

CM13.5. Local Area Traffic Management - Tenbrink Street/Ryan Road

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Purpose of Report

To provide an update on the status of road safety improvements that were implemented in Glenroy in late 2019. This report reviews the treatments with regard to effectiveness and considers any alterations or additional treatments required.

Background

Glenroy is a suburb of Albury, located north west of the Albury CBD and south west of the Lavington CBD. The western ring road, which connects Albury with Lavington and Springdale Heights, runs through Glenroy local streets.

The area of review is central Glenroy, specifically Ryan Road, Tenbrink Street, Watson Street, Wilkinson Street and Hodge Street and is shown on the map below.



Figure 1: Aerial View of Glenroy

In mid-2019 a number of vehicle crashes occurred in Glenroy, prompting the investigations of various traffic safety improvements. The matter was presented to the Local Traffic Committee in September 2019, and then referred to Council for endorsement. The Council resolution from this meeting is as follows:

- a. Installation of Stop signs at the Wilkinson Street/Tenbrink Street and Hodge Street/Tenbrink Street intersections;
- b. Implement channelised turn lanes at the Hodge Street/Tenbrink Street intersection;
- c. Implement a surface treatment on Tenbrink Street between Ryan Road and Hodge Street;
- d. Implement a speed zone reduction from 60kmph to 50kmph on Ryan Road and Tenbrink Street;
- e. Installation of barrier railing at the intersection of Tenbrink and Wilkinson Streets;
- f. Close the southbound access to Watson Street from the Chenery/Burrows/Ryan roundabout for a trial period of three months;
- g. Continue to monitor the Tenbrink Street/Ryan Road intersection, with consideration for possible improvement in the future; and
- h. To report back to Council on all the treatments on the success or otherwise.

These treatments resulted in the need to implement temporary modifications to the Albury to Quicks Hill bus route, which travels through Glenroy in both northern and southern directions.

Additional to vehicle crashes, there has been a history of undesirable driver behaviour in Glenroy, with motorists using Watson and Wilkinson Streets as a bypass to overtake vehicles on Ryan Road when travelling towards Albury, and doing so at speed. Council has twice implemented local area traffic management treatments at the intersection of Watson and Wilkinson to mitigate this behaviour, with little benefit achieved.

Investigation

Traffic counts were taken on all relevant streets prior to and after the implementation of the traffic management facilities to determine driver behaviour, with the following results:

- Average Daily Traffic volume (ADT) on Ryan Road and Tenbrink Street increased approximately 11% following the southbound closure of Watson Street at the Burrows Road roundabout.
- Wilkinson Street saw a reduction in westbound traffic by 56% as a result of the Watson Street closure; however at the same time saw an increase of 133% in eastbound traffic, with the speed increasing by 13%. These volume and speed increases can also be seen on Watson Street. This indicates that the closure has resulted in vehicles using Wilkinson and Watson Streets to bypass traffic on Ryan Road when travelling north away from Albury.
- Hodge Street traffic volumes saw minimal change with a marginal increase to eastbound volumes.
- The installation of channelised turning lanes on Tenbrink Street reduced on-street parking by approximately seven spaces, resulting in nearby residents parking around the corner in Hodge Street. This, coupled with a relocated bus stop on Hodge Street, significantly reduced the number of available on-street parks on Hodge Street within the vicinity of the childcare centre. The Watson Street closure further impacted Hodge Street as parents and carers visiting the

childcare centre are required to enter and exit via Tenbrink Street, and perform a U-turn in Hodge Street. This has resulted in a significant increase in congestion on Hodge Street.

- A surface treatment on Tenbrink Street was proposed in the initial report to Council, but further investigations determined that this would decrease traction and potentially result in increased crashes. A larger stone seal was investigated; however this would result in significant noise and impact on neighbouring properties and therefore this treatment was not progressed.

Issues

Following the initial implementation of safety improvements in Glenroy, approximately 450 residents and property owners were contacted by mail in February 2020 and asked to provide feedback. A total of 130 responses were received. Residents were requested to provide feedback on the traffic management facilities installed in terms of impact on traffic safety, public transport access, travel time, traffic speed and traffic volumes. Residents scored each treatment as very positive, positive, neutral/no impact, negative, or very negative, and were able to provide written feedback as well.

Feedback relating to the installation of stop signage as well as channelised turning lanes on Tenbrink Street was predominantly positive. However, responses regarding the southbound closure of Watson Street were largely divided, with a total of 57% of respondents opposed to the closure.

Following the feedback in February, a suite of alternate treatments were developed and presented to Glenroy residents in May 2020, requesting feedback. These included:

- Re-route the 907-bus to reduce congestion at the Hodge and Tenbrink intersection;
- Installation of a median to restrict right turns from Watson to Hodge to alleviate traffic congestion and conflict in Hodge Street by preventing vehicles from using Watson and Hodge Streets as a bypass to the western-ring road;
- Full closure of Wilkinson Street at Tenbrink Street to eliminate the ability of vehicles to use Watson and Wilkinson Streets as a bypass in either direction. This treatment would allow for the construction of an indented bus stop on Tenbrink Street for southbound buses on the modified route; and
- Reopen Watson Street southbound access to alleviate congestion within Hodge Street near the childcare centre and at the Hodge/Tenbrink intersection.

