



Inner West Council
Newtown (area 6)
Local Area Traffic Management Study



September 2018

Document Information:

Document Number	14/5139
Creation Date	17 September 2018
Revision No	02
Document Status	Draft
Document Author	Sunny Jo
Department	Roads, Traffic and Stormwater

Version Control:

Version	Changes from existing Treatments	Date	Comment
00	No Changes	17/09/2018	First Draft
01	Revised treatments, strategic cost and concept plans	19/10/2018	Second Draft

Reviewers:

Name	Department	Title	Date	Initials

Table of Contents

1. Executive Summary.....	4
2. Introduction	8
2.1 Background	8
2.2 Study Background	9
2.3 Referenced Documents.....	11
2.4 LATM Scheme in Inner West.....	11
3. Existing Condition Assessment	13
3.1 Study Area.....	13
3.2 Area Demographics.....	13
3.3 Road Hierarchy.....	14
3.4 Public Transport Services	15
3.5 Previous LATM Study in Newtown.....	19
4. Traffic data review	23
4.1 Environmental Capacity and Speed Performance Standards	23
4.2 Evaluation of Environmental Capacity and Speed Performance in the Study Area	24
4.3 Performance of Signalised Intersections	30
5. Crash Statistic Analysis.....	30
5.1 Background	30
5.2 Crash rate by time.....	30
5.3 Motorbikes and Cyclists Crashes	33
5.4 Pedestrian safety	35
6. Future Conditions.....	37
6.1 Marrickville LEP.....	37
6.2 Future developments in the immediate area	40
7. Community Consultation Overview	44
7.1 Review of Council's Record System prior to the study	44
7.2 Initial Consultation	46
7.3 Public Exhibition.....	48
8. Newtown LATM Scheme Review	48
8.1 Introduction	48
8.2 New LATM Treatment Proposals	48
8.3 Audit of Existing traffic facilities	55
8.4 Pedestrian Access and Mobility Plan (PAMP) Implementation	56
8.5 Non-Infrastructure Improvements	56
8.6 Prioritisation of treatments and Strategic Cost Estimation	56

Appendices

Appendix A: Criteria for pedestrian precinct treatment (Extract from 40km/h Speed Limits in High Pedestrian Activity Areas, Roads and Traffic Authority 2006).....	60
Appendix B: Results of Newtown LATM Audit of Existing Traffic Devices.....	61
Appendix C: <i>Newtown-Enmore Parking Study 2010 (ARUP) Proposed Parking, Newtown-Enmore Parking Review 2013 (Inner West Council) Proposed Parking</i>	62
Appendix D: <i>Initial Community Consultation Result Summary</i>	67
Appendix E: <i>Crash Road User Movement (RUM) Codes from RMS Traffic Accident Database System Data Manual</i>	72
Appendix F: <i>Crash Data Summary sourced from RMS Accident Database July 2012 to June 2017</i>	73
Appendix G: <i>Proposed LATM Concept Designs</i>	78
Appendix H: <i>Public Exhibition Feedback Summary</i>	90

Appendix I: <i>Impact of WestConnex Project on Edgeware Road</i>	91
Appendix J: <i>Matters to be referred to the RMS for consideration</i>	93
Appendix K: <i>Marrickville Development Control Plan 2011 Amendment No.4</i>	95
Appendix L: <i>Locations of Missing Kerb Ramps & Marrickville PAMP focus areas</i>	96
Appendix M: <i>Holt Street Reduced No Stopping zone Risk Assessment</i>	98
Appendix N: <i>Proposed Bicycle Facilities</i>	100
Appendix O: <i>Streets nominated for 40km/h Local Traffic Area</i>	103
Appendix P: <i>Marrickville Public Domain Masterplan King Street & Enmore Road</i>	104

Figures

Figure 1: Study Area	8
Figure 2: Road classification within the study area	15
Figure 3: Public Rail Network connecting Newtown	16
Figure 4: Public Bus Routes in Enmore and Newtown Areas	16
Figure 5: Bicycle routes identified by the Marrickville Bicycle Strategy 2007	17
Figure 6: Former Enmore LATM Scheme Review (2004)	19
Figure 7: Truck Load Limits in study area	22
Figure 8: Traffic count locations within the study area	24
Figure 9: Average Truck Traffic Volumes per day	28
Figure 10: Prominent Through Traffic in the Newtown Study Area	29
Figure 11: Crash trend over time in the Newtown study area	31
Figure 12: Crash in study area by time of day	32
Figure 13: Crash in study area by day of week	32
Figure 14: Reported traffic accidents from RMS database July 2012 to June 2017	33
Figure 15: Crash Frequency in the Newtown Study Area by Road User Movement (RUM Code)	34
Figure 16: Crashes involving a pedal cyclist	34
Figure 17: Crashes involving a Pedestrian	34
Figure 18: Crashes with speeding a factor	34
Figure 19: Crashes involving a motorbike	34
Figure 20: Crash by vehicle type	35
Figure 21: Total Injury Accidents by Road User Movement (RUM) Category	36
Figure 22: Look Before You Step Out patches in King Street, Newtown and Enmore Road, Enmore..	36
Figure 23: Land use zoning in the study area under the Marrickville Local Environment Plan 2011...	39
Figure 24: Estimated dwellings in 2031 from S94 Traffic and Transport Study by Transport and Urban Planning 2011	40
Figure 25: Proposed Sydney Metro Network	44
Figure 26: Most selected locations for each issue during the initial community consultation	46
Figure 27: Initial Survey Question Results	47
Figure 28: Stage 1 Holt Street proposed kerb extensions west of King Street	50
Figure 29: Stage 2 Holt Street proposed shared zone	51
Figure 30: Metropolitan Road entry treatment at Enmore Lane	51
Figure 31: Local Area Improvement Strategy 2018 Concept Plan for Edgeware Road	92

1. Executive Summary

The Newtown LATM study was undertaken by Inner West Council in order to review the traffic management strategy within the precinct. This report sets out an assessment of the traffic conditions within the Newtown study area include the following:

- Road Hierarchy
- Traffic survey data (including volumes, speed and heavy vehicles)
- Crash statistics
- Identification of pedestrian and cyclist improvements
- Initial community and stakeholder consultation
- Assessment of the effectiveness of the existing LATM measures
- Public Exhibition of the draft scheme
- A review of Council records including complaints and issues received since 2012
- Existing and proposed cycle routes under the Marrickville Bicycle Strategy
- Future land use
- Identification of further opportunities to reduce volumes and speed of traffic on local streets to address public amenity
- Development of concept LATM proposals

The recommendations provided in this document aim to align with the principles outlined in the Marrickville Integrated Transport Strategy 2007 providing the rationale and recommended actions for addressing local transport issues, and moving towards sustainable transport – that is, reducing car use and increasing use of public transport, walking and cycling. The Inner West Community Strategic Plan 2018 also has a strategy for improving transport infrastructure and active travel that is safe, connected and well maintained.

Community opinions were collected by a survey designed to establish what the major issues in the area were. A draft report was prepared for the consideration of Council and will be placed on public exhibition for a minimum of 28 days. The prominent issues highlighted from the community were:

- Too much traffic along regional and state roads,
- Concerns on heavy vehicles on the road network, and
- Rat running on local roads

Following feedback from the community at the public exhibition, a final report will be prepared for Council's consideration.

Reported crash history data was analysed over a 5 year period ending in 2017 within the study area and most crashes (96.7%) occurred along the regional and state road network. These were comparable to other urban regional and state roads, with rear ends accidents (20%), pedestrian (17.4%) and right turn through (12.9%) accidents being the most prominent accidents. There was a higher level of motorbike crashes (16.8% of reported accidents) compared to the NSW average (10.1%), and similar results for pedal cyclists (14.2%) compared to the NSW average (3.6%). The demographic data indicate that there is a higher level of bike use in Newtown and Enmore.

To support the design principles outlined in the draft Public Domain Masterplan for the King Street & Enmore Road, a continuous footpath treatment as well as a 10km/h shared zone is proposed on a

number of side streets along King Street and Enmore Road. These changes will improve safety for pedestrians and will offer a continuous walking environment along the main shopping strip.

The additional proposed treatments in the local streets aim to improve intersection safety and further reduce traffic speeds, in order to meet the Roads and Maritime Services (RMS) requirement for the establishment of a 40km/h zone in the study area. The reduced speed limit should encourage active transport and provide consistency with the already established 40km/h zone in the neighbouring East Newtown and Erskineville areas.

Additional bicycle infrastructure enhancements are proposed along the routes identified in the Marrickville Bicycle Strategy and should encourage cycling in the area.

A list containing the recommended treatments to address the issues identified in the report is tabled below. The estimated total cost of the LATM works is \$456,000.

Newtown LATM Review 2018 Draft proposed treatments						
Items	Map ref	Street	Section	Proposed Treatment	Priority	Estimated Cost
1	B	Bailey Street	Enmore Road	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of one (1) speed cushion.	1	\$28,000
2	A	Goddard Street	King Street	Continuous footpath treatment (raised treatment on side street, installation of bollards, planter boxes and/or street furniture).	2	\$25,200
3	B	Reiby Street	Enmore Road to Pemell Lane	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	3	\$58,100
4	B	Simmons Street	Enmore Road to Pemell Lane	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	4	\$43,000
5	B	Marian Street	Enmore Road Enmore Lane	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	5	\$50,000
6	E	Holt Street	King Street to Station Street	Stage 1: kerb extensions at King Street, reduced No Stopping distance on south side, bollards, kerb ramps, repositioned traffic signage.	6	\$26,000

Items	Map ref	Street	Section	Proposed Treatment	Priority	Estimated Cost
7	B	Holt Street	King Street	Stage 2: 10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	7	\$65,500
8	A	Camden Street	King Street	Continuous footpath treatment (raised treatment on side street, installation of bollards, planter boxes, street furniture)	8	\$26,700
9	C	Metropolitan Road	Enmore Lane	Installation of kerb blister island Installation of at grade pavement or similar linemarking Installation of truck prohibited symbolic and local traffic signage	9	\$16,500
10	C	Station Street	Reiby Lane	Installation of at grade pavement or similar linemarking Installation of truck prohibited symbolic and local traffic signage	10	\$9,500
11	E	Metropolitan Road	Cross Lane	Installation of kerb blister islands with motorbike parking	11	\$60,000
12	E	Cross Lane	Edgeware Road	Installation of kerb blister island	12	\$8,000
13	E	Camden Street	College Street	2x landscaped kerb blister islands, give way signs and lines	13	\$14,000
14	E	Camden Street	Station Street	2x landscaped kerb blister islands, give way signs and lines	14	\$13,500
15	Appendix N	Simmons Street	entire length	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	15	\$1,000
16	Appendix N	Margaret Street	Between Ferndale Street and College Street	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	16	\$2,400
17	Appendix N	College Street	Between Margaret Street and Holt Street	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	17	\$2,200
18	Appendix N	Holt Street	Between Station Street and King Street	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	18	\$1,400
19	Appendix N	Station Street	Between Holt Street and Enmore Road	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	19	\$3,200
20	Appendix N	Metropolitan Road	Between Enmore Road and southern end of road	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	20	\$1,800
				Total		\$456,000



Newtown Local Area Traffic Management Study 2018

Draft Proposed Treatments

November 2018

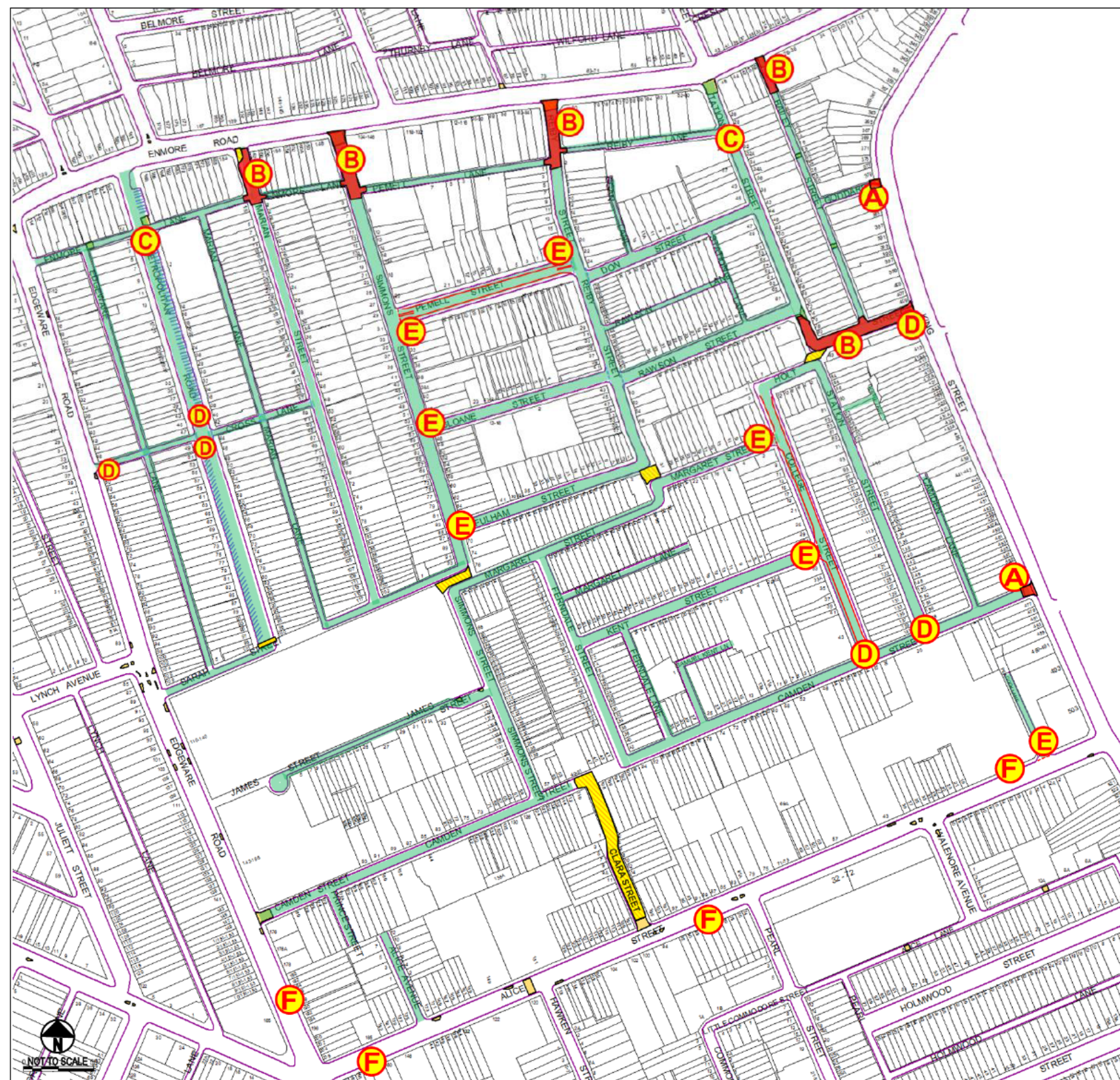
© COPYRIGHT Land and Property Information NSW
Inner West Council
All Rights Reserved.

Plan Produced by Information Systems of Inner West Council. This Map Remains the Property of Inner West Council. Reproduction of any part of this map without approval is prohibited.

DISCLAIMER
This map has been compiled from various sources and the publisher and/or contributors accept no responsibility for any injury, loss or damage arising from its use or errors or omissions therein.

Legend:

- Continuous footpath treatment
- 10km/h Shared zone
- Local road entry treatment (surface treatment, signage and kerb blister)
- Kerb blister island/kerb extensions
- Give Way lines and signs
- Linemarking changes
- Proposed linemarking
- Existing Traffic Facility
- Streets nominated for 40km/h local traffic area



2. Introduction

2.1 Background

The Inner West Council was established in 12 May 2016 formed from the three previous Councils of Ashfield, Leichardt and Marrickville. Within the new Council's Local Government Area 5 wards were formed and carry over the previous codes, plans, strategies and policies of the former Councils. In 2018 the Newtown local precinct was identified for review the existing local area traffic management (LATM) scheme. The subject area is identified as 'area 6' bounded by King Street, Enmore Road, Edgeware Road and Alice Street shown in Figure 1.

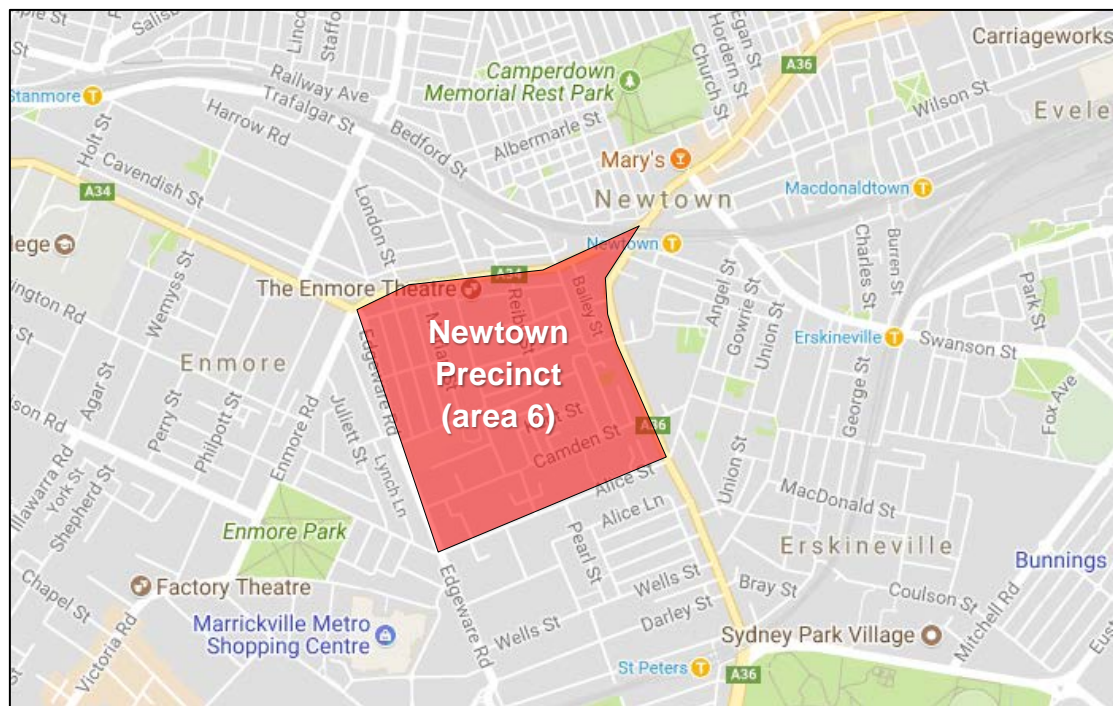


Figure 1: Study Area

The Inner West Community Strategic Plan (CSP) 'Our Inner West 2036' endorsed in June 2018 provides outcomes and strategies for the future of Inner West as outlined in Table 1. The Newtown Precinct LATM achieves these outcomes by reviewing existing traffic measures in place aimed at creating a safer road environment that will support public transport, walking and cycling.

CSP Outcomes	Strategies
2.5 Public transport is reliable, accessible, connected and enjoyable	1. Advocate for improved public transport services to, through and around Inner West 2. Advocate for, and provide, transport infrastructure that aligns to population growth
2.6 People are walking, cycling and moving around Inner West with ease	1. Deliver integrated networks and infrastructure for transport and active travel 2. Pursue innovation in planning and providing new transport options 3. Ensure transport infrastructure is safe, connected and well maintained

Table 1: Inner West Community Strategic Plan Outcomes and Strategies

2.2 Study Background

This report sets out an assessment of the traffic conditions within the Marrickville East study area and includes the following:

- Road Hierarchy
- Traffic survey data (including volumes, speeds and heavy vehicle percentages)
- Crash statistics
- Intersection operation analysis
- Identification of pedestrian and cyclist improvements
- Initial community and stakeholder consultation
- Assessment of the effectiveness of the existing LATM measures
- Public exhibition period.
- A review of Council records including complaints and issues which have been raised since 2007
- Existing and proposed cycle routes
- Future land use
- Identification of further opportunities to reduce volumes and speed of traffic on local streets to address public amenity
- Development of concept LATM proposals

A review of the Austroads Guide to Traffic Engineering – Part 8 for Local Area Traffic Management was undertaken. The following information from Austroads describes the purpose of a LATM.

2.2.1 What is Local Area Traffic Management (LATM)

Local Area Traffic Management is concerned with the planning and management of the usage of road space within a local traffic area, often to modify streets and street networks which were originally designed in ways that are now no longer considered appropriate to the needs of residents and users of the local area. LATM can be seen as a tool of traffic calming at the local level (Brindle 1991; O'Brien and Brindle 1999 p. 259). It involves the use of physical devices, street scaping treatments and other measures (including regulations and other non-physical measures) to influence vehicle operation, in order to create safer and more pleasant streets in local areas.

For the purpose of distinguishing between LATM and other aspects of traffic management, a 'local (traffic) area' is an area containing only local streets and collector roads, and is usually bounded by arterial roads or other roads serving a significant road transportation function, or other physical barriers such as creeks, railways, reserves or impassable terrain.

LATM is essentially system-based and area-wide. It considers neighbourhood traffic-related problems and their proposed solutions in the context of the local area or a group of streets within it, rather than only at isolated locations. In addition, it requires that physical traffic measures be seen as a sequence of interrelated devices rather than individual treatments. Much of the material in the Austroads Guide to Traffic Engineering – Part 8, will assist practitioners in selecting and implementing single countermeasures at isolated sites, where there are localised problems needing spot treatment. Many street closures, channelisation's and small roundabouts, for example, are valid stand-alone treatments at problem intersections. However, the installation of such isolated

measures is not truly 'local area traffic management', and practitioners will need to be alert to the potential problems of isolated speed management devices.

2.2.2 Identifying the Cause of Traffic Related Problems

Identifying the root causes of traffic problems in neighbourhoods can often provide pointers to appropriate solutions. In broad terms, problems usually arise because of the quantity of traffic, its speed, or other characteristics of the network that lead directly to higher crash rates and reduced amenity. These in turn are created, at least in part, by the planning and design features of the local network. In summary, inspection of the causes of traffic problems over the past 30 years or so in Australia and New Zealand has led to the following guidelines for local planning and minor street network management:

To reduce vehicle speeds:

- shorten forward sightlines and enclose the driver's field of vision, by tree planting and other means
- keep street section lengths (i.e. between slow or near-stop conditions) below 200-250m
- reduce the available street width and/or introduce deflections in the vehicle path, while maintaining the margin of safety
- ensure that there is a traffic route within 400-500m of each local street.

To minimise traffic levels and intruding traffic in a local street:

- Maintain the level of traffic service on adjacent arterials to reduce 'rat-running'
- Increase the lengths (time and distance) of paths through the local street network to reduce their connectivity between points on the arterial road network
- Direct local traffic onto those streets most able to accommodate it. Neighbourhoods with high internal connectivity (that is, grid-based systems showing network redundancy with many alternative and direct paths for trips within the local area) may actually increase the average exposure to traffic for each household
- Provide closer spacing of traffic routes at network planning and subdivision approval stages, including the provision of supplementary traffic routes within large subdivisions. This will avoid the creation of large districts with high levels of internal traffic, and the misuse of local streets as substitutes for missing links in the traffic route network
- Consider traffic impacts at the land use approval stage. Traffic generators should be carefully located so that they do not create additional pressure on the local network.
- Changes to the local street system, LATM provisions, and the provision of other modes such as cycling and walking and other travel demand measures might be considered as conditions for planning approval.

To minimise crash risk (in addition to the above):

- Limit the number of local street intersections and junctions. Within reason, fewer intersections mean fewer crashes
- Limit the number of cross-intersections, and include roundabouts or other passive controls where cross-intersections are unavoidable. Note that Stop or Give Way signs may improve cross-intersection safety but still have higher risk
- Limit the number of major-minor road connections

- Minimise the percentage of dwellings with their frontage to connective roads
- Protect or manage parking on distributor roads and other connective streets.

2.3 Referenced Documents

In preparing this report, reference has been made to a number of background documents, including:

- Austroads Guide to Traffic Engineering Practice Part 8 - Local Area Traffic Management
- Austroads Guide to Traffic Engineering Practice Part 13 Pedestrians
- Austroads Guide to Traffic Engineering Practice Part 14 Bicycles
- RTA (Roads and Traffic Authority) Road Design Guide
- Towards Traffic Calming Manual – A Practitioners' Manual of Implemented Local Area Traffic Management and Blackspot Devices 1993
- RMS Technical Directions & Supplements to Australian Standards
- RTA NSW Bicycle Guidelines 2003
- Marrickville Council Reports including those from the Land Use, Assets and Corporate Committee
- Marrickville Local Environment Plan 2011
- Marrickville Development Control Plan 2011
- Marrickville Integrated Transport Strategy 2007
- Marrickville Bicycle Strategy August 2007
- Marrickville Pedestrian Access and Mobility Plan ARUP 2009
- Marrickville Town Centre Parking Strategy 2013
- Marrickville Public Domain Masterplans (draft) 2014
- Marrickville Council's Independent Review of the Marrickville Metro TMAP, Transport & Urban Planning (TUP), August 2010
- Marrickville Metro Traffic Impact Assessment, The Transport Planning Partnership & Bitzios Consulting 2017
- Inner West Council WestConnex Local Area Improvement Strategy BECA 2018
- Newtown Enmore Parking Study Review 2017
- Newtown-Enmore Parking Study ARUP 2014
- Former Newtown LATM Review Study 2004
- Connecting MARRICKVILLE, Connecting streetscape planning and delivery with places and people. Project Overview and Draft Action Plan, June 2013.
- RTA Guide to Traffic Generating Developments, 2002

2.4 LATM Scheme in Inner West

For over 25 years, Council has been 'traffic calming' local roads via Local Area Traffic Management (LATM) schemes. The purpose of traffic calming is to discourage excessive traffic volumes and speeds on local roads, thereby improving residential amenity and safety. Council's existing schemes have played a part in minimising the impact of freight and other traffic on local streets.

In relation to the plan to be developed, analysis should take place on (but is not limited to) the following data:

- Road hierarchy.
- Traffic survey data (including volumes, speeds and heavy vehicle percentages).

- Crash statistics.
- Intersection operation analysis.
- Identification of pedestrian and cyclist improvements.
- Community feedback.
- Future land use.

From the analysis of the data, issues will be identified (but not limited to) the following means:

- Consideration of locations with high numbers of accidents.
- Consideration of residential streets carrying excessive traffic volumes.
- Consideration of residential streets carrying excessive heavy vehicle volumes.
- Consideration of streets where traffic speeds are excessive.
- Consideration of streets where there is a need and opportunity to improve amenity.

Consideration of the impacts of proposed developments and the changes that can be forecast as a result of the new Marrickville LEP-2011 in relation to traffic generation, including quantifying and distributing traffic generation through the road network within the study area using simple modelling methods.

The recommendations provided in this document aim to align with the parking management principles outlined in the Marrickville Integrated Transport Strategy (2007). The document “provides the rationale and recommended actions for addressing local transport issues and moving Marrickville toward sustainable transport – that is, reducing car use and increasing use of public transport, walking and cycling.”

In developing recommendations in LATM strategy, consideration must not only be given to minimising vehicle speed, traffic volumes and reducing crash rates, but consideration must also be given to incorporate the following principals of Local Area Traffic Management:

- Reducing car use.
- Increasing use of public transport.
- Increasing walking and cycling.
- Improving the streetscape.

2.4.1 Stages of a LATM

The general stages of preparing to undertake a LATM study are described below:

Stage 1: Initiating an LATM program

- Decide that action is needed
- Define study area, precincts and functional hierarchy of roads
- Develop study plan, including type treatments and study costs
- Develop consultation strategy
- Council decision.

Stage 2: Data collection and problem identification

- Define and collect required data
- Identify problems
- Identify potential solutions
- Define and confirm objectives.

Stage 3: Development of ‘Draft’ plans

- Clarify suitable strategies (including confirmation of LATM as an appropriate response)
- Develop outline concept schemes
- Council decision to place on Public Exhibition

Stage 4: Public exhibition

- Consult on draft concept plans
- Assess and refine alternatives
- Select, present to council for adoption

Stage 5: Scheme design

- Location and design of treatments
- Consult with nearby owners/occupiers
- Select, present to council for adoption

Stage 6: Implementation

- Confirm timing and staging
- Conduct additional 'before' studies as required
- Community information
- Advertise for 28 days as per the Roads Act
- Construct/install

Stage 7: Monitoring and review

- 'After' data collection, observation and reports
- Identify unanticipated impacts or outcomes
- Review technical and community assessment of scheme
- Revise as needed and feasible
- Record and report process and outcomes

3. Existing Condition Assessment

3.1 Study Area

The Newtown precinct study area is bounded by King Street, Enmore Road, Edgeware Road and Alice Street, forming parts of Enmore and Newtown suburbs. The land use along Enmore Road and King Street comprise of mixed commercial and residential buildings, with a TAFE NSW Design Centre Enmore located between Sarah Street and James Street. The Enmore Theatre is also located within the study area and attracts many visitors to the area during events.

The area has a good level of public transport within walking distance to bus stops, and access to heavy rail at St Peters Station and Newtown Station is within 15 minutes.

Local shopping such as supermarkets, medical centres, restaurants and café are mainly within the Enmore Road and King Street commercial district. The Marrickville Metro, located outside the study area is a regional shopping centre that can be accessed within 5 minutes by car or within a 15 minute walk.

3.2 Area Demographics

The 2016 Census and 2016 Journey to Work datasets were examined to identify travel trends to and from the study area. The ten statistical areas cover the Newtown LATM study area and data was compared to the NSW average shown in Table 2.

The study area features a higher level of young population between ages 20-34 and a smaller proportion of aged population over 65. The Newtown and surrounding areas are recognised for its artistic, diverse and unique culture.

The 2016 Census data indicate a higher proportion of those surveyed use public transport as a mode of travel to work compared to the NSW average. Similarly there are higher rates of bicycle riders and walking only to work compared to the rest of the state.

Car ownership is lower and as there is very limited and high competition of on-street parking. The lower dependence on the motor vehicle in Newtown was found to be consistent with the previous census data for this area.

Table 2: Newtown SA1 areas Census and Journey to Work Datasets

Newtown Electorate Census and Journey to Work Datasets		
Source: 2016 Census and 2016 Journey to Work, Australian Bureau of Statistics		
	Newtown SA1 Areas	NSW Average
Proportion of young population between age 20 and 34	29.3%	21%
Proportion of aged population over age 65	7.5%	16%
Car ownership of one (1) motor vehicle or less	84.7%	45.5%
Proportion using public transport as a mode of travel to work	45.5%	16%
Proportion of bicycle riders as a mode of travel to work	5.0%	0.7%
Proportion of walking only as a mode of travel to work	9.8%	3.9%

3.3 Road Hierarchy

The RTA (Roads and Traffic Authority) Road Design Guide states that the purpose of a functional road hierarchy is to establish a logical integrated network in which roads of similar functional classifications. This classification in NSW include are:

- State/Arterial – Predominantly carry through traffic from one region to another, forming principal avenues of communication for urban traffic movements. These roads are controlled by state government authorities
- Regional/Sub-Arterial – Connects the arterial road to areas of development and carry traffic directly from one part of the region to another. They may also relieve traffic on arterial roads in some circumstances. These roads are often controlled by state government authorities
- Collector – Connects the sub-arterial roads to the local road system in developed area and are generally controlled by local government authorities
- Local – The sub-divisional roads within a particular developed area. These are used solely as local access roads. These roads are generally controlled by local government authorities.

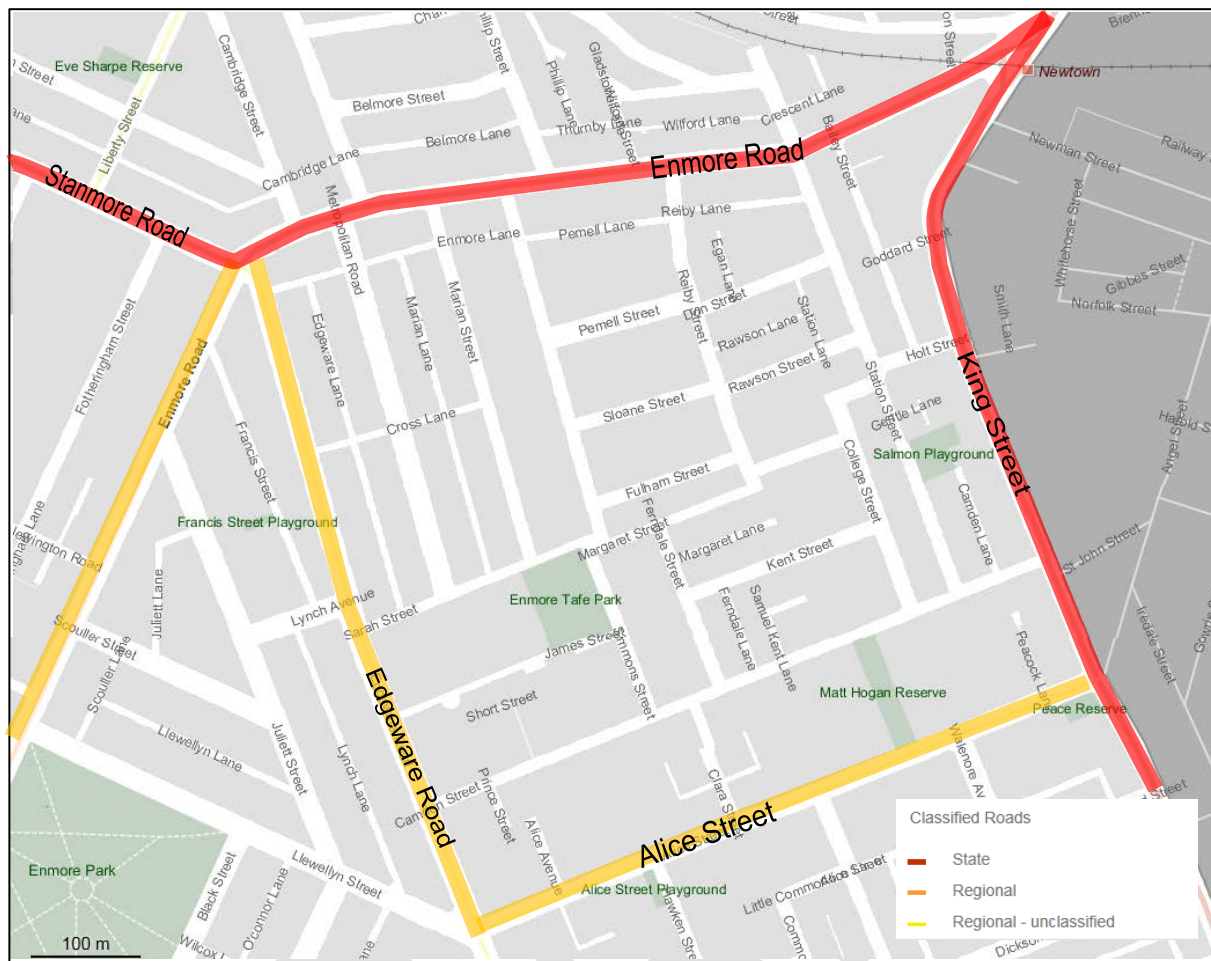


Figure 2: Road classification within the study area

There are 38 streets which were examined as part of the Newtown precinct study area. As shown in Figure 2, these state roads in the Newtown precinct are Enmore Road and King Street. The two regional roads are Edgeware Road and Alice Street.

