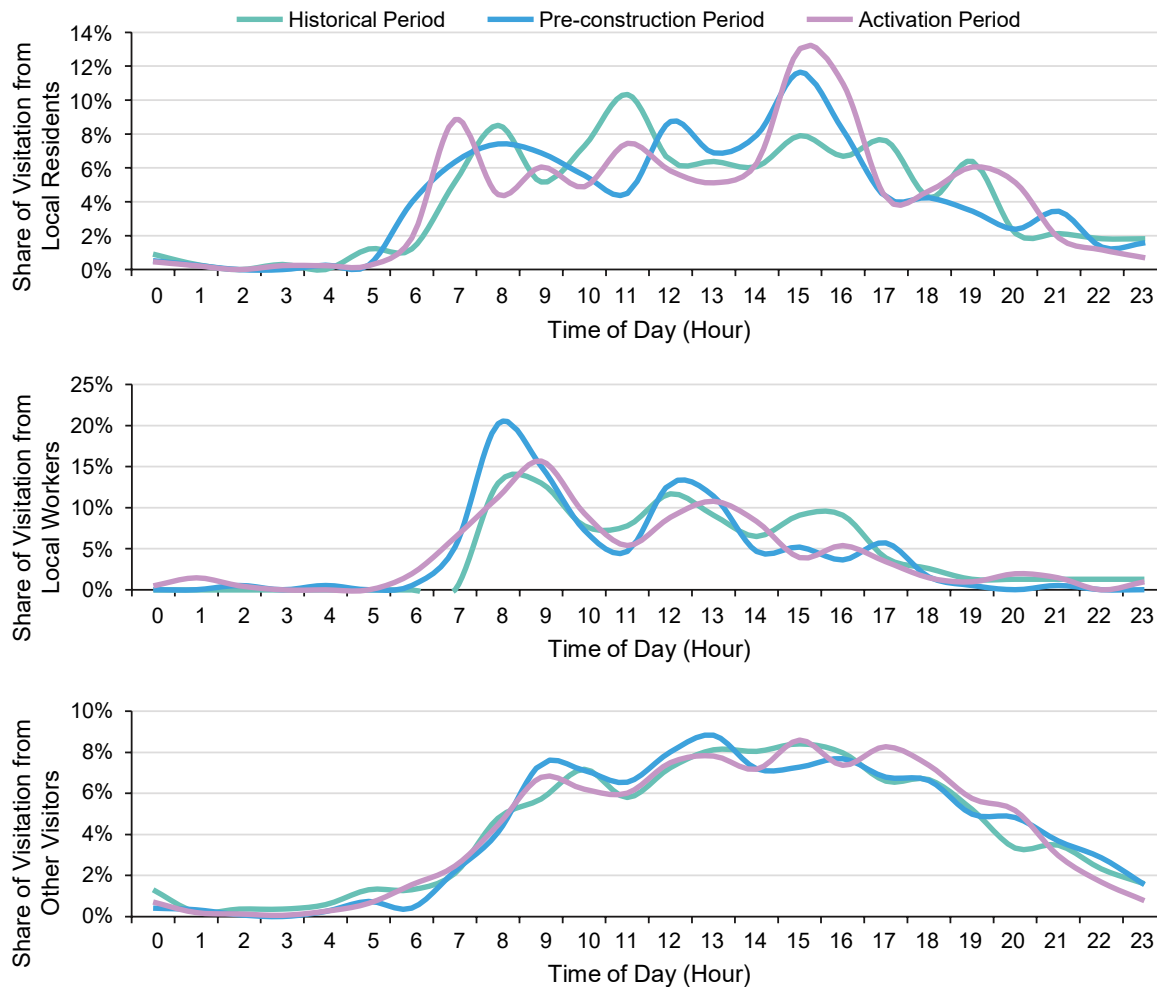
The charts on the right illustrates the visitation profile of each visitor category throughout the day (by hour) for Young Street. Each line represents the share of that category's visitation (i.e. each line adds to 100%).

In terms of change between the historical and activation periods, the proportion of local resident activity has increased in the afternoon, especially around 3pm and 4pm.

For local workers, there has been a minor shift to earlier visitation, between 6am and 9am, while the visitation profile for other visitors has generally remained similar, albeit with a slightly higher share of visitation in the evening.

**Local resident visitation to Young Street has trended towards 3pm and 4pm in the activation period.**  
**Local worker activity is similar to historic and pre-construction trends, with morning and lunch peaks.**

