

# HORNSBY SHIRE LOCAL TRAFFIC COMMITTEE

MEMBER FOR WAHROONGA - Mr Alister Henskens SC MP

**HORNSBY POLICE - Leading Senior Constable Steven Henri** 

TRANSPORT FOR NSW - Mr Timothy Drozd - Traffic Engineering Officer

TRANSPORT FOR NSW - Mr Pushpendra Kharbanda - Traffic Engineering Officer

HORNSBY SHIRE COUNCIL COUNCILLOR VERITY GREENWOOD - Council's LTC Representative

HORNSBY SHIRE COUNCIL THE MAYOR AND ALL COUNCILLORS - For your information

**HORNSBY SHIRE COUNCIL GENERAL MANAGER - For your information** 

HORNSBY SHIRE COUNCIL DIRECTOR, INFRASTRUCTURE & MAJOR PROJECTS - For your information

**NSW FIRE SERVICE - For your information** 

**NSW AMBULANCE SERVICE - For your information** 

**CDC NSW BUS SERVICE - For your information** 

**NSW TAXI COUNCIL - For your information** 

Road: Buckingham Avenue

Suburb: Normanhurst

Location: Intersection with Milson Parade and Malsbury Road

File Ref: F2004/09763 - File Parts 1 and 2

LTC No: 38/2024

Electorate: WAHROONGA

Google Map: <a href="https://maps.app.goo.gl/J18jJwgDheouZvuj8">https://maps.app.goo.gl/J18jJwgDheouZvuj8</a>

Subject: Proposed part-time "No Right Turn" into Malsbury Road

Date of Circulation: Monday, 16 December 2024

REFERRAL OF TRAFFIC MATTER FOR COMMENT OR OBJECTION, IF ANY

## **SUMMARY**

This report details the traffic implications of the proposed "No Right Turn - 6am-10am, 3pm-7pm, Mon-Fri" restriction from Buckingham Avenue into Malsbury Road as well as installation of "STOP" sign in Buckingham Avenue at the intersection with Malsbury Road in Normanhurst.

# **SUBJECT**

Council has received numerous requests from the community concerning the operation of the intersection of Buckingham Avenue with Malsbury Road. Council is aware that due to the high amount of traffic between Malsbury Road and Milson Parade during peak hours, vehicles coming from Buckingham Avenue railway bridge have difficulty finding a gap in traffic to make the right turn safely.

The situation leads to traffic congestion in Normanhurst, and unsafe right turn movements when vehicles are attempting to make the turn with insufficient traffic gaps. Analysis of Transport for NSW crash data indicates that three (3) injury crashes have been recorded within five (5) years at the intersection, with many additional crashes reported by residents.

Council has investigated the traffic flow at the intersection confirming that, should a part-time "No Right Turn - Buses Excepted" restriction be implemented, from the Buckingham Avenue railway bridge onto Malsbury Road, the reassigned traffic can be safely accommodated along the road network.

The following changes to the intersection of Buckingham Avenue with Malsbury Road are proposed, to mitigate the existing traffic issues:

- Installation of "No Right Turn Buses Excepted" signs at the intersection facing Buckingham Avenue.
  The signage will be time-limited for AM and PM peak hours during weekdays (6am-10am, 3pm-7pm, Mon-Fri).
- 2. Installation of "STOP" sign at the intersection facing Buckingham Avenue to upgrade the intersection from priority-controlled to stop-controlled.

A plan of the proposal is attached.

### **CONSULTATION**

Public consultation has been conducted - 19 August to 2 September, 2024.

Council invited comments on the proposal from complainants, residents, tenants, owners corporations, schools, transport providers, and authorities.