There are no collector roads within the study area. All other roads within the study area are classified as local roads.

3.4 Public Transport Services

3.4.1 Train Services

Train services operate along the northern boundary at Newtown Station at the intersection of Enmore Road and King Street. The Newtown precinct study area is within a 16 minute walk to Newtown train station, which is within minutes away from the Sydney CBD and the city circle railway stations. Streets along the north west side are also within 15 minutes of Stanmore Station.

Newtown station is served by the T2 Inner West and Leppington line which operate from Leppington station to the city circle via Homebush and Parramatta. The station is accessible through an upgrade undertaken in 2012. A paid secure parking facility for short term parking or commuters is available by near Newtown Station.

The announced Sydney Metro project currently underway proposes to convert the Sydney to Bankstown section of the T3 line with single deck metro trains, with a new tunnel to be built between Sydenham and Chatswood and access to the city.

The map illustrates the Sydney Trains network, highlighting the following lines and stations:

- Central Business District (CBD) Area:** Central, Redfern, Museum, Green Square, Mascot.
- Airport Line:** Domestic Airport, International Airport.
- T1 Line (Green):** Kingsgrove, Bexley North, Bardwell Park, Turrella, Marrickville, Dulwich Hill, Campsie, Canterbury, Hurlstone Park.
- T2 Line (Orange):** Strathfield, Burwood, Croydon, Ashfield, Summer Hill, Lewisham, Petersham, Stanmore, Newtown, Macdonaldtown, Erskineville, St Peters, Sydenham, Tempe, Wolli Creek, Arndcliffe, Banksia, Rockdale, Kogarah.
- T3 Line (Yellow):** Strathfield, Burwood, Croydon, Ashfield, Summer Hill, Lewisham, Petersham, Stanmore, Newtown, Macdonaldtown, Erskineville, St Peters, Sydenham, Tempe, Wolli Creek, Arndcliffe, Banksia, Rockdale, Kogarah.

A number of public bus services operate within the study area and Sydney Buses is the main public bus operator in this area. Shown in Figure 4, a good level of bus services operates through Enmore Road and King Street to the CBD with many services passing through inner west suburbs of Stanmore, Marrickville, Petersham, and Dulwich Hill, reaching to outer areas such as Kogarah, Canterbury and Coogee.

[illegible]

3.4.3 Bicycles

The Marrickville Bicycle Strategy 2007 proposes a number of bicycle routes currently in the study area and incorporate regional and local routes. Over the years Council has progressively improved the cycling network according to the strategy, including enhancements along the east-west route through Lynch Avenue and Sarah Street, including a separated bicycle facility across Edgeware Road and bicycle logo mixed traffic arrangement in Sarah Street. Existing facilities for the north-south route through Simmons Street, Camden Street and Clara Street include bicycle directional signs and bicycle logos throughout the road pavement at regular intervals. The bicycle route through Metropolitan Road connects from Sarah Street and takes cyclists through a short shared path through the south side of Enmore Road, and connecting to the Stanmore area via Phillip Street. Routes identified in the Bicycle Strategy are shown in Figure 5.

Other bicycle routes through the study area include the north-south local route through Station Street, College Street, Camden Street and through Matt Hogan Reserve. Council is progressively implementing the routes identified in the bicycle strategy based on priority and funding allocation. As a result some sections of these routes have not been completed at the time of this report.

The Super Tuesday Bicycle Counts undertaken by Bicycle Network in 2017 show 138 bicycle riders in Enmore Road between Simmons Road and Phillip Street during a commuter morning peak hour 7am-9am period. As revealed in the census data, a higher proportion of people cycle compared to the NSW average. The high patronage of cyclists can be seen by the high level of bicycle parking and riding in the commercial areas of Enmore Road and King Street.

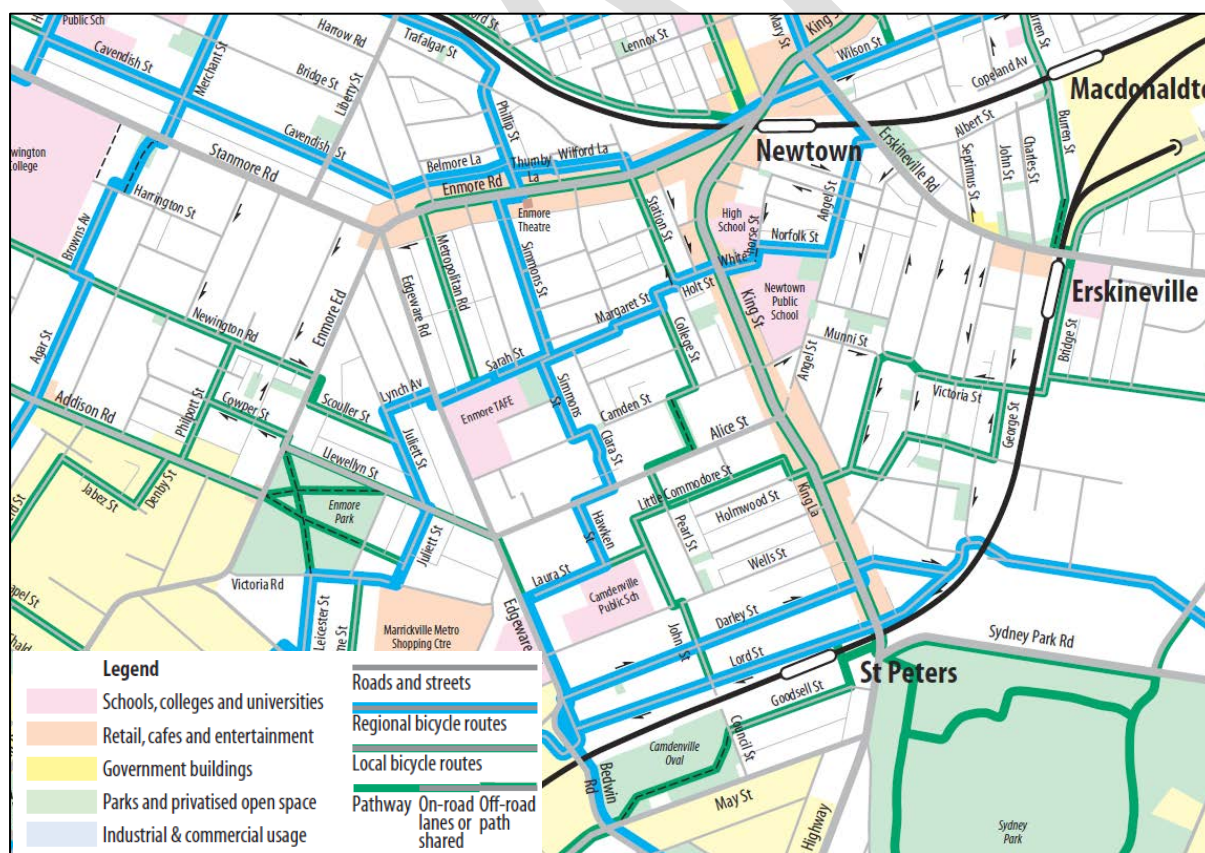


Figure 5: Bicycle routes identified by the Marrickville Bicycle Strategy 2007

3.4.4 Carshare

The use of carshare schemes has been increasingly popular in recent years. According to the operator Goget each carshare vehicle eliminates up to 9 vehicles parked on-street in this area, lowering the parking demand of on-street spaces. Currently Goget has a number of vehicles operating and established in the area, with three of these locations having a dedicated parking space issued by Inner West Council, and an additional three pods without a dedicated parking bay however these have been issued a residential parking permit allowing them to be exempted from the time limited parking. The six (6) carshare spaces are generally scattered equally in the study area and these are located at:

- Edgeware Road carpark, Edgeware Road (with a dedicated space)
- Pemell Street, near Simmons Street (with a dedicated space)
- Fulham Street, near Simmons Street (with a dedicated space)
- Margaret Street, near College Street
- Camden Street, near Matt Hogan Reserve
- Camden Street, near Edgeware Road

The 2013 Newtown Enmore Parking Study undertaken by ARUP recommend additional carshare spaces within this area and more dedicated spaces to be allocated, reducing the number of car ownership in the area.

3.4.5 Motorbikes

Motorbikes and scooters are popular within dense urban areas such as the inner west due to their lower cost of ownership and smaller space required for parking compared to a standard passenger vehicle. In recent years Council has approved a number of dedicated on-street parking areas to support motorbike use in the area. These spaces are subject to assessment and are based on community needs and suitability such as street lighting and road grade. As these spaces are signposted as 'P Motor Bikes Only' they do not have any time limitations for motorbikes or scooters.

- Holt Street, west of King Street – 6m length
- Simmons Street, south of Enmore Road – 6m length
- Clara Street, north of Alice Street – four (4) dedicated spaces on east side, two (2) dedicated spaces on west side

3.4.6 Pedestrians

In 2009 the former Marrickville Council undertook a review of the Pedestrian Access and Mobility Plan (PAMP), focusing on high pedestrian use areas within the Council area. The PAMP recommendations for footpath improvements have been included in Council's Capital Works Program, funded as budget allowed.

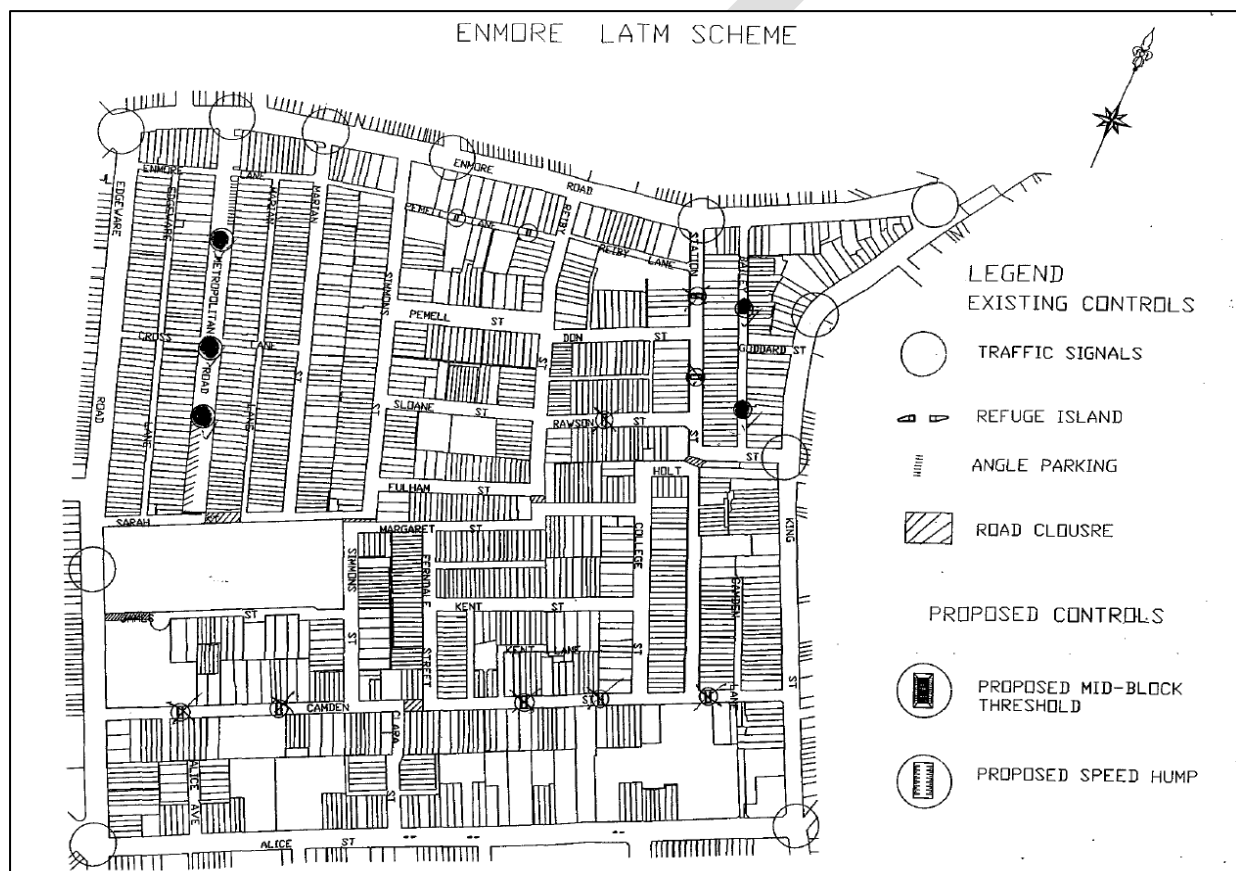
The PAMP study identified approximately \$870,000 worth of improvements along the footpath, ramps, and accessibility. Council has since undertaken some of the works and subject to funding availability a number of these are progressively completed each year.

3.5 Previous LATM Study in Newtown

The former Marrickville Council undertook a review of the Enmore LATM scheme in 2004, with many of the partial road closures already established during the 1980s and 1990s. The study in 2004 identified a number of traffic speed calming devices for some streets within the study area.

The prominent treatments in place included a series of permanent mid-block and diagonal closures and restricting north-south vehicle access through Sarah Street, Margaret Street and Holt Street. The closures in Camden Street and Holt Street also restrict west-east vehicle access, and this is reflected in the favourable traffic volume levels along these streets. As these have been generally accepted by the local community, it is intended to retain the existing road closures.

Figure 6: Former Enmore LATM Scheme Review (2004)



Shown in Figure 6 is the Enmore Scheme reviewed in 2004 where residents were given questionnaire forms regarding a number of speed control devices (watts profile speed humps and raised thresholds) in Camden Street, Metropolitan Road, Rawson Street, Station Street and Bailey Street. Due to the low level of support from residents of Camden Street, Rawson Street and Station Street Council resolved not to proceed with these projects. Residents from Metropolitan Road and Bailey Street generally supported the proposal and at the time Council installed two watts profile humps in Bailey Street. However following Council's decision a petition was soon received from Metropolitan Road residents opposing the proposed speed humps and Council as an alternative measure sought to expand the angle parking areas which increased the on-street parking supply whilst narrowing the road carriageway and discouraging higher travel speeds.

3.5.1 Traffic Management Since 2004

A number of minor improvements were implemented in the study area between 2004 and 2018 through the Local Traffic Committee. The significant projects during this period include the following:

- Clara Street shared zone works undertaken early 2018 incorporating a 10km/h shared zone, entry raised threshold, coloured stamped asphalt treatment from Alice Avenue to Camden Street, and other beautification works.
- Simmons Street footpath widening project between Sarah Street and No.43 Simmons Street to improve pedestrian accessibility at this location in 2017. The work reduced the travelling carriageway width of Simmons Street from 5.2m to 4.2m.
- Reiby Street footpath reconstruction was undertaken in 2014 with damaged asphalt footpaths replaced with new concrete footpaths and improvements to the street tree verge.
- On-street angle parking arrangement was considered in Pemell Street and Metropolitan Road in 2012 after a former parking study recommended for improved management of parking resources. At the time a low level of support was received from local residents of Pemell Street and more favourable responses were received from Metropolitan Road residents. Council decided not to progress with the angle parking proposal in Pemell Street however a section of Metropolitan Road was converted to angle parking.
- Parking restrictions at several laneways were established in order to assist residential access in and out of driveways. Some of these locations include Marion Lane and Camden Lane.
- Safety was enhanced at the Alice Street wombat crossing near Hawken Street in 2016 with two additional landscaped kerb blister islands being approved and constructed.

3.5.2 Existing LATM devices

The former LATM studies undertaken for this area has been comprehensive as out of the 34 local streets in the study area 17 streets have some form of traffic calming treatment or some form of road closure. Dominant features of the area include several diagonal and mid-block road closures in Sarah Street and Margaret Street act to prevent undesirable west-east as well as north-south through traffic movements. Table 3 lists the existing treatments in place in the Newtown study area.

Table 3: Existing Traffic Devices

Street	Traffic calming or treatment	Treatment type
Alice Avenue	No	
Camden Lane	Yes	entry surface treatment
Cross Lane	Yes	one way, staggered on-street parking
Edgeware Lane	No	Stop priority
Egan Lane	No	
Ferndale Lane	No	
Marian Lane	No	Stop priority
Peacock Lane	No	
Pemell Lane	No	
Rawson Lane	No	
Reiby Lane	No	
Samuel Kent Lane	No	
Station Lane	No	

Street	Traffic calming or treatment	Treatment type
Bailey Street	Yes	entry surface treatment, one way, two (2) watts profile speed humps, staggered parking
Camden Street	Yes	mid block closure, entry surface treatments
Clara Street	Yes	10km/h shared zone, marked parking bays
College Street	No	
Don Street	No	
Ferndale Street	No	
Fulham Street	No	
Goddard Street	Yes	entry surface treatment, one way
Holt Street	Yes	entry surface treatment, one way, diagonal closure
James Street	Yes	road closure
Kent Street	No	
Margaret Street	Yes	mid block and diagonal closure
Marian Street	Yes	one way, partial road closure
Metropolitan Road	Yes	entry surface treatment, on-street angle parking, road closure
Pemell Street	No	
Rawson Street	No	
Reiby Street	Yes	entry surface treatment
Sarah Street	Yes	mid block closure
Simmons Street	Yes	entry threshold treatment, diagonal closure, footpath widening
Sloane Street	No	
Station Street	Yes	entry surface treatment, diagonal closure, half closure, raised threshold
Alice Street	Yes	edge lines, wombat crossing, kerb blisters, refuge islands, traffic signals
Edgeware Road	Yes	edge lines, kerb blisters, traffic signals

3.5.3 Existing Parking Controls

Newtown comprise of dense commercial and residential areas which has formed much of the area's renowned building character. Residential lots are smaller in size with terrace housing mostly without off-street parking. Some units in the area with a rear access have some type of vehicular access and some have been retrofitted with some type of garage space. Commercial shopping districts along King Street and Enmore Road also do not feature off-street parking areas and employees with a vehicle would be forced to find street parking in the area.

Some areas experience high levels of parking during evening events in Enmore Theatre and also throughout the day from the Enmore TAFE students and staff.

Generally most on-street parking areas have a 1P or 2P residential parking scheme in place along one side of the street. This is more prominent in the northern half of the study area with more unrestricted parking areas along towards the south. The Newtown Enmore Parking Review 2017 proposes to add more streets to the residential parking scheme, namely Alice Avenue, Camden Street, Clara Street, Ferndale Street, Kent Street and Simmons Street (southern end). Most of these have been implemented recently.

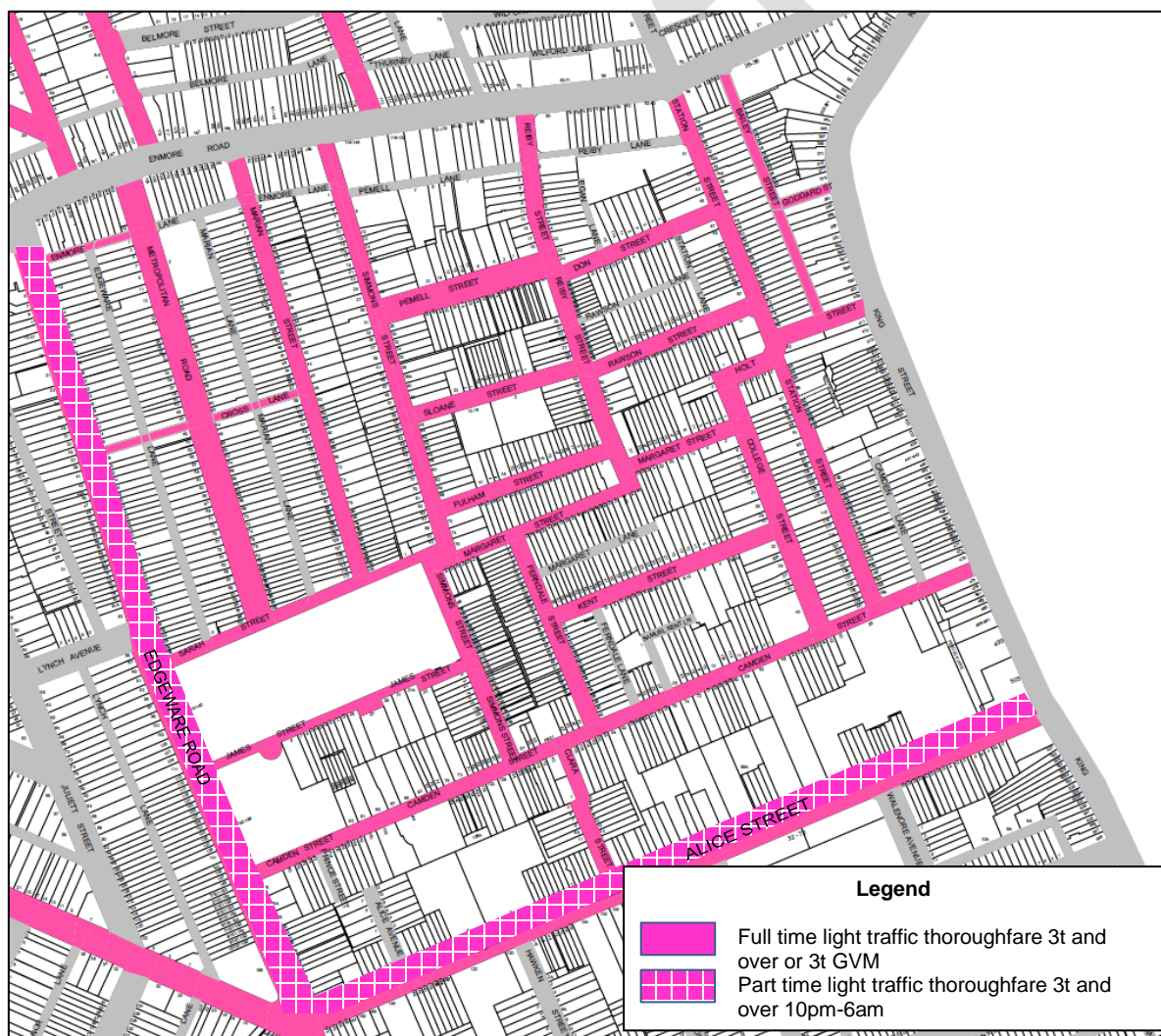
On-street parking signs have been in place to better manage parking for the community. Throughout the past number of years several parking restrictions have been installed for access or safety

reasons. Whilst not all streets have parking restriction signs near intersections, drivers need to comply with the parking rules even in areas without No Stopping or No Parking signs.

3.5.4 Existing Truck Load Limits

The load limit along any public road is set by the road authority, with local, collector and regional roads under being under the jurisdiction of Councils and state roads falling under the jurisdiction of the Roads and Maritime Services (RMS). In the Newtown study area, a number of truck load limits have been established for residential amenity purposes as well as other reasons such as safety and access. With the exception of several lanes all of the local roads within the study area have some form of truck prohibition, either a Truck Prohibited 3T Gross Vehicle Mass (GVM) or a Truck Prohibited symbolic 3T and over. Both Alice Street and Edgeware Road has a 10pm-6am Truck Prohibited 3t and over, which has been in place for a number of years.

Figure 7: Truck Load Limits in study area



An audit of existing traffic facilities including truck load limit signs was undertaken as part of the study. The audit proposes to address the inconsistent truck load limit signs in place. Wording along the Edgeware Road night time truck prohibition (10pm-6am) would also need to be clear so that this restriction can be enforced.

3.5.5 Laneway Parking and Access Requirements

In 2015 the former Marrickville Council undertook an investigation and developed a guideline to have a consistent approach to assess laneways whether parking restrictions would be required to prevent access issues by garbage, residential and delivery vehicles. The guidelines state that generally laneways requiring access by garbage vehicles and trucks (up to a Medium Rigid size) would have a minimum laneway kerb to kerb width of 5.1m if parking is to be permitted in the laneway. In Newtown there are many laneways that are smaller in width than 5.1m and are not suitable for on-street parking.

The recent Enmore Newtown Parking Review 2017 undertook community consultation and recommended the following:

In the initial survey one of the key reported issues was laneway parking, residents having off street parking blocked by parked vehicles. However, after the draft recommendations to restrict laneway parking went to public exhibition, the objections far outnumbered those in favour of restricting laneway parking with 66 against and 16 in favour of laneway restrictions.

All feedback has been analysed and comments related to garages and gates being blocked specifically reviewed with respect to minimising loss of laneway parking while accommodating rear lane access. In cases where there is one person who is occasionally impacted the decision is weighted in not recommending restricting laneway parking overall. In cases of parking across driveways enforcement is recommended. Any further issues not addressed that arise in the laneways where recommendations have not been made, will be dealt with on a case by case basis.

4. Traffic data review

4.1 Environmental Capacity and Speed Performance Standards

The RTA Guide to Traffic Generating Developments and the RTA NSW Classification review paper assist in determining the acceptable environmental limit for each road classification. These guidelines are based on research undertaken by the RTA relating to residential safety and amenity and consider issues such as ease of crossing the road, consideration of noise and delay. This has been used as the basis for identifying traffic speed and volume issues along urban areas of NSW including the Inner West Council local government areas.

Road Classification	Road Type	Maximum Speed (km/h)	Max Peak Hour volume (veh/hr)	Daily Volume (ADT)
Local	Access way	25	100	1,000
	Street	40	200 desirable 300 maximum	2,000 Residential area 4,000 Other
Collector	Street	50	300 desirable 500 maximum	5,000 Residential area 10,000 Other
Regional (Sub-arterial)	Main Road	60-80	15,000-25,000	15,000-25,000

Table 4: Environmental Capacity and Speed Performance

4.2 Evaluation of Environmental Capacity and Speed Performance in the Study Area

The traffic data collected for this study has been evaluated and presented in Table 5. The table also cover an assessment on the suitability of the existing conditions in relation to traffic volumes, prevailing traffic speeds using the environment capacity and speed performance standards.

4.2.1 Traffic Survey Review

Pneumatic traffic counts were deployed over a four year period from 2014 to 2018 to collect traffic data of the prevailing road conditions. Some streets had more than one counter installed and collected mid-block volume and speed data. The counters were also able to determine the vehicle classification (truck or passenger vehicle), and in one way streets data on vehicles travelling contrary to the traffic direction. Figure 8 show the locations where traffic count data were collected.

Figure 8: Traffic count locations within the study area



4.2.2 Traffic Volumes

All local streets within the study area have been found to have daily traffic volumes within the guidelines and are considered adequate. Metropolitan Road and Cross Lane were found with higher volumes compared to other streets as they experience a level of 'rat running' during the AM peak

hour. Similarly Station Street and Holt Street experience similar traffic conditions during the PM peak hour and have higher traffic volumes.

The traffic data also revealed that there has been some level of traffic travelling opposed to the one-way restriction in Cross Street and Holt Street. In Cross Lane there has been on average 11 vehicles travelling westbound against the eastbound one-way restriction. Further examination also shows that these occur at random times of the day and night, suggesting that residents could be undertaking risky driving out of Cross Lane to avoid driving long distances in order to travel south.

There is a more significant compliance issue in Holt Street, where there is a daily average of 52 vehicles travelling eastbound against the westbound one-way traffic between the road bend and Bailey Street. The data show that during the AM peak hour 8am-9am and PM peak hour 5pm-6pm up to 12 and 6 vehicles were logged travelling in contravention to the one-way rule respectively.

4.2.3 Traffic Speed

The traffic speeds found from the mid-block counts were generally acceptable and within the local speed limit. Most local streets have narrow carriageways and with the high demand of on-street parking, this results in a tight road profile for two way traffic, and in many cases only space for a single travelling lane. This acts to naturally lower vehicle speeds as drivers will need to be cautious about passing opportunities with vehicles coming in the opposing direction. These roads within the study area typically carry less than 400 vehicles per day.

The 85th percentile speeds in Alice Street range between 42.8km/h and 49km/h which are below the signposted speed limit of 50km/h in the area. As the existing regional road configuration features edge lines, raised pedestrian crossing, a number of refuge islands and kerb blisters, these work together to generally lower traffic speeds. The traffic speeds found in Alice Street is considered to be acceptable.

Edgeware Road is also a regional road and carries traffic volume in the order of 21,000 vehicles per day. The road has a speed limit of 60km/h and existing feature include edge lines, kerb blisters, traffic signals and a refuge island. On-street parking is permitted on most sections of the road and operates with one travelling lane on each direction. The 85th percentile speeds were below the speed limit and deemed comparable to other regional roads with a 60km/h speed limit. At approach and departure to traffic signals at Enmore Road and Alice Street the kerbside parking restrictions apply during the peak hours for additional capacity. This road provides an important north-south link in the area and is subject to the various future changes proposed in the area such as the Marrickville Metro expansion and WestConnex works. This is discussed in further detail in appendix I.

Street	Between	Road Classification	Year Count Taken	Volume (AADT)	85 th Percentile Speed (km/h)	Proportion of HV %	Acceptable Volume	Acceptable Speed	Acceptable HV Proportion
Alice Street	Walenore Ave & Pearl St	Regional	2014	10,168	49	8.4	Yes	Yes	No
Alice Street	Hawken St & Edgeware Rd	Regional	2014	10,639	42.8	4.0	Yes	Yes	Yes
Bailey Street	Enmore Rd & Goddard St	Local	2018	693	27.3	4.5	Yes	Yes	No
Camden Street	Edgeware Rd & Simmons St	Local	2016	915	37.4	3.6	Yes	Yes	No
Camden Street	College St & Ferndale St	Local	2016	434	37.4	4.0	Yes	Yes	No
Clara Street	Alice St & Camden St	Local	2016	532	32.8	2.5	Yes	Yes	Yes
Cross Lane	between Edgeware Road and Edgeware Lane	Local	2018	980	26.0	3.9	Yes	Yes	No
Cross Lane	between Edgeware Lane and Metropolitan Road	Local	2018	1,308	24.8	2.6	Yes	Yes	Yes
Don Street	Station St & Reiby St	Local	2018	364	33.1	2.2	Yes	Yes	Yes
Edgeware Lane	Cross La & Sarah St	Local	2016	285	35.3	1.3	Yes	Yes	Yes
Edgeware Road	Lynch Ave & Camden St	Regional	2014	20,652	52.2	4.1	Yes	Yes	Yes
Edgeware Road	Cross La & Lynch Ave	Regional	2014	21,750	52.6	5.9	Yes	Yes	Yes
Enmore Road	60m east of Bailey St	State	2018	28,336	n/a	n/a	n/a	n/a	n/a
Ferndale Street	Margret St & Camden St	Local	2015	320	38.2	2.3	Yes	Yes	Yes
Fulham Street	Reiby St & Simmons St	Local	2015	236	37.1	2.2	Yes	Yes	Yes

Street	Between	Road Classification	Year Count Taken	Volume (AADT)	85 th Percentile Speed (km/h)	Proportion of HV %	Acceptable Volume	Acceptable Speed	Acceptable HV Proportion
Holt Street	Station St & Bailey St	Local	2018	1,451	22	4.6	Yes	Yes	No
Kent Street	College St & Ferndale St	Local	2015	173	36.7	1.5	Yes	Yes	Yes
King Street	10m south of Newman St	State	2018	20,063	n/a	n/a	n/a	n/a	n/a
Margaret Street	Reiby St & Ferndale St	Local	2015	200	16.2	9.4	Yes	Yes	No
Marian Street	Midpoint	Local	2015	364	37.1	3.0	Yes	Yes	No
Metropolitan Road	Enmore Ln & Cross Ln	Local	2018	1,558	41.5	1.7	Yes	Yes	Yes
Pemell Street	Midpoint	Local	2015	279	42.1	1.6	Yes	Yes	Yes
Rawson Street	Station St & Reiby St	Local	2018	595	38.2	1.8	Yes	Yes	Yes
Reiby Street	Enmore Rd & Pemell St	Local	2018	683	34.7	3.0	Yes	Yes	No
Sarah Street	Marian St & Simmons St	Local	2016	430	25.2	2.9	Yes	Yes	Yes
Simmons Street	James St & Camden St	Local	2015	805	32	1.5	Yes	Yes	Yes
Simmons Street	Enmore Rd & Pemell St	Local	2015	806	40.3	2.6	Yes	Yes	Yes
Sloane Street	Simmons St & Reiby St	Local	2018	269	37.3	3.2	Yes	Yes	No
Station Street	Enmore Rd & Rawson St	Local	2018	1,823	36.5	2.9	Yes	Yes	Yes

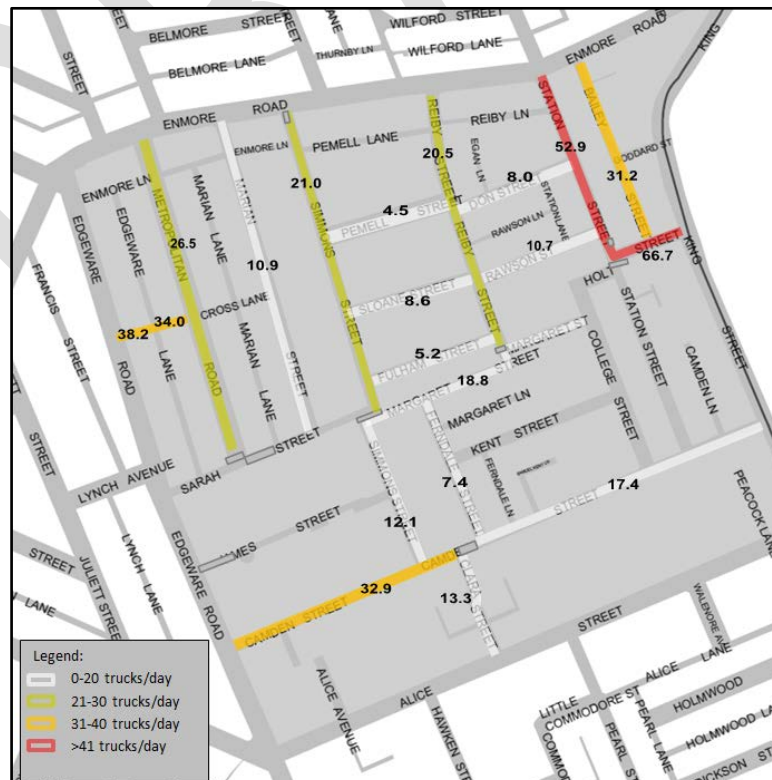
Table 5: Evaluation of Environmental Capacity & Speed of roads within the Newtown Study Area

The use of heavy vehicles within the public road network is permitted in areas where it does not enforce a truck load limit. The Heavy Vehicle National Law sets the rules for vehicles exceeding 12.5m length or a truck trailer/semi-trailer combination exceeding 19.0m in length or 4.3m in height.