## Young Street Visitation by Visitor Categories



# YOUNG STREET VISITOR ANALYSIS (VOLUME)

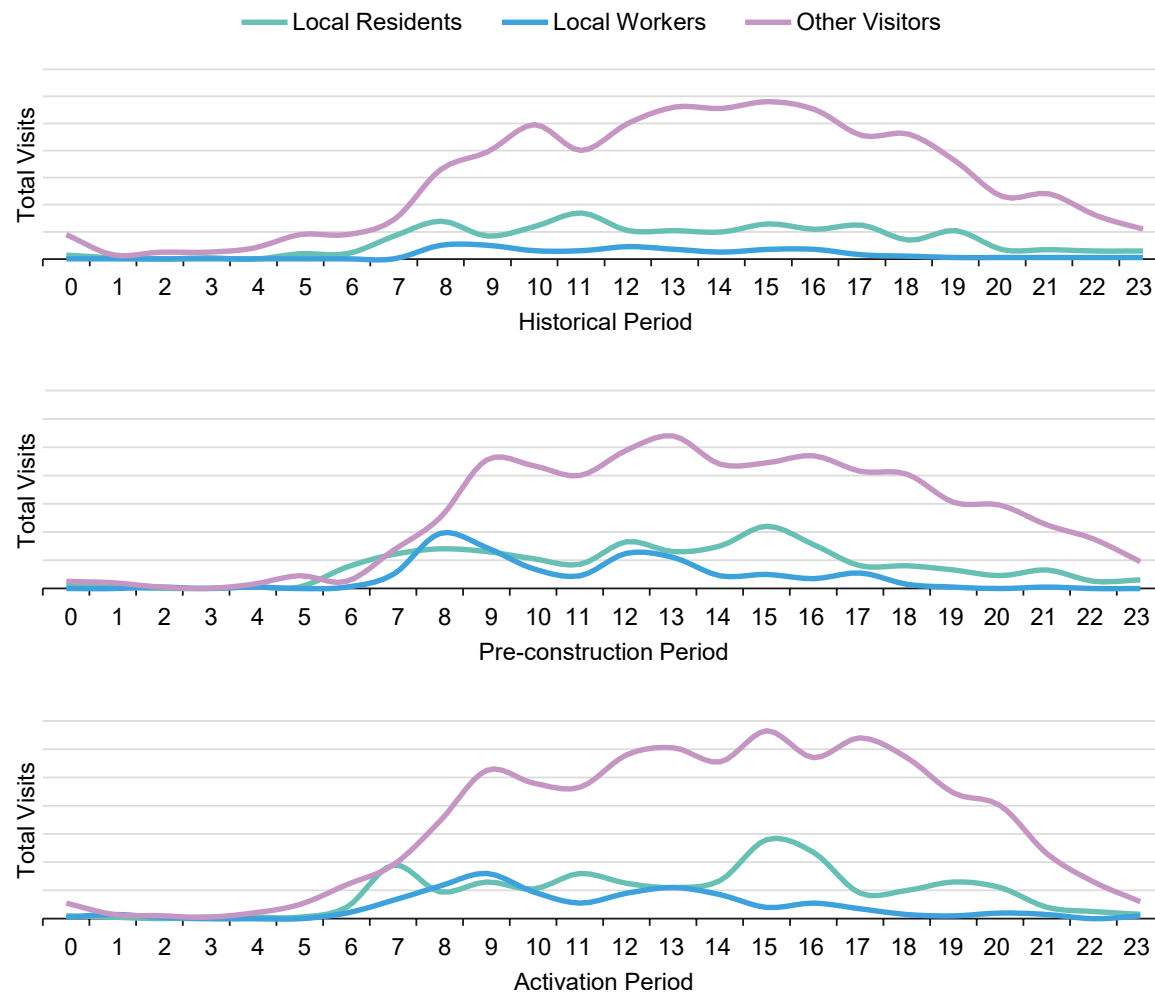
## Key Findings

The charts on the right illustrates the activities of each visitor category throughout the day for Young Street. Each line represents the share of total visitation (i.e. all lines adds to 100%). This allows each market segment to be viewed against one another in terms of contribution of visitation.

The other visitor market accounts for the largest share of visitation across all analysis periods, however between the historical and activation periods, it is evident that the local resident market is driving higher levels of visitation in the afternoon and evening.

**During the activation period, the local resident and local worker market became more relevant for Young Street, though visitation from broader Sydney residents still drives visitation.**

## Young Street Visitation by Visitor Categories (share of total)



# NEUTRAL BAY VISITOR ANALYSIS (SHARE)

## Key Findings

The charts on the right illustrate the activity of each visitor category throughout the day across the defined time periods for Neutral Bay precincts. Each line represents the share of that category's visitation (i.e. each line adds to 100%).

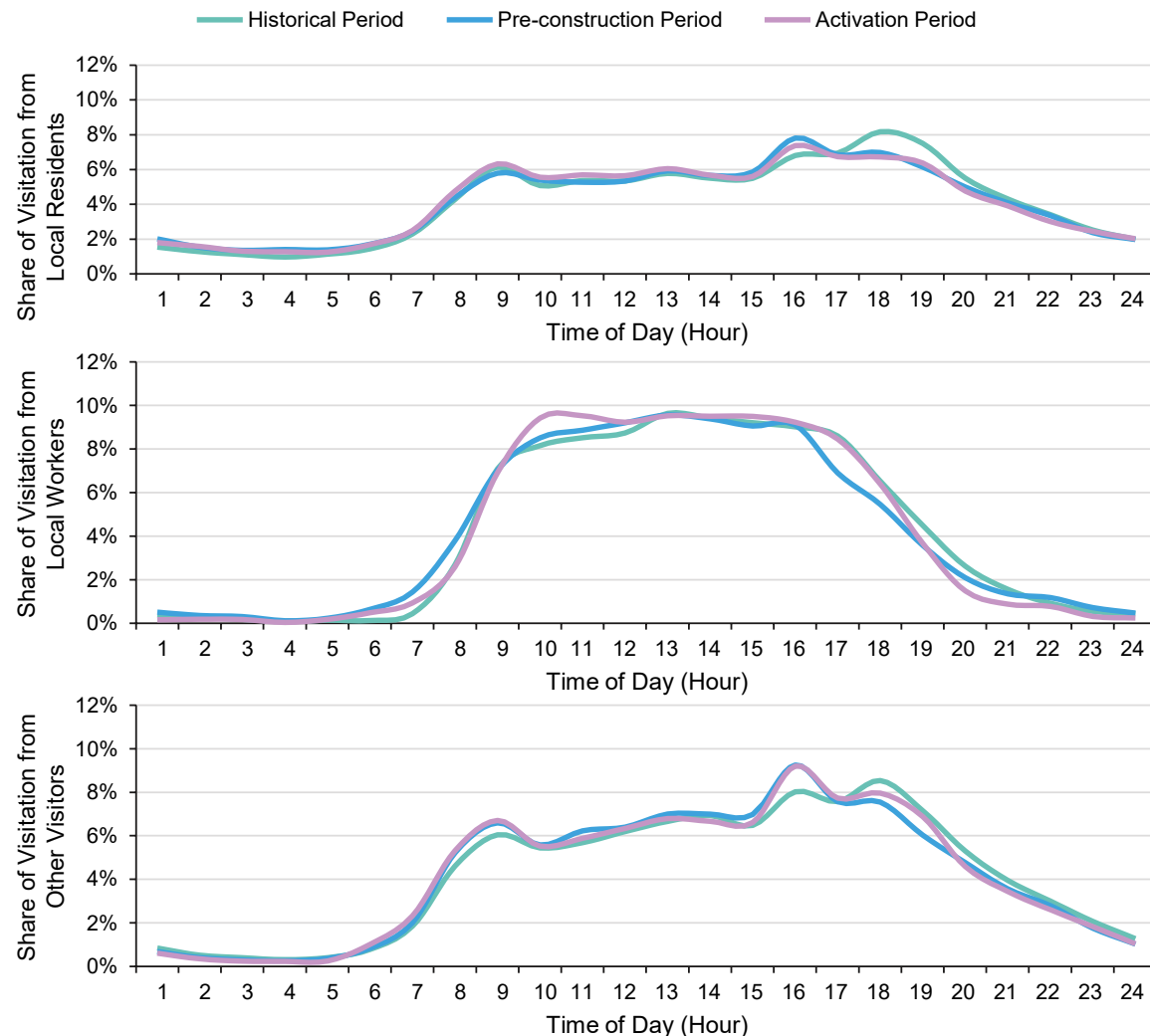
The travel patterns across the day for each visitor categories are similar across the time periods.

Neutral Bay has greater share of visitations in the evening from the local residents and other visitors. Local workers' activity level reflects the standard working hours, picking up at 8am and dropping off at 5pm.

The visitation profile of the various user groups, across all visitation to Neutral Bay, has generally remained constant, however the proportion of local worker visitation has slightly increased in the morning.

