

5.2. Ben Boyd Lane conversion to one-way southbound

AUTHOR: Lizzie Cheng, Traffic & Transport Engineer

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS:

1. Ben Boyd Ln - Convert to 1 Way - TMP (final) [5.2.1 - 5 pages]

PURPOSE:

Conversion of Ben Boyd Lane to one-way southbound between Belgrave Street to Grosvenor Street, to improve pedestrian safety and accommodate increasing high density development with driveway positioned in Ben Boyd Lane.

EXECUTIVE SUMMARY:

The Conversion of Ben Boyd Lane to one-way was investigated by Council previously, all traffic counts and affected residents have been surveyed with options. With the majority of residents supporting conversion to one-way southbound, on 2 July 2021, Council submitted a Traffic Management Plan (TMP) to Transport for NSW (TfNSW) for the approval of the conversion of Ben Boyd Lane between Belgrave Street to Grosvenor Street to one-way southbound. The TMP is finally approved by TfNSW on 30 March 2022.

FINANCIAL IMPLICATIONS:

Associated signages cost to implement the changes.

RECOMMENDATION:

1. **THAT** Council implement the conversion of Ben Boyd Lane between Belgrave Street and Grosvenor Street to one-way southbound.
2. **THAT** Council notifies the residents, businesses, and all submitters before implementing the One-Way traffic direction in Ben Boyd Lane.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

2. Our Built Infrastructure

2.4 Improved traffic and parking management

4. Our Social Vitality

4.1 North Sydney is connected, inclusive, healthy and safe

5. Our Civic Leadership

5.3 Community is informed and consulted

BACKGROUND

The issue of pedestrian safety in Ben Boyd Lane between Grosvenor Street and Belgrave Street, Cremorne has been raised with Council in 2020. Due to the high-rise developments in the area, there has been an increase in both vehicle and pedestrian traffic. The matter was considered at the North Sydney Local Traffic Meeting on 20 March 2020 with three recommendations:

- 1. THAT** Council survey affected residents with regard to converting Ben Boyd Lane between Grosvenor Street and Belgrave Street to one-way, including which direction of traffic flow is preferred.
- 2. THAT** concurrent to the community consultation, Council obtain traffic count data in Ben Boyd Lane, Belgrave Lane and Young Lane (between Grosvenor Street and Belgrave Street)
- 3. THAT** subject to majority support from the community consultation to convert Ben Boyd Lane between Grosvenor Street and Belgrave Street to one-way, a Traffic Management Plan is prepared and submitted to TfNSW for approval

The first two recommendations were both concluded in 2020, and the third recommendation was prepared and submitted to Transport for NSW on 02 July 2021 with the proposal of conversion of Ben Boyd Lane between Belgrave Street and Grosvenor Street to one-way southbound.

CONSULTATION REQUIREMENTS

Community engagement has occurred in accordance with Council's *Community Engagement Protocol*. The detail of this report provides the outcomes from the engagement for Council to consider prior to adoption.

Relates to ECM No: 8847710

Standard or Guideline Used: NA

Signs & Lines Priority: 2

Precinct and Ward: Parks and Cammeraygal

Impact on Bicycles: No

Impact on Pedestrians: Yes

Impact on Parking: No

DETAIL

Ben Boyd Lane between Belgrave Street and Grosvenor Street is approximately 100 metres long and 5.3 metres wide. It is a narrow two-way road and there are three on-street parking spaces situated on the northeast corner.

On the western side of Ben Boyd Lane, there are two mid to high-density development including 12-14 Grosvenor Street development which is in the final stage of construction. On the eastern side, most of the developments are low-density. The road is a local road and is primarily used for property access purposes. There is one existing footpath it is located on the eastern section between Belgrave Street and Belgrave Lane, it is approximately 45 metres long.

The matter of conversion Ben Boyd Lane traffic flow direction was considered at the North Sydney Local Traffic Meeting on 20 March 2020 with three recommendations:

- 1. THAT** Council survey affected residents with regard to converting Ben Boyd Lane between Grosvenor Street and Belgrave Street to one-way, including which direction of traffic flow is preferred.
- 2. THAT** concurrent to the community consultation, Council obtain traffic count data in Ben Boyd Lane, Belgrave Lane and Young Lane (between Grosvenor Street and Belgrave Street)
- 3. THAT** subject to majority support from the community consultation to convert Ben Boyd Lane between Grosvenor Street and Belgrave Street to one-way, a Traffic Management Plan is prepared and submitted to TfNSW for approval

Based on the recommendation Council resolved to survey the community on the introduction of one-way traffic flow along Ben Boyd Lane between Grosvenor Street and Belgrave Street.

Community engagement took place from 10 July 2020 to 9 August 2020 (4 weeks) with three different flow options proposed 'one-way north' 'one-way south' and 'retain existing two-way'. Approximately a total of 443 letters were mailed to residents, property owners in Ben Boyd Lane and other affected streets. A total of 54 responses were received which represents a response rate of 12.2% which is above the typical response rate of 10-12% for traffic surveys.