Local streets within the study area exceeding 3% of the total volume and their respective daily average truck volumes are:

- Margaret Street (18.8 trucks/day)
- Bailey Street (31.2 trucks/day)
- Marian Street (10.9 trucks/day)
- Camden Street between College Street and Ferndale Street (17.4 trucks/day)
- Camden Street between Edgeware Road and Simmons Street (32.9 trucks/day)
- Holt Street (66.7 trucks/day)
- Cross Lane between Edgeware Road and Edgeware Lane (36.1 trucks/day)
- Station Street (52.9 trucks/day)

Figure 9: Average Truck Traffic Volumes per day



It should be noted that streets experiencing higher usage such as Cross Lane, Station Street and Holt Street would be affecting residential amenity and some form of load enforcement would be required. Shown in Figure 9, local roads with the highest truck volumes are Holt Street, Station Street, and Cross Lane.

4.2.5 Through Traffic in the Study Area

A number of permanent road closures were established during the initial LATM scheme and these have addressed most of the 'rat running' issues in the area. However smaller levels of through traffic were highlighted by the community and examined during the study. The prominent traffic routes are illustrated in Figure 10 and discussed below:

- Edgeware Road right turning traffic into Cross Lane and Metropolitan Road to bypass the No Right Turn restriction at Edgeware Road and Enmore Road intersection. An examination of the traffic count data indicate that the eastbound traffic volume in Cross Lane peaked at 149 vehicles during the AM peak hour.
- Enmore Road right turn into Bailey Street and Goddard Street and enter King Street to bypass the right turn restriction at Enmore Road and King Street intersection. Traffic count data revealed 66 vehicles travelling southbound in Bailey Street during the PM peak hour.
- King Street left turn into Holt Street and Station Street to enter Enmore Road in order to bypass traffic queues at King Street and Enmore Road traffic signals. Traffic count data revealed 186 vehicles travelling westbound in Holt Street and 174 vehicles travelling northbound in Station Street during the PM peak hour.
- Camden Street and Clara Street have been reported from the community as rat running streets however existing traffic data indicates that this would be low in volume during the peak hour.

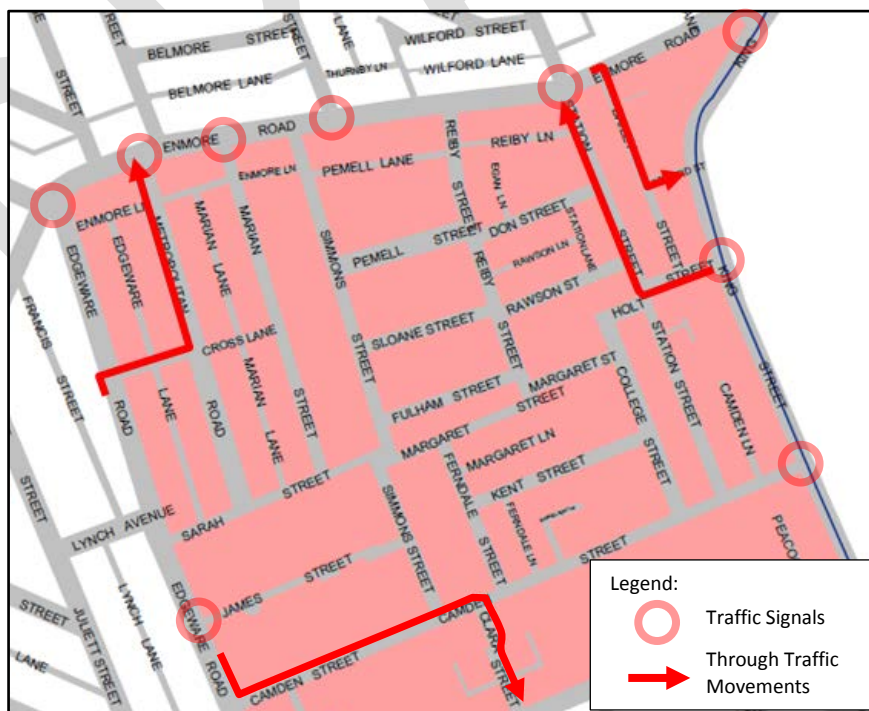


Figure 10: Prominent Through Traffic in the Newtown Study Area

4.3 Performance of Signalised Intersections

There are a total of 11 signalised intersections within the study area, with six (6) traffic signals along Enmore Road and four (4) in King Street. Two traffic signals exist in both Alice Street and Edgeware Road. Both Enmore Road and King Street feature 6am-10am Clearway restrictions for the citybound parking lanes, and 3pm-7pm Clearway restrictions for the parking lane traffic coming from the city.

The traffic signals in the study area are coordinated and part of the Sydney Coordinated Adaptive Traffic Systems (SCATS) where cycle and phase times are constantly adjusted depending on the traffic situation. It is understood that traffic signals in King Street and Edgeware Road are prioritised to meet the morning city bound traffic demand and vice versa during the afternoon peak.

A Traffic Impact Assessment was undertaken by The Transport Planning Partnership (TPPA) and Bitzios Consulting in 2017 for the Marrickville Metro Expansion Section 75W application. The study included both existing and future scenarios of the road network with the expanded Marrickville Metro shopping centre. The microsimulation modelled a number of intersections near the development site in VISSIM, including the two signalised intersections of Edgeware Road at Alice Street and at Enmore Road. The report found existing performance of signalised intersections along Edgeware Road with results in Table 6.

Intersection	Thursday PM peak		Saturday AM peak	
	Level of Service	Av. Delay	Level of Service	Av. Delay
Edgeware Road/ Alice Street/ Llewellyn Street	C	29.9s	B	28.9s
Edgeware Road/ Enmore Road/ Stanmore Road	B	21.7s	B	19.3s

Table 6: Traffic Signal Performance in Edgeware Road/Alice Street and Edgeware Road/Enmore Road

5. Crash Statistic Analysis

5.1 Background

Crash information reported by NSW Police is managed by the RMS, with the latest 5 year period used for this study is the accident data ranging from 1 July 2012 to 30 June 2017.

From October 2014 the NSW Police has ceased reporting tow away accidents with the exception where there are any persons killed or injured, or where a driver fails to swap details, or where a driver is suspected to be under the influence of drug or alcohol.

A total of 155 accidents are recorded from the data provided by the RMS for the 5 year period ending in June 2017. It should be noted that out of the 155 accidents 5 accidents were located in local roads, and 56 accidents along regional roads.

5.2 Crash rate by time

A summary of the total crashes by year is provided in Figure 11. The Figure indicates that the total level of accidents have decreased after 2014 as the NSW Police have stopped reporting tow away accidents. This is reflected in the consistent number of injury accidents from 2014 to 2016.

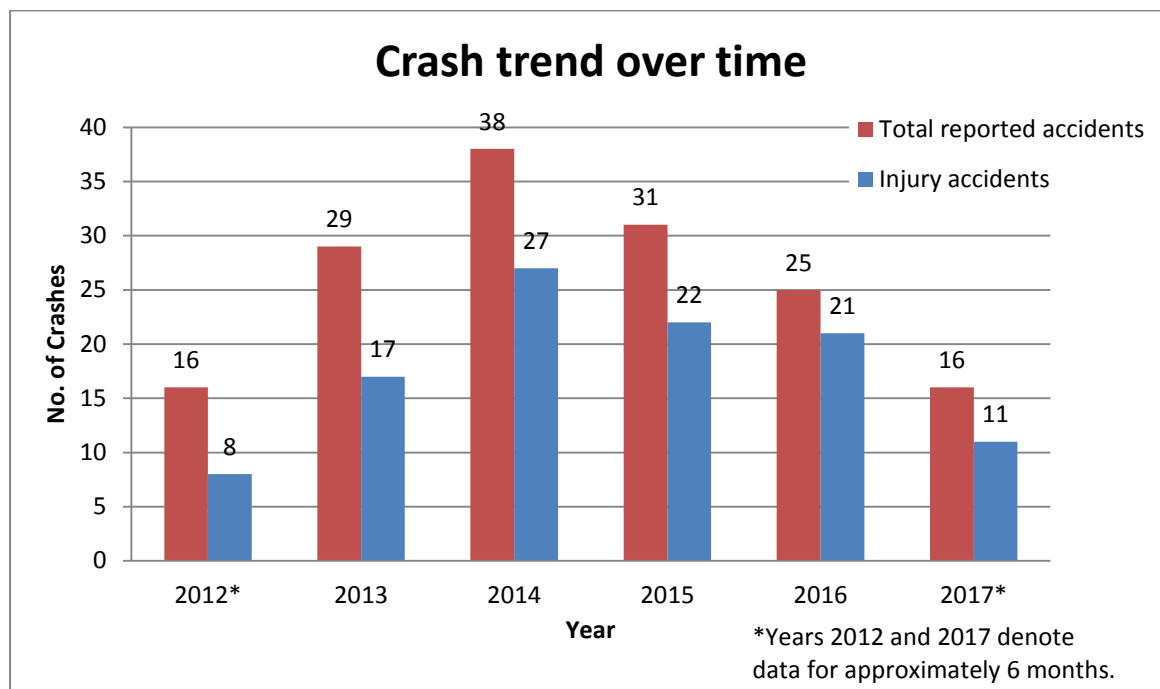


Figure 11: Crash trend over time in the Newtown study area

The traffic accident database provided by the RMS uses Road User Movement (RUM) code which is used to identify crash types. For example a 'Right Through' accident (RUM Code 21) is classified as an accident between two vehicles travelling in opposing directions, with one of the vehicles turning right colliding into another travelling in the opposing direction. A list of the RUM codes and associated data for the Newtown study area is referenced in appendix E.

Crash rates for the study area have been compared with the rates for the Inner West Council local government area as well as the rates by the Roads and Maritime Services for metropolitan urban local and collector roads.

Crash Summary by Road User Movement (RUM) Code Classification			
Category	RUM Code Classification	Total Reported Accidents	Total Injury Accidents
Pedestrian	0-9	27	27
Adjacent Directions, intersections only	10-19	9	4
Opposing Vehicles	20-29	24	18
Same Directions	30-39	56	35
Parking/U-Turns	40-49	13	3
Overtaking	50-59	0	0
On Path	60-69	9	8
Off Path, On Straight	70-79	14	9
Off Path, On Curve or Turning	80-89	2	1
Miscellaneous	90-99	1	1
Total		155	106

Table 7: Crash Summary by Road User Movement (RUM) Code Classification

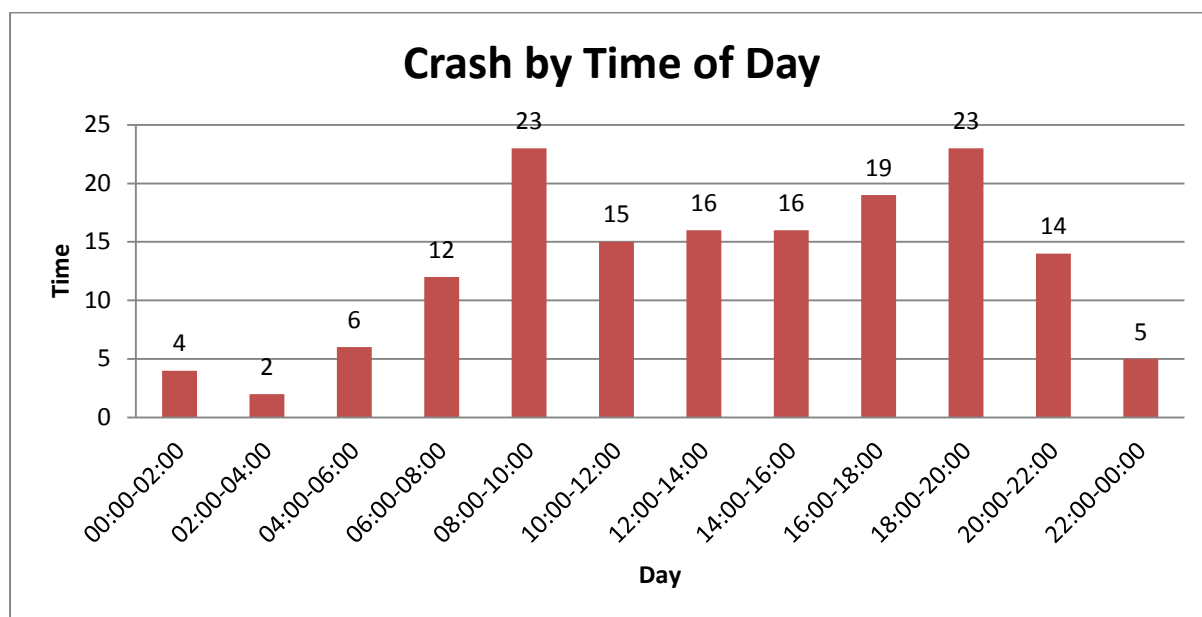


Figure 12: Crash in study area by time of day

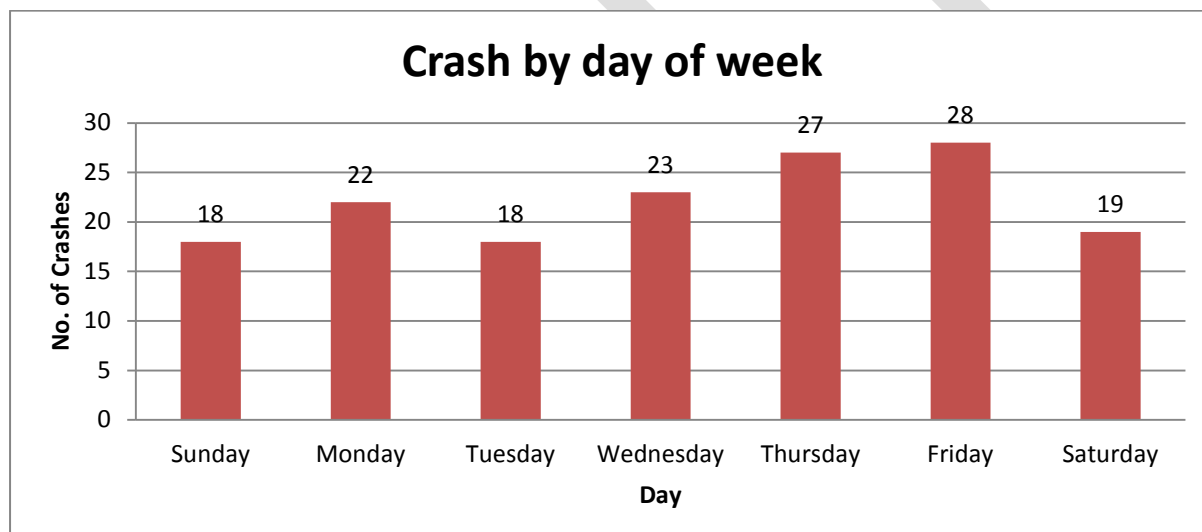
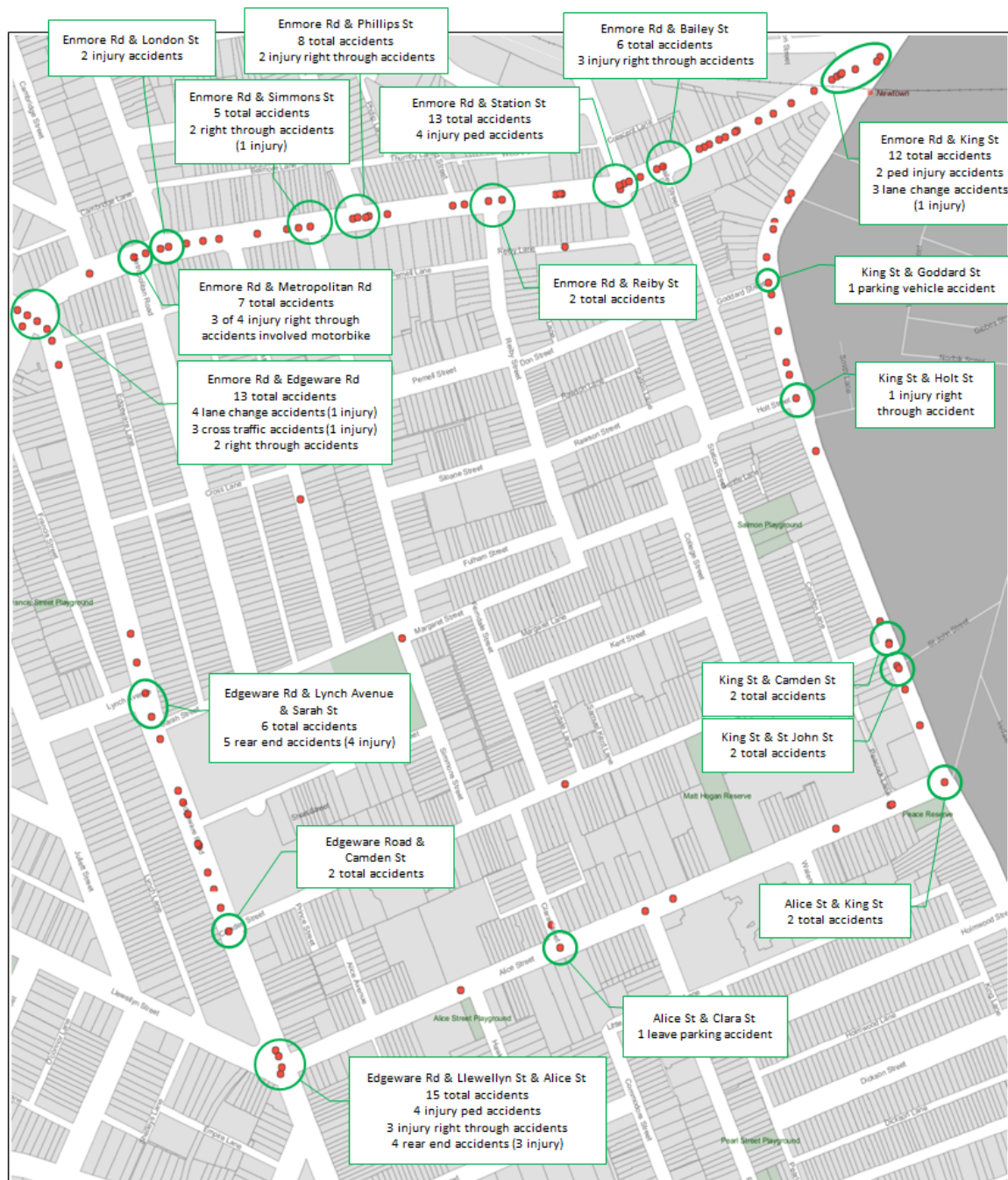


Figure 13: Crash in study area by day of week

Figure 14 illustrates that apart from the five accidents, most (96.7%) of the accidents have occurred within the arterial roads and regional roads. Further examination of the traffic accident data indicate that the top three accident types in RUM category codes are:

- RUM Code 30: rear end attributing 20% of total recorded accidents
- RUM Code 21: right through attributing to 12.9% of total recorded accidents
- RUM Code 0: pedestrian near side attributing to 9.7% of total recorded accidents

Figure 14: Reported traffic accidents from RMS database July 2012 to June 2017



5.3 Motorbikes and Cyclists Crashes

Crashes involving motorbikes represent 16.8% of all accidents which is higher than the NSW average of 10.1% however it should be noted that there is a higher patronage of motorbike and scooter use in the Inner West Local Government Area (LGA). This reflected in the higher overall proportion (12%) of all accidents in the Inner West LGA. Of the 26 accidents involving a motorbike, eight (8) comprised of RUM Code 21: right through, two crashes were RUM Code 20: head on, and two RUM Code 37: left turn side swipe. Most accidents involving motorbikes (22 of 26) were reported with an injury.

Pedal Cyclists are likewise overrepresented as 14.2% of accidents involve pedal cyclists, and is higher than the NSW average (3.6%) and the Inner West LGA average (6%). All 22 incidents involving cyclists

are recorded as injury accidents, with five (5) right-through crashes and five (5) vehicle door crashes. Out of the cyclist vehicle door crashes, it was noted that four of the five occurred during night.

Figure 15: Crash Frequency in the Newtown Study Area by Road User Movement (RUM Code)

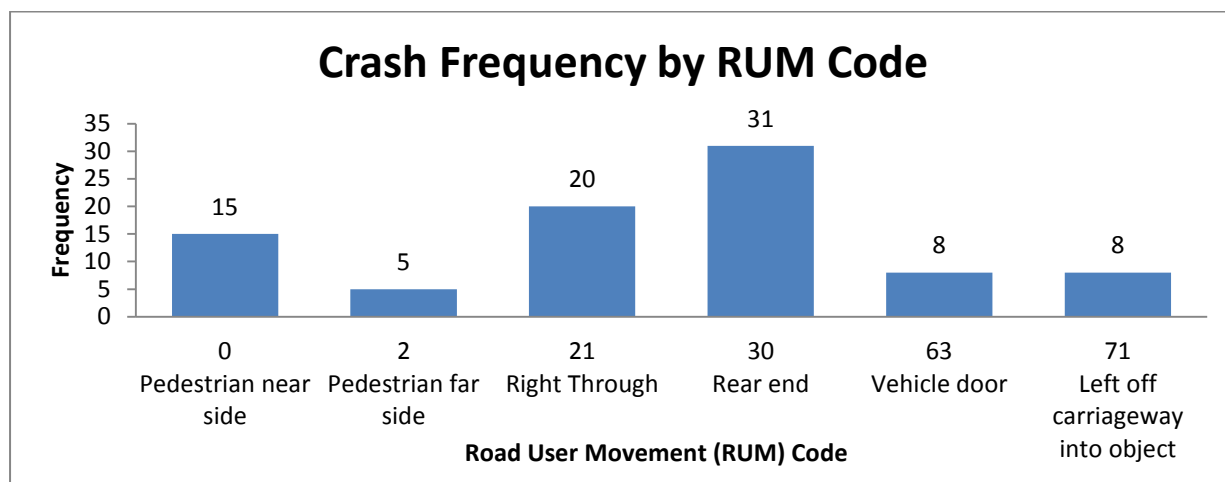


Figure 16: Crashes involving a pedal cyclist

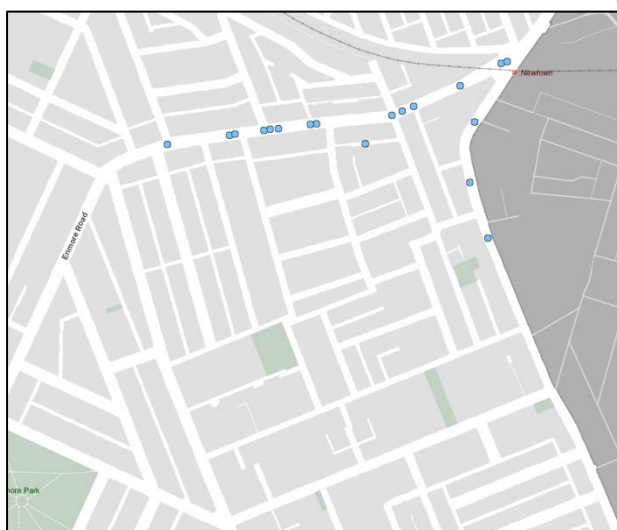


Figure 17: Crashes involving a Pedestrian

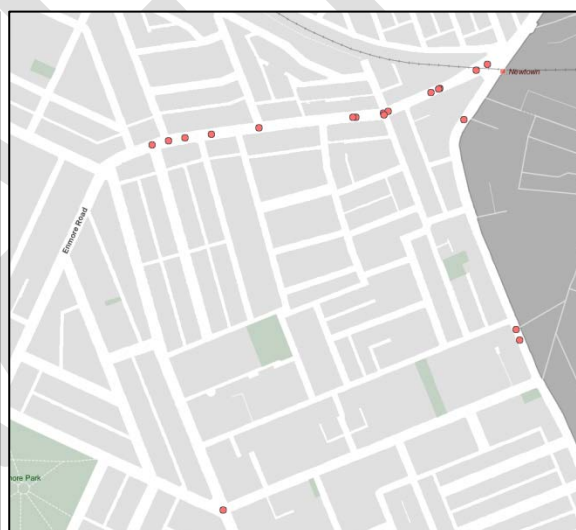


Figure 18: Crashes with speeding a factor

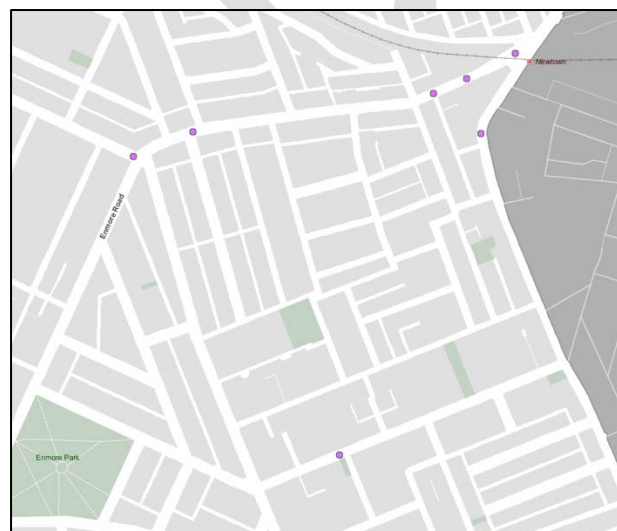


Figure 19: Crashes involving a motorbike

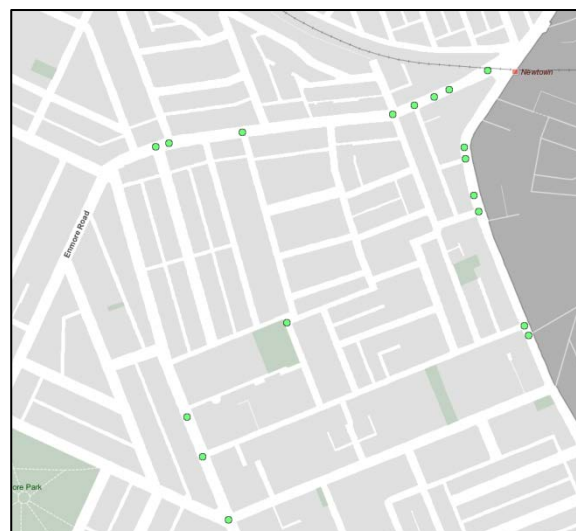
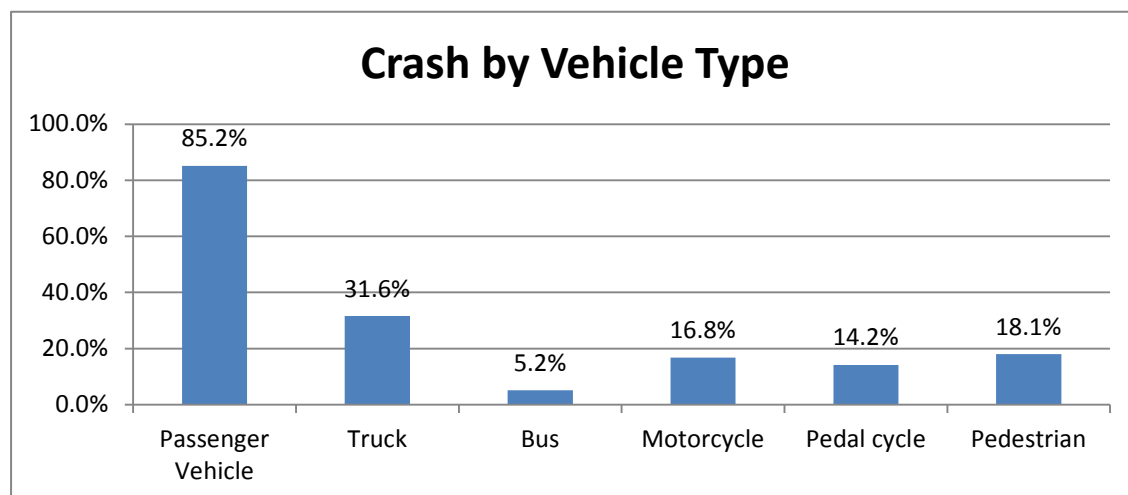


Figure 20: Crash by vehicle type



5.4 Pedestrian safety

Crash locations shown in Figure 14 indicate that pedestrian accidents have been located within state and regional roads. Out of 28 injury accidents reported, 15 comprised of RUM code 0: near side and five (5) accidents reported with RUM code 2: far side. Considering that 16 accidents have occurred over 800m length of Enmore Road between Edgeware Road and King Street, this averages to approximately two accidents every 100m along Enmore Road. A comparison with other town centres such as Marrickville Road show similar rates of accidents. Recognising that 100% of reported pedestrian accidents resulted in some form of injury, both the RMS and Council is mindful of the importance of pedestrian safety, including the elderly and young children. Council's road safety officers regularly undertake local preventive strategies and road safety awareness campaigns in Inner West.

Recently a number of 'look out before you step out' stencils at 43 locations in Enmore Road and King Street, Newtown were installed as part of the road safety strategy. These have been installed in high pedestrian activity areas and there were some media coverage in The Courier in 14 August 2018. Photos in Figure 22 show some example locations of kerb ramps where these stencils were installed.

A preliminary investigation was undertaken for possible kerb extensions along the three existing pedestrian refuge islands in Alice Street. Pedestrian safety could be improved through the provision of kerb extensions which reduce the pedestrian crossing distance and exposure to the road carriageway when crossing. As the RMS technical direction TDT2011/01a allows a reduced approach and departure No Stopping zones at refuge islands with kerb extensions, this option could potentially increase the supply of on-street parking in Alice Street by up to three (3) spaces.

Further investigation revealed some areas required the relocation of underground services lines and stormwater drainage pits which significantly increased the project cost. Most kerb extensions also prevented truck turning movements in and out of the side streets, as well as creating a squeeze point for on-road cyclists in Alice Street. Accordingly kerb extensions were not considered feasible and excluded from the recommendations.