**The overall visitation profile for visitor segments to Neutral Bay has not changed drastically across the three analysis periods. Local Residents and Other Visitors have a much higher rate of visitation in the evenings than local workers.**

## Neutral Bay Activities by Visitor Categories



# NEUTRAL BAY VISITOR ANALYSIS (VOLUME)

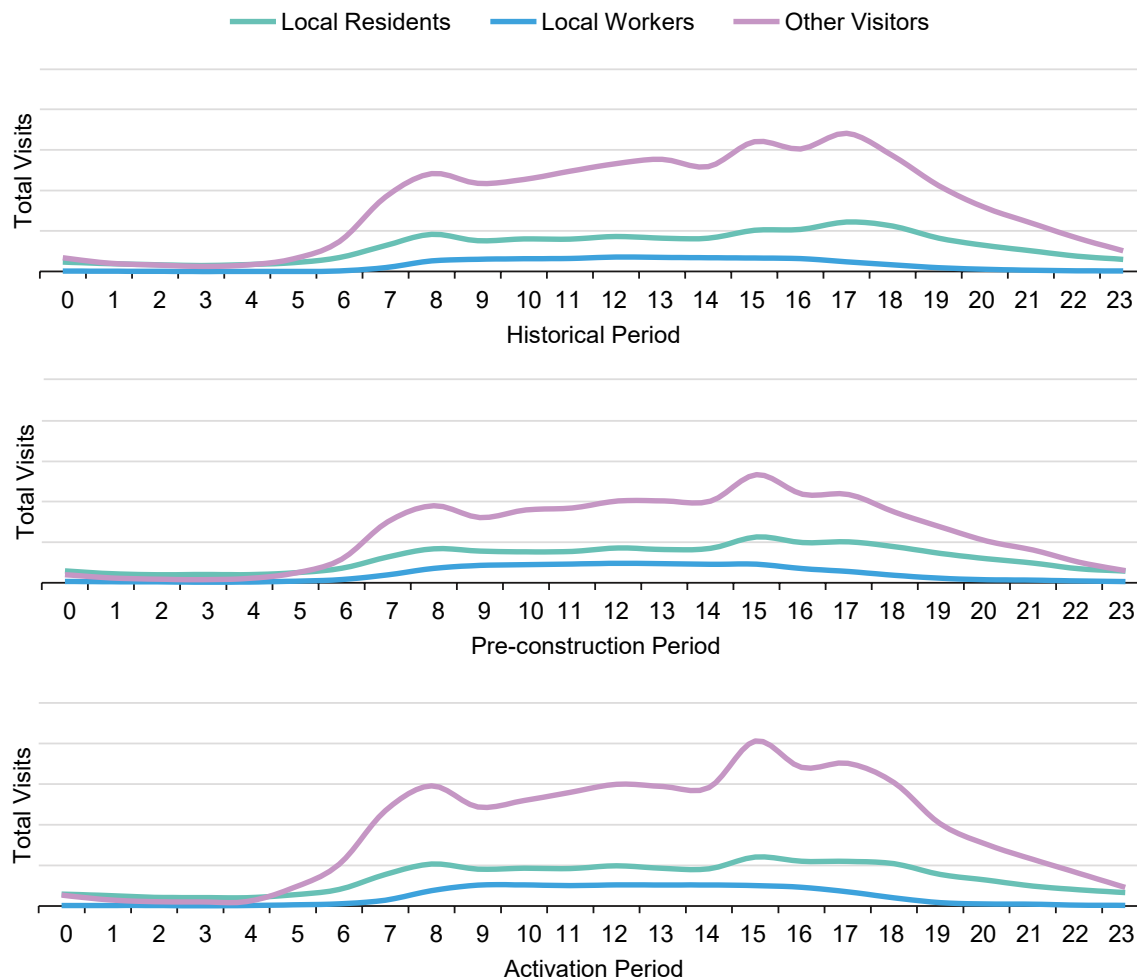
## Key Findings

The charts on the right illustrates the activities of each visitor category throughout the day for Young Street. Each line represents the share of total visitation (i.e. all lines adds to 100%). This allows each market segment to be viewed against one another in terms of contribution of visitation.

There are not any significant changes evident in the way the various customer segments have contributed to hourly visitation across the three analysis periods, other than the greater share of visitation driven by local residents and workers during the pre-construction period.

**As with Young Street, the other visitor market is the strongest contributor to visitation across Neutral Bay.**

## Neutral Bay Activities by Visitor Categories



## HOME LOCATION BY DISTANCE

### Key Findings

The tables on the right represent the distribution of visits to Young Street and Neutral Bay based on home location by distance.

Across the time periods, Young Street and Neutral Bay received more than 60% of visits from residents within the 8km radius. This share has continued to rise over all analysis periods, from 61% in the historical period to 70% in the activation period, with the biggest shift seen in those residents living within 2km, showing that Young Street is drawing a greater share from local residents.

Conversely, the proportion of visitation to Neutral Bay from residents living within 2 km decreased by 2% between the historical and activation periods. Visitation from within an 8km had increased however.

**During the activation period, residents from within 2km are contributing to a greater share of visitations to Young Street, but a lower share across Neutral Bay more generally.**

### Home Location of Young Street Visitors

	Historical Period	Pre-construction Period	Activation Period	Change between Historical and Activation Period
0-2km	32%	35%	36%	+4%
2-4km	13%	14%	14%	+1%
4-6km	10%	13%	12%	+3%
6-8km	6%	5%	8%	+2%
8-10km	7%	7%	5%	-2%
10-15km	10%	8%	8%	-1%
15-20km	11%	8%	6%	-5%
20-30km	6%	6%	5%	-0%
30-40km	1%	1%	1%	+0%
40-50km	1%	1%	1%	+0%
50km+	5%	3%	3%	-1%

### Home Location of Neutral Bay Visitors

	Historical Period	Pre-construction Period	Activation Period	Change between Historical and Activation Period
0-2km	31%	37%	29%	-2%
2-4km	12%	13%	14%	+3%
4-6km	9%	10%	12%	+2%
6-8km	8%	8%	9%	+1%
8-10km	7%	6%	7%	+0%
10-15km	10%	9%	11%	+0%
15-20km	7%	5%	6%	-1%
20-30km	6%	5%	6%	+0%
30-40km	2%	2%	2%	-0%
40-50km	1%	1%	1%	+0%
50km+	8%	3%	3%	-4%

## WORK LOCATION BY DISTANCE

### Key Findings

The tables on the right represent the distribution of visits to Young Street and Neutral Bay based on work location, by distance.

Young Street's share of visitation, by workers from within 2km has increased by 9% between the historical and activation period, and by 14% from within a 6km radius.

The share of visitation to Neutral Bay from workers with 2km decreased between the historical and activation periods.

**During the activation period, Young Street is attracting a greater share of visits from workers within 6 km when compared to previous periods.**

### Work Location of Young Street Visitors

	Historical Period	Pre-construction Period	Activation Period	Change between Historical and Activation Period
0-2km	33%	39%	42%	+9%
2-4km	12%	13%	16%	+3%
4-6km	10%	12%	12%	+2%
6-8km	7%	6%	7%	-1%
8-10km	6%	7%	5%	-1%
10-15km	9%	6%	5%	-4%
15-20km	11%	8%	5%	-5%
20-30km	5%	5%	5%	+0%
30-40km	1%	1%	1%	-0%
40-50km	1%	1%	1%	-0%
50km+	5%	2%	2%	-3%

### Work Location of Neutral Bay Visitors

	Historical Period	Pre-construction Period	Activation Period	Change between Historical and Activation Period
0-2km	31%	37%	29%	-2%
2-4km	12%	14%	16%	+3%
4-6km	11%	12%	13%	+2%
6-8km	8%	8%	9%	+1%
8-10km	6%	6%	7%	+0%
10-15km	9%	8%	9%	-0%
15-20km	7%	5%	6%	-1%
20-30km	5%	5%	6%	+0%
30-40km	2%	2%	2%	+0%
40-50km	1%	1%	1%	-0%
50km+	8%	3%	3%	-5%



# 03

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## DWELL TIME AND CROSS USAGE



# DWELL TIME ANALYSIS

## Key Findings

The charts opposite record the average time people spend at Young Street and Neutral Bay across the three time periods. This analysis considers all visits, including those that dwell and those that pass through the precinct.