Three hundred and eighty-five (385) letters were issued (by mail OR by letterbox drop OR by email) to:

Complainants

Residents

**Tenants** 

**Owners Corporations** 

School - Normanhurst Public School - The Principal Mrs Jacqui Gordon

School - Normanhurst West Public School - The Principal Mr Paul McSweeney

School - Normanhurst West Community Preschool - The Director Mrs Thomson

School - Normanhurst Boys High School - The Principal Ms Asli Harman

School - St Stephen's Preschool - The Director Ms Caroline Dalziel

School - Loreto Normanhurst - The Principal Ms Marina Ugonotti

Emails were sent to transport providers and authorities.

The proposal was also placed on Council's website for 14 days - 19 August to 2 September, 2024.

Variable Message Signs (VMS) of the proposal were placed on Buckingham Avenue and Denman Parade for one week - 19 August to 25 August, 2024.

During the consultation period, three hundred and sixty-seven (367) submissions were received by Council. A table summarising the responses is provided below:

Support	Support	Support	Object
	with other	with questions	
	suggestions		
159	94	15	99

**Referral Comments from Transport for NSW** - *TfNSW* has reviewed the proposed upgrades and has no objections regarding these. However, with the proposal including the installation of a 'stop' sign at the intersection, the existing T.B line-marking will need to be replaced with T.F line-marking.

Council Response - Comments noted. Line-marking has been updated to meet the requirement for stop control intersection. Plan is attached.

Referral Comments from NSW Police - No objection.

Council Response - Comments noted.

**Referral Comments from Bus Company** - Thank you for having buses excepted signage on the proposed no right turn restriction to assist buses.

Council Response - Comments noted.

#### **CONSULTATION - Summary of Submissions**

Key points from the Submissions, related to traffic and road safety, are summarised below:

**Submission from residents -** What are the alternative routes for existing right turn traffic from Buckingham Avenue to Malsbury Road?

Council Response - Traffic Survey has been conducted for the intersection and it shows that currently there are around 100 vehicles per hour during peak hours turning right from Buckingham Avenue to Malsbury Road. These vehicles will likely keep travelling north on Pennant Hills Road, rather than turning right using the intersection of Milson Parade with Dartford Road. It is also noted that, Transport for NSW has recently reduced the speed limit on Milson Parade, Malsbury Road, Sefton Road and Clarke Road from 60 to 50km/h. The lower speed limits are likely to reduce through traffic.

**Submission from residents** - What will be the Impact for the right turn ban on intersection of Buckingham Avenue with Milson Parade and Malsbury Road, intersection of Milson Parade with Hammond Avenue and intersection of Malsbury Road with Eaton Avenue?

Council Response - Council has used Signalised Intersection Design Research Aid (SIDRA) to model the existing and future traffic volumes at the intersection. The impact on the adjacent intersections will be minimal. Please see 'Traffic Modelling' section of the report.

**Submission from residents -** What if many traffic choose to U-turn at the intersection of Milson Parade with Hammond Avenue?

Council Response - U-turn movements are unlikely to become an issue since the delay of this turn is relatively high. Council will be monitoring the intersection and if the U-turn movement becomes an issue, a "No U-turn" sign will be installed at the intersection.

Submission from residents - Agree but would prefer that restricted times be altered.

Council Response - The right turn ban hours proposed are based on traffic survey for the network peak hours. The time represents AM and PM peak hour periods across the road network. Council will keep monitoring the intersection performance after the implementation of the right turn ban and may alter the restricted times if it does not achieve desired outcome.

Submission from residents - Has council considered a roundabout for the intersection?

Council Response - The installation of a roundabout at this intersection is not viable due to constrained geometry. Additionally, the installation of a roundabout could create a rat run through the local road network which is undesirable. Council is aware that Sydney Trains will be upgrading the Buckingham Avenue rail bridge in the future. Council will explore opportunities for improvements to the intersection in conjunction with the bridge upgrade.

**Submission from residents** - I reject this proposal because this will hurt the small businesses along Denman Pde. As a local shopper i frequently turn right into Denman Pde to get my coffee or post office, then will go back onto Malsbury to continue to Hornsby.