Figure 21: Total Injury Accidents by Road User Movement (RUM) Category

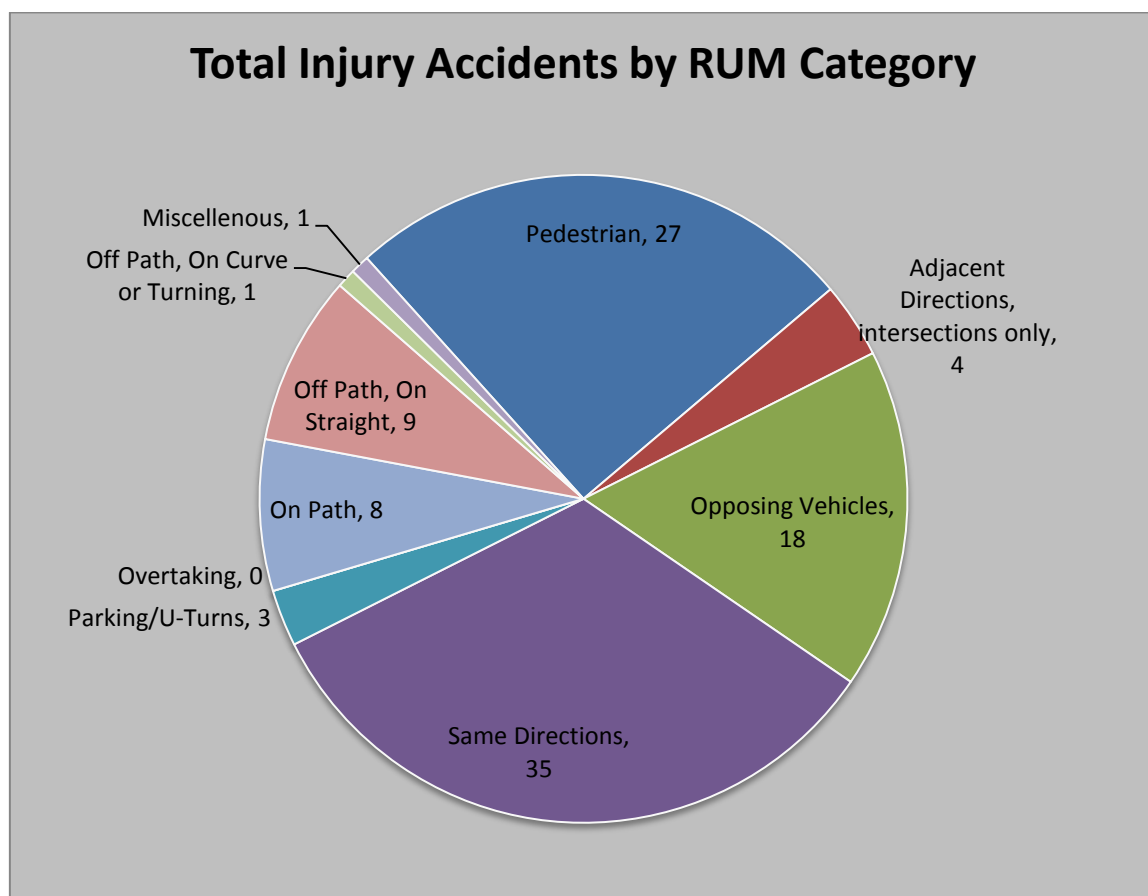


Figure 22: Look Before You Step Out patches in King Street, Newtown and Enmore Road, Enmore

6. Future Conditions

Future traffic conditions were considered as part of the study with the main contributors comprising of traffic generation from within the study area, and also some traffic generated outside of the study area.

6.1 Marrickville LEP

The Marrickville Local Environment Plan Zoning Map show that the Newtown study area includes a mixture of residential (R2, R3 and R4 zoning) with commercial (B2 local centre zoning) areas predominantly along King Street and Enmore Road. Significant developments in this area include the following:

- Sydney Design Centre Enmore (DEC) TAFE, located on the south western end of the study area. The venue provides tertiary education courses in the creative design courses. The establishment provide off-street parking for approximately 151 vehicles.
- The Enmore Theatre is one of the oldest established performance and entertainment venues in NSW. As the venue has been operating since 1908 there are no off-street parking facilities and has an arrangement the DEC TAFE in Edgeware Road, offering parking spaces for a fee to patrons who have already purchased tickets for at the theatre between 6pm and 12am during event days. Typically, all of the 151 spaces are available for a Saturday event and approximately 40 spaces are available for a Wednesday evening event as a result of evening courses in the TAFE College.
- Newtown High School of the Performing Arts, located outside the study area east of King Street and within close distance to Newtown Rail Station, is a secondary school of approximately 1,000 students.
- Newtown Public School provides education for about 400 child enrolments (Kindy to year 6) and is located outside the study area, near Newtown High School east of King Street.
- Camdenville Public School a Preschool to year 6 public school with about 250 children enrolment is located outside the study area in Laura Street. Most of the Newtown Study Area falls within the catchment for this school.
- Golden Barley Hotel, located outside of the study area is located at the intersection of Edgeware Road and Llewellyn Street, is a local pub and dining venue. The Warren View Hotel is also positioned outside the area at the intersection of Enmore Road and Edgeware Road.
- 32-72 Alice Street, located outside of the study area, is a mixed retail and residential development recently constructed and currently zoned as B4 'mixed use'. The site also runs a child care centre with capacity for 32 children and 10 staff.

6.1.1 Lane Zoning within the Study Area

Shown in Figure 23, a description of the land zones contained within the study area consists of the following:

- Zone R1 - R1 General Residential: This zone is to provide for a broad variety of residential densities and housing types, including dwelling houses, multi-dwelling housing, residential flat buildings, boarding houses and seniors housing. The zone also includes additional uses that provide facilities or services to residents, including neighbourhood shops, community facilities, child care centres and respite day care centres.

- **Zone R2 Low Density Residential:** This zone is intended to be applied to land where primarily low density housing is to be established or maintained. Typically the zone features detached dwelling houses, but it may be appropriate to include dual occupancy (attached or detached) or some multi-dwelling housing. This is the lowest density urban residential zone and the most restrictive in terms of other permitted uses considered suitable. These are generally restricted to facilities or services that meet the day-to-day needs of residents.
- **Zone R3 Medium Density Residential:** This zone provides similar characteristics as the Zone R1 however there is a higher level of density permissible under the Marrickville Local Environment Plan 2011. A number of lands with this zoning are positioned adjacent to Alice Street.
- **Zone R4 High Density Residential:** Similar to Zone R3, this zoning permits a higher level of density than the Zone R3. There are scattered R4 zoning within the study area, with some positioned generally adjacent to Alice Street and behind King Street and Enmore Road Local Centre areas.
- **Zone B1 Neighbourhood Centre:** The zone is for neighbourhood centres that include small-scale convenience retail premises (neighbourhood shops), business premises, medical centres and community uses that serve the day-to-day needs of residents in easy walking distance. Shop top housing is permitted in the zone, and other mixed use development may be considered appropriate.
- **Zone B2 Local Centre:** This zone is for local centres that include commercial business use, medical centres, restaurants and community uses within a town centre with accessible and easy walking distance from public transport. This zone also provides for residential accommodation in the form of shop top housing and other uses such as educational establishments, entertainment facilities, function centres, information and education facilities, office premises and tourist and visitor accommodation. Such a mix of uses will increase walking, cycling and public transport options for more people by making more activities available in one location. This is the dominant land type for properties fronting Enmore Road and King Street.
- **RE1 Public Recreation:** This zone is generally intended for a wide range of public recreational areas and activities including local and regional parks and open space. The two RE1 zoned land include Salmon Playground in Station Street and Matt Hogan Reserve between Alice Street and Camden Street.
- **RE2 Private Recreation:** This zone is generally intended to cover a wide range of recreation areas and facilities on land that is privately owned or managed. The use of facilities developed on this land may be open to the general public or restricted e.g. to registered members only. Currently there is one land in Metropolitan Road with this classification and is occupied by the Enmore Fijian Seventh Day Adventist Church.
- **SP2 Infrastructure:** Infrastructure land that is highly unlikely to be used for a different purpose in the future should be zoned SP2, for example cemeteries and major sewage treatment plants. The TAFE Design Centre Enmore including the TAFE Park is zoned under this classification and is positioned at the corner of Sarah Street and Edgeware Road.

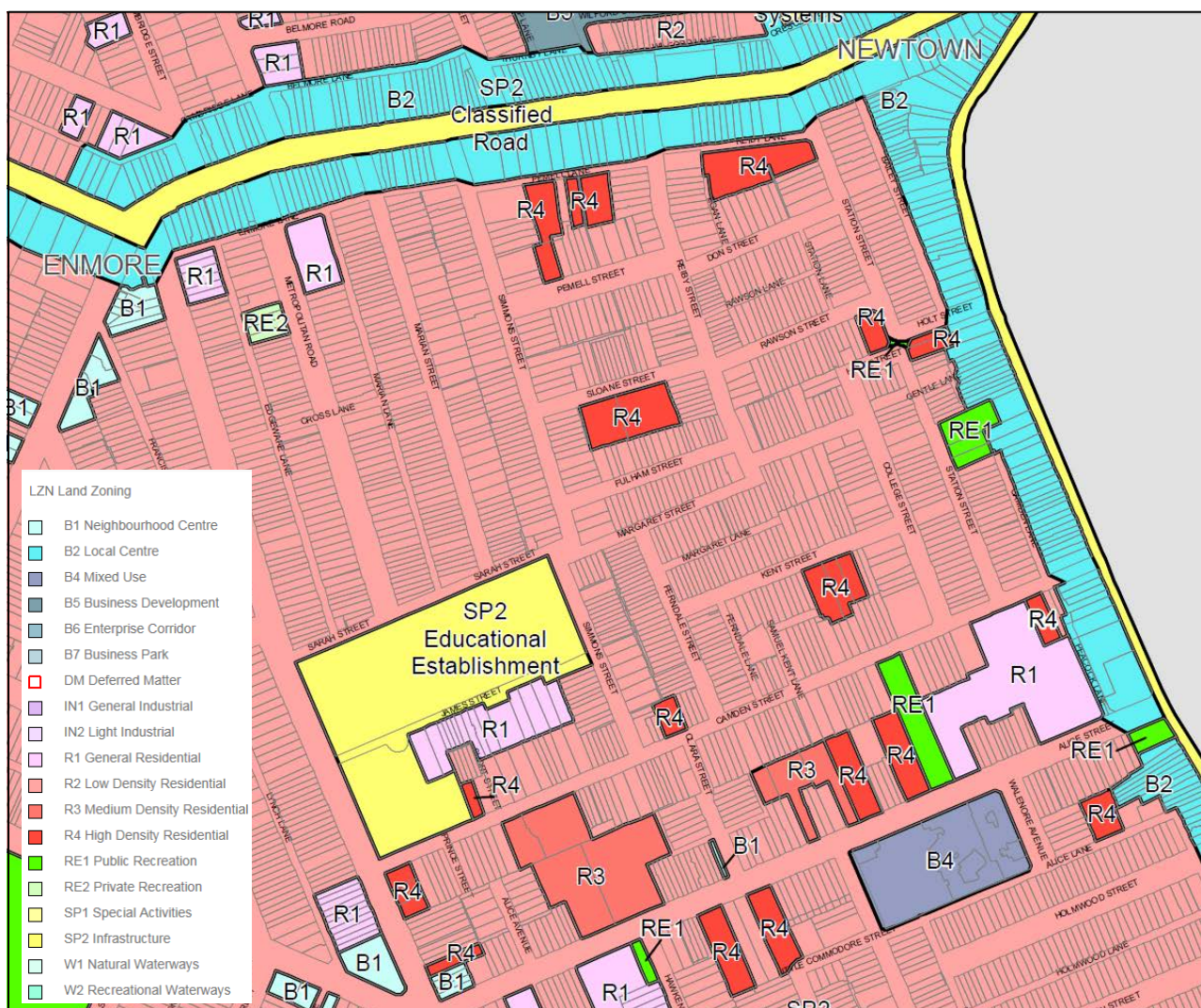


Figure 23: Land use zoning in the study area under the Marrickville Local Environment Plan 2011

6.1.2 Planning Proposal - Marrickville Local Environment Plan 2011 Amendment No. 4

In 2018 the Inner West Council has made a number of changes to the Marrickville Local Environment Plan (LEP) 2011, comprising of changes to land rezoning, height of buildings, floor space ratios, listing of 2 heritage items and 32 archaeological sites. Specifically the following land zoning changes are proposed within the Newtown LATM study area includes:

- Peacock Lane: change of land zoning at the northern end of Peacock Lane, from B2 'local centre' to zone SP2 'local road' extending the laneway to Camden Street, providing improved rear vehicular access to shopfront properties.
- James Street: change of land zoning along the south side of the street from Simmons Street to the western cul-de-sac to facilitate minor road widening. It is proposed to change from land zoning R1 'general residential' into SP2 'load road'.

Details of the above land rezoning are shown in appendix K.

6.2 Future developments in the immediate area

The existing LEP zoning maps indicate that there would be small high density developments limited to 14m height of buildings for the scattered R3 and R4 zones area. With most of the local street areas being R2 zoning, future developments would be minor and residential in nature.

6.2.1 Developments along King Street and Enmore Road

The sites identified along B2 Local Centre zones in King Street and Enmore Road could potentially increase retail and commercial floor areas, resulting in increased trips to the area. Residential dwellings are also possible along the B2 Local Centre zone, with building height limited to 14m and floor space ratio (FSR) limited to 1.5:1 along these areas.

Transport and Urban Planning in 2011 completed a Section 94 Traffic and Transport Study which looked at a 2031 scenario where additional developments were identified along the King Street and Enmore Road retail corridor. The report based its findings from the draft Sydney Subregional Strategy (dSSS) where 4,150 residential dwellings were proposed in the former Marrickville Local Government Area. As illustrated in Figure 24 Enmore Road and King Street precinct would accommodate 154 and 100 dwellings respectively. Calculating traffic generation using the RTA Guide to Traffic Generating Developments version 2 these two precincts would generate 58 and 38 additional vehicle trips in the PM peak hour respectively, which would not significantly contribute to the existing road congestion.

The recently released Greater Sydney Commission Eastern City District Plan 2018 has identified 5,900 additional dwellings within the amalgamated Inner West Council area. Applying this level of additional dwellings the level of additional trips from the Enmore Road and King Street precincts would result in similar levels of traffic generation found in the 2011 report.

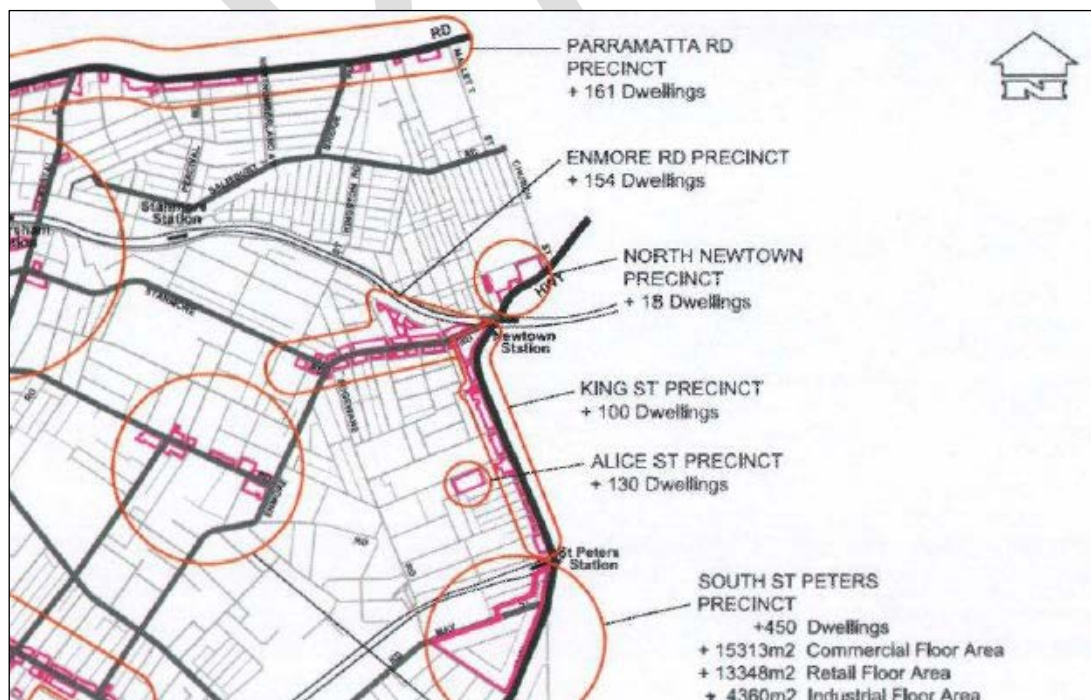


Figure 24: Estimated dwellings in 2031 from S94 Traffic and Transport Study by Transport and Urban Planning 2011

6.2.2 Marrickville Public Domain Masterplans for King Street & Enmore Road

The Marrickville Public Domain Masterplans 2014 sets out Council's vision to provide a consolidated planning and management direction that enables high priority short term works to be implemented as part of a holistic long term framework in relation to public domain upgrades including street and footway environments. The vision generally aims to apply a consistent pavement and kerbing approach, and simplify choice of material to open visual scale of pedestrian areas.

A public domain masterplan was created for the King Street and Enmore Road commercial area, with a vision to *'declutter the King Street and Enmore Road and create respite on side streets'*. The masterplan makes recommendations to investigate opportunities to improve crossing of side streets along the main streets through kerb extensions, threshold treatments, road closures and localised shared zones. Appendix P provides urban design principles and concept for the King Street/Enmore Road area.

6.2.3 Marrickville Metro Expansion

Marrickville Metro is located outside of the study area however as it is a significant regional shopping centre it is expected to generate traffic trips through roads such as Edgeware Road and Alice Street. Stage 1 of the development is proposed to add approximately 10,000 square metres of retail space, additional two levels of off-street carpark and improved bus, and taxis. Stage two will be built above the existing centre will add approximately 6,000 square metres of additional retail space and new loading docks. Smidmore Street will be permanently closed between Edinburgh Road and Murray Street, creating a pedestrian plaza while retaining car parking access at the western end. The two development stages will also increase the carpark capacity from 1,108 to 1,815 spaces.

Studies indicate that the development will generate a total of 1,573 vehicles per hour during a Thursday evening peak, and 2,573 vehicles per hour during a Saturday daytime peak hour.

The expansion of the Marrickville Metro Shopping Centre was first granted approval in March 2012 by the NSW Department of Planning and Environment as a Part 3A Major Projects approval. The developer and Council are currently reviewing a voluntary planning agreement which is expected to be reported to Council in the near future.

The Traffic Impact Assessment report proposes to change the existing daytime Mon-Fri parking restrictions along the eastern side of Edgeware Road between Alice Street and Victoria Road to include the Saturday peak periods.

6.2.4 WestConnex

The WestConnex scheme proposes improvements to the Sydney's main motorways mainly the M4 Western Motorway, the M4 East, Connection from M4 east to the Sydney CBD and the M5, including a connection to the Sydney Airport and Port Botany, including inner west suburbs. The project is expected to significantly produce high levels of population and employment growth and changing land use driving further forecast growth along the proposed corridor.

A major interchange is proposed at St Peters south of Sydney Park, providing a major access to Sydney Airport and Port Botany. The strategic traffic forecasting model developed by RMS indicates a reduction of through traffic from local roads, however concerns are raised by the community that the traffic condition in the road network in the inner west will be adversely affected due to the

congested citybound traffic in peak periods. Council is currently working with the RMS to ensure impacts to local residents are minimised.

6.2.5 Westconnex Local Area Improvement Strategy

Inner West Council in 2017 initiated a study to develop a Local Area Improvement Strategy in order to minimise impacts to the local community in the Inner West affected by the WestConnex project. Council is concerned about the level of through traffic in the Inner West through drivers avoiding to pay tolls or where WestConnex has missing links to key destinations.

The strategy was undertaken by BECA Consulting and has undertaken further work on the 'Zenith' strategic traffic model obtained from Veitch Lister Consulting (VLC). Traffic flows outputs associated with various scenarios incorporating the stages of WestConnex were interrogated to identify routes where transport conditions may change as a result of WestConnex projects. The key addition to the revised traffic model was the addition of key local roads to the model network to investigate the potential 'rat-running' through as a result of various stages of the WestConnex project. The report highlights the significant changes to the volume of roads in the study area such as Edgeware Road and Llewellyn Street. Appendix I outline the anticipated change to Edgeware Road affected by the St Peters Interchange works, and the proposed recommendations on Edgeware Road.

The Edgeware Road treatments described in Figure 31 have not been added to the current LATM scheme as these treatment proposals will required further investigation and community engagement before final draft schemes can be considered.

6.2.6 King Street Gateway

The King Street Gateway project proposes a number of changes in Princes Highway and King Street with a view to reduce road carriageway and expand the pedestrian footpath areas. The project is currently managed by the RMS in collaboration with City of Sydney and Inner West Councils and expected to be delivered in parallel with the Westconnex project. The key objectives of the project included exploring opportunities to:

- Downgrade of Princes Highway and Sydney Park Road by limiting capacity of Princes Highway north of Campbell Street (as supported by operational traffic modelling and consistent with the WestConnex project) to achieve a balance for all users including road (vehicles, cyclist and buses) and pedestrians;
- Improve the 'gateway' to King Street by changing the area around the entry to St Peters station and the entry to Sydney Park and the movement between these areas to provide a better pedestrian environment;
- Support future activity along Princes Highway south of King Street by mirroring the existing activity mix that exists along King Street;
- Utilise roadway space outside of trafficable lanes as some or all of bus lanes, parking or landscaping;
- Improve the footpath environment through widening and other measures;
- Reduce road lane widths and increase space for pedestrians and cyclists consistent with proposed road usage and place making;
- Improve at-grade pedestrian and cyclist access to Sydney Park across the Princes Highway (north of Campbell St) and across Sydney Park Road.

An AIMSUM strategic traffic model undertaken by the RMS for the WestConnex for the project indicates that traffic volume will be lower in King Street (Princess Highway) north of Campbell Street.

The project is expected to decrease through traffic in King Street where traffic is predominantly for local business and residents.

6.2.7 Alexandria to Moore Park Connectivity Upgrade

RMS has initiated this project as there is a need to reduce travel time, improve connectivity and support urban growth in the southern fringe of Sydney CBD. The project will improve east-west travel and access through Euston Road, McEvoy Street, Lachan Street and Dacey Avenue. This improvement will assist in the reduction of through traffic along King Street as it provides an alternative route to the CBD through Moore Park from Princes Highway. The connectivity upgrade will also link to the proposed Westconnex Interchange in St Peters. At the time of this report RMS has accepted comments from the community and has incorporated them in a Review of Environmental Factors (REF) planned for release sometime in 2018. It is expected that the RMS will again undertake stakeholder and community consultation with the REF to progress the project.

6.2.8 Sydney Metro

Sydney Metro forms part of Sydney's Rail Future, a plan released by the NSW government in 2012 which identifies staged programs to meet Sydney's growing population and transport needs. The Sydney Metro Northwest (formerly the North West Rail Link) was proposed in 2012 as part of stage 1 of Sydney's new metro network. In 2014 the rail line was extended to include the Sydney CBD and link through the inner west suburbs including Waterloo, Sydenham, Marrickville, Dulwich Hill, and to Bankstown. Currently the project is in the construction stage with the main excavation works in progress.

The service is expected to deliver trains arriving every 4 minutes during the peak hour and travel time savings compared to existing rail services. Upgrades to the Sydenham station and subsequent stations to the west along the current T3 Bankstown line are in progress, including full lift access, and improved transfer to buses, taxis, bicycles, and drop off and pickup areas.

The Sydney Metro will operate alongside Sydney Trains to bring greater capacity to public transport in particular along the existing T3 line. The Sydney Metro line will operate independently with existing heavy rail lines, and will not be affected by delays or issues from the rail lines. The project should make public transport a more attractive option and assist in lowering the dependence of car ownership in this area. Figure 25 shows the proposed Sydney Metro network, including Chatswood to Bankstown line.



Figure 25: Proposed Sydney Metro Network

7. Community Consultation Overview

Inner West Council undertook a series of community consultation regarding traffic and safety in the Newtown Precinct. A summary of consultation taken concerning the study area include the following:

- Initial consultation – invitation for comment on improving traffic and parking. Approximately 3,300 letters were sent out to owners and occupiers within the study area to gauge local issues. The letters were posted on 6 June 2018 and submissions closed on 4 July 2018. Council's YourSay website had 485 visits and 243 completed online surveys were received.
- Public Exhibition – the proposed scheme was put in exhibition for 28 days from xxx and xxx and following the exhibition the matter was to be referred to the Inner West Local Traffic Committee for consideration.

7.1 Review of Council's Record System prior to the study

An analysis of Council's record system spanning from 2012 to 2018 show a varied range of traffic and parking related matters. Table 8 outline the number of letters or concerns within the Newtown study area which was counted prior to the commencement of the Newtown LATM study. In general the issues raised were mostly concerning parking, whilst some covered safety issues at intersections. There were small numbers of submissions covering traffic volume, heavy vehicles and bicycle safety.

Table 8: Number of concerns rose 2012-2018 related to traffic and parking prior to study

Street	Road Classification	Issues raised by community								Total
		parking	speed	heavy vehicles	traffic volume	bicycle safety	other	dangerous intersection	pedestrian crossing/safety	
Alice Avenue	Access Way		1					1	2	4
Camden Lane	Access Way	5	1							6
Cross Lane	Access Way				1		1			2
Edgware Lane	Access Way									0
Egan Lane	Access Way									0
Ferndale Lane	Access Way	1								1
Marian Lane	Access Way	1						1		2
Peacock Lane	Access Way									0
Pemell Lane	Access Way	2								2
Rawson Lane	Access Way									0
Reiby Lane	Access Way									0
Samuel Kent Lane	Access Way									0
Station Lane	Access Way									0
Bailey Street	Local		1				1			2
Camden Street	Local						1			1
Clara Street	Local									0
College Street	Local									0
Don Street	Local									0
Ferndale Street	Local	1								1
Fulham Street	Local									0
Goddard Street	Local									0
Holt Street	Local	2							1	3
James Street	Local									0
Kent Street	Local									0
Margaret Street	Local									0
Marian Street	Local						1			1
Metropolitan Road	Local		1							1
Pemell Street	Local									0
Rawson Street	Local	1								1
Reiby Street	Local									0
Sarah Street	Local						1			1
Simmons Street	Local	1		1						2
Sloane Street	Local									0
Station Street	Local	2	1							3
Alice Street	Regional	1				1	1	3	2	8

Edgeware Road	Regional		1		1			7	1	10
Enmore Road	State									0
King Street	State								1	1
Total		17	6	1	2	1	6	12	7	52
		parking	speed	heavy vehicles	traffic volume	bicycle safety	other	dangerous intersection	pedestrian crossing/safety	

7.2 Initial Consultation

Initial Consultation undertaken in June and July 2018 was to obtain local safety and traffic issues within the Newtown Study Area. The highest received issue raised were traffic volumes in King Street and Alice Street, with a smaller level of concern on Edgeware Road and Enmore Road.

Concern over heavy vehicles was received in King Street, Edgeware Road and Alice Street. Amongst these some specified trucks associated with current works such as the Westconnex and Sydney Metro projects. Some have raised truck movements in King Street near Sydney Park which falls outside of the study area.

Station Street was the highest rated street for rat running, followed by the Metropolitan Road and Camden Street as described in section 4.2.5 and Figure 10 in this report.

Speeding vehicles along larger state and regional roads were an issue and less along local roads in the study area. Some were associated with parking issues, and several made comments about the narrow footpaths in local roads. Figure 26 and 27 provides a summary of the initial consultation undertaken.

Figure 26: Most selected locations for each issue during the initial community consultation

Issue	Location	Count	Issue	Location	Count
Too much traffic			Exceeding speed limit		
	King Street	26		Alice Street	14
	Alice Street	24		King Street	13
	Edgeware Road	15		Edgeware Road	11
	Enmore Road	16		Enmore Road	9
Heavy vehicles				Station Street	8
	Alice Street	11		Camden Street	5
	Edgeware Road	14		Simmons Street	5
	King Street	23		Marian Street	4
	Camden Street	5		Reiby Street	3
Rat running				Clara Street	3
	Station Street	16	Sight obstruction		
	Camden Street	12		Clara Street	11
	Metropolitan Road	11		Camden Street	10
	Cross Lane	10		Simmons Street	7
	Clara Street	6		College Street	5
	Alice Street	5		Reiby Street	4
	Holt Street	7		Ferndale Street	2
	Simmons Street	5	Other		
	Fulham Street	4		Enmore theatre related	9
	Bailey Street	3		Pedestrian related	9
Parked cars				Road too narrow	7
	Simmons Street	2		Truck related	5
	Alice Street	3		TAFE related	4
				Cyclist related	4

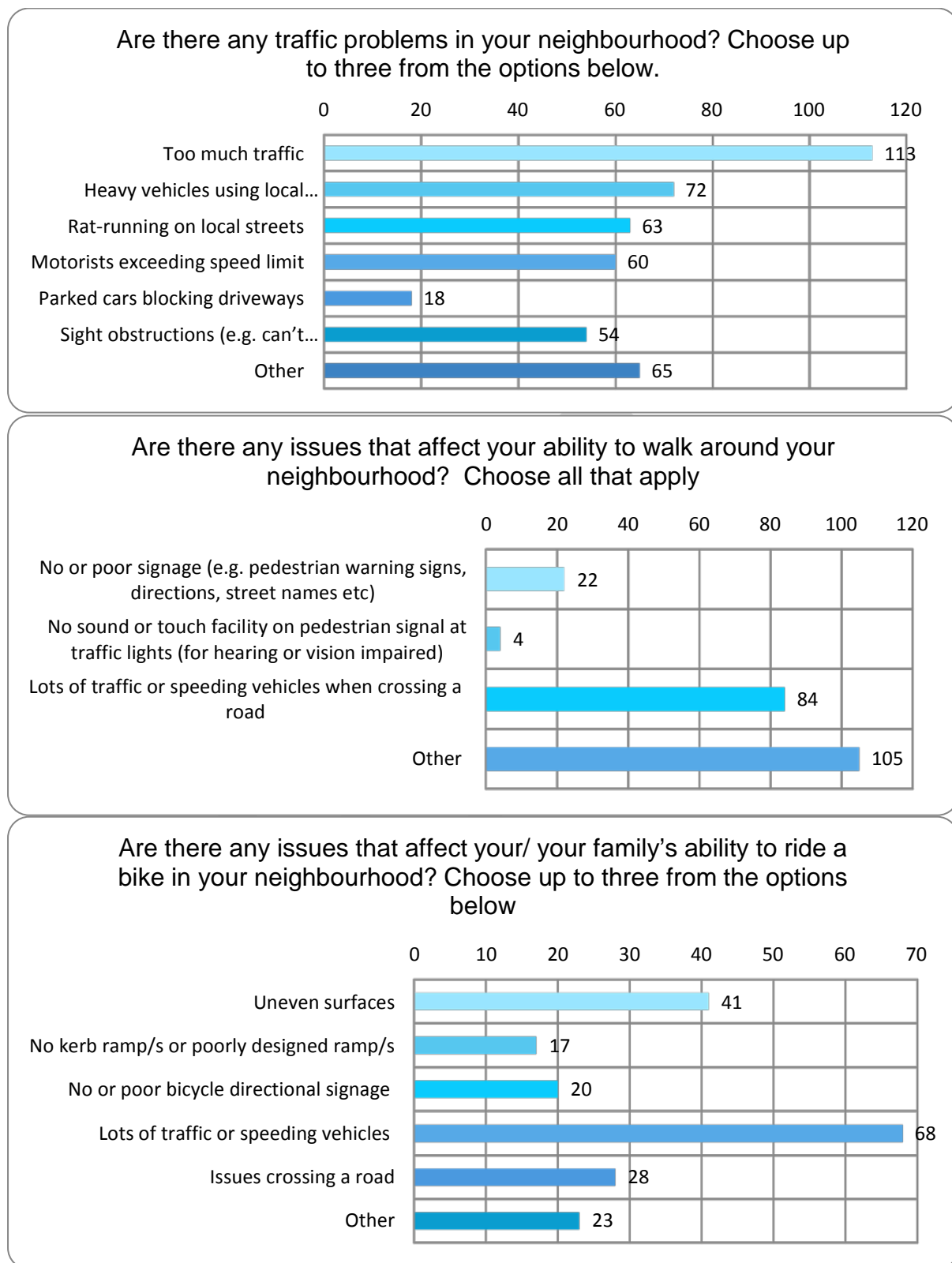


Figure 27: Initial Survey Question Results

7.3 Public Exhibition

The draft Newtown LATM report was considered by the Inner West Local Traffic Committee in November 2018 and adopted at Ordinary Council Meeting on xx November 2018. The draft report was put in public exhibition for 28 days commencing from xx to xx. Hard copies of the report were made available in in Petersham, Leichardt and Ashfield Customer Service Centres. Inner West Council's YourSay website provided opportunities for the public to make comment on the draft report and access copy of the report. The exhibition was advertised in Inner West Courier on xx.

A feedback summary from the submissions is provided in appendix H.

8. Newtown LATM Scheme Review

8.1 Introduction

Sections of this report have provided a good understanding of the existing traffic conditions and future traffic projection within the Newtown study area. The issues identified in these sections form the basis for developing mitigation measures which appropriately address the issues to further improve safety and public amenity through this area.

The LATM scheme aims to align with the parking management principles outlined in the Marrickville Integrated transport Strategy 2007. The document "provides the rationale and recommended actions for addressing local transport issues and moving towards sustainable transport – that is, reducing car use and increasing use of public transport, walking and cycling."

8.2 New LATM Treatment Proposals

The proposed scheme is a collection of physical and strategic measures to improve safety and encourage walking and cycling in the area. The treatment options include the following, with concept plans for the treatment below proposals provided in appendix G:

- Continuous footpath treatment & shared zone (7 locations)
- Local road entry treatments (Metropolitan Road and Station street)
- Kerb blister treatment in Metropolitan Road & Cross Lane
- Safety improvements at local road intersections
- Edge Line treatment in Pemell Street and College Street
- Formalisation of 40km/h Local Traffic Area
- Safety improvements in King Street & Enmore Road
- Bicycle routes improvements
- Improving traffic flow in regional roads

8.2.1 Continuous Footpath Treatment & Shared Zone

A Continuous footpath treatment is defined by a continuous, at grade footpath across the side street parallel with the main street at the T-intersection. With Continuous Footpath treatment the footpath area would be between 4m-10m in length, whilst a 10km/h Shared Zone is typically provided as a longer zone with continuous traffic calming devices and textured surface to retain low

vehicles speeds. Both treatments will prioritise pedestrians in particular the streets identified along the King Street and Enmore Road shopping strips and align with the design principles from the Marrickville Public Domain Masterplan 2014 for the Newtown area, providing opportunities for:

- Wider footpaths and street furniture
- Bicycle and motorbike parking
- Street trees and landscaped low planting vegetation
- Elimination of kerb and gutter, replaced with attractive paving or stamped asphalt
- Water sensitive urban design (WSUD)

The provision of a continuous footpath treatment would be appropriate for Camden Street and Goddard Street. Benefits of this treatment include improved pedestrian safety, reduced vehicular speeds, enhanced quality and liveability of the area including walking and cycling. By creating both continuous footpath treatment and shared zone treatment on side streets along the King Street and Enmore Road strip this will meet the LATM principles by creating a respite area and improving walkability through the commercial areas.