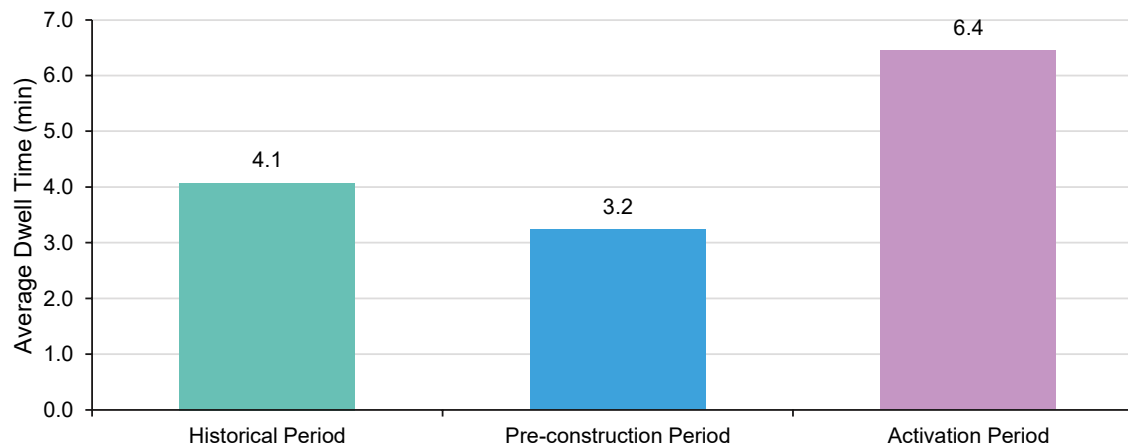
On average, visitors were spending more time at Young Street during the activation period, compared to the historical (+56%) and pre-construction (+100%) period.

Those Neutral Bay visitors who visited Young Street, typically spend longer in Neutral Bay than those that don't visit Young Street. This trend is prevalent across all analysis periods, but is much more pronounced in the activation period.

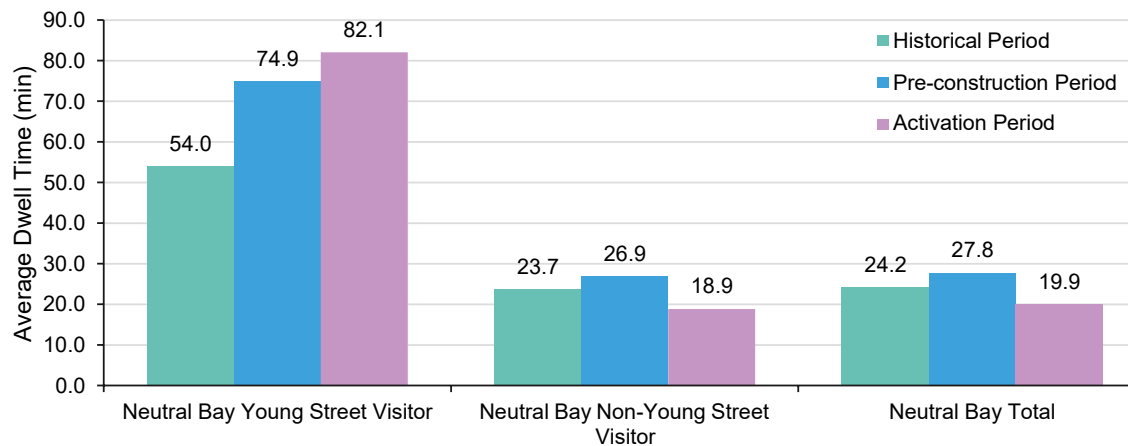
**The average dwell time for all visits to Young Street in the activation period is more than 55% longer than the historical period.**

**People visiting Young Street spent more time in Neutral Bay than those that did not visit Young Street.**

## Average Dwell Time within Young Street (minutes)



## Average Dwell Time within Neutral Bay (minutes)



## HOME LOCATION BY SUBURBS

### Key Findings

The table on the right outlines the top 20 home suburbs of residents visiting Young Street and Neutral Bay.

Most of the visitations came from the immediate areas like Cremorne, Neutral Bay and Mosman.

Young Street is observed to have an increase in visitation share from Cremorne and Mosman during the activation period.

Neutral Bay experienced a significant increase of 6 percentage point in visitation share from Cremorne residents.

**Cremorne residents are accounting for a greater share of visitation to Young Street and Neutral Bay during the activation period.**

### Top 20 Home Suburbs

	Young Street				Neutral Bay		
	Historical Period	Pre-construction Period	Activation Period		Historical Period	Pre-construction Period	Activation Period
Cremorne	12%	11%	15%	Mosman	13%	15%	16%
Mosman	9%	9%	11%	Neutral Bay	9%	12%	8%
Neutral Bay	9%	13%	8%	Cremorne	10%	10%	8%
Cammeray	2%	2%	5%	Seaforth	2%	2%	2%
Artarmon	4%	4%	3%	Cammeray	2%	2%	2%
Chatswood	0%	3%	3%	Dee Why	2%	1%	2%
Greenwich	2%	3%	2%	Manly	1%	1%	2%
Putney	0%	2%	2%	Balgowlah Heights	1%	1%	1%
Northbridge	1%	2%	2%	Balgowlah	1%	1%	1%
Roseville	0%	1%	1%	North Balgowlah	1%	1%	1%
Frenchs Forest	0%	1%	1%	Manly Vale	1%	1%	1%
Seaforth	1%	0%	1%	Cremorne Point	1%	1%	1%
Balgowlah	1%	1%	1%	Northbridge	1%	1%	1%
Wahroonga	3%	2%	1%	Allambie Heights	1%	1%	1%
Lane Cove North	1%	1%	1%	Freshwater	1%	1%	1%
Lane Cove	0%	0%	1%	Clontarf	0%	1%	1%
Willoughby	1%	1%	1%	Fairlight	1%	1%	1%
Northmead	0%	0%	1%	Kurraba Point	1%	1%	1%
North Sydney	1%	1%	1%	Chatswood	1%	1%	1%
Manly (NSW)	1%	1%	1%	Wollstonecraft	1%	1%	1%

# CROSS USAGE

## Key Findings

The charts on the right illustrates the cross usage between Young Street and other precincts in Neutral Bay.

The top chart looks at the proportion of Young Street visitors that also went to other precincts on the same day. For example, 30% of visitors to Young Street also went to Grosvenor Street East on the same day.