Council Response - There is no proposal to ban the right turn at Denman Parade. Traffic will be able to turn right from Buckingham Ave into Denman Parade as per existing conditions.

**Submission from residents -** I don't understand why a bus needs to turn right from Buckingham Ave into Malsbury Road (are there any current bus routes that require that turn).

Council Response - Bus company has confirmed that there are existing bus routes using the right turn at the intersection.

**Submission from residents -** For those of us who live on Eaton and Woodbine Avenue, as well as people turning off Pennant Hills Road, this is incredibly inconvenient.

Council Response - Council understands that the proposal results in inconvenience for residents living in Eaton Avenue and Woodbine Avenue. However, the right turn ban will improve traffic safety and reduce traffic delays at the intersection, benefitting the wider community. Residents living in Eaton Avenue and Woodbine Avenue can use alternative routes such as right from Dartford Road which is a safer alternative as that intersection is signalised.

Submission from residents - Why doesn't Council widen the Rail Bridge to have two lanes to the north.

Council Response - Most bridges over railways are owned by the NSW State Government. Council is aware that Sydney Trains will be upgrading the Buckingham Avenue rail bridge in the future. Council will explore opportunities for improvements to the intersection in conjunction with the bridge upgrade.

Submission from residents - Has council considered a traffic signal for the intersection?

Council Response - Council is aware that Sydney Trains will be upgrading the Buckingham Avenue rail bridge in the future. Council will explore opportunities for improvements to the intersection in conjunction with the bridge upgrade.

**Submission from residents -** *Traffic is atrocious there. There should be a no left turn onto Buckingham Avenue from Pennant Hills Road between those times.* 

Council Response - Banning the left turn Pennant Hills Road to Buckingham Avenue is not recommended as it would impact on local retail and access to Normanhurst Train Station.

**Submission from residents -** People speed down Buckingham Avenue. There should be speed humps along that road.

Council Response - The section of Buckingham Avenue between Pennant Hills Road and Denman Parade is operating safely, with no crashes recorded in the past five (5) years. Installation of traffic calming measures is not warranted. Speeding has been referred to NSW Police for investigation.

Submission from residents - Very good idea, however needs to be monitored to ensure compliance at the start.

Council response - Monitoring of the new restriction will be undertaken by Council and NSW Police.

Submission from residents - A "Stop" sign is not necessary.

Council Response - The "STOP" sign is proposed to improve safety of the intersection. An analysis of Transport for NSW crash data indicates that three (3) crashes have been recorded within five (5) years at the intersection, with additional crashes reported by residents.

# Council Responses to frequently asked questions by residents, in relation to traffic impact of the part-time No Right Turn:

## What are the alternative routes for existing right turn demand from Buckingham Avenue into Malsbury Road?

Hornsby Shire Council uses a (PTV VISUM) traffic model to analyse and simulate traffic movement for the whole shire. PTV VISUM is a complete software package for traffic analyses, forecasts and GIS-based data management on city, regional or national levels. Changes to intersections or roads can be made in the model to observe route selections for traffic.

Key findings from the traffic model with proposed right turn ban in place are:

- 1. During AM peak hours, existing traffic using the right turn from Buckingham Avenue to Malsbury Road is generally coming from the south along Pennant Hills Road, turning left turn into Buckingham Avenue and have a destination in Hornsby area or further north. The travel route is in line with Council's observations and AM commuting routes.
- 2. By applying a turn ban from Buckingham Avenue to Malsbury Road during AM peak hours, the existing right turn traffic will generally travel through the following alternative routes, in order of likelihood and driver preference:
  - a. Keeping travelling north along Pennant Hills Road to access Hornsby.
  - b. Right turn from Dartford Road into Milson Parade and go along Malsbury Road to the north, or right turn from Chilvers Road entering Sefton Road, Milson Parade and go along Malsbury Road to the north. The number of vehicles choosing to use those alternative routes is low, since the travel time of the routes is higher than the travel time on Pennant Hills Road.
  - c. Right turn from Buckingham Avenue into Denman Parade and through Denman Parade, Edwards Road and Unwin Road to the North. The number of traffic choosing to use this alternative route is low due to the congestion on Unwin Road during peak hours.
  - d. Left turn from intersection of Buckingham Avenue with Milson Parade and Malsbury Road, U-turn back north along Malsbury Road. Or right turn into Hammond Avenue, right turn into Johns Avenue, and right turn into Eaton Avenue, left turn back to Malsbury Road. While the likelihood of this movement is very low, the impact on adjacent intersections (assuming a worst case scenario) has been tested through a traffic model (SIDRA).
- 3. During PM peak hours, majority of existing traffic using the right turn from Buckingham Avenue into Malsbury Road is generally coming from the south along Pennant Hills Road, turning left turn into Buckingham Avenue and has a destination in Hornsby or further north. Some of the traffic will have destinations in local streets in Normanhurst on the western side of the train line.
- 4. By applying turn ban from Buckingham Avenue to Malsbury Road during PM peak hours, these demands (existing right turn traffic) will generally travel through the following alternative routes:
  - a. Keeping travelling north along Pennant Hills Road to access Hornsby.
  - b. Right turn from Dartford Road into Milson Parade and go along Malsbury Road to the north, or right turn from Chilvers Road entering Sefton Road, Milson Parade and go along Malsbury Road to the north. The number of vehicles choosing to use those alternative routes is low, since the travel time of the routes is higher than the travel time on Pennant Hills Road.
  - c. Right turn from Buckingham Avenue into Denman Parade and through Denman Parade, Edwards Road and Unwin Road to the North. The number of traffic choosing to use this alternative route is low due to the congestion on Unwin Road during peak hours.
  - d. Left turn from intersection of Buckingham Avenue with Milson Parade and Malsbury Road, U-turn back north along Malsbury Road. Or right turn into Hammond Avenue, right turn into Johns Avenue, and right turn into Eaton Avenue, left turn back to Malsbury Road. While the likelihood of this movement is very low, the impact on adjacent intersections (assuming a worst case scenario) has been tested through a traffic model (SIDRA).

What will be the impact for the right turn ban at intersection of Buckingham Avenue with Milson Parade and Malsbury Road, on intersection of Milson Parade with Hammond Avenue and intersection of Malsbury Road with Eaton Avenue?

VISUM model has demonstrated that there may be a small portion of traffic which will turn left at the intersection and right turn into Hammond Avenue or U-turn back to Malsbury Road during AM and PM peak hours. Approximately 10 additional vehicles during the peak hour are likely use Hammond Avenue / Johns Avenue and Eaton Avenue route to head north towards Hornsby.

Potential traffic impacts of this additional traffic were assessed by comparing the performance of the road network with and without the part time "No Right Turn". Existing and future traffic volumes were entered into the intersection modelling software 'SIDRA' (Signalised Intersection Design Research Aid) to evaluate the performance of the road network.

The key intersection performance indicator extracted from the SIDRA Network analysis for this study include:

• Level of Service (**LOS**) – this is the standard measure used to assess the operational performance of an intersection. It is a measure of the delay at an intersection. There are six levels of service from 'A' (excellent with delays of less than 15 seconds) to 'F' (unacceptable with delays of more than 70 seconds)

Existing intersection performances are summarised in Table 1. It indicates a **LOS** F for both AM and PM east leg approach at intersection of Buckingham Avenue with Milson Parade and Malsbury Road. The right turn from Buckingham Avenue to Malsbury Road is not only experiencing a long delay, but also blocking left turn opportunities due to the geometric constrains of the Buckingham Avenue rail bridge.