Preliminary assessments of the roads identified for continuous footpath treatment as outlined in RMS technical direction TDT2013/05 and shared zone are provided in Table 9 and 10.

	Goddard Street	Camden Street
Main Street	King Street	King Street
Average Annual Daily Traffic (AADT)	<400 (estimated)	434.7
Peak Hourly traffic volumes	<45 (estimated)	31.9 28.9 27.0
One way/Two way	One way	Two way

Table 9: Preliminary continuous footpath treatment assessment

A shared zone treatment is proposed for Bailey Street, Reiby Street, Simmons Street, Marian Street and Holt Street. A preliminary assessment indicates that these streets except Holt Street would meet the Transport for NSW policy and guideline SS/12/01 and RMS Technical Direction TTD2016/001 for a category 2 shared zones. Shared zone treatments will also feature textured surface treatment, speed cushions, designated parking spaces, regulatory signs, including a reduced 10km/h speed limit which will require the approval of RMS.

	Bailey Street	Reiby Street	Simmons Street	Marian Street	Holt Street
Between	Enmore Road & No.2 Bailey Street	Enmore Road & Pemell Lane	Enmore Road & Pemell Lane	Enmore Road & Enmore Lane	King Street & Station Street
Proposed length of shared zone	30m	50m	50m	44m	100m
Average Annual Daily Traffic (AADT)	693	683	806	364	1,451
Is the current speed limit ≤ 50 km/h?	Y	Y	Y	Y	Y
Is the current traffic flow ≤ 100 veh/h and ≤ 1000/day?	Y	Y	Y	Y	N
Is the speed limit on approaching roads ≤ 50 km/h?	Y	Y	Y	Y	Y

	Bailey Street	Reiby Street	Simmons Street	Marian Street	Holt Street
Is the length of the proposed scheme $\leq 400\text{m}$?	Y	Y	Y	Y	Y
Along a bus route or a heavy vehicle route except delivery vehicles?	N	N	N	N	N
Min trafficable width of 2.8 m	Y	Y	Y	Y	Y
Does the scheme include the removal of kerb & gutter?	Y	Y	Y	Y	Y
Propose parking within shared zone?	Y	Y	Y	Y	Y
Number of speed cushions proposed	1	2	2	2	2
Textured surface treatment	Y	Y	Y	Y	Y

Table 10: Preliminary shared zone assessment

The streets identified for both continuous footpath treatment and shared zones would be suitable for RMS infrastructure funding. Concept plans for the shared zones are provided in Appendix G.

The above assessment indicates that Holt Street currently do not meet the requirements for a shared zone due to its higher traffic volume. Further improvements could be made in this street by undertaking a staged treatment with kerb extensions and bollards, and if this treatment is effective in reducing overall traffic volume to a suitable level, Council could further consider the implementation of a shared zone from King Street to Station Street, subject to RMS approval. Concept plans for the two stages are illustrated in Figure 28 and 29. Both stage 1 and 2 proposals will retain the same parking arrangements in Holt Street and will not result in any loss of on-street parking spaces.

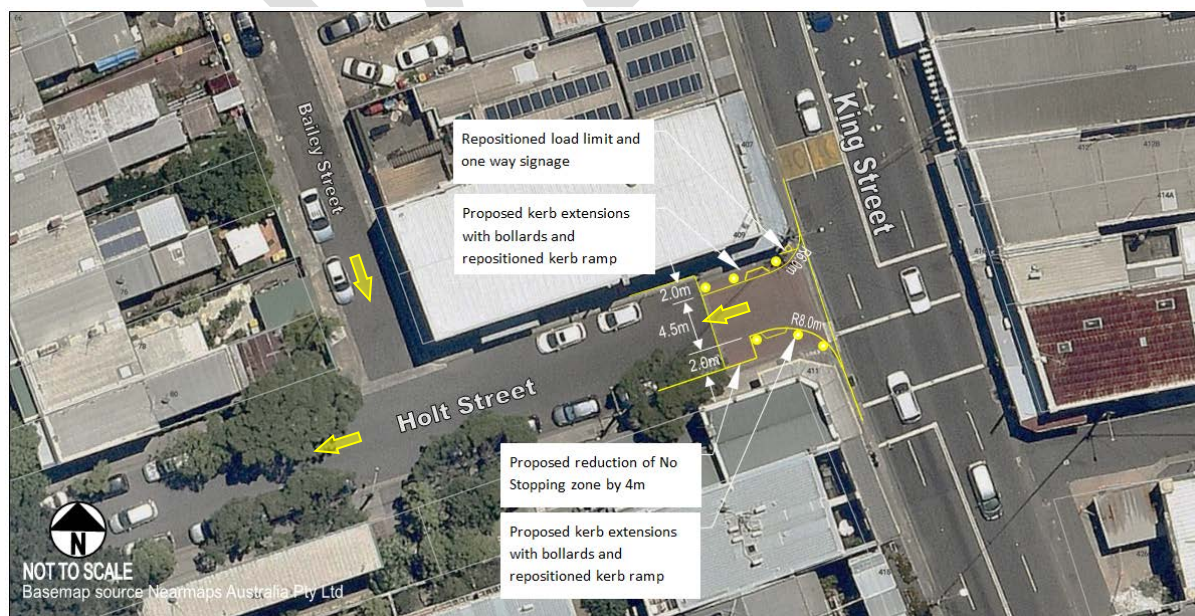


Figure 28: Stage 1 Holt Street proposed kerb extensions west of King Street

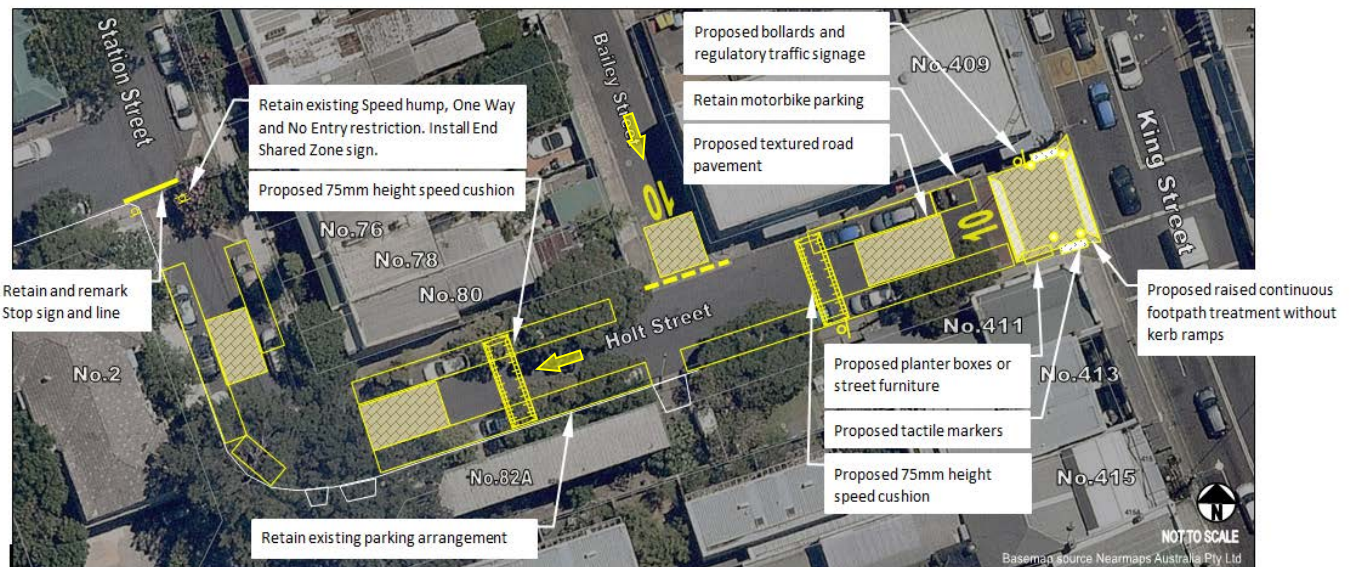


Figure 29: Stage 2 Holt Street proposed shared zone

8.2.2 Local Road Entry Treatments

The aforementioned continuous footpath and shared zone treatments would provide a desirable environment for residential amenity and safety. As Station Street and Metropolitan Road are signalised at Enmore Road, a local road entry treatment is proposed with differing road texture and signage, separating the residential section from the Enmore Road shopping areas. This local road entry treatment will discourage non-residential traffic, including trucks during afternoons and evenings when there are events in the Enmore Theatre. The proposed treatment would not reduce legal on-street parking supply and would not generate significant noise issues in the area. Concept plans for the proposed devices are illustrated in Appendix G, and an example concept plan proposed for Metropolitan Road is shown in Figure 30.



Photo source Google Maps Australia

Figure 30: Metropolitan Road entry treatment at Enmore Lane

8.2.3 Additional Kerb Blister Treatments

Metropolitan Road is a local road with comprising of angled parking on one side and parallel parking on the other side, with a generous road width for unimpeded two way traffic flow. The angle parking arrangement south of Cross Lane alternates to the other side and naturally provides a chicane-like environment when occupied by parking. It is proposed to construct suitable kerb blisters to improve delineation as well as help reduce vehicle speeds at this location. Provision of two marked motorcycle parking bays and ramps will be considered in the design to support motorcycle and scooter use in the area. The kerb blister treatment will not remove legal on-street parking.

Cross Lane experiences a high level of through traffic of about 150 vehicles in the in AM peak hour from Edgeware Road. Whilst a permanent road closure or a right turn ban from Edgeware Road will eliminate this issue, this arrangement will not allow local residents to enter their streets and would increase travel distances and time for local residents to legally enter their streets. As an alternative a kerb blister has been proposed east of Edgeware Road to discourage traffic in Cross Lane including trucks.

Concept plans for both sites are illustrated in Appendix G.

8.2.4 Safety at Local Road Intersections

With the majority of the local street arranged in a grid layout, the intersections are perpendicular with most locations having some form of intersection control and parking restrictions to reinforce the NSW Road Rules. It is known that overparking in the area results in an undesirable situation where sight distances at intersections would be compromised. There is a community need to retain on-street parking in the area however it is also important to maintain acceptable safety at local road intersections.

Consideration was given for statutory 10m No Stopping restrictions at local T-intersections on roads generally carrying higher than 600 vehicles daily traffic volume and roads without a suitable vehicle passing area. For consistency with existing intersection controls, the following measures are proposed at intersections below:

- Pemell Street and Simmons Street: Give Way signs and lines across Pemell Street and installation of 10m length Centreline.
- Pemell Street and Reiby Street: Give Way signs and lines across Pemell Street and installation of 10m length Centreline.
- Sloane Street and Simmons Street: Give Way signs and lines across Sloane Street.
- College Street and Camden Street: Give Way signs and lines across College Street and installation of 10m length Centreline.
- Station Street and Camden Street: Give Way signs and lines across Station Street.
- Peacock Lane and Alice Street: Give Way signs and lines across Alice Street.

As Holt Street is a westbound one way road, considerations were given for reduced No Stopping distance at King Street provided that there are no safety or vehicle movement issues. The RMS technical direction TTD2014/05 outline the checklist requirements for reduced No Stopping distance at unsignalised intersections, including a vehicle sight distance assessment, vehicle movement assessment, and others. The risk assessment checklist is provided in appendix M.

8.2.5 Edge Line Treatment in Pemell Street and College Street

Pemell Street and College Street were identified as roads having a wider carriageway of 12.8m and 10.2m respectively, attracting higher traffic speeds. The Austroads Guide to Traffic Engineering – Part 8 Local Area Traffic Management suggest that reducing the available street width is one of the ways vehicle speeds could be reduced. It is proposed that E1 edge line treatment be installed on both sides for the length of Pemell Street and College Street. In addition section 5.3.1 in the RTA Bicycle Guidelines recommends an edge line which could be used to separate parked vehicles and the travelling carriageway in a mixed traffic urban situation bicycle route.

8.2.6 Formalisation of 40km/h Local Traffic Area

The speed and land use environment within the study area were relatively low and comparable to the neighbouring eastern Newtown and Erskineville residential areas where a reduced 40km/h speed limit was established by the RMS as part of the City of Sydney's LATM scheme for those areas. As shown in Table 5, the 85th percentile speeds of all residential streets in the Newtown study area were found to be close to 40km/h. Only three streets listed in Table 11 below had speeds exceeding the 40km/h and these streets have been identified for some form of treatment for a self-enforcing road environment.

Table 11: Local Roads exceeding proposed 40km/h and proposed treatments

Street	85 th Percentile Speed (km/h)	Proposed treatment
Pemell Street	42.1	Edge line treatment on both sides for entire length
Metropolitan Road	41.5	Mid block kerb blister treatment at Cross Lane, entry treatment at Enmore Lane
Simmons Street	40.3	Entry treatment at Pemell Lane, reduced road width and footpath widening work already completed in 2017

As the RMS is the only authority delegated to change speed limits, Council should, with supporting information apply for a 40 local traffic area after the initial treatments are completed. The matter will be referred to the RMS for assessment and consideration of a Speed Zone Authorisation (SZA) in accordance to the Speed Zoning Guidelines. With the exception of the shared zones and continuous footpath treatment areas, entry signage '40 local traffic area' and repeater signage is required and for traffic leaving the area an 'end 40 zone' should be installed as part of the scheme.

8.2.7 Safety Improvements in Enmore Road and King Street

Several safety issues were identified along the two State Roads within the study area. At the intersection of Enmore Road and Bailey Street, three right-through accidents were reported where a vehicle turning right from Enmore Road into Bailey is required to cross two lanes of westbound traffic in Enmore Road. There would be a higher risk for this movement when vehicle queuing on one of the lanes extend s past Station Street. It is suggested that RMS investigate an offset 'Keep Clear' restriction for the westbound lanes of Enmore Road at Bailey Street allowing for improved sight distance for right turn vehicles during the afternoon peak hours.

At the signalised intersection of Enmore Road and Metropolitan Road, three of four injury accidents were right through accidents involving a motorbike. The time of the accidents were all in the afternoon where westbound traffic is operating in two lanes and does not feature a dedicated turn

phase from Enmore Road to Metropolitan Road. It is likely that when westbound vehicles in Enmore Road queue across the intersection in lane 2 and a vehicle (or motorbike) turning right into Metropolitan Road is looking for a gap in both westbound lanes. A 'Do Not Queue Across Intersection' for westbound traffic could prevent the incidence of vehicles queuing and improve safety for both vehicles and motorbikes turning right.

The accident statistics for bicycles are considerably higher in King Street and Enmore Road. Enmore Road is a regional route (RR08) and King Street is a local cycling route (LR10) in the Marrickville Cycling Strategy (2007). The prevailing road conditions in both streets feature approximately 12.8m wide carriageway, with several bus stops and frequent services, filter right turning vehicles at intersections and high turnover of on-street parking throughout the day. The RMS could investigate the provision of 'Watch for cyclists symbolic' signs at Enmore Road between Metropolitan Road and King Street, and at King Street north of King Street and Enmore Road.

Appendix J contains the above proposals to be referred to the RMS for consideration.

RMS data indicate that Enmore Road and King Street carries 28,300 vehicles and 19,900 vehicles daily respectively. As they are located in close distance to public transport stations, and a commercial shopping precinct they are desirable locations where pedestrian movements would be high. Both state roads appear to meet categories A and B as listed in appendix A for a pedestrian precinct treatment from the 40km/h High Pedestrian Activity Area Guidelines by the RTA (2006), however both roads play an important role in the state road network and due to the high traffic volume they would not meet the guidelines for a 40km/h High Pedestrian Activity Area (HPAA). The guidelines recommend further treatments to separate pedestrian and vehicular traffic such as pedestrian fencing and improved pedestrian crossing facilities.

Council has examined a section of Enmore Road between King Street and Bailey Street having three (3) reported pedestrian injury accidents in the past 5 year history. This 200m section between two traffic signals has a high level of pedestrian activity, where pedestrians were observed crossing Enmore Road at any random sections between Bailey Street and King Street. The south side footpath is particularly narrow at approximately 2.0m. During the afternoon peak hours pedestrian access through this area is more difficult due to the limited path width and further constrained by parking meters, A-frame boards, and commercial rubbish bins. Some form of kerbside pedestrian fencing was considered at this location however this would not completely prevent pedestrian movements across Enmore Road as fence gaps are required at existing driveways. The idea will also create a barrier for pedestrians accessing to and from kerbside parking.

8.2.8 Improving Traffic Flow in Regional Roads

On approach to signalised intersections on regional roads (Alice Street and Edgeware Road) peak hour parking restrictions allow for two lane operations. While this has been in place for some years, vehicles illegally parked during the peak hour affect traffic flow and intersection performance. It is proposed to extend the dual lane linemarking and terminating where unrestricted parking ends, specifically:

- Alice Street approach to King Street: extend eastbound dual lane markings by approximately 44m and terminate edge lines at the driveway 9m east of No.19 Alice Street, matching the existing 'No Parking 6am-10am Mon-Fri' zone.

- Alice Street approach to Edgeware Road: extend westbound dual lane markings by approximately 50m, matching the existing 'No Parking 3.30pm-5.30pm Mon-Fri' zone.
- Edgeware Road approach to Alice Street: extend southbound dual lane markings by approximately 45m, matching the existing 'No Parking, 6.30am-9.00am Mon-Fri' zone.

On Edgeware Road there are poor linemarking on the southbound traffic between Enmore Road and Enmore Lane. It is recommended that RMS be requested to remark the two lane arrangement from the signalised intersection and the faded give way line at the left turn slip lane. The lane lines should extend to the entrance driveway of Edgeware Road Carpark. Appendix G show three concept plans showing the proposed changes in Alice Street and Edgeware Road.

The Enmore Newtown Parking Review 2017 considered a 15m length part time No Stopping 3.30pm-5.00pm on the west side of Edgeware Road, opposite Cross Lane to improve traffic flow during the peak hours. Observations during the AM peak hour Traffic counts revealed 144 vehicles turn right from Edgeware Road to Cross Lane. Further observations suggested that about 40% of right turning vehicles hold back traffic flow whilst waiting for a suitable gap to turn right. As there are typically delays experienced at the Edgeware Road and Enmore Road intersection, the overall delays caused by the right turning movement is not considered significant and a passing bay is not warranted at this time.

8.2.9 Bicycle Route Improvements

Some routes identified in the Marrickville Bicycle Strategy 2007 such as Simmons Street and Sarah Street have some line marking indicating a cycling route, including the older bicycle directional signs in place. It is proposed to install missing bicycle logos (PS-2) marking in Metropolitan Road, Margaret Street, Station Street, Holt Street, College Street and Camden Street. The treatment will also include bicycle warning symbolic signs along the side streets. Appendix N show the concept plans showing the proposed changes.

8.3 Audit of Existing traffic facilities

In order to determine the current condition of the existing LATM devices, an audit has been undertaken on the current devices in place within the study area, including compliance with relevant standards and guidelines.

A review of the existing truck prohibition signs in the study area appear to be inconsistent and misleading as some have been defaced and do not feature arrows indicating that a side street has the load restriction. Former 'Trucks Prohibited symbolic' and supplementary '3t and over' should now be replaced with regulatory 'Trucks Prohibited symbolic' with supplementary 'Vehicles over 3t GVM' and an arrow direction indicating to the street which has the restriction. It is also noted that the supplementary times in Edgeware Road should be larger to ensure that there restrictions are clear to the general public and that are no associated compliance issues.

The full details of the audit are provided in appendix B and mostly comprise of signage and linemarking details.

8.4 Pedestrian Access and Mobility Plan (PAMP) Implementation

In 2009 Marrickville Council undertook a review of their Pedestrian Access and Mobility Plan (PAMP). The plan focuses on the high pedestrian use areas within the former Marrickville local government area, and makes recommendations for footpath improvements. The work is included in Council's four year Capital Works program, funded as budget allowed.

Under the plan Enmore Road and King Street were identified as high priority routes, and Edgeware Road and Alice Street were identified as low priority routes.

An audit of Council's missing ramps and existing ramp conditions has been undertaken. The audit identified 40 missing ramps within the study area, identified in Appendix L. These areas will be subject to further inspection and assessment as part of the Capital Works program.

8.5 Non-Infrastructure Improvements

The ongoing improvements to Council's Policy and operations, including other agencies such as NSW Police and Ausgrid should contribute to the improvements in the area, supporting public transport, walking and cycling.

- Police Enforcement of the one way restriction in Holt Street. Traffic data has shown that 52 vehicles have travelling against the one way in a 24 hour period.
- Periodic enforcement of the truck load limit in local roads. With the improved truck load limit signs in place, it is recommended that both NSW Police and Council consider load enforcement at the streets identified in Figure 9 in this report.
- Review Council's road opening and restoration policy, with a view to improve restoration work, which should improve pavement and footpath quality for cyclists and walking pedestrians.
- Review of Council's outdoor dining area policy and applications in the shopping areas of Enmore and Newtown, with a view to improve pedestrian access.
- Incorporating areas in Council's Road Safety Education Program targeting pedestrians, mobile phone use and speeding in regional roads. The projects run can vary from year to year depending on the community concerns and rising road safety issues and trends.
- Maintenance work from audit of existing devices replacing signs and linemarking as required as the study area feature a high level of public art and murals.
- Ongoing kerb ramp and street lighting improvements will improve walkability and safety for pedestrians.
- The Australasian New Car Assessment Program (ANCAP) has revealed a rising trend of new vehicles fitted with autonomous emergency braking (AEB) as standard features. In December 2015 only 3% of new vehicles were fitted with AEB and this Figure has increased to 31% in March 2018. As more new vehicles are fitted with AEB, the rate of rear-end crashes (RUM Code 30) are expected to improve in the future.

8.6 Prioritisation of treatments and Strategic Cost Estimation

Having regard to the suggested LATM measures, a priority ranking was determined based on a number of factors including crash history, existing traffic issues, community demand and required planning. Any road improvements associated with development application conditions of consent

are not considered in Council's implementation plan and there are not included in this section. Table 12 containing the priority list also contain cost estimates. The cost estimates do not include allowances for site specific issues such as relocation of stormwater pits or service relocation.

Table 12: Strategic Cost Estimation and Priority

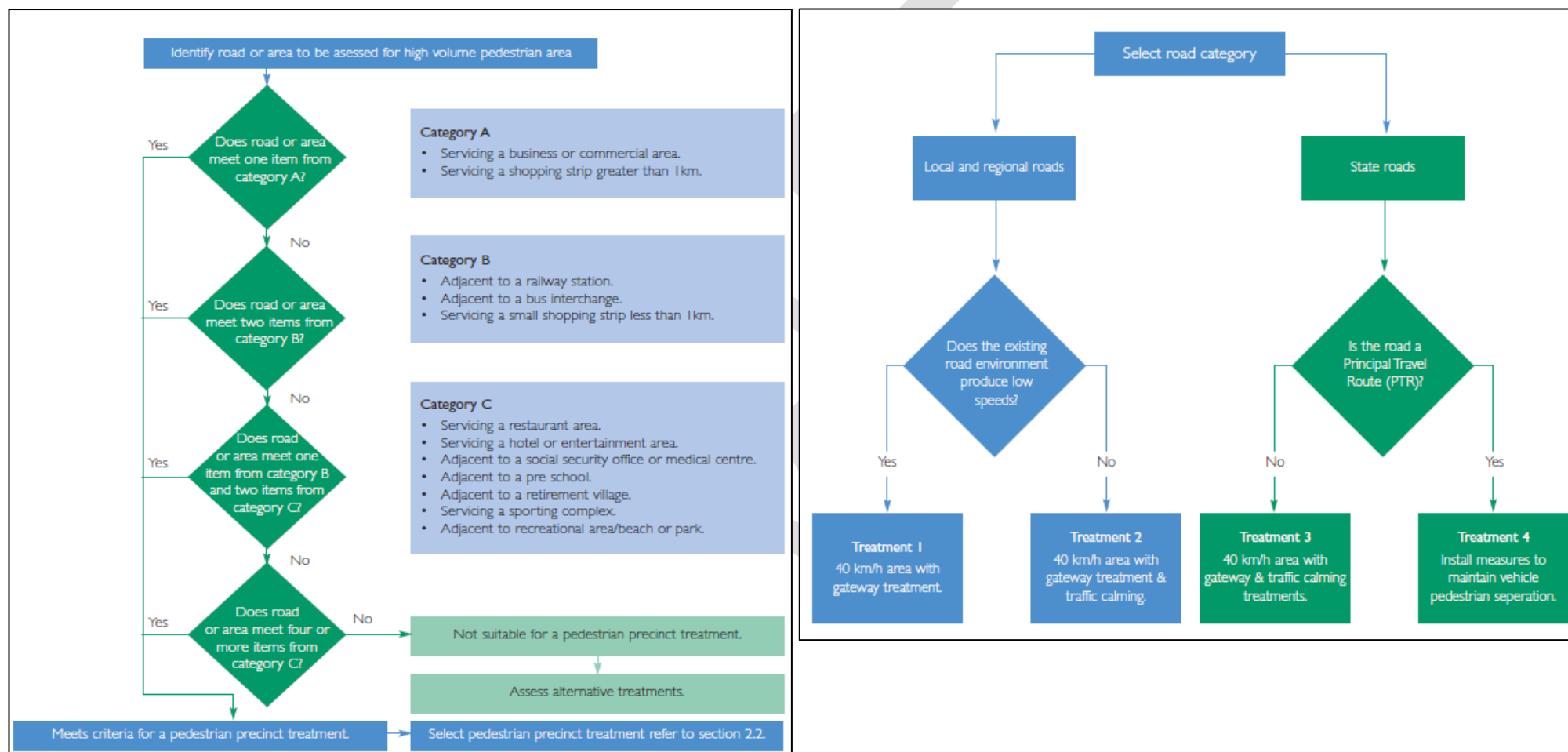
Newtown LATM Review 2018 Draft proposed treatments & Strategic Cost Estimation						
Items	Map ref	Street	Section	Proposed Treatment	Priority	Estimated Cost
1	B	Bailey Street	Enmore Road	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of one (1) speed cushion.	1	\$28,000
2	A	Goddard Street	King Street	Continuous footpath treatment (raised treatment on side street, installation of bollards, planter boxes and/or street furniture)	2	\$25,200
3	B	Reiby Street	Enmore Road to Pemell Lane	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	3	\$58,100
4	B	Simmons Street	Enmore Road to Pemell Lane	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	4	\$43,000
5	B	Marian Street	Enmore Road Enmore Lane	10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	5	\$50,000
6	E	Holt Street	King Street to Station Street	Stage 1: kerb extensions at King Street, reduced No Stopping distance on south side, bollards, kerb ramps, repositioned traffic signage.	6	\$26,000
7	B	Holt Street	King Street	Stage 2: 10km/h raised shared zone with regulatory signage, bollards, marked parking bays, planter boxes and/or street furniture, textured road pavement and street lighting. Installation of two (2) speed cushions.	7	\$65,500

Items	Map ref	Street	Section	Proposed Treatment	Priority	Estimated Cost
8	A	Camden Street	King Street	Continuous footpath treatment (raised treatment on side street, installation of bollards, planter boxes, street furniture)	8	\$26,700
9	C	Metropolitan Road	Enmore Lane	Installation of kerb blister island Installation of at grade pavement or similar linemarking Installation of truck prohibited symbolic and local traffic signage	9	\$16,500
10	C	Station Street	Reiby Lane	Installation of at grade pavement or similar linemarking Installation of truck prohibited symbolic and local traffic signage	10	\$9,500
11	E	Metropolitan Road	Cross Lane	Installation of kerb blister islands with motorbike parking	11	\$60,000
12	E	Cross Lane	Edgeware Road	Installation of kerb blister island	12	\$8,000
13	E	Camden Street	College Street	2x landscaped kerb blister islands, give way signs and lines	13	\$14,000
14	E	Camden Street	Station Street	2x landscaped kerb blister islands, give way signs and lines	14	\$13,500
15	Appendix N	Simmons Street	entire length	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	15	\$1,000
16	Appendix N	Margaret Street	Between Ferndale Street and College Street	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	16	\$2,400
17	Appendix N	College Street	Between Margaret Street and Holt Street	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	17	\$2,200
18	Appendix N	Holt Street	Between Station Street and King Street	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	18	\$1,400
19	Appendix N	Station Street	Between Holt Street and Enmore Road	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	19	\$3,200
20	Appendix N	Metropolitan Road	Between Enmore Road and southern end of road	Bicycle logo mixed traffic arrangement Bicycle warning symbolic signs on side streets	20	\$1,800
				Total		\$456,000

9. Appendices

Appendix A	Criteria for Pedestrian Precinct Treatment (RTA, 2006)
Appendix B	Results of Newtown LATM Audit of Existing Traffic Devices
Appendix C	Newtown-Enmore Proposal Parking Measures
Appendix D	Initial Community Consultation Result Summary
Appendix E	Crash Road User Movement Codes
Appendix F	Crash Data Summary
Appendix G	Proposed LATM Concept Designs
Appendix H	Public Exhibition Feedback Summary
Appendix I	Traffic Impacts of WestConnex on Edgeware Road
Appendix J	Matters to be referred to the RMS for consideration
Appendix K	Marrickville Development Control Plan 2011 Amendment No.4
Appendix L	Map of Missing Kerb Ramps from Council's 2009 PAMP Study & Marrickville PAMP Focus Areas
Appendix M	Holt Street Reduced No Stopping zone Risk Assessment
Appendix N	Proposed bicycle facilities
Appendix O	Streets nominated for 40km/h Local Traffic Area
Appendix P	Marrickville Public Domain Masterplan King Street & Enmore Road

Appendix A Criteria for pedestrian precinct treatment (Extract from 40km/h Speed Limits in High Pedestrian Activity Areas, Roads and Traffic Authority 2006)



Appendix B Results of Newtown LATM Audit of Existing Traffic Devices

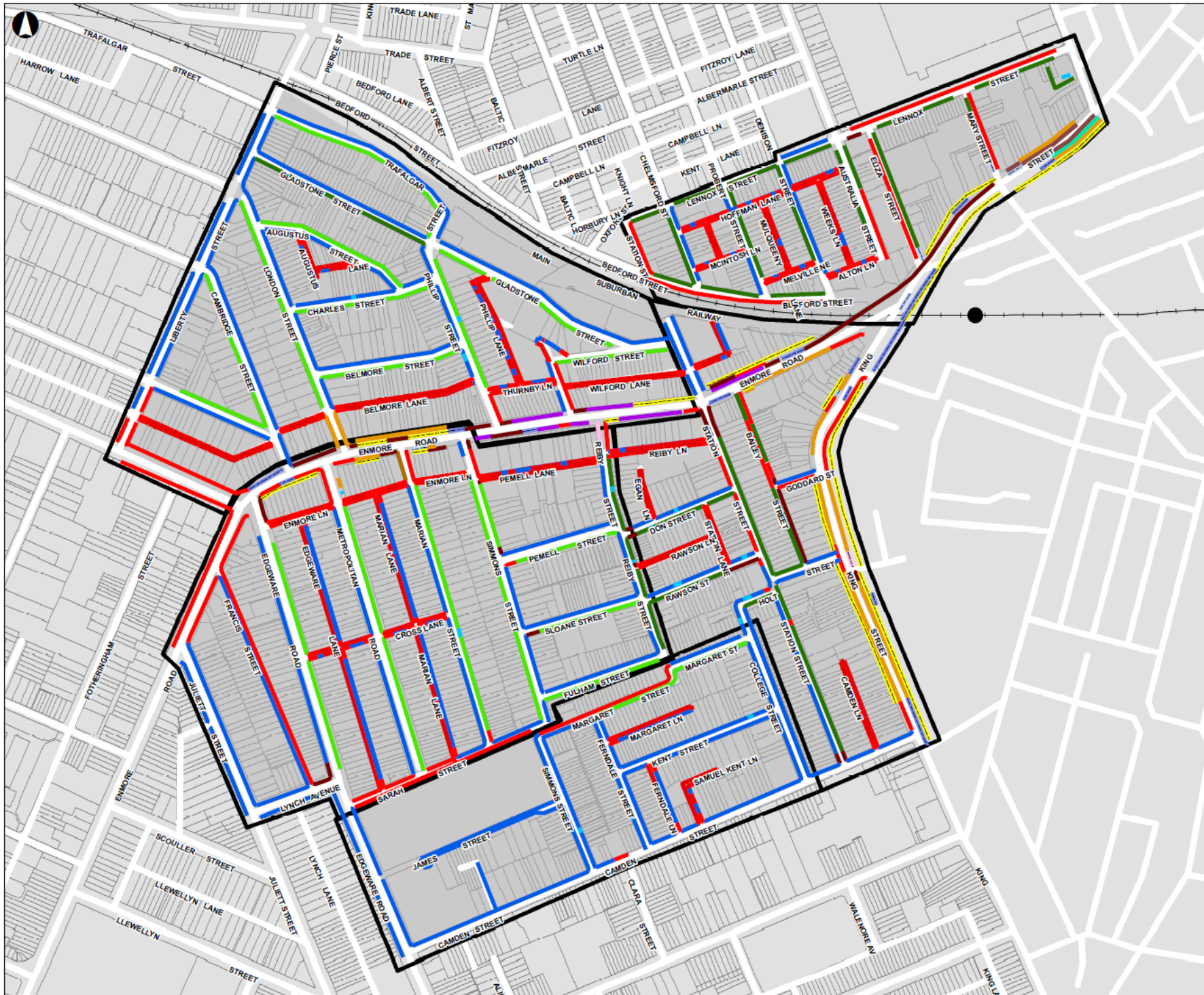
Newtown LATM 2018 Audit of Existing Devices		
Audit date 4 July 2018		
Street location	Description	Coordinates
Alice Avenue	Install missing 40 school zone patch and dragons teeth at existing school zone sign	151.1741334,-33.9045448,0
Alice Street	Upgrade R3-1 ped crossing signs to size B, fluoro signs, review sign locations	151.1749904,-33.9043845,0
Alice Street	Review 15km/h hump advisory sign. Standard advisory speed for hump should be 25km/h.	151.1749461,-33.9043633,0
Alice Street	Replace dashed edge line with solid line at Clara Street for EB traffic.	151.1758178,-33.9040751,0
Alice Street	Replace dashed edge lines to refuge island with solid edge lines and chevrons hatching, reinstall RRPMS. Install missing Keep Lefts	151.1765756,-33.9038302,0
Alice Street	Upgrade W6-2 crossing to size B. Consider whether fluoro backing is acceptable	151.1762966,-33.9039637,0
Alice Street	Remark edge line at NE corner of intersection at Alice Avenue	151.1741039,-33.9046483,0
Alice Street	Mark out missing edge line on WB lane. Edge lines are to be positioned 3.2m from centreline.	151.1759882,-33.9040439,0
Alice Street	Install x2 missing Keep Left at refuge island	151.178024,-33.903356,0
Alice Street	Remove edge lines to align with existing NP 6am-10am Mon-Fri restrictions. Install S1 lines leading to existing S1 lines at traffic signals.	151.1787388,-33.9030822,0
Alice Street	S side on ELP install missing 50 speed limit sign. Sign to face east.	151.179074,-33.9030377,0
Alice Street	On S side remark faded edge lines and missing RRPMS.	151.1786315,-33.9031746,0
Alice Street	Replace existing yellow CAMs with D4-1-2 unidirectional hazard marker on existing blister island on S side.	151.1781822,-33.9033226,0
Alice Street	Replace missing D4-1-2 unidirectional hazard marker.	151.1794053,-33.9029085,0
Alice Street	Install Truck Load Limit GVM signs with arrow. Install 2 signs facing E and W	151.1758554,-33.9040394,0
Bailey Street	On speed hump install missing hump symbolic sign and advisory 15km/h sign on ELP on W side	151.177045,-33.898898,0
Bailey Street	Remove hump sign on ELP on W side.	151.1769551,-33.8987076,0
Camden Street	Remark faded 50 patch	151.1729398,-33.9038881,0
Camden Street	Replace NP with NS (R)	151.1760271,-33.9028173,0
Camden Street	Replace NP with NS(L)	151.176129,-33.9027861,0
Camden Street	Remove Road Closed and hazard marker. Replace with CAMs (R). Sign to face east.	151.1756918,-33.9029664,0
Camden Street	Remove Road Closed and unihazard marker. Replace with CAMs (R). Signs to face W.	151.1754692,-33.9030555,0
Camden Street	Install 50 signs adjacent to 50 patch. Sign to face E	151.1786985,-33.9020158,0
Camden Street	Install local 50km/h sign required on N side	151.1729868,-33.9038435,0
Cross Lane	Truck load limit signs require update to GVM and with arrow. Sign to face both directions along Edgeware Road	151.1717167,-33.900965,0
Cross Lane	Add 'bicycles excepted' under existing No Through Road sign	151.1717302,-33.9010385,0
Cross Lane	Remove old Trucks Prohibited symbolic sign and stem	151.171765,-33.9009561,0
Don Street	Linemark missing TB line across Don Street at Reiby Street	151.1755174,-33.899823,0
Edgeware Road	Remark edgeline linemarking at Cross Lane	151.1716685,-33.9009851,0
Edgeware Road	Install missing 'Form 1 Lane' sign for SB traffic	151.171242,-33.8997584,0
Edgeware Road	Remark L1 lines for SB traffic	151.171179,-33.8996505,0
Edgeware Road	Remark edgeline to align with existing NS sign on W side.	151.1732349,-33.9048943,0
Edgeware Road	Request RMS to remark TB line at LT slip lane from Enmore Road to Edgeware Road E side on existing blister island replace existing CAMs with D4-1-2 unidirectional hazard marker.	151.1710382,-33.8994801,0
Edgeware Road	Remark edge lines on E side at Camden Street intersection. Remark faded TB line across Camden Street.	151.1729211,-33.9039793,0
Edgeware Road		151.1728473,-33.9039092,0
Edgeware Road	Replace existing CAMs with D4-1-2 on existing blister island on E side.	151.1724597,-33.9031,0
Edgeware Road	At pedestrian traffic signals replace CAMs with D4-1-2 on E and W sides.	151.1722934,-33.9029442,0
Edgeware Road	At central refuge island install 2x missing holding bars	151.1720762,-33.9023342,0
Edgeware Road	Remark faded edge line at SE kerb return and NE kerb return	151.1721808,-33.9025234,0
Edgeware Road	At blister island on W side replace CAMs with D4-1-2.	151.1719796,-33.902165,0
Edgeware Road	Install missing NS (R) on E side north of Cross Lane.	151.1716323,-33.9009016,0
Enmore Lane	Missing Stop sign on empty stem. Reinstate missing Stop sign.	151.1717087,-33.8996226,0
Enmore Lane	Incomplete piano keys	151.1717302,-33.8995914,0
Enmore Lane	Stop sign obscured by bamboo within property. Remove foliage and ensure sign can be seen.	151.173023,-33.8993087,0
Enmore Lane	Remark faded TF line across Enmore Lane east of Marian Street.	151.1729975,-33.8992764,0
Enmore Lane	Remark faded TF line across Enmore Lane west of Marian Street.	151.1729345,-33.8992853,0
Enmore Road	Replace existing truck load limit sign with GVM sign with arrow. 2 signs to face W and E	151.1752841,-33.8986853,0
Enmore Road	Install Truck load limit GVM signs facing W and N at entrance to Station Street	151.1765152,-33.8985674,0
Enmore Road	Install Truck Load Limit GVM signs facing W and E	151.1768398,-33.8984605,0
Enmore Road	Remove faded local traffic zone sign on ELP	151.1736131,-33.8988612,0
Enmore Road	Install 2x Truck Load Limit GVM signs with arrow. Signs to face W and E	151.1735514,-33.8988813,0
Enmore Road	Install Shared Path symbolic with supplementary End on ELP on S side facing W	151.1739805,-33.8988234,0
Enmore Road	Install Shared Path symbolic with supplementary End on ELP on S side facing E	151.1736477,-33.8988679,0
Goddard Street	Install missing 40 school zone patch and dragons teeth	151.1776417,-33.8992887,0
Holt Street	Install CAMs (R) at bend.	151.1772206,-33.9003206,0
Holt Street	Install CAMs (L) facing S. Install CAMs (R) facing W.	151.1772649,-33.9004252,0
James Street	Install NP (L) close off at cul-de-sac	151.1730472,-33.9029687,0
King Street	Replace existing Trucks Prohibited signs with Truck Load Limit GVM signs with arrow below sign. Install 2 signs facing N and S	151.1780253,-33.9000723,0
King Street	Replace trucks prohibited symbolic sign and Truck Load Limit GVM signs with arrow facing N and S	151.1788166,-33.9018466,0
Lynch Avenue	Install 2x missing holding rails at existing refuge islands	151.1719662,-33.9022496,0
Margaret Street	Install CAMs	151.1759761,-33.9012055,0
Margaret Street	Install CAMs	151.176078,-33.9012545,0
Margaret Street	Install CAMs (L)	151.1743802,-33.9019001,0
Margaret Street	Install CAMs	151.1744151,-33.9017954,0
Metropolitan Road	Linemark faded 90deg parking bays	151.1720145,-33.8991907,0
Metropolitan Road	Relocate truck load limit GVM sign to SE side on blister island.	151.1719957,-33.8994579,0
Metropolitan Road	Remark faded angle parking bays	151.1721674,-33.8996538,0
Pemell Street	Remark missing TB line across Pemell Street at Reiby Street	151.1753941,-33.8997517,0
Rawson Street	Remove redundant old light traffic thoroughfare sign near Reiby Street on S side	151.1758474,-33.9005042,0
Reiby Street	Install CAMs (R)	151.1759439,-33.9010853,0
Simmons Street	Replace NP (L) with NS(L) on W side 10m N of Enmore Lane	151.1736318,-33.8990972,0
Sloane Street	Remark faded TB line across Sloane Street	151.1756529,-33.9004731,0
Station Street	Install faded piano keys on speed hump	151.1771134,-33.900099,0
Station Street	Install faded TB line across Station Street at stop sign	151.1770959,-33.900079,0
Station Street	Replace faded Children symbolic sign on ELP on E side. Sign to face north.	151.1775009,-33.9008382,0
Station Street	Install missing Children symbolic warning sign on ELP on W side. Sign to face south.	151.1777504,-33.9015116,0
Walenore Avenue	Remark faded BB line and chevron at existing refuge islands	151.1781017,-33.9033783,0
Walenore Avenue	Install missing give way sign	151.1780669,-33.9033638,0
Walenore Avenue	Remark faded TB lines at throat of Walenore Avenue	151.1780789,-33.9033682,0

Appendix C

Newtown-Enmore Parking Study 2010 (ARUP) Proposed Parking

Newtown-Enmore Parking Review 2013 (Inner West Council) Proposed Parking

DRAFT



Legend

- Study Area
- Railway Station
- + Railway
- Precincts
- Parking Controls**
- 1/4P
- 1/2P
- 1P
- 2P
- 3P
- 4P
- Unrestricted*
- Permit (1P)
- Permit (2P)
- Bus Zone
- Disabled
- Clearway
- Mail Zone
- Loading Zone
- No Parking
- No Stopping

*Note: A number of laneways have 'No Parking' on Monday (5:00am-10:00am) for garbage collection.

F2	2014-01-17	JRT	EKC	AMH
Issue	Date	By	Chkd	Appd



ARUP

Level 10, 201 Kent Street
Sydney NSW 2000
Tel +61 2 9320 9320 Fax +61 2 9320 9321
www.arup.com

Client

Marickville Council

Job Title

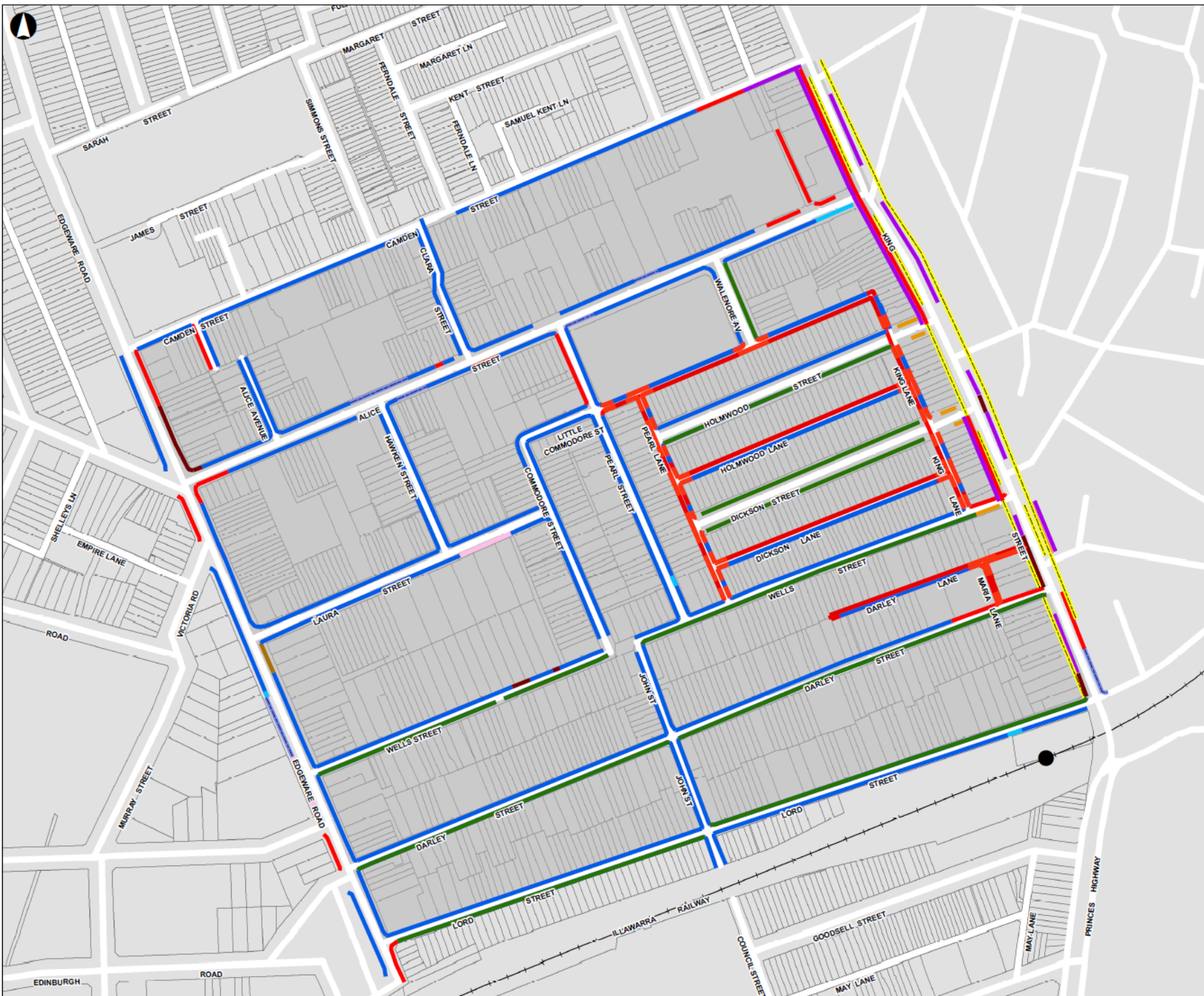
Newtown Enmore Parking Study

Newtown-Enmore (Area 1) Proposed Operations

Scale at A3
1:4,000

Job No	Drawing Status
227657-00	For Issue

Drawing No	Issue
Figure 96	F2



Legend

- Study Area
- Railway Station
- Railway
- Parking Controls**
- P 5 min
- 1/4P
- 1P
- 2P
- 3P
- 4P
- Unrestricted*
- Permit (1P)
- Permit (2P)
- Bus Zone
- Disabled
- Clearway
- Mail Zone
- Loading Zone
- No Parking
- No Stopping

*Note: A number of laneways have 'No Parking' on Monday (5:00am-10:00am) for garbage collection.

F2	2014-01-17	JRT	EKG	AMH
----	------------	-----	-----	-----

Issue	Date	By	Chkd	Appd
-------	------	----	------	------



ARUP

Level 10, 201 Kent Street
Sydney NSW 2000
Tel +61 2 9320 9320 Fax +61 2 9320 9321
www.arup.com

Client

Marickville Council

Job Title

Newtown Enmore Parking Study

St Peters North (Area 3) Proposed Operations

Scale at A3

1:3,000

Job No

227657-00

Drawing Status

For Issue

Drawing No

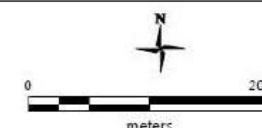
Figure 98

Issue

F2



Proposed Parking Restrictions. Newtown-Enmore Precinct. Area 1



Scale 1:4,000
Projection: Map Grid of Australia
Datum: GDA 94

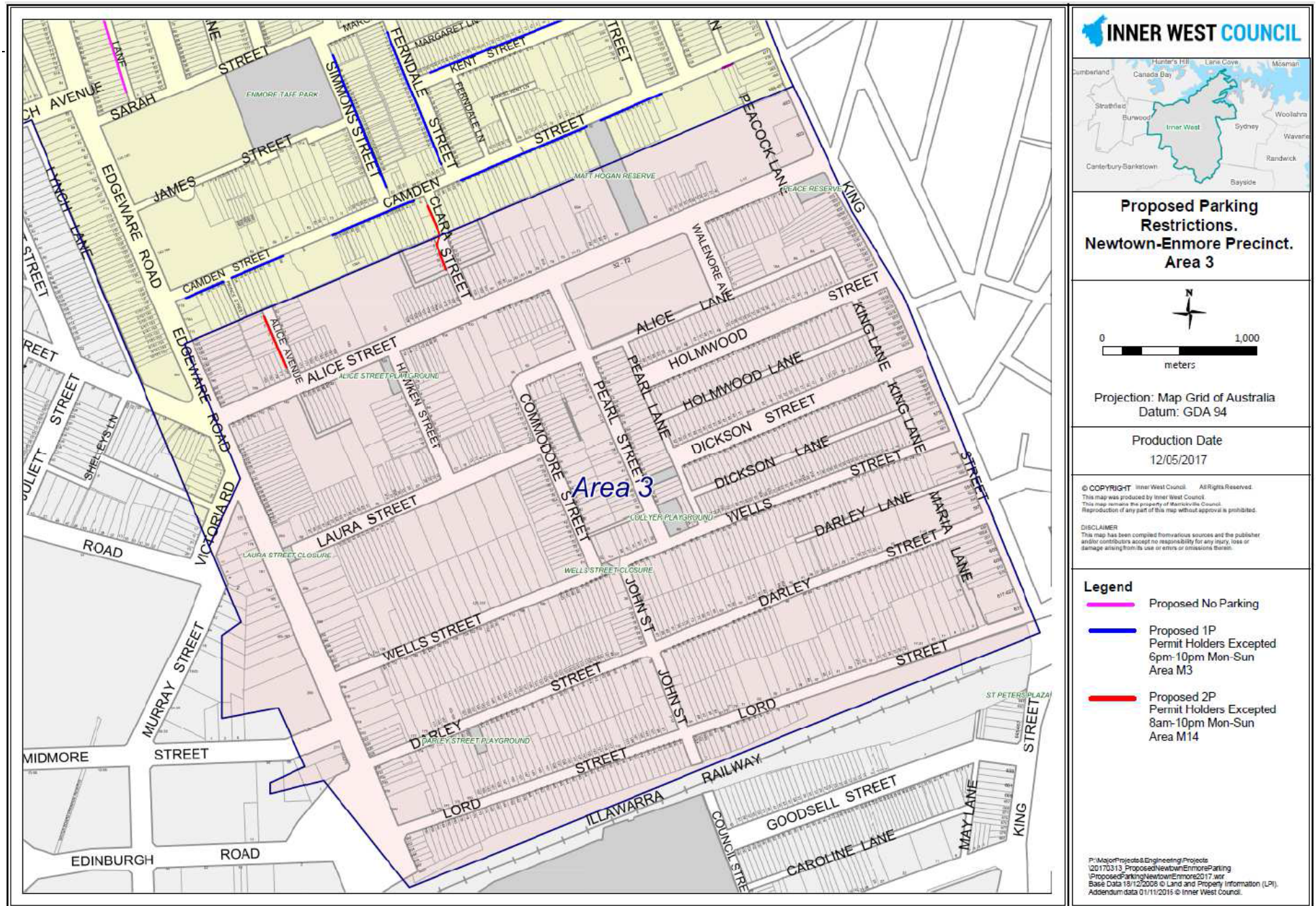
Production Date
12/05/2017

© COPYRIGHT Inner West Council. All Rights Reserved.
This map was produced by Inner West Council.
This map remains the property of Marrickville Council.
Reproduction of any part of this map without approval is prohibited.
DISCLAIMER
This map has been compiled from various sources and the publisher
accepts no responsibility for any loss, injury, loss or
damage arising from its use or errors or omissions therein.

- Legend**
- Proposed No Parking
 - Proposed Statutory 10m No Stopping
 - Proposed Statutory 10m No Stopping 3:30pm-5:30pm Mon-Fri
 - Proposed 1P Permit Holders Excepted 6pm-10pm Area M3
 - Proposed 2P Permit Holders Excepted 8am-10pm Area M14
 - Proposed 2P Permit Holders Excepted 8am-10pm Area M3
 - Proposed Motorcycle Parking

P:\MajorProjects\EngineeringProjects
120170513_ProposedNewtownEnmoreParking
ProposedParkingNewtownEnmore2017.vor
Base Data 19/12/2008 © Land and Property Information (LPI).
Addendum data 01/11/2015 © Inner West Council.

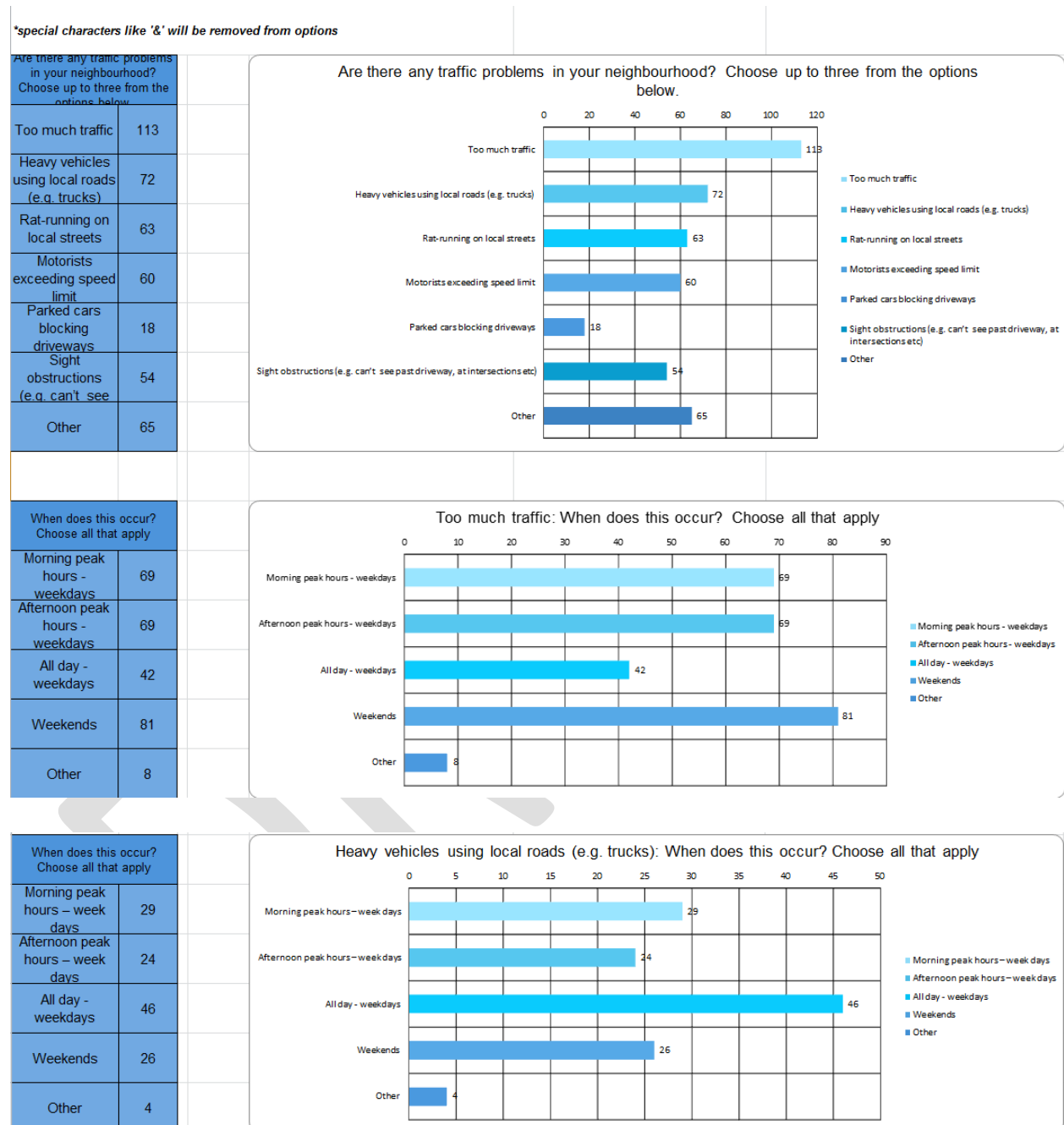




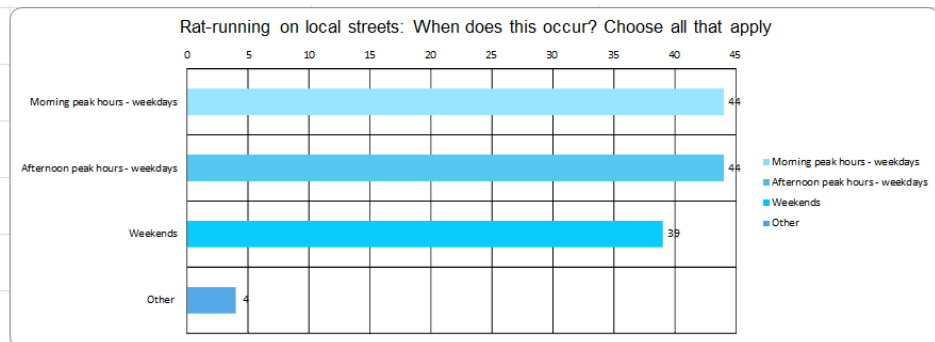
Appendix D

Initial Community Consultation Result Summary

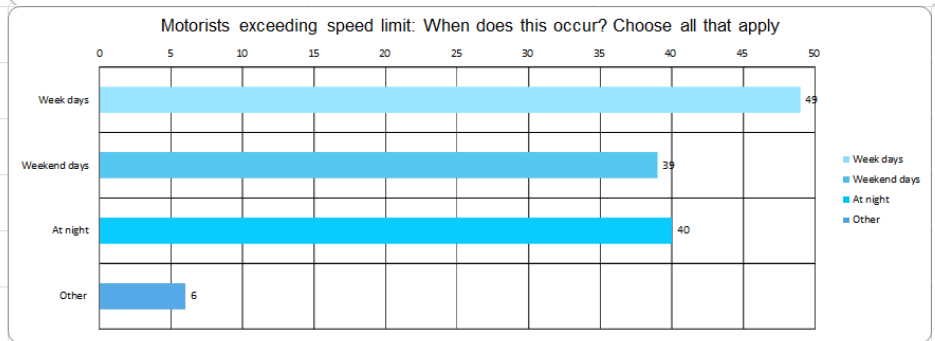
Undertaken May 2018



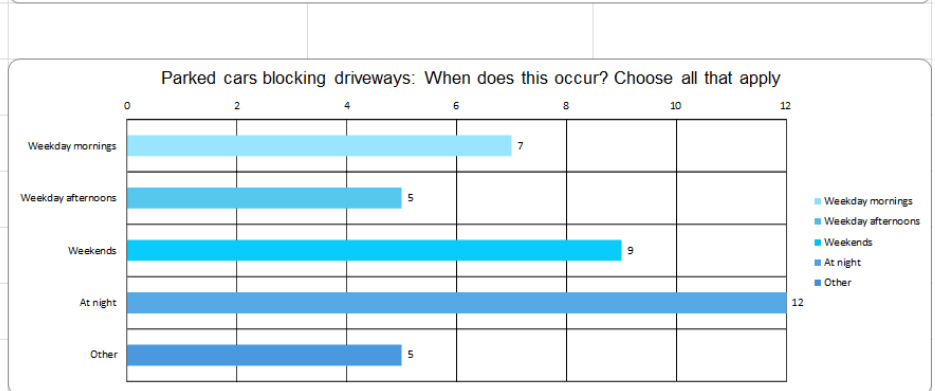
When does this occur? Choose all that apply	
Morning peak hours - weekdays	44
Afternoon peak hours - weekdays	44
Weekends	39
Other	4



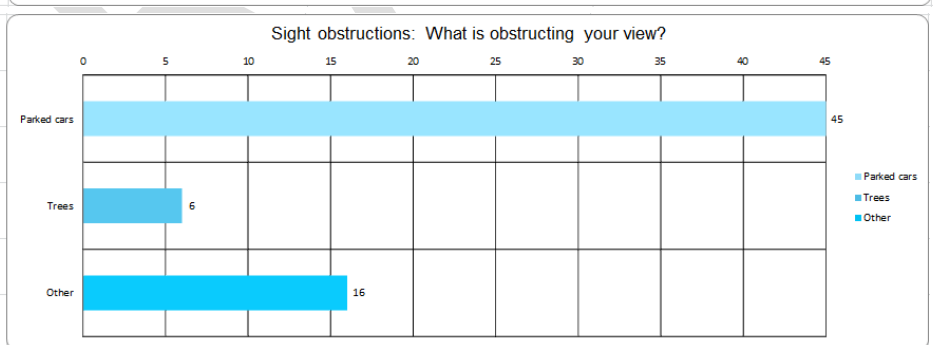
When does this occur? Choose all that apply	
Week days	49
Weekend days	39
At night	40
Other	6



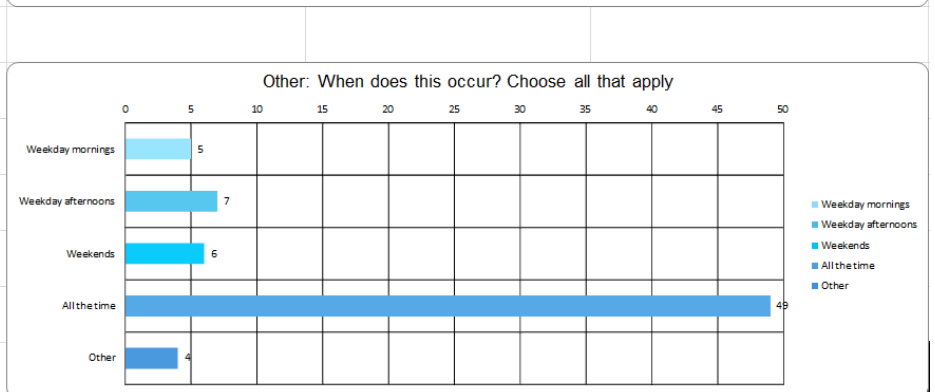
When does this occur? Choose all that apply	
Weekday mornings	7
Weekday afternoons	5
Weekends	9
At night	12
Other	5



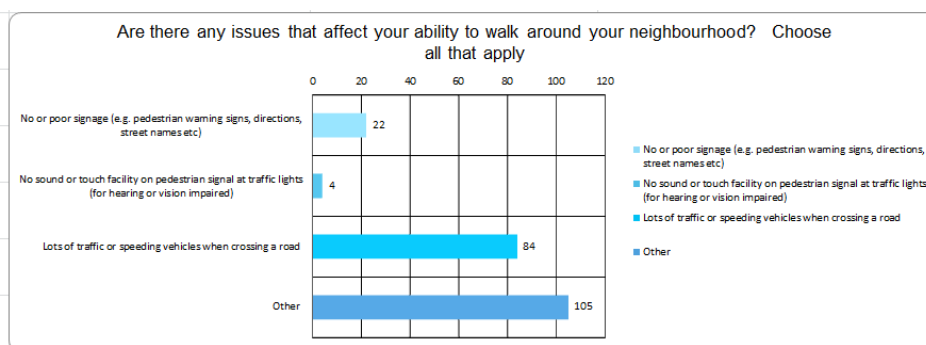
What is obstructing your view?	
Parked cars	45
Trees	6
Other	16



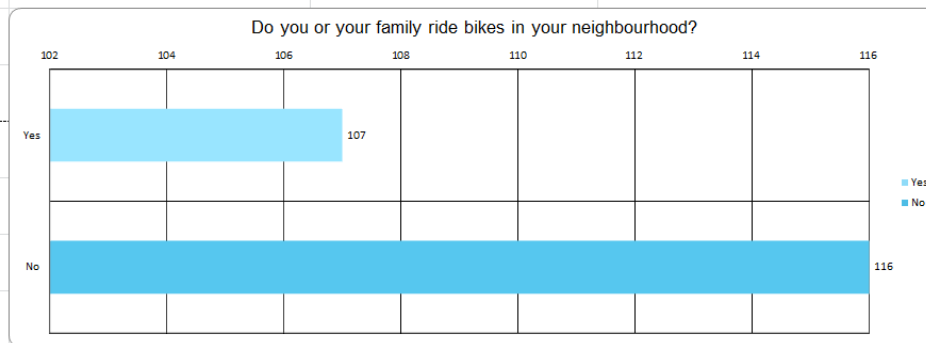
When does this occur? Choose all that apply	
Weekday mornings	5
Weekday afternoons	7
Weekends	6
All the time	49
Other	4



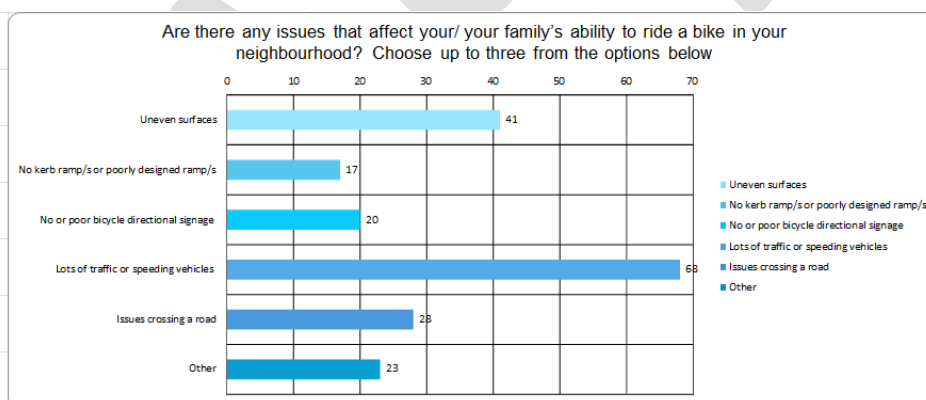
Are there any issues that affect your ability to walk around your neighbourhood? Choose all that apply	
No or poor signage (e.g. pedestrian)	22
No sound or touch facility on pedestrian signal	4
Lots of traffic or speeding vehicles when	84
Other	105



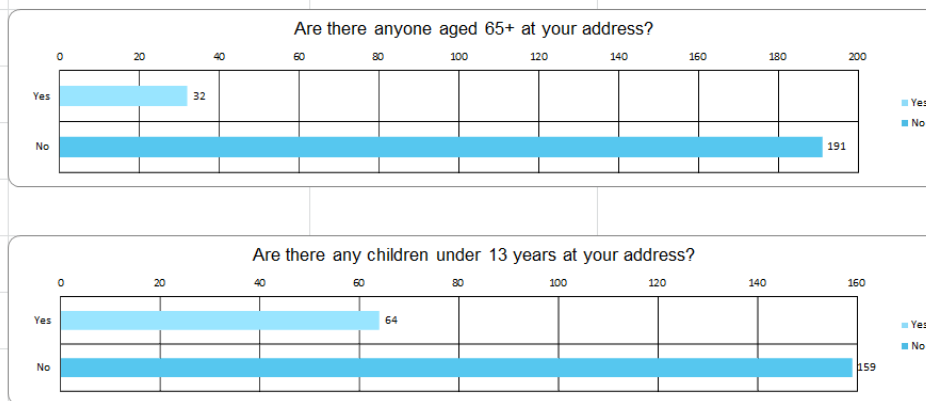
Do you or your family ride bikes in your neighbourhood?	
Yes	107
No	116



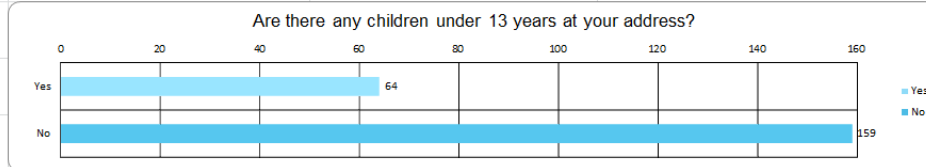
Are there any issues that affect your/ your family's ability to ride a bike in your neighbourhood? Choose up to three	
Uneven surfaces	41
No kerb ramp/s or poorly designed ramp/s	17
No or poor bicycle directional	20
Lots of traffic or speeding vehicles	68
Issues crossing a road	28
Other	23



Are there anyone aged 65+ at your address?	
Yes	32
No	191



Are there any children under 13 years at your address?	
Yes	64
No	159



Issue	where	count		
Too much traffic	King Street	24	Too much traffic	113
	Alice Street	23		
	Edgeware Road	15		
	Enmore Road	15		
Heavy Vehicles	Alice Street	11	Heavy vehicles using local roads (e.g. trucks)	72
	Edgeware Road	14		
	King Street	22		
	Camden Street	5		
Rat running	Station Street	13	Rat-running on local streets	63
	Camden Street	12		
	Metropolitan Road	11		
	Cross Lane	10		
	Clara Street	6		
	Alice Street	5		
	Holt Street	5		
	Simmons Street	5		
	Fulham Street	4		
	Bailey Street	3		
Exceeding speed limit	Alice Street	14	Motorists exceeding speed limit	60
	King Street	13		
	Edgeware Road	11		
	Enmore Road	9		
	Station Street	8		
	Camden Street	5		
	Simmons Street	5		
	Marian Street	4		
	Reiby Street	3		
	Clara Street	3		
Parked Cars	Simmons Street	2	Parked cars blocking driveways	18
	Alice Street	3		
Sight obstruction	Clara Street	11	Sight obstructions (e.g. can't see past driveway, at intersections etc)	54
	Camden Street	10		
	Simmons Street	7		
	College Street	5		
	Reiby Street	4		
	Ferndale Street	2		
Other	Enmore theatre related	9	Other	65
	pedestrian related	9		
	road too narrow	7		
	truck related	5		
	TAFE related	4		
	cyclist related	4		

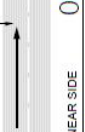



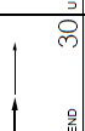




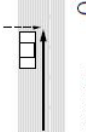





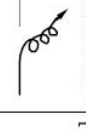


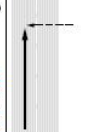
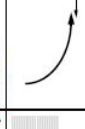
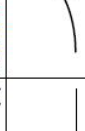


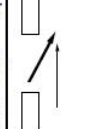


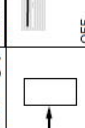
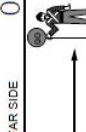



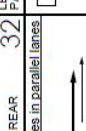
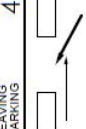








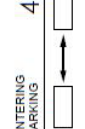






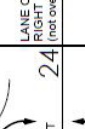




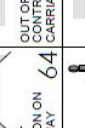



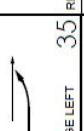
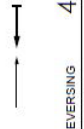





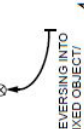








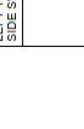

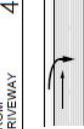


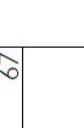

Issue	Location	Count	Issue	Location	Count
Too much traffic			Exceeding speed limit		
	King Street	26		Alice Street	14
	Alice Street	24		King Street	13
	Edgeware Road	15		Edgeware Road	11
	Enmore Road	16		Enmore Road	9
Heavy vehicles				Station Street	8
	Alice Street	11		Camden Street	5
	Edgeware Road	14		Simmons Street	5
	King Street	23		Marian Street	4
	Camden Street	5		Reiby Street	3
Rat running				Clara Street	3
	Station Street	16	Sight obstruction		
	Camden Street	12		Clara Street	11
	Metropolitan Road	11		Camden Street	10
	Cross Lane	10		Simmons Street	7
	Clara Street	6		College Street	5
	Alice Street	5		Reiby Street	4
	Holt Street	7		Ferndale Street	2
	Simmons Street	5	Other		
	Fulham Street	4		Enmore theatre related	9
	Bailey Street	3		Pedestrian related	9
Parked cars				Road too narrow	7
	Simmons Street	2		Truck related	5
	Alice Street	3		TAFE related	4
				Cyclist related	4
Pedestrians			Cycling		
What would need to change for more walking?			What would need to change for more Cycling?		
Better public lighting at night		26	Dedicated bike lanes		38
Safer crossing facilities		20	Nothing, opposed to cycling and dangerous		18
Reduce speed limit		17	Reduce speed limit		12
Nothing		15	Less traffic		11
Wider footpaths		13	Even surfaces		8
Stricter regulation of cyclists in footpaths		12			
Do something about the bins in footpath		8			
Less cars, trucks & traffic		6			
Cut back tree branches in footpath		6			
Obstruction on footpaths		5			
Stricter regulation of outdoor dining areas		4			

Appendix E

Crash Road User Movement (RUM) Codes from RMS Traffic Accident Database System Data Manual

ROAD USER MOVEMENT (R.U.M.) CODE

This is recorded for the first impact according to the table below
Note: The 'key' vehicle is represented by the dark arrow: →
and is the first vehicle listed for each accident in the accident description list (ADL).

PEDESTRIAN (ON FOOT OR IN TOY/PRAV)	VEHICLES FROM ADJACENT DIRECTIONS (INTERSECTIONS ONLY)	VEHICLES FROM OPPOSING DIRECTIONS	VEHICLES FROM SAME DIRECTION	OVERTAKING	ON PATH	OFF PATH, ON STRAIGHT	OFF PATH, ON CURVE OR TURNING	
 00 NEAR SIDE	 10 CROSS TRAFFIC	 20 HEAD ON (not overtaking)	 30 REAR END	 40 U TURN	 60 PARKED	 70 OFF CARRIAGEWAY TO LEFT	 80 OFF CARRIAGEWAY TO LEFT ON RIGHT BEND	 90 FELL IN/FROM VEHICLE
 01 EMERGING	 11 RIGHT FAR	 21 RIGHT THRU	 31 LEFT REAR	 41 U TURN INTO FIXED OBJECT/ PKD VEHICLE	 61 DOUBLE PARKED	 71 LEFT OFF CARRIAGEWAY INTO OBJECT/ PKD VEH	 81 OFF CARRIAGEWAY, LEFT ON R.H. BEND INTO OBJECT/ PKD VEH	 91 LOAD OR MISSILE STRUCK VEHICLE
 02 FAR SIDE	 12 LEFT FAR	 22 LEFT THRU	 32 RIGHT REAR	 42 LEAVING PARKING	 62 ACCIDENT OR BROKEN DOWN	 72 OFF CARRIAGEWAY TO RIGHT	 82 OFF CARRIAGEWAY TO RIGHT ON RIGHT BEND	 92 STRUCK TRAIN / AEROPLANE
 03 PLAYING, WORKING, STANDING ON CARRIAGEWAY	 13 RIGHT NEAR	 23 RIGHT/LEFT	 33 LANE SIDE SWIPE	 43 ENTERING PARKING	 63 VEHICLE DOOR	 73 RIGHT OFF CARRIAGEWAY INTO OBJECT/ PKD VEH	 83 OFF CARRIAGEWAY, RIGHT ON R.H. BEND INTO OBJECT/ PKD VEH	 93 PARKED VEH RUN AWAY INTO OBJECT/ PKD VEH
 04 WALKING WITH TRAFFIC	 14 TWO R TURNING	 24 RIGHT/RIGHT	 34 LANE CHANGE RIGHT (not overtaking)	 44 PARKING VEHICLES ONLY	 54 CUTTING IN	 74 OUT OF CONTROL ON CARRIAGEWAY	 84 OFF CARRIAGEWAY TO RIGHT ON LEFT BEND	 94 PARKED VEH RUN AWAY INTO VEHICLE
 05 FACING TRAFFIC	 15 RIGHT/LEFT FAR	 25 LEFT/LEFT	 35 LANE CHANGE LEFT	 45 REVERSING	 55 PULLING OUT REAR END	 75 OFF END OF ROAD / T INTERSECTION	 85 OFF CARRIAGEWAY TO RIGHT ON L.H. BEND INTO OBJECT/ PKD VEH	 95 STRUCK WHILE BOARDING OR ALIGHTING VEHICLE
 06 ON FOOTPATH/ MEDIAN	 16 LEFT NEAR		 36 RIGHT TURN SIDE SWIPE	 46 REVERSING INTO FIXED OBJECT/ PKD VEHICLE	 66 STRUCK OBJECT ON CARRIAGEWAY		 86 OFF CARRIAGEWAY TO LEFT ON LEFT BEND	
 07 DRIVEWAY	 17 LEFT/RIGHT FAR		 37 LEFT TURN SIDE SWIPE	 47 EMERGING FROM DRIVEWAY	 67 ANIMAL (not ridden)		 87 OFF CARRIAGEWAY TO LEFT ON L.H. BEND INTO OBJECT/ PKD VEH	
	 18 TWO LEFT TURNING			 48 FROM FOOTPATH			 88 OUT OF CONTROL ON CARRIAGEWAY	 98 OTHER
 09 OTHER PEDESTRIAN	 19 OTHER ADJACENT	 29 OTHER OPPOSING	 39 OTHER SAME DIRECTION	 49 OTHER	 59 OTHER OVERTAKING	 69 OTHER ON PATH	 79 OTHER STRAIGHT	 89 OTHER CURVE
								 99 UNKNOWN

Appendix F

Crash Data Summary sourced from RMS Accident Database July 2012 to June 2017

DRAFT

[illegible]

Accident ID	Day of Week	WPT/MSD	Acc. Date	Public	Hwy	School	Hrs	Time of Day	Street	Dir	Cross Str	Cross Dir	Suburb	RMS	Route	Class	Geo. Loc.	Location	Road Align	Permanent	Hazardous	Temp	Street Light	Surf	Surface	CWeather	Natural	Other	Tr
20130627	1	Tuesday	2013-06-27	27:00:00	1	Highway	2118	20:00 - 21:00	Princes Hwy	W	On the spd	Good	S	Newtown	1	State high	Ashfield	1	1-Junction Straight	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20130929	1	Friday	2013-09-29	27:00:00	1	Highway	585	04:00 - 05:00	Enmore Rd	W	2 West	St	Hwy	Newtown	1	State high	Ashfield	1	2-1 Junction Curved	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20130323	7	Friday	2013-03-23	07:00:00	1	Highway	640	06:00 - 07:00	Edgeware Rd	N	10 South	St	Enmore	Enmore	1	Unclassified	Ashfield	1	2-1 Junction Straight	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20140109	1	Thursday	2014-01-09	09:00:00	1	Highway	915	08:00 - 09:00	Enmore Rd	N	On the spd	Starmore	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20130607	7	Tuesday	2013-06-07	07:00:00	1	Highway	1700	16:00 - 17:00	Enmore Rd	N	On the spd	Starmore	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20130425	3	Wednesday	2013-04-25	07:00:00	1	Highway	295	08:00 - 09:00	Princes Hwy	W	On the spd	Starmore	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20141115	5	Friday	2014-11-15	14:00:00	1	Highway	955	12:00 - 13:00	Princes Hwy	W	100 North	St	Newtown	Newtown	1	1 State high	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20140109	1	Thursday	2014-01-09	09:00:00	1	Highway	1200	14:00 - 15:00	Edgeware Rd	N	On the spd	Starmore	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170129	1	Sunday	2017-01-29	07:00:00	1	Highway	1200	14:00 - 15:00	Edgeware Rd	N	On the spd	Starmore	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170412	3	Wednesday	2017-04-12	07:00:00	1	Highway	1520	14:00 - 15:00	Edgeware Rd	N	On the spd	Metropolis	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170505	1	Friday	2017-05-05	07:00:00	1	Highway	1380	12:00 - 13:00	Princes Hwy	W	On the spd	Number 4	St	Newtown	1	1 State high	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170521	3	Wednesday	2017-05-21	07:00:00	1	Highway	1840	18:00 - 19:00	Princes Hwy	W	On the spd	Number 4	St	Newtown	1	1 State high	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170521	3	Wednesday	2017-05-21	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170407	3	Friday	2017-04-07	07:00:00	1	Highway	1225	12:00 - 13:00	Edgeware Rd	N	20 North	St	Enmore	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	Unknown	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170412	3	Wednesday	2017-04-12	07:00:00	1	Highway	45	00:01 - 01:00	Enmore Rd	N	On the spd	Number 2	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170618	7	Tuesday	2017-06-18	07:00:00	1	Highway	830	08:00 - 09:00	Princes Hwy	W	50 South	St	Newtown	Newtown	1	1 State high	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170618	7	Tuesday	2017-06-18	07:00:00	1	Highway	1850	18:00 - 19:00	Enmore Rd	N	On the spd	Metropolis	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1380	12:00 - 13:00	Princes Hwy	W	On the spd	Metropolis	Rd	Enmore	1	167 Other class	Ashfield	1	1-K-intersect	On	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown	1	167 Other class	Ashfield	1	1-K-intersect	Off	Sealed	Dry	On	Sealed	Dry	On	No traffic	Other	Tr
20170627	7	Tuesday	2017-06-27	07:00:00	1	Highway	1030	10:00 - 11:00	Enmore Rd	N	On the spd	Phillip	St	Newtown															

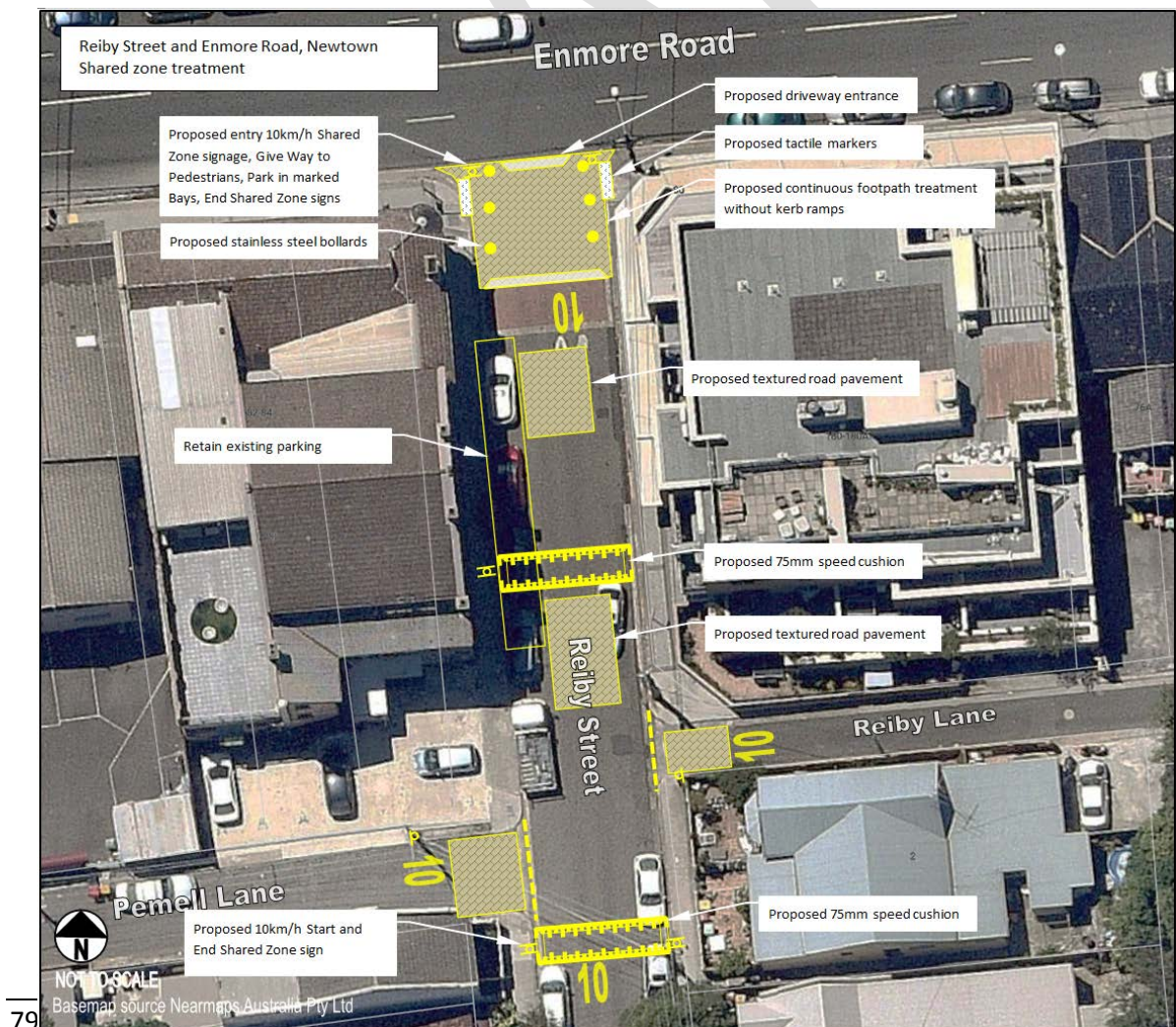
[illegible]

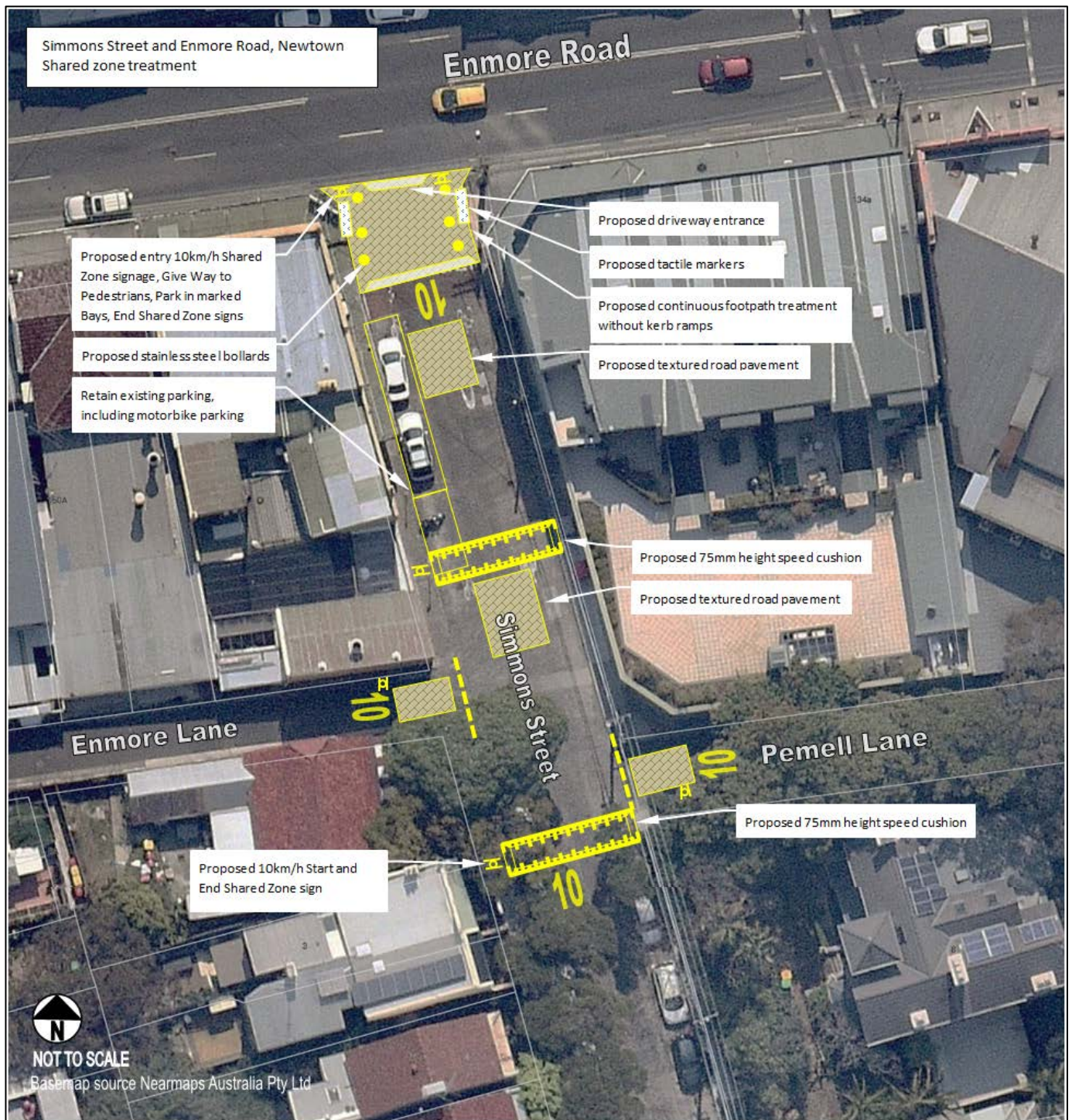
[illegible]

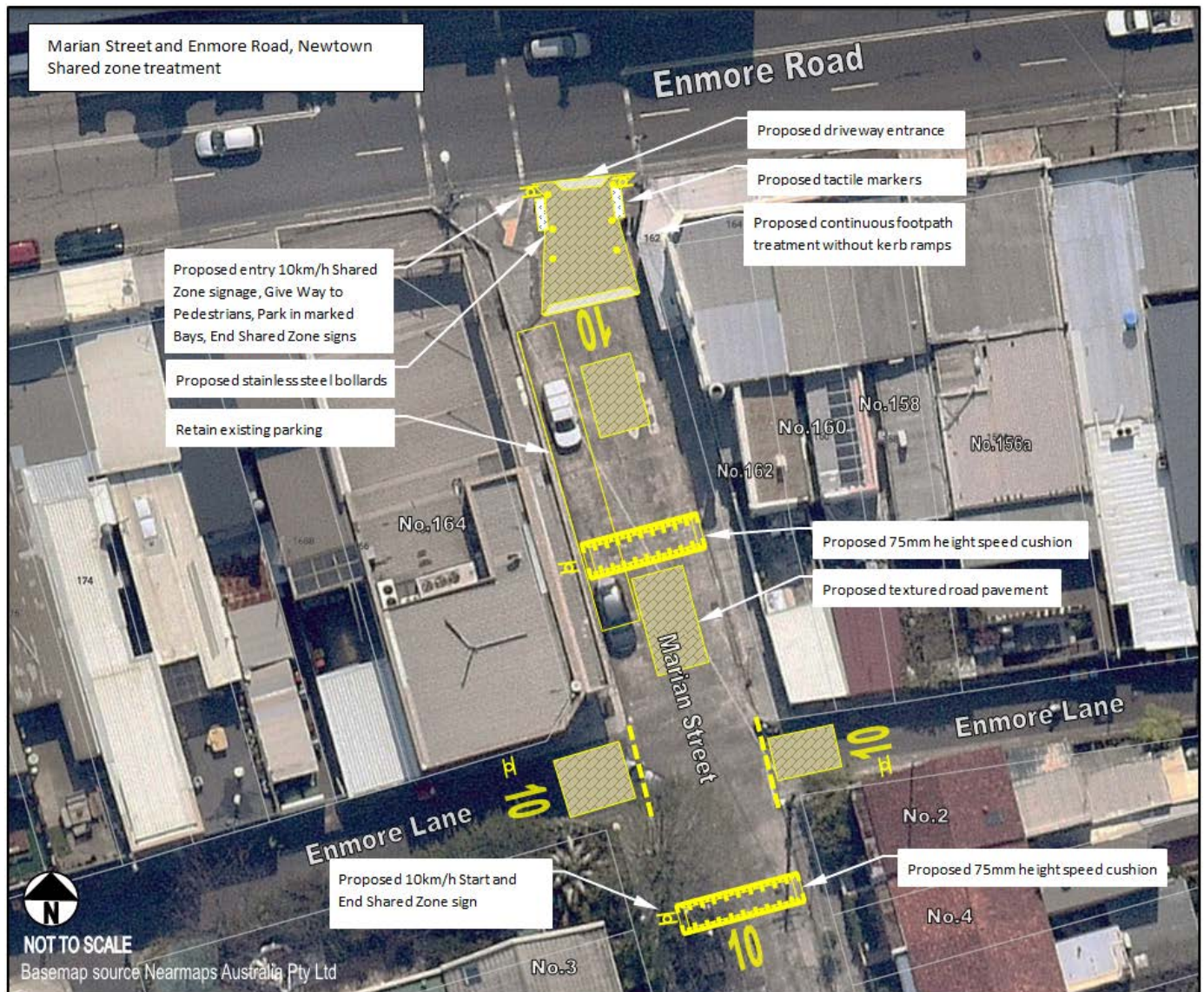
Appendix G

Proposed LATM Concept Designs



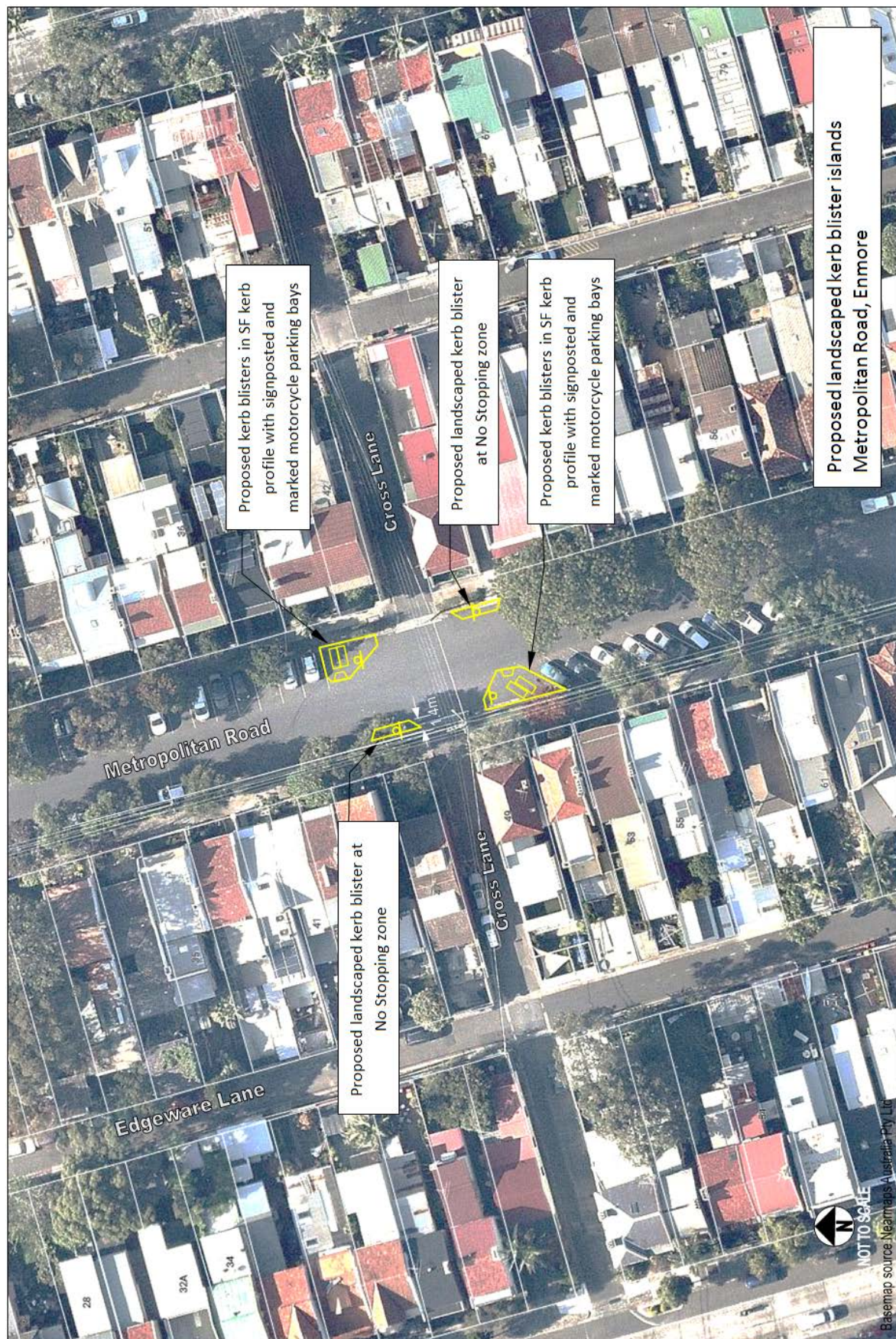








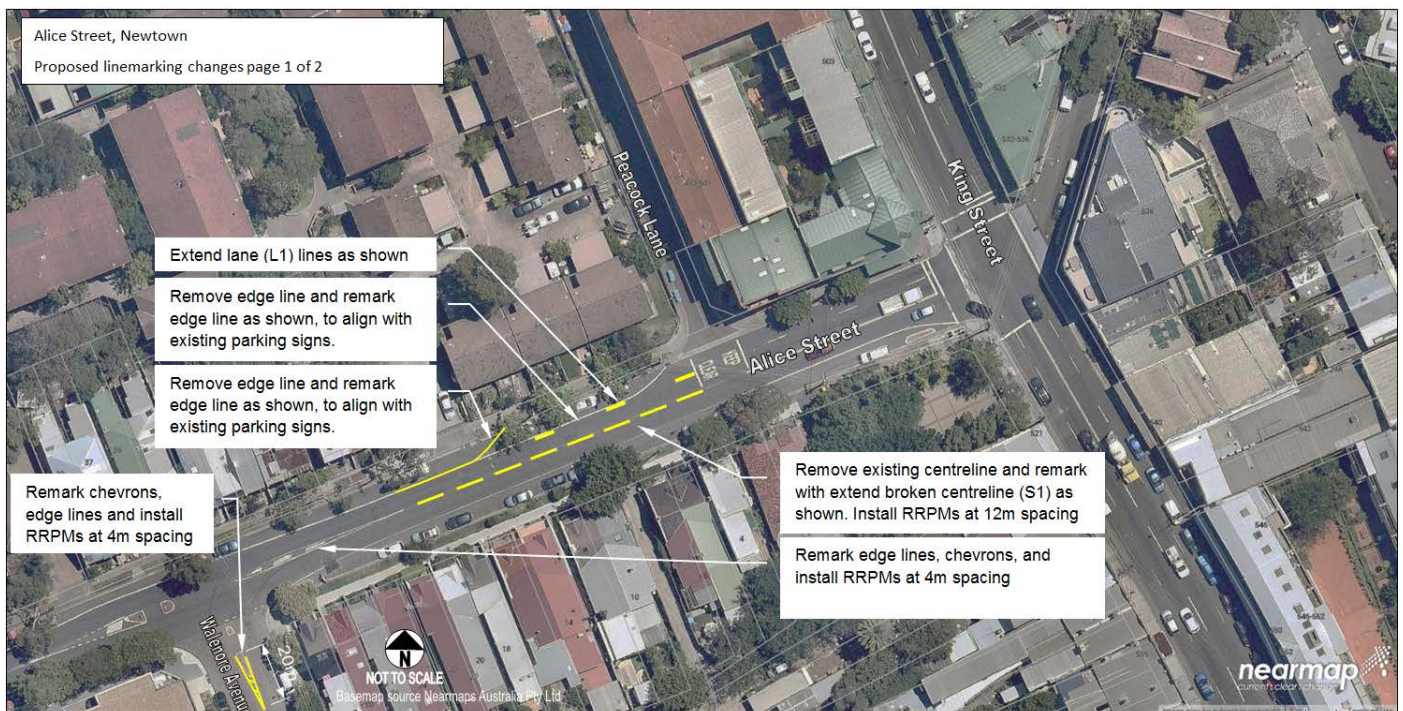














Appendix H

Public Exhibition Feedback Summary – (to be completed)

DRAFT

Appendix I

Impact of WestConnex Project on Edgeware Road

Inner West Council in 2017 engaged BECA to develop a Local Area Improvement Strategy (LAIS) in order to minimise impacts to the local community in the Inner West affected by stages 1, 2 & 3 of the WestConnex project. The community engagement undertaken at the study revealed that community concerns in Edgeware Road were most received for the St Peters precinct area. The LAIS is intended to guide the design and ultimately implementation of a series of traffic calming schemes to protect streets from WestConnex-related traffic.

According to the strategic traffic modelling undertaken by BECA as part of the WestConnex Local Area Improvement Strategy, Edgeware Road will experience an increase in average weekday traffic (AWT) as well as Bedwin Road and Campbell Street. Under the 2021 scenario (stage 1 and 2 of WestConnex projects completed) there will be projected increase in Bedwin Road and Edgeware Roads by about 10% whilst a completed stage 3 WestConnex scenario will see the AWT reduce by 12% partially reversing the increases in traffic expected from the first two stages of the project. Table 13 and 14 detail the change in volume in both roads through 2021 stage 1 to 3 scenarios of the WestConnex project.

The report also considered the results of consultation undertaken with the community during the study as well as the traffic modelling results and recommends five (5) treatment locations in Edgeware Road between Enmore Road and Alice Street. Whilst the report does not detail specific treatment in each location, it identifies a need to reduce vehicle speeds and treating intersections.

Section	2021 Base Traffic		2021 Stage 1 and 2		Change	
Bedwin Road – Between Edinburgh Road and Unwins Bridge Road	NB	SB	NB	SB	NB	SB
	Daily	17910 16800	22480 21530		26%	28%
Edgeware Road – Between Enmore Road and Lynch Avenue	NB	SB	NB	SB	NB	SB
	Daily	9830 10410	10640 11600		8%	11%

Table 13: Edgeware Road and Bedwin Road Stage 1 and 2 expected traffic volume changes (AWT)

Section	2031 Stage 1 and 2		2031 Stage 3		Change	
Bedwin Road – Between Edinburgh Road and Unwins Bridge Road	NB	SB	NB	SB	NB	SB
	Daily	24680 23780	21080 20730		-15%	-13%
Edgeware Road – Between Enmore Road and Lynch Avenue	NB	SB	NB	SB	NB	SB
	Daily	11290 12300	10050 10880		-11%	-12%

Table 14: Edgeware Road and Bedwin Road Stage 3 expected traffic volume changes (AWT)

These volumes in Edgeware Road are also similarly represented in the modelling undertaken by Roads and Maritime Services (RMS) for the WestConnex Stage 1 & 2 scenarios with King Street

Gateway works. The RMS modelling scenario 2021 WestConnex Stages 1 & 2 with King Street Gateway works show that Edgeware Road between Enmore Road and Lynch Avenue will carry 18,400 vehicles (AWT). Under an additional 2021 scenario with WestConnex Stages 1 & 2 and where the King Street Gateway works are not completed, Edgeware Road is estimated to carry 19,100 weekly daily vehicles, representing approximately 3.8% increase.

The treatments proposed under the Local Area Improvement Strategy are outlined in Figure 31 including an integrated traffic calming with pedestrian and cycling facilities, and some form of intersection modifications.

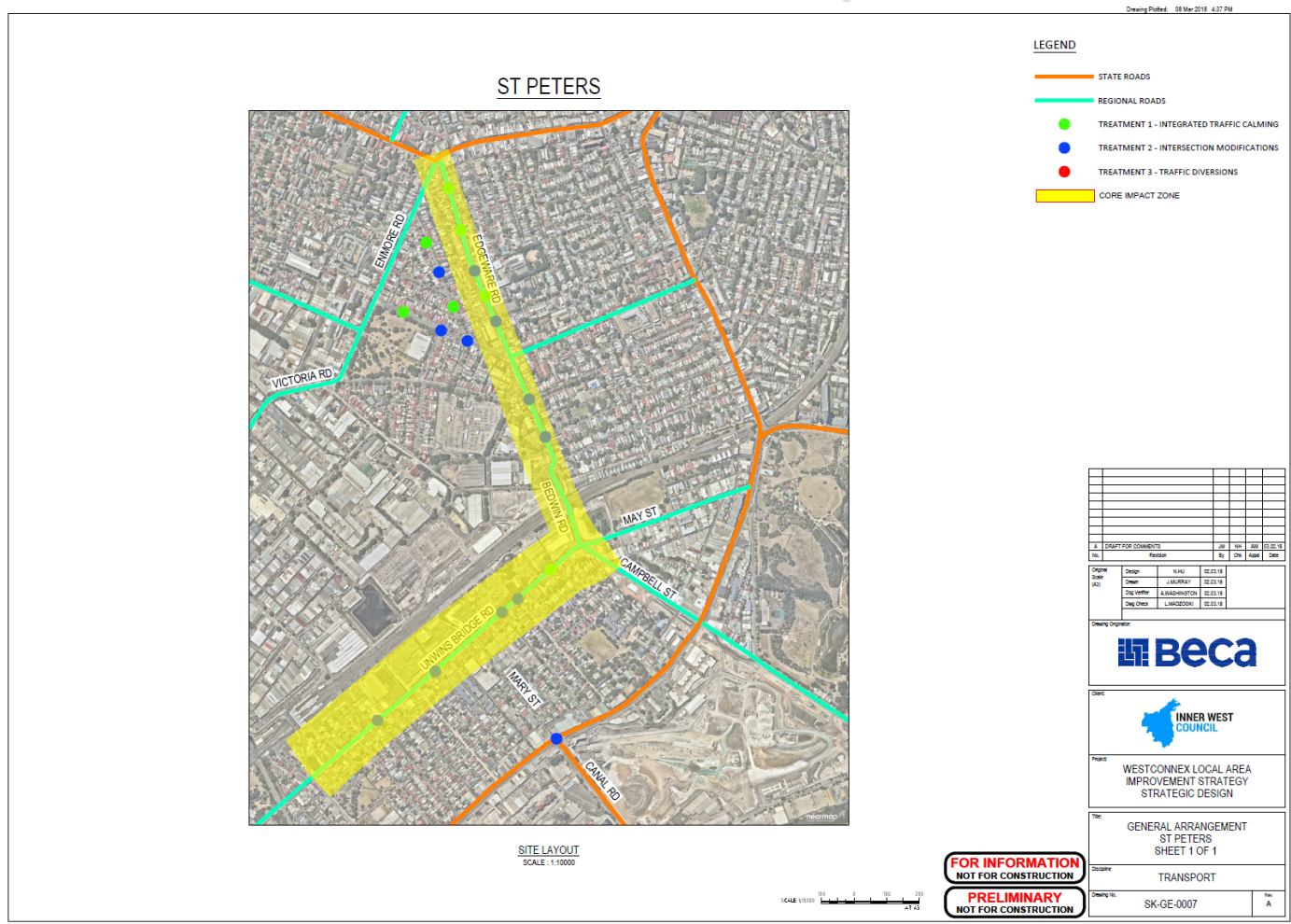


Figure 31: Local Area Improvement Strategy 2018 Concept Plan for Edgeware Road

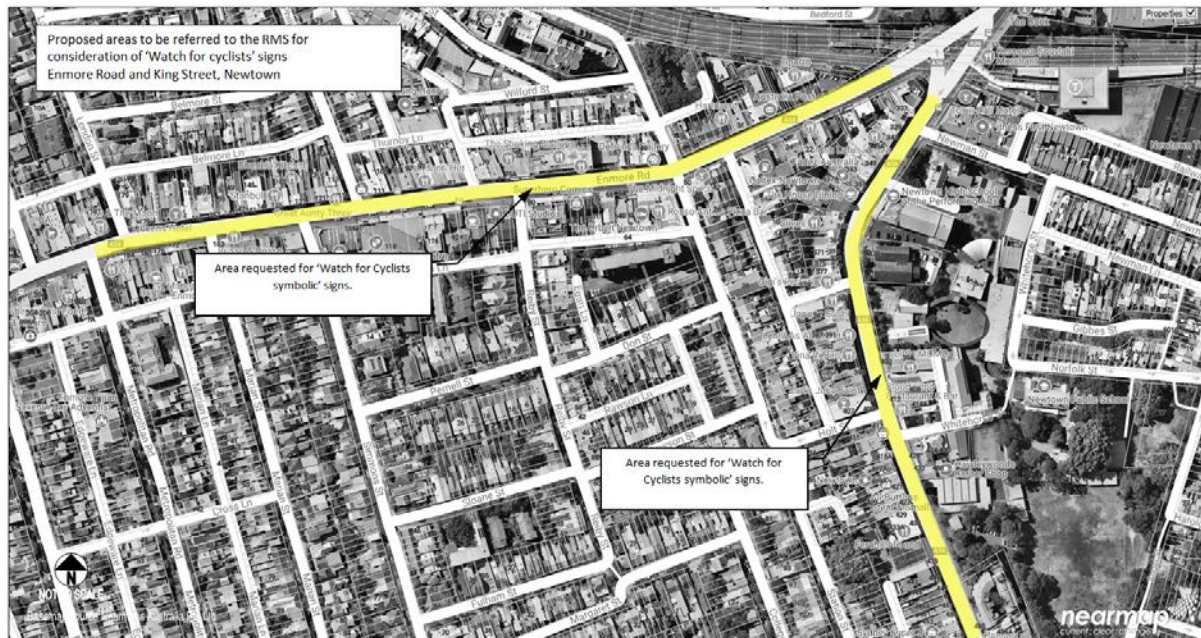
The Edgeware Road treatments described in Figure 31 have not been added to the current LATM scheme as these treatment proposals will required further investigation and community engagement before final draft schemes can be considered.

The Edgeware Road treatments are included in the total cost of LAIS works, estimated to \$29 million and it is intended that Council seeks funding from RMS for these works, arguing that RMS funding is justified as WestConnex has created the need for the works.

Appendix J

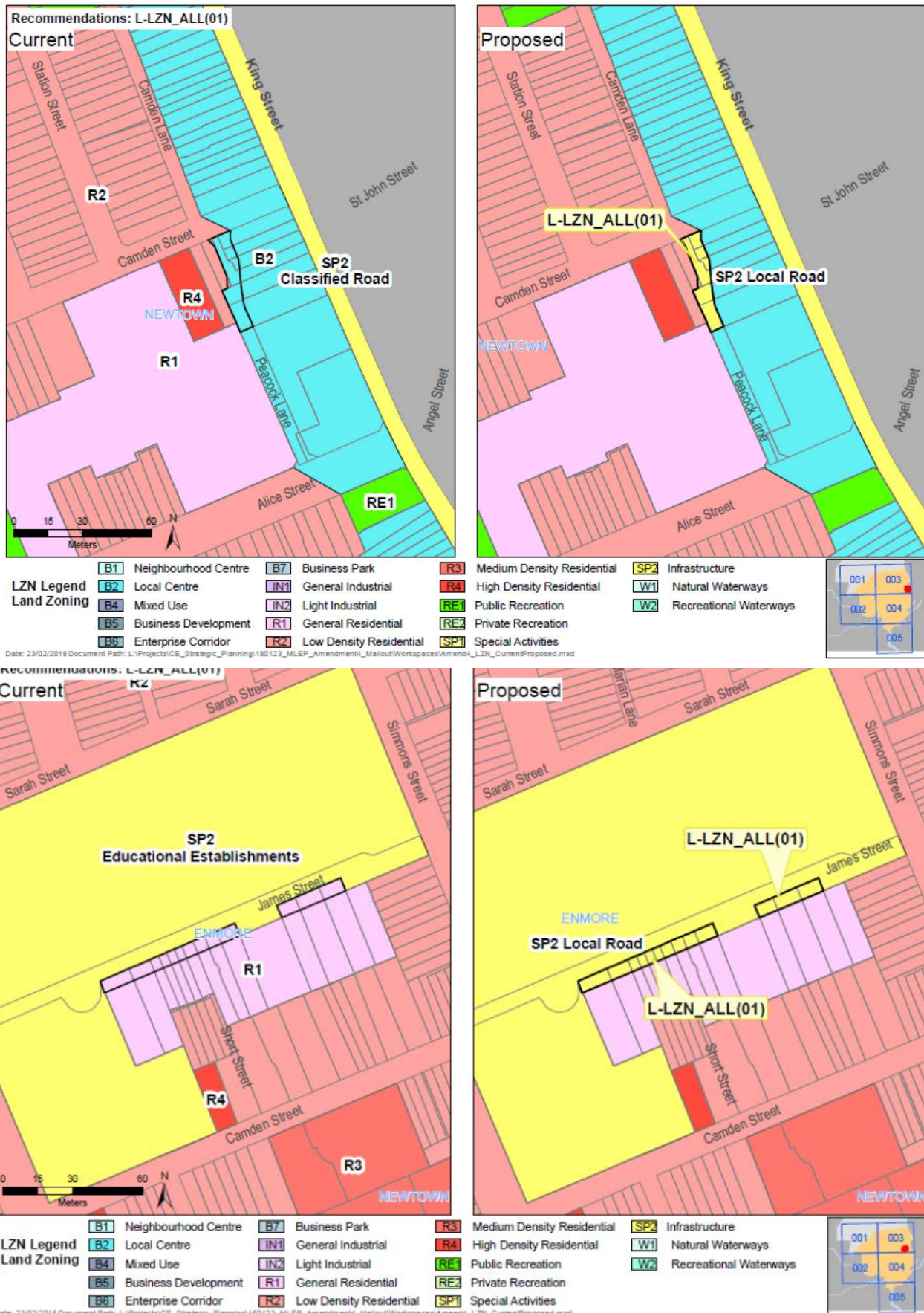
Matters to be referred to the RMS for consideration





Appendix K

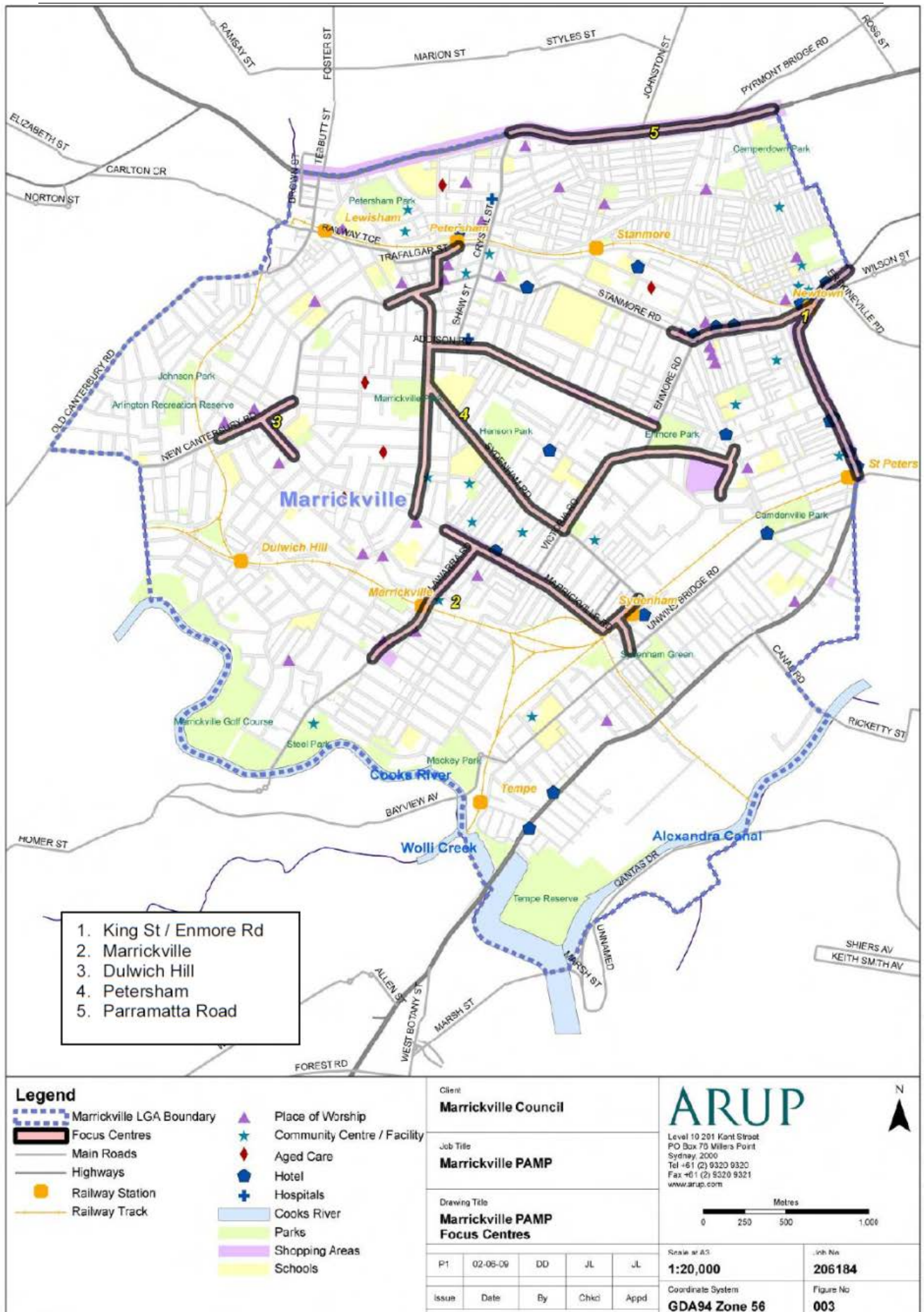
Marrickville Development Control Plan 2011 Amendment No.4



Appendix L

Locations of Missing Kerb Ramps & Marrickville PAMP focus areas
(source ARUP PAMP Report for Marrickville Council 2009)





Appendix M

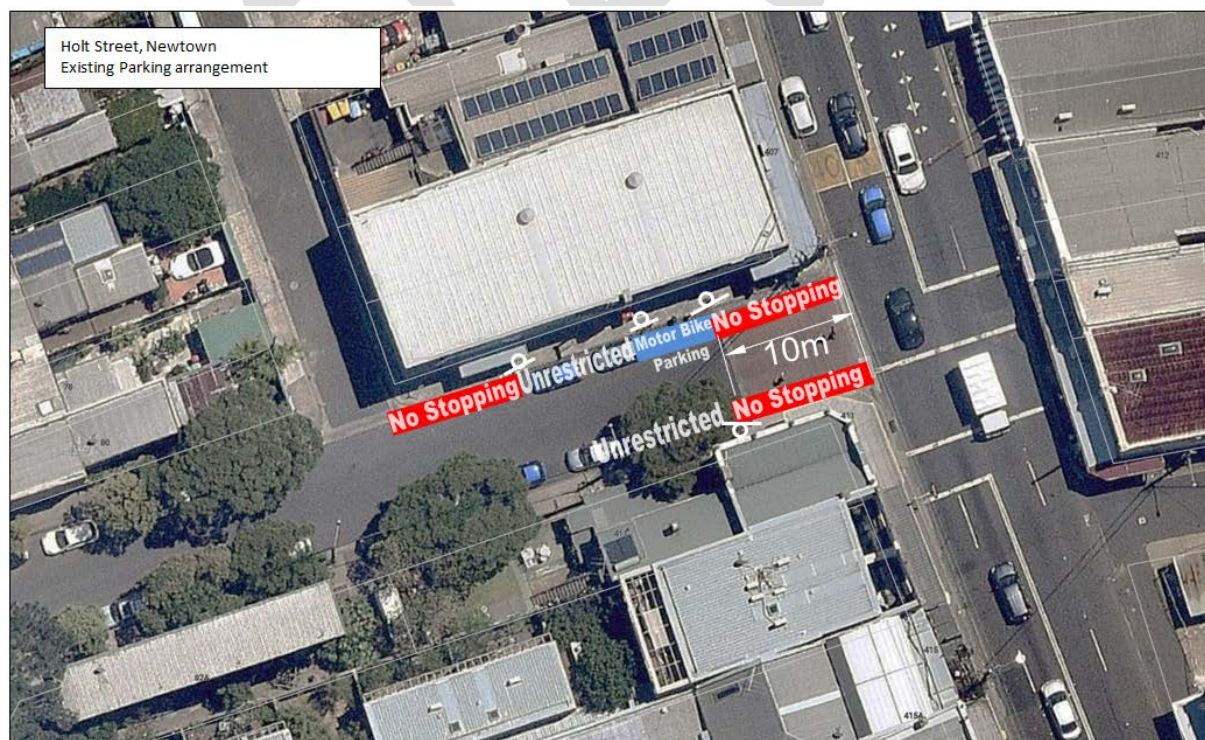
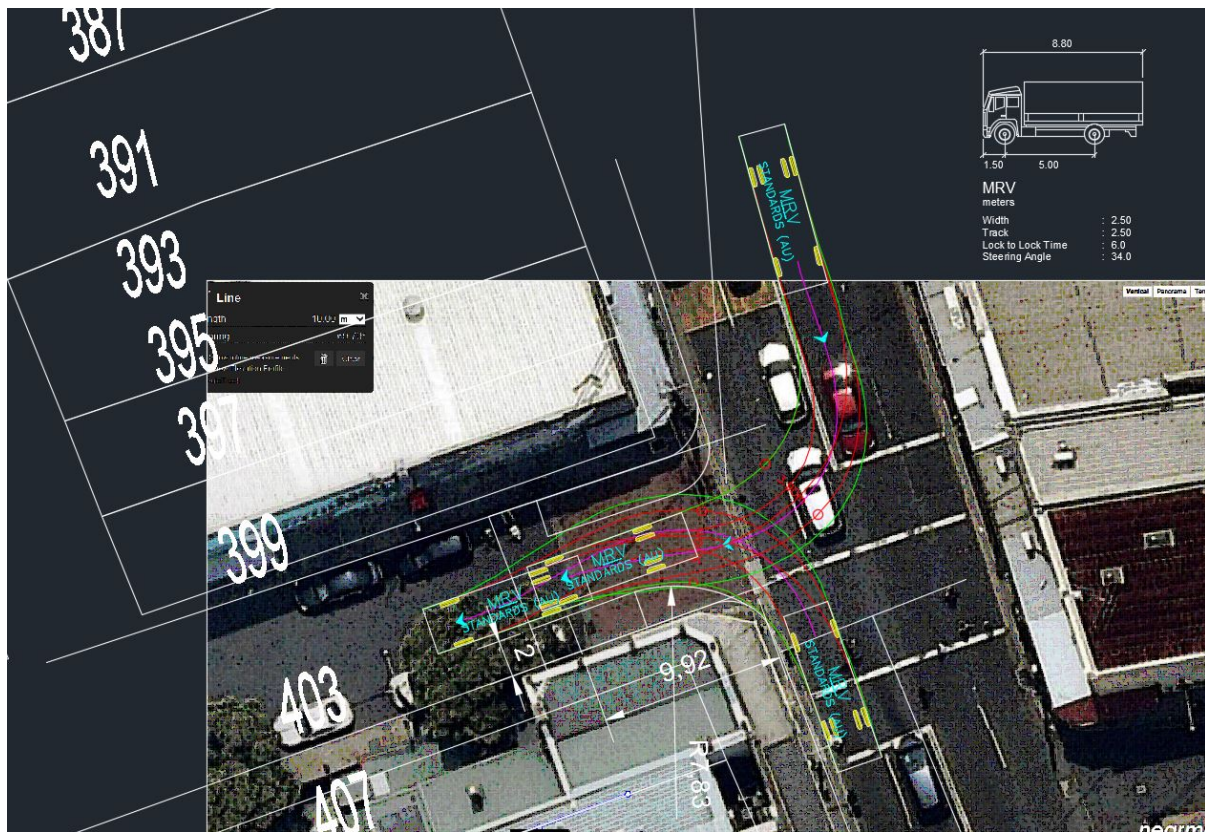
Holt Street Reduced No Stopping zone Risk Assessment

The RMS checklist attached in the 'TTD 2014/005: Statutory 10m No Stopping at unsignalised intersections review' was used in this risk analysis. The proposal is to reduce the existing 10m No Stopping zone on the south side of Holt Street west of King Street to 6m. This will provide an additional parking space.

Holt Street west of King Street is a local road of 8.5m width between kerbs. The road operates as a one way westbound and generally has unrestricted parking on both sides of the road, with a short section of motor bike parking on the north side. Parking restrictions for the first 10m west of King Street is currently No Stopping.

Both King Street and Holt Street have a speed limit of 50km/h.

Risk Assessment for Holt Street, Newtown			
Criteria	Yes	No	Comment
Detailed plan to scale, include key elements like: <ul style="list-style-type: none"> Kerb and gutter Linemarking Existing property line Footpath width Existing Kerbside Parking 			See swept path diagram and aerial below.
Crossing Sight Distance (CSD)		Not affected	CSD depends on crossing length, walking speed and 85th%ile speed. The proposal does not impact on those criteria.
Approach Sight Distance (ASD)		Not affected	
Safe Intersection sight Distance (SISD)		Not affected	
Minimum Gap Sight Distance (MGSD)		Not affected	
Turning paths		Not affected	Turning path assessment for an 8.8m truck has been provided below.
Public Transport		Not affected	Holt Street is not a bus route.
Emergency vehicle access		Not affected	Fire engines used in the Inner West LGA are 2.5m wide and 8m long. 8.8m medium rigid vehicle swept path diagram to be used to analyse.
Angle parking manoeuvres		Not affected	

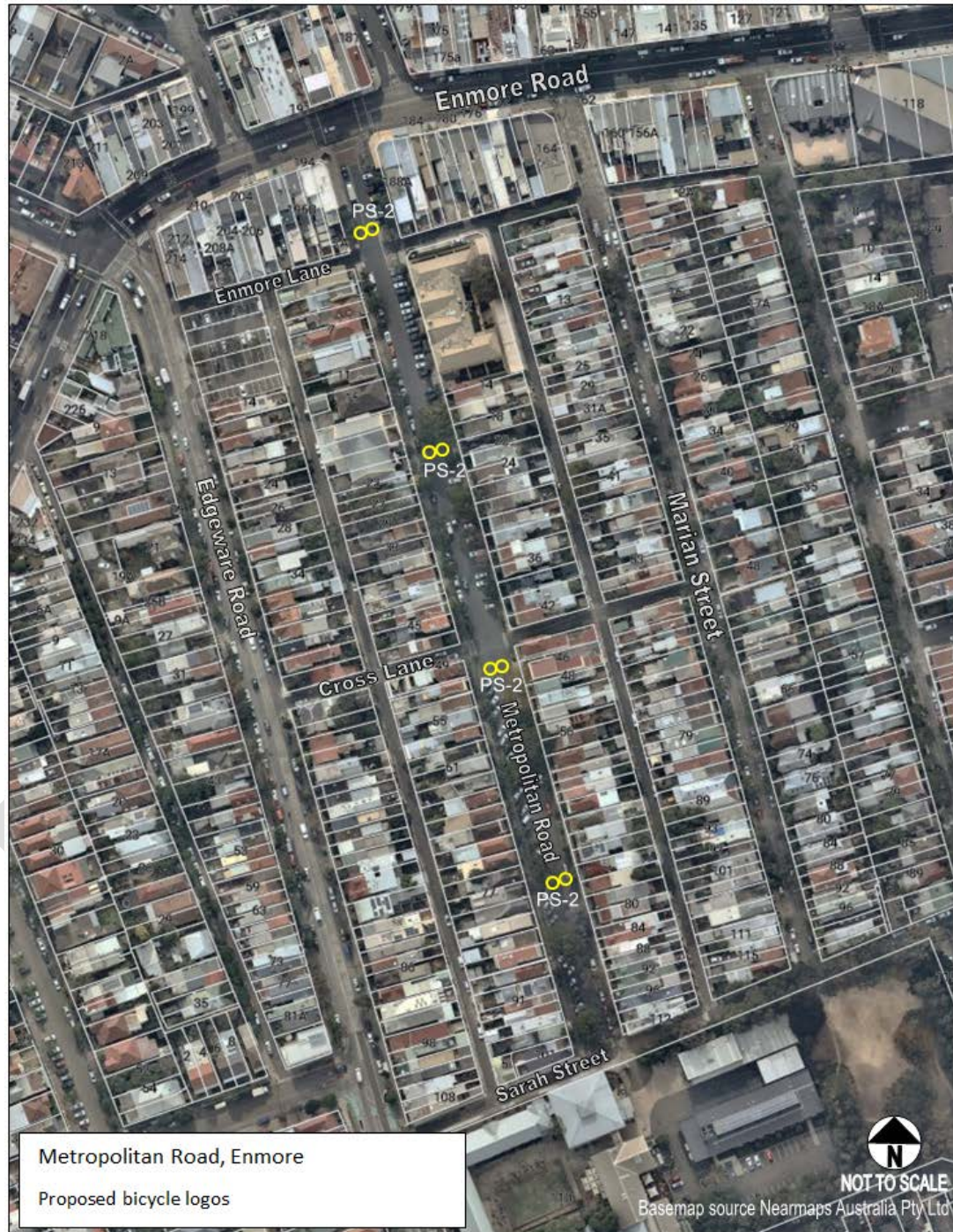


Appendix N

Proposed Bicycle Facilities







Appendix O

Streets nominated for 40km/h Local Traffic Area



Appendix P

Marrickville Public Domain Masterplan King Street & Enmore Road

King Street and Enmore Road

Principles & Initiatives Diagram

Reveal Character and Reinforce Identity



1. Maximise public domain space by focussing public domain improvements on side streets
 2. Enhance Newtown Square as a Community Heart
 3. Better orientate the centre near Newtown Square through wayfinding and landmarks
 4. Select a material and furniture palette that is high quality and durable but not visually dominant
 5. Celebrate the unique character of Heritage facades
- Heritage conservation area
Heritage items
Commercial Use
Residential

Green the street & Promote sustainability



- Embrace the contrast between the main and adjacent side streets by increasing green corner initiatives
- Existing Tree Canopy
1. Maintain the historic urban character of streetscape along main streets. Investigate opportunities for alternative greening techniques such as green walls without diluting the strong urban character of the streetscape.
 2. Increase tree planting on corners with side streets
 3. Consider planting of large nodal trees where space allows to enhance vistas and street character
 4. Investigate opportunities for WSUD on laneways such as permeable pavings.
 5. Make green links to nearby community parks

Improve getting around by foot and bike



1. Improve wayfinding within the centre specifically at Newtown Station to give better orientation between King Street and Enmore Road
2. Improve pedestrian connections from the active main street to nearby green spaces
3. Improve pedestrian flows along main road by removing obstructions and by applying continuity of treatments
4. Provide an unobstructed path of travel
5. Group street furniture and infrastructure in a furniture zone away from corners
6. Investigate opportunities to widen verges
7. Investigate opportunities to improve crossings at side streets
8. Investigate opportunities to relocate and re-configure bus stops that create a bottle neck effect on narrow footpaths (Liaise with Sydney Bus)
9. Improve pedestrian and cyclist connectivity at Newtown station and across King St and Enmore Rd intersection
10. Enhance amenity for cyclists on and off road
11. Consider potential secondary cyclist route through laneway connections parallel to the active main street

Enhance Amenty & Encourage Activation



1. Up-grade existing squares and plazas and investigate opportunities for new open space
2. Redesign Newtown Square to reflect its role as main civic space
3. Enhance amenity in Telstra Plaza through public domain improvements
4. Redesign Peace Reserve and encourage active edges, include elements such as play facilities, bicycle facilities and community gardens
5. Investigate opportunities to acquire Sydney Water site at Station St and convert to public green space
6. Test temporary proposals with community to ensure the success of interventions
7. General upgrade of public domain material palette. Use high quality finishes to reflect the area role as a centre
8. Design the public domain for various forms and intensities of activation
9. Continue CoS treatment along Marrickville side of King St and Enmore Rd
10. Consider whether the palette for Enmore Rd should be different
11. Continue Public Domain treatment around corners, into side streets and across side streets
12. Reduce visual clutter by:
 - Infill paved service covers, multi-purpose lightpoles, consider underground power / conduits

Structure Plan



Create respite on side streets



Revitalise existing public spaces



1. Newtown Square



2. Telstra Plaza



3. Peace Reserve

Declutter the active Spine



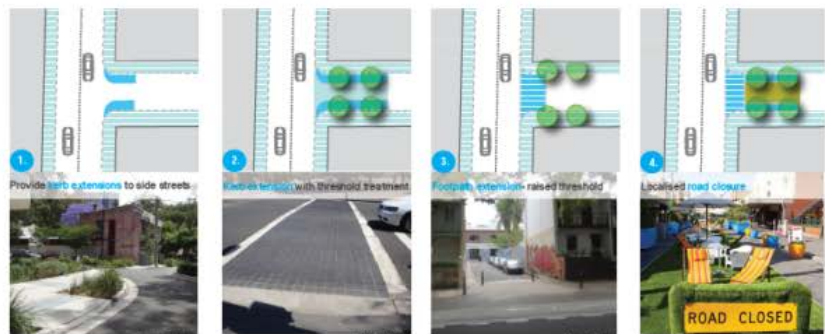
Ideas / Proposals

Create respite on side streets

Challenges



Side street interventions



Opportunities



Prioritise pedestrians
Raised pedestrian crossing
Slow down cars
Reduce width of crossing
Improve visibility

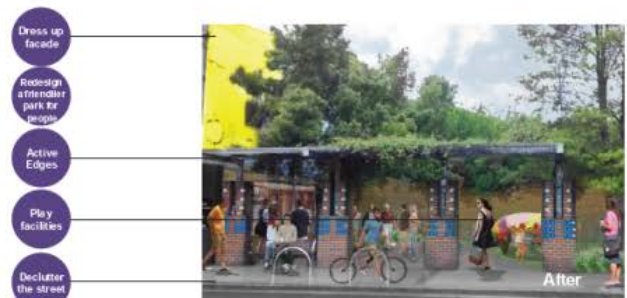
Lighting
Traffic Lights
Signage
Barriers
Hanging Baskets

Revitalise existing public spaces

1. New Town Square



3. Peace Reserve



Opportunities

Declutter and Upgrade paving & Street Furniture

Visual clutter



Poor quality of paving & confusing paving patterns



Outdated & inconsistent range of street furniture



Narrow verges



Smart poles



High quality paving with integrated kerb ramps & pit covers



Contemporary & functional range of furniture, cluster facilities



Localised footpath widening for planting, street trees, outdoor dining, street furniture

Before

After
Continued City of Sydney treatment along Maricville side of King St and Enmore Rd

Should the material palette of Enmore road be different to King Street?



Challenges