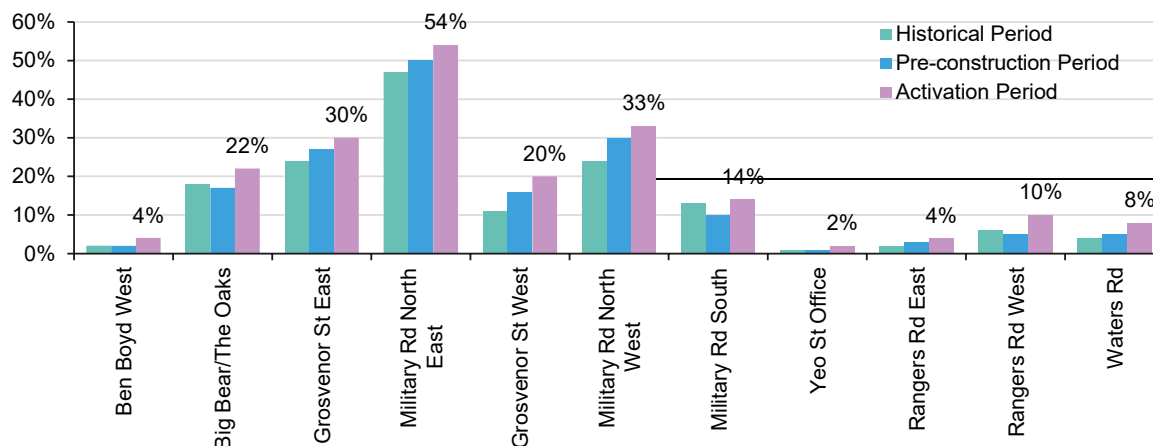
The proportion of cross-usage from Young Street visitors, to other precincts, has increased across all parts of Neutral Bay during the activation period.

The bottom chart considers the share of visitors to the various other precincts that also visited Young Street on the same day. For example, 2% of visitors to Big Bear/The Oaks also went to Young Street on the same day.

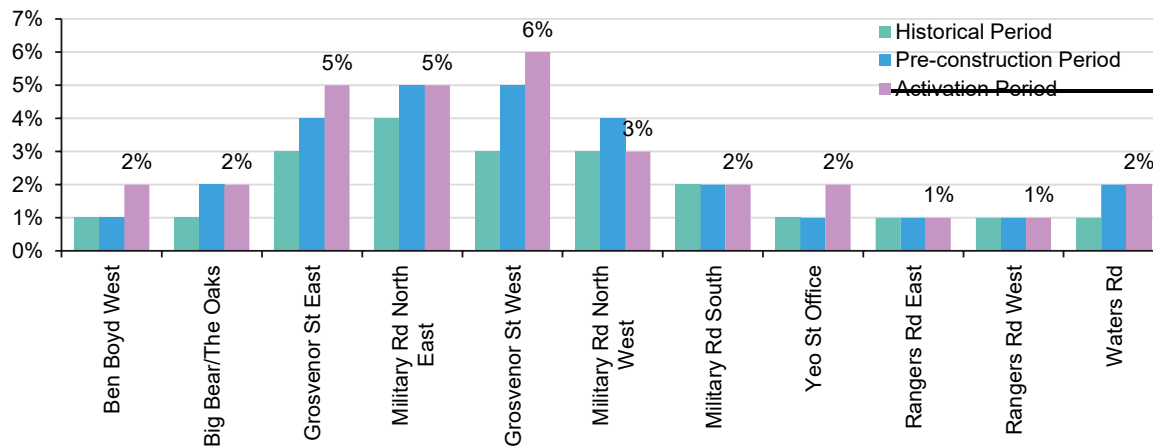
Observed cross usage rates for visitors to other precincts are much lower with Young Street (i.e. visitors to Young Street are more likely to visit other precincts than other precinct visitors are to visit Young Street).

**The proportion of cross-usage from Young Street visitors, to other precincts, has increased across all parts of Neutral Bay during the activation period.**

Share of Young Street Visitors that also went to other precincts on the same day



Share of Other Precincts Visitors that also went to Young Street on the same day



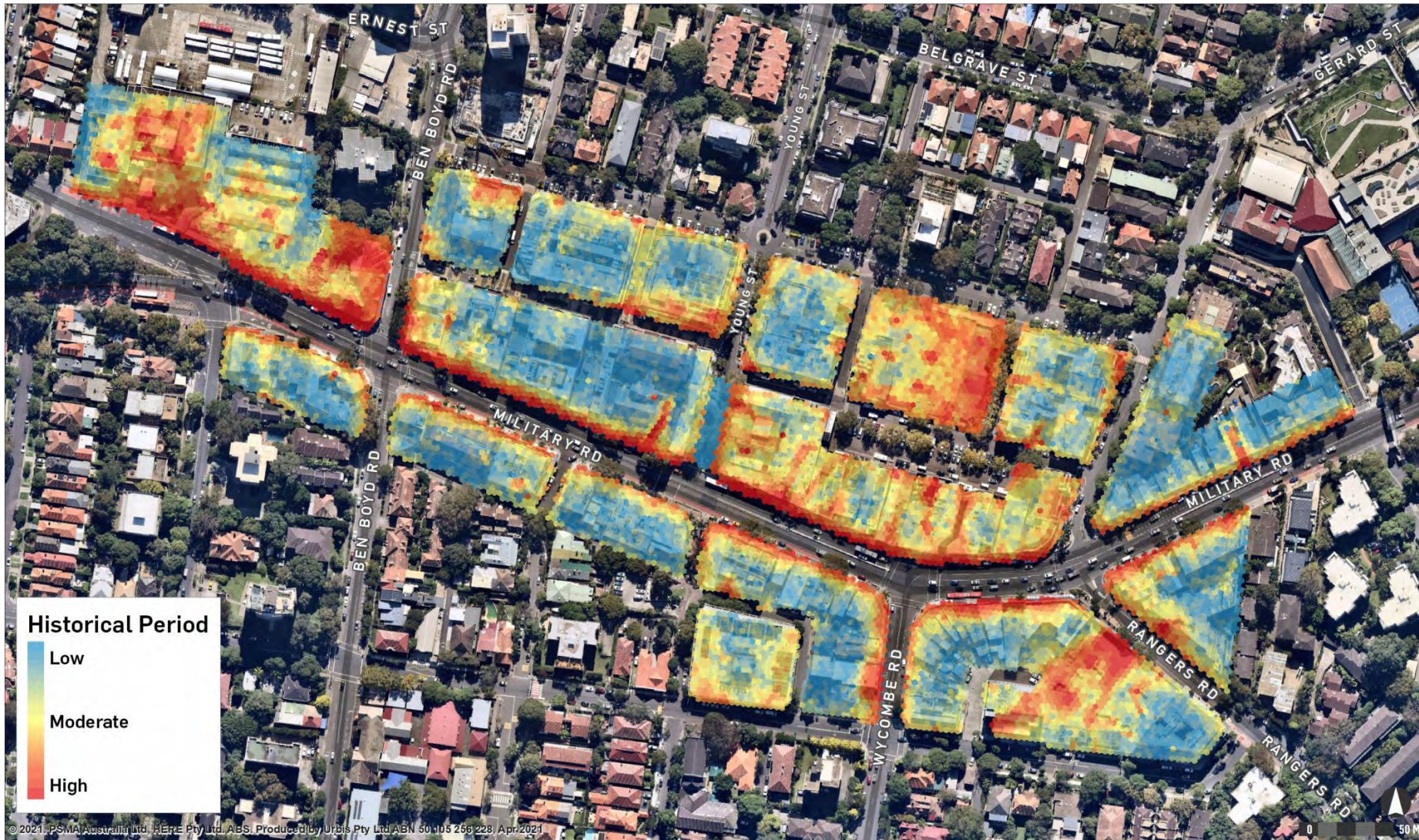
# 04

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## HEATMAPPING

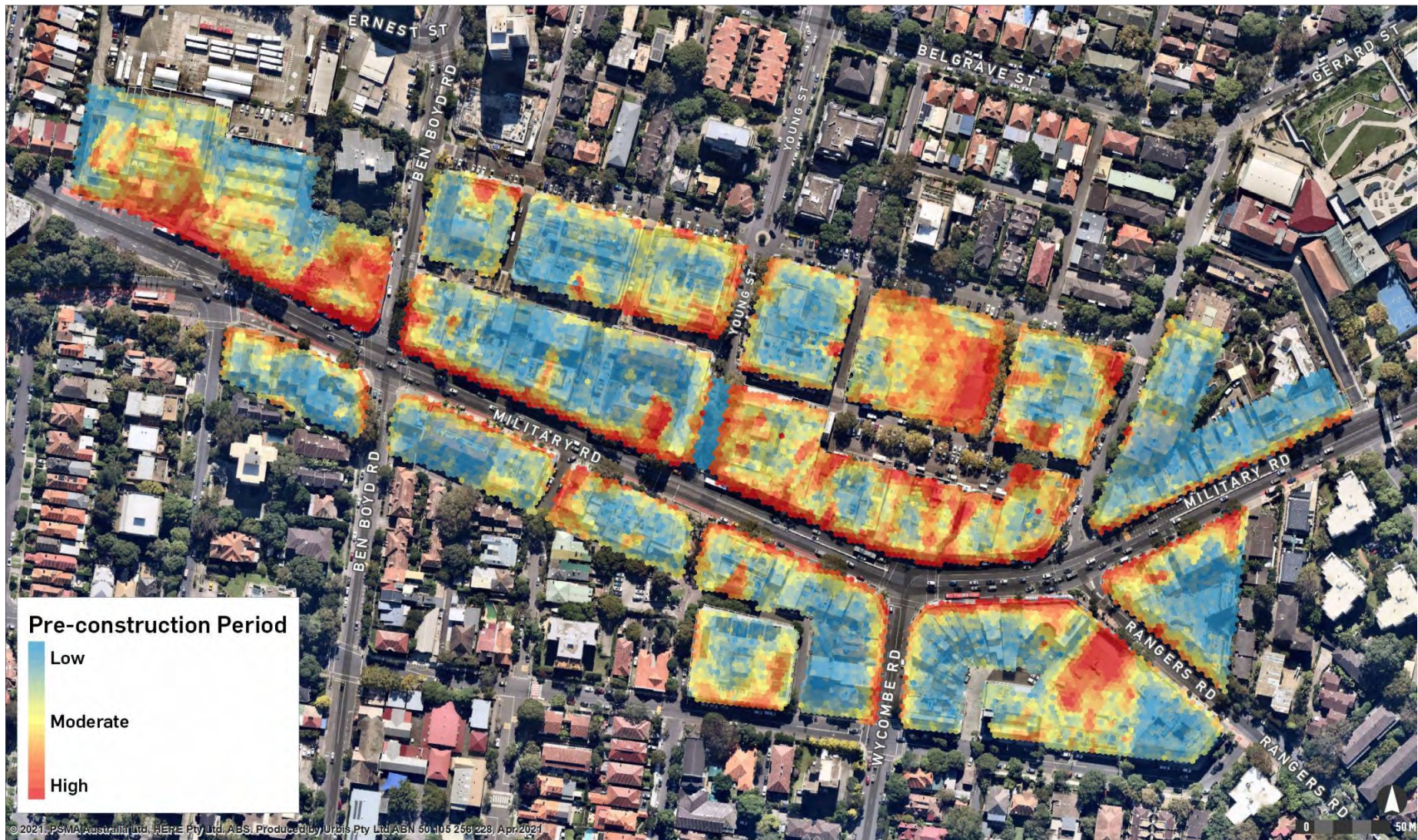


# NEUTRAL BAY HEATMAP: HISTORICAL PERIOD



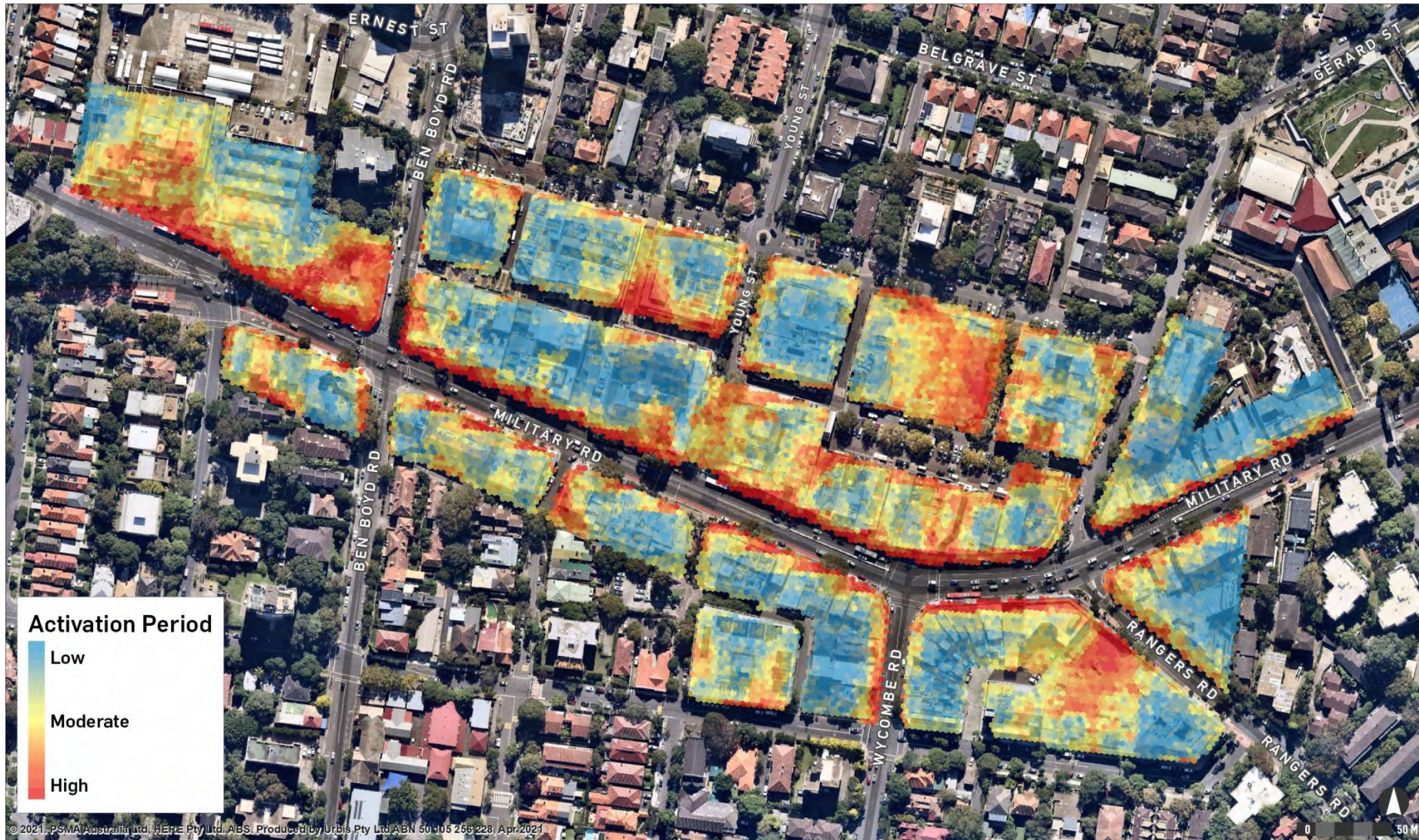
Note: Young Street's vehicle path has been omitted during the historical and pre-construction periods to exclude the passing by vehicular traffic.