Residents were informed that the proposed traffic safety improvements were a suite of items that were required to be installed collectively in order to be effective. As such residents were asked to provide feedback on whether or not they supported the treatments, and to detail any concerns.

Of the 450 residents, a total of 68 responses were received. Responses were largely divided, with 55% in support of the treatments and 45% opposed.

Due to the polarising and limited responses received, as well as a number of concerns raised by residents, further investigation was again undertaken, with additional options developed for consideration by the affected residents in the Glenroy community.

Risk

- **Business Risk** – There are no identified Business Risks.
- **Corporate Risk** – To not address the significant community concerns would reflect poorly on Council's image. This is to be addressed through implementing appropriate traffic calming facilities to manage and improve the traffic movement through the area.
- **WHS & Public Risk** – There is a significant risk to public safety with unacceptable driver behaviour and vehicle speeds. To do nothing would not address numerous safety issues or public concern and would impact on the liveability and amenity of the immediate Glenroy suburb.
- **Environmental Risk** – There are no identified Environmental Risks.
- **Delivery Program** – These works can be carried out as part of the current works program, as part of Council's annual traffic improvements program.

Discussion

Due to the variety of issues within the Glenroy area, additional treatments have been investigated as part of an overall traffic management strategy. This strategy involves the implementation of traffic calming treatments in multiple locations with the goal of managing driver behaviour and improving road safety across the broader network. Each of the investigated treatments are discussed below.

Wilkinson Street flat-topped humps trial

Three flat-topped humps could be installed in Wilkinson Street at spacings in accordance with the Austroads Design Guidelines. Council has rarely used flat-topped humps due the following potential negative impacts:

- Noise for nearby residents – through vehicles braking, accelerating and moving up and down;
- Reduced comfort for bus passengers and ambulance patients;
- Cars speeding between flat-topped humps; and
- Cars crossing flat-topped humps at speed.

A six month trial would be proposed with residents asked to provide feedback at the conclusion.

The cost of trialling flat-topped road humps in Wilkinson Street is approximately \$25,000.

Full closure of Wilkinson Street at Tenbrink Street and bus route modifications

The full closure of Wilkinson Street at Tenbrink Street would eliminate the ability of vehicles to use Watson and Wilkinson Streets as a bypass in either direction.

The closure would require residents of Wilkinson Street and Watson Streets to access Albury via the Chenery/Ryan/Burrows roundabout, or via Hodge Street. This would inconvenience some residents, however will improve traffic safety.

This treatment would also require modification to the bus service as previously detailed, which would result in some Wilkinson Street residents having to walk further to bus stops.

The cost of a full closure of Wilkinson Street at Tenbrink Street is approximately \$50,000.

Watson Street flat-topped humps trial

Similar to the proposal for Wilkinson Street, two flat-topped humps could be installed at spacings in accordance with Austroads Design Guidelines. The flat-topped road humps would be installed on a six month trial basis at a cost of approximately \$15,000.

Roundabout at the intersection of Tenbrink and Hodge Street

Roundabouts can improve safety at intersections by controlling traffic in all directions, however must be constructed in accordance with *The Austroads Guide to Road Design Part 4B: Roundabouts*. This guide specifies that the minimum radius for the central island of a roundabout for an approach speed of 50kmph is 8m. Due to narrow road widths and road reserves, the construction of a compliant roundabout is not possible in this location. The cost to install a roundabout in this location is approximately \$350,000. Due to the significant cost and inability to meet the minimum requirements of *The Austroads Guide to Road Design Part 4B: Roundabouts*, this option was not further considered.

Chicanes in Wilkinson and Watson Street

Chicanes add an extra turn which causes vehicles to slow down and give way to opposing traffic. However, chicanes have only proven effective in relatively busy roads with consistent traffic flow in opposing directions, requiring drivers to reduce speed and give way. There are also design challenges to cater for both cars and buses. Therefore, this option was not further considered.

Rumble Strips in Wilkinson and Watson Street

Rumble strips are raised strips which cause a noise when a vehicle drives over them. They are effective for alerting drivers to oncoming intersections or speed restrictions, however investigations have proved rumble strips are ineffective at slowing down traffic. Therefore, this option was not further considered.

Do Nothing

Retaining the current configuration would not address concerns raised by residents, instances of speeding and rat-running through Wilkinson and Watson Streets, or congestion on Hodge Street and at the Hodge/Tenbrink intersection. The current configuration of local area traffic management in Glenroy presents a variety of issues and must be addressed.

Removal of road closure

Removal of the current road closure in Watson Street without the implementation of additional treatments would not address concerns raised by residents, instances of speeding and rat-running through Wilkinson and Watson Streets.

Community Engagement

Further to the consultation in mid-2019, February 2020 and May 2020, Glenroy residents were contacted in July 2020 and supplied with a fact sheet detailing all considerations surrounding the issues in Glenroy, and the proposed improvement options considered as detailed above (attachment 1).

Residents were asked to complete a short survey providing feedback on the proposed options. Of 450 residents a total of 97 responses were received.

The majority of respondents supported the trial installation of flat-topped road humps in Wilkinson Street. Approximately 50% of Wilkinson Street residents responded with 60% of those supporting flat-topped road humps.

The majority of respondents also supported the trial installation of flat-topped road humps in Watson Street.

Additional feedback provided by Glenroy residents identified the need to reopen southbound access to Watson Street to reduce congestion in Hodge Street