Intersection performances with the proposal are summarised in Table 1. It indicates a **LOS** B for AM and **LOS** C for PM east leg approach at intersection of Buckingham Avenue with Milson Parade and Malsbury Road. Several assumptions were made to prepare this future scenario:

- 1. The number of vehicles turning left will increase 10 vehicles / hour, which represents 10% of existing right turn vehicles.
- 2. For these 10 vehicles, 8 of them turn right at the intersection of Milson Parade with Hammond Avenue, 2 of them conduct a U-turn and travel back to Malsbury Road.
- 3. 10 vehicles join in modelled network from west to east, representing vehicles right turn from Dartford Road or Chilvers Road.
- 4. Other 80 vehicles which would previously turn left into Buckingham Avenue are likely to continue to travel along Pennant Hills Road, which does not affect the local modelled network.

	Turning from Minor Road	Peak Hour	Existing		Future	
Intersection			Average vehicle delay (Seconds)	Level of Service (LoS)	Average vehicle delay (Seconds)	Level of Service (LoS)
Buckingham Ave with Milson Pde and Malsbury Rd	East	AM	200.8	F	10.9	В
Milson Pde with Hammond Ave	West	AM	16.9	С	17.1	С
Malsbury Rd with Eaton Ave	West	AM	27.1	D	17.8	С
Buckingham Ave with Milson Pde and Malsbury Rd	East	PM	121.4	F	16.6	С
Milson Pde with Hammond Ave	West	PM	14.4	В	12.1	В
Malsbury Rd with Eaton Ave	West	PM	31.2	D	14.1	В

Table 1: Network performance comparison

Several key findings are noted for the output of network performance with proposal:

- 1. The part time "No Right Turn" proposal will alleviate significant traffic delays experienced in Buckingham Avenue during the peak times which also contribute to significant traffic congestion in Normanhurst.
- 2. The intersections of Milson Parade with Hammond Avenue and Malsbury Road with Eaton Avenue will continue to operate at existing or improved level of service.
- 3. The increased traffic movements in Hammond Avenue, Johns Avenue and Eaton Avenue will be in the order of 10 vehicles per hour during the peak hour which is considered a very minor increase. These local roads will continue to operate well below the environmental capacity for local roads.

It is noted that the network analysis and traffic modelling demonstrate the 'worst case' scenario. With time, drivers will start to notice that travelling north along Pennant Hills Road is the fastest route towards Hornsby. In addition to this, Transport for NSW has recently lowered the speed limit on Sefton Road, Milson Parade and Malsbury Road. The speed limit reduction will, over time, decrease the attractiveness of this route for vehicles which may be by-passing the arterial road network (Pennant Hills Road).

#### CONCLUSION

The submissions from residents and service providers have been addressed in the report. Traffic modelling undertaken for the proposal demonstrates that the proposal will significantly improve traffic conditions around Normanhurst with minimal impact on local residents due to re-assigned traffic. This proposal will also address the significant crash history at the intersection which has been documented by Transport for NSW crash data and residents' reports.

#### **ATTACHMENTS**

- 1. Plan of the proposal LTC 38/2024
- 2. Traffic Modelling Data Summary

#### **RECOMMENDATION THAT**

- 1. Installation of two part time "No Right Turn Buses Excepted" signs at the intersection facing Buckingham Avenue (6am-10am, 3pm-7pm, Mon-Fri) as per plan LTC 38/2024 be approved.
- Installation of one "STOP" sign at the intersection facing Buckingham Avenue to upgrade the intersection from priority-controlled to stop-controlled and associated line marking as per plan LTC 38/2024 be approved.

## Note for voting Local Traffic Committee members.

Under Transport for NSW 'Delegation of Functions to Regulate Traffic' (operation of local traffic committees) you are required to comment or indicate your acceptance or objection to the recommendation of this report.

Your response must be submitted in writing within 14 days of the date of this notice.

Please send your response via return email for the item, or email trafficbranch@hornsby.nsw.gov.au

For further information please contact Radek Zarzycki on 9847 6524.

Upon receipt of your comments the matter will be referred to Council for action.

Radek Zarzycki Chairman

Issued Date:

Monday, 16 December 2024

Comments Close Date:

Tuesday, 31 December 2024, at 5:00pm