# NEUTRAL BAY HEATMAP: PRE-CONSTRUCTION PERIOD



Note: Young Street's vehicle path has been omitted during the historical and pre-construction periods to exclude the passing by vehicular traffic.

# NEUTRAL BAY HEATMAP: ACTIVATION PERIOD





## COVID-19 AND THE POTENTIAL IMPACT ON DATA INFORMATION

The data and information that informs and supports our opinions, estimates, surveys, forecasts, projections, conclusion, judgments, assumptions and recommendations contained in this report (Report Content) are predominantly generated over long periods, and is reflective of the circumstances applying in the past. Significant economic, health and other local and world events can, however, take a period of time for the market to absorb and to be reflected in such data and information. In many instances a change in market thinking and actual market conditions as at the date of this report may not be reflected in the data and information used to support the Report Content.

The recent international outbreak of the Novel Coronavirus (COVID-19), which the World Health Organisation declared a global health emergency in January 2020 and pandemic on 11 March 2020, is causing a material impact on the Australian and world economies and increased uncertainty in both local and global market conditions.

The effects (both directly and indirectly) of the COVID-19 Outbreak on the Australian real estate market and business operations is currently unknown and it is difficult to predict the quantum of the impact it will have more broadly on the Australian economy and how long that impact will last. As at March 2020, the COVID-19 Outbreak is materially impacting global travel, trade and near-term economic growth expectations. Some business sectors, such as the retail, hotel and tourism sectors, are already reporting material impacts on trading performance now and potentially into the future. For example, Shopping Centre operators are reporting material reductions in foot traffic numbers, particularly in centres that ordinarily experience a high proportion of international visitors.

The Report Content and the data and information that informs and supports it is current as at the date of this report and (unless otherwise specifically stated in the Report) necessarily assumes that, as at the date of this report, the COVID-19 Outbreak has not materially impacted the Australian economy, the asset(s) and any associated business operations to which the report relates and the Report Content. However, it is not possible to ascertain with certainty at this time how the market and the Australian economy more broadly will respond to this unprecedented event. It is possible that the market conditions applying to the asset(s) and any associated business operations to which the report relates and the business sector to which they belong could be (or has been) materially impacted by the COVID-19 Outbreak within a short space of time and that it will have a lasting impact. Clearly, the COVID-19 Outbreak is an important risk factor you must carefully consider when relying on the report and the Report Content.

Any Report Content addressing the impact of the COVID-19 Outbreak on the asset(s) and any associated business operations to which the report relates or the Australian economy more broadly is (unless otherwise specifically stated in the Report) unsupported by specific and reliable data and information and must not be relied on.

To the maximum extent permitted by law, Urbis (its officers, employees and agents) expressly disclaim all liability and responsibility, whether direct or indirect, to any person (including the Instructing Party) in respect of any loss suffered or incurred as a result of the COVID-19 Outbreak materially impacting the Report Content, but only to the extent that such impact is not reflected in the data and information used to support the Report Content.



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GROUPGSA



# YOUNG STREET PLAZA

Concept Report

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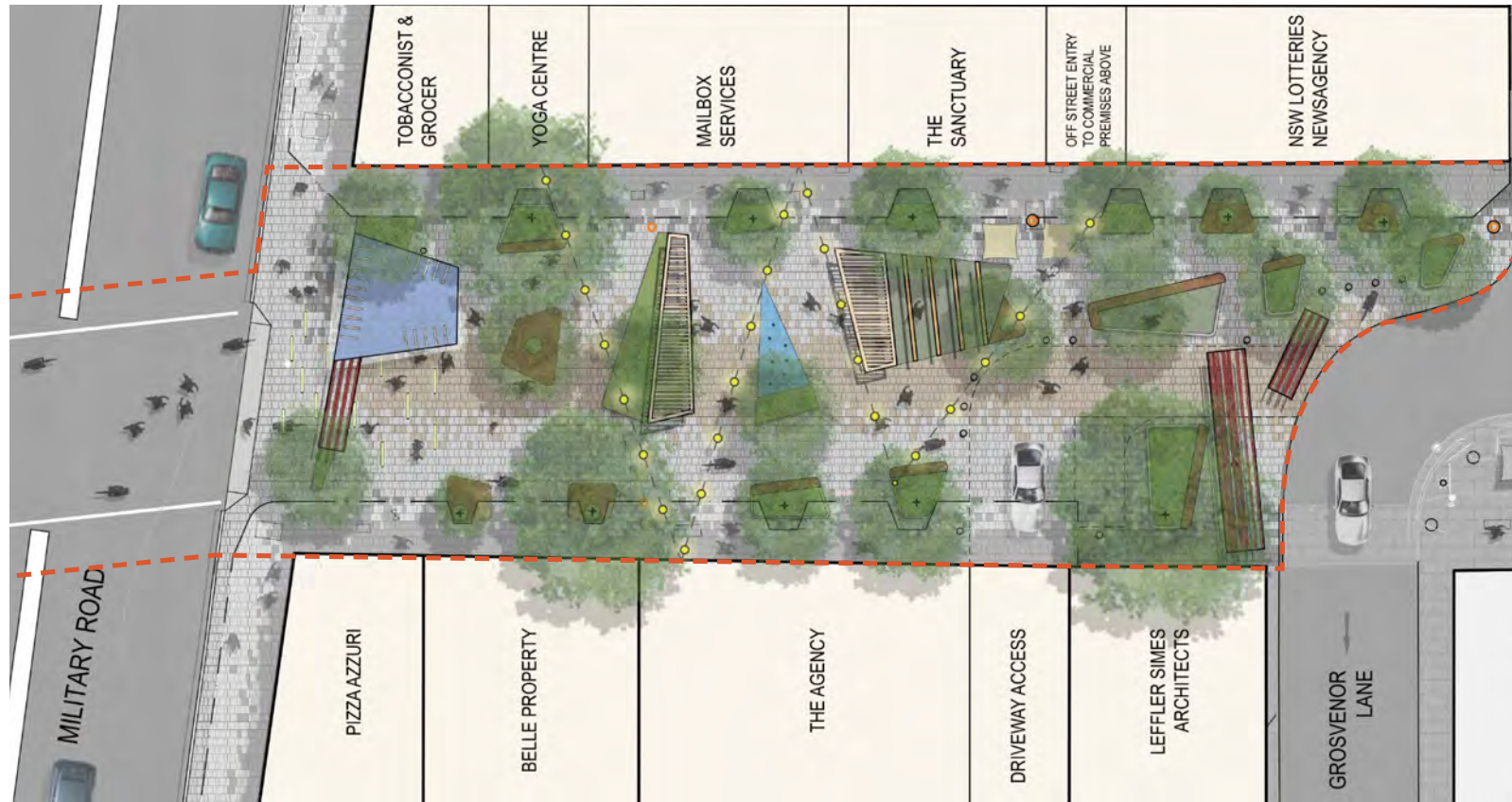
**MONTAGES**

**PRECEDENTS**

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# ORIGINAL CONCEPT - PLAN



Designed by GroupGSA in 2019, this concept was the basis for the first round of community consultation.

Key elements included an architectural secure bike storage facility, a sculptural water feature and bold entry arches.

	<b>KEY</b>		FEATURE PAVING		CATENARY (OVERHEAD) LIGHTING SEATING		LIGHTING COLUMNS
	DECIDUOUS STREET TREES		WATER FEATURE/SCULPTURE		ARTIFICIAL TURF		BOLLARDS
	ENTRY ARCHES		IN GROUND FEATURE LIGHTING		PLATFORM SEAT		EXTENT OF WORKS
	ARCHITECTURAL SECURE BIKE STORAGE		PERGOLA WITH PLANTING				
			OUTDOOR DINING OPPORTUNITY				

# ORIGINAL CONCEPT - MONTAGES

PHOTOMONTAGE - LOOKING SOUTH



EXISTING VIEW 2 - YOUNG STREET VIEW LOOKING SOUTH TOWARDS MILITARY ROAD

For further information, please  
contact Lindsay Mandley on  
(02) 9936 8100.



# POP UP PLAZA

THE POP-UP PLAZA WAS DESIGNED AND INSTALLED AS A TEMPORARY 3 MONTH TRIAL

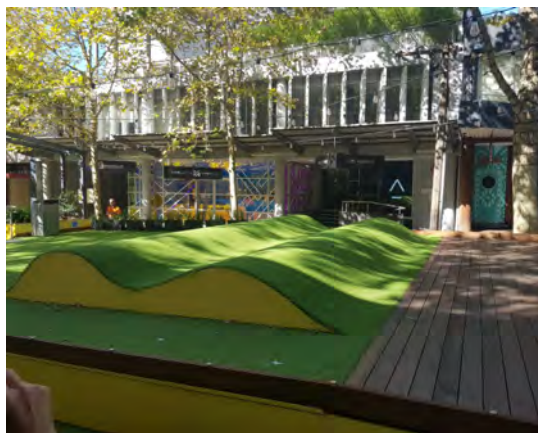


## KEY TAKEAWAYS FROM THE COMMUNITY CONSULTATION:

There were approximately 240 responses received to the online survey - 63% Support, 29% Oppose, 8% Neither support/oppose.

Key items to be considered for inclusion:

- Add more amenities for kids, make more child friendly.
- Use 'upmarket' materials.
- Incorporate some shade/shelter elements
- Ensure Military Road is blocked off/not easily accessible to children.
- Create more of a 'piazza' style rather than bright 'funky' design.
- Design should be befitting café society/ bar culture that suits the suburb.
- Consider weather protection/shelter.
- Consider a noise barrier to Military Road.
- Increase the artificial turf area.
- Include games/kids activities like in the Newport Arms like Jenga o bowling lane
- Include more seating space with tables.
- Extend the feature lighting concept from Grosvenor lane.
- Ensure there is some 'green space'.
- Provide access for a food truck
- Find the balance between a café style plaza and child-friendly open space



# CURRENT CONCEPT PLAN




BASED ON COMMUNITY FEEDBACK



- 1** Café Court with loose outdoor seating & retractable shade sail
- 2** Shipping Container type Café - 3-sided activation
- 3** Timber Deck (At Grade) with loose outdoor seating to café front
- 4** 'Rolling' Artificial Turf Play

- 5** Artificial Turf Slope with timber wave seating
- 6** Timber Seating (combination of benches & seating platforms)
- 7** Raised Timber 'Lounge' Deck
- 8** Shared Access Zone - 4m Wide Emergency Egress (left turn only) onto Military Road

- 9** Driveway Access
- 10** Movable Timber Benches
- 11** Existing Signalled Pedestrian Crossing to Military Road to be retained
- 12** Continuous Pedestrian Crossing
- 13** Timed Loading Zone

-  Existing Tree to be retained
-  New Deciduous Tree
-  New / Transplanted Livistona Palm



# MONTAGE - CAFE LOOKING NORTH

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# MONTAGE - LOOKING SOUTH, DAY VIEW

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# MONTAGE - LOOKING SOUTH, NIGHT VIEW

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# MONTAGE - CENTRAL SPACE

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# PRECEDENTS



# MATERIALS PALETTE

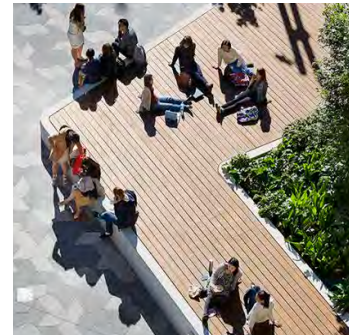
## Built Elements



## Raised Planters



## Seating

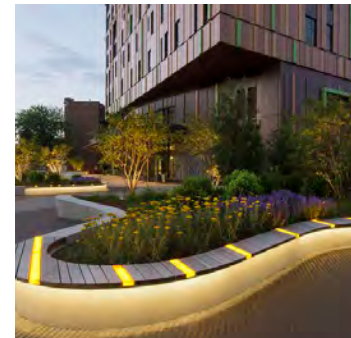
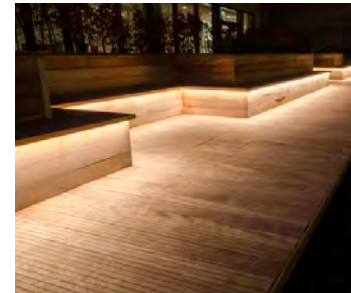


# MATERIALS PALETTE

## Surface Finishes



## Feature Lighting



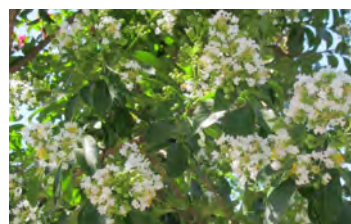
# PLANTING PALETTE

## Trees

For instant impact trees are to be planted at semi-mature size, this will also ensure some natural shade is provided throughout the plaza.

Clear stems will provide visibility under the canopy and reduce eye height hazards to pedestrians.

CODE	BOTANICAL NAME	COMMON NAME
T1	<i>Platanus orientalis</i> 'Digitata'	Plane Tree
T2	<i>Pyrus ussuriensis</i>	Manchurian Pear
T3	<i>Lagerstroemia indica</i> 'Natchez'	White Crepe Myrtle
T4	<i>Livistona australis</i>	Cabbage Tree-palm





# PLANTING PALETTE

## Ornamental Planting

Ornamental planting will complement the plaza, creating a bright and warm palette with varying textures and shape.

A mixture of large plant pots, raised planters and planting at grade provides dynamic planting at a range of heights and helps to define the different spaces within the plaza.

CODE	PLANTING STYLE	LOCATION
P1	Planting at grade	To edges of the plaza, particularly under existing and new trees and to Military Road
P2	Raised planters	Used to define spaces within the plaza and accommodate level changes
P3	Large pots	Scattered throughout the plaza, clustered in groups to provide "living colour" seasonal displays





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