Of the 54 submissions received, 33 (61%) supported converting Ben Boyd Lane to one-way and 21 (39%) submissions supported retaining the existing two-way. Of the 33 submissions that support the one-way, 20 (61%) submissions preferred the proposal for one-way in a southbound direction.

Traffic counts for Ben Boyd Lane, Belgrave Lane, and Young Lane were obtained between 26 May 2020 to 2 Jun 2020 for a duration of 7 days.

As the majority of the respondents from the resident survey in 2020 supported one-way, and southbound direction is a preferred direction, therefore, a Traffic Management Plan was prepared by the Council's Traffic and Transport Engineer to Transport for NSW and submitted on 2 July 2021 for the proposal of conversion of Ben Boyd Lane to one-way southbound between Belgrave Street and Grosvenor Street.

On 29 March 2022 Transport for NSW officially approved the Traffic Management Plan for the proposed Ben Boyd Lane one-way southbound. It is recommended:

1. THAT Council implement the conversion of Ben Boyd Lane between Belgrave Street and Grosvenor Street to one-way southbound.
2. THAT Council notifies the residents, businesses, and all submitters before implementing the One-Way traffic direction in Ben Boyd Lane.



Permanent Traffic Management Plan

Site Details

Address: Ben Boyd Lane, Neutral Bay	LGA: North Sydney
Ref / Version: V.1	Date of TMP Submission: 02/07/2021
Council Contact Name: Lizzie Cheng	Council Contact Number: 02 9936 8266

Introduction

North Sydney Council has submitted a Traffic Management Plan (TMP) in accordance with the Roads and Maritime Services *Procedures for use in the preparation of a Traffic Management Plan (2001)* for the proposal to convert the existing narrow two-way Ben Boyd Lane between Belgrave Street to Grosvenor Street to one-way for Southbound traffic to improve pedestrian safety and accommodate increasing high density development with driveway positioned in Ben Boyd Lane. The purpose of this TMP is to assess the proposal and determine if conversion of Ben Boyd Lane to one-way southbound between Belgrave Street to Grosvenor Street is feasible.

Summary

North Sydney Council commissioned CFE Information Technologies in May 2020 to undertake Speed and traffic volume counts in Ben Boyd Lane, Belgrave Lane, Young Ln for seven days from 26th May to 1st Jun 2020 to investigate the feasibility and impact of converting Ben Boyd lane to one-way Southbound.

Restricting traffic entering Ben Boyd Lane from Grosvenor Street will detour traffic to Young Lane and Young Street. This is likely resulting in increase of traffic volume into Young Lane and Young Street, especially during the morning and afternoon peak hours.

This increase in traffic volume may have an impact on the serviceability of Young Lane, Young Street and Grosvenor Street. It is also predicted that traffic queuing is likely to be increased when Grosvenor Street enter to Young Street and Young Lane exit to Belgrave Street. Further assessment, including intersection modelling may be needed to confirm affected roads serviceability and queuing.

The extent of the TMP study area is Ben Boyd Lane, Grosvenor Street, Young Street, Young Lane, Belgrave Street.

The key features of the project include;

- Conversion of Ben Boyd Lane to one-way southbound between Belgrave Street to Grosvenor Street to accommodate increasing high density development and improve pedestrian safety.

Key objectives of the TMP are:

- To assess the proposal and determine if the conversion of Ben Boyd Lane to one-way southbound between Belgrave Street to Grosvenor Street is feasible.
- To assess the road closure's impact on the surrounding local road network through traffic modelling.
- Identify key intersections within the study area where impacts are expected to be greatest.
- Identify estimated future traffic volumes following the proposed conversion of Ben Boyd Lane to one way southbound.

Details

North Sydney Council commissioned CFE Information Technologies in May 2020 to undertake Speed and traffic volume counts in Ben Boyd Lane, Belgrave Lane, Young Ln for seven days from 26th May to 1st Jun 2020. The extent of road network in the study area and location of the proposed conversion to one way is as shown below:



Comparing the predicted proposed one-way southbound traffic flow arrangement with the existing two-way weekday traffic volume, the daily net traffic increase for the surrounding streets is summarised in Table 2:

Street Name	Direction	Current daily traffic volume	Future traffic with proposed one-way arrangement	
			Daily traffic volume increase	% change in traffic
Belgrave Street	Eastbound	13,613	27	+0.2 %
	Westbound	12,876	7	+0.05 %
	Total	26,489	34	+0.13%
Belgrave Lane	Eastbound	30	0	0 %
	Westbound	17	4	+24 %
	Total	47	51	+8%
Ben Boyd Lane <i>Grosvenor St to Belgrave Ln</i>	Northbound	76	0	0%
	Southbound	416	0	0%
	Total	492	0	0%
Ben Boyd Lane <i>Belgrave Ln to Belgrave St</i>	Northbound	62	0	0%
	Southbound	435	0	0%
	Total	497	0	0%
Young Lane <i>Grosvenor St to Belgrave Ln</i>	Northbound	74	38	+51%
	Southbound	315	0	NA
	Total	389	38	+9.8%
Young Lane <i>Belgrave Ln to Belgrave St</i>	Northbound	90	34	+38%
	Southbound	211	0	NA
	Total	301	34	+11%
Young Street	Northbound	2,089	27	+1.3 %
	Southbound	2,444	NA	NA
	Total	5,489	NA	NA
Grosvenor Street	Eastbound	2,921	76	+2.6 %
	Westbound	1,597	NA	NA
	Total	4,518	NA	NA

Table 2: Daily net traffic increase after Ben Boyd Lane change to one-way southbound

In summary, Young Lane and Belgrave Lane will experience the greatest percentage increase with the proposed one-way arrangement, however current traffic volumes in these laneways are very low and the actual increase in the daily traffic volumes is minimal. The expected increase in traffic is not significant and is expected to allow for a more equal distribution of traffic between Ben Boyd Lane, Young Lane and Belgrave Lane.

Young Lane has a carriageway width of approximately 4.5m from kerb to kerb (same as Ben Boyd Lane) with 'No Parking' restrictions in place on both sides of the street to facilitate access to driveways. The road is forecasted to have a 38% to 51% daily traffic increase in the northbound direction from the existing 90 vehicles per day.

Similarly, Belgrave Lane is forecasted to have approximately 24% daily traffic volume increase in the westbound direction from the existing 17 vehicles per day. It should also be noted that due to COVID19 the traffic survey completed in May 2020 may underestimate the true daily traffic volume as during that period people kept their activity level to a minimum.

Approximately 500 letters were sent out to the residents including businesses near the proposed area, a separate survey link for electronic submission was prepared and opened from 1st June 2020 to 20th August 2020 (duration of 2 weeks). There were 290 people that visited the link and 54 submissions received.

There were 3 options proposed. Ben Boyd Lane one-way north, Ben Boyd Lane one-way south and Ben Boyd Lane retain existing two-way.

Among the 54 submissions, 33 (61%) supported converting Ben Boyd Lane to one-way and 21 (39%) submissions supported retaining existing two-way. Of the 33 submissions that support the one-way, 20 (61%) submissions preferred the proposal for one-way in a southbound direction.

Existing Road conditions and traffic environment

The existing Ben Boyd Lane between Belgrave Street and Grosvenor Street consists of:

- Both existing Northbound and Southbound traffic lanes have a carriageway width of 4.5m from kerb to kerb.
- 2P resident exempted parking spaces (3 spaces) for approximately 16m located just south of Belgrave Street on the eastern side of the laneway. Elsewhere there are No Stopping and No Parking restrictions to facilitate access to driveways along the laneway.
- The proposed one-way street is situated in a R4 – High Residential Density zone, the southern side of the road shares the boundary with B4 – Mix Use zone. It is expected that high density residential developments will occur in the future for the entire length and the traffic generation will increase.
- There has not been any crashes recorded in Ben Boyd Lane in the past 5 years

Ben Boyd Lane connects to Grosvenor Street and Belgrave Street. Converting Ben Boyd Lane to one-way southbound will divert traffic to the surrounding streets including Belgrave Lane, Young Lane, Young Street, Grosvenor Street and Ben Boyd Road. All roads in the proposed study are local roads with the exception of Belgrave Street which is designated as a regional road.

Buses will not be affected by the proposal. Taxis and hire cars will be impacted similar to other road users and with no special provisions expected to be necessary for emergency vehicles. The proposal is not expected to impact upon traffic movements in adjoining Council areas.

Conclusion

The provision of making Ben Boyd Lane one-way southbound will have a minimal impact on the surrounding road network. Young Lane and Belgrave Lane will experience the greatest percentage increase with the proposed one-way arrangement, however current traffic volumes in these laneways are very low and the actual increase in the daily traffic volumes is minimal. The expected increase in traffic is

Transport for NSW

27-31 Argyle Street, Parramatta NSW 2150

W www.rms.nsw.gov.au

not significant and is expected to allow for a more equal distribution of traffic between Ben Boyd Lane, Young Lane and Belgrave Lane.

Recommendation

The submission from North Sydney Council regarding the proposal to convert Ben Boyd Lane between Belgrave Street and Grosvenor Street to one-way southbound has satisfactorily addressed the necessary requirements of the TMP and is **recommended for approval**.

Recommended:

RECOMMENDED		David Osborne Network and Safety Officer Greater Sydney
	25/03/2022	
CONCURRENCE		Peter Carruthers Manager Network & Safety Services Greater Sydney
	25/3/22	
APPROVAL		Shane Schneider Director Network Management Eastern Greater Sydney
	25/03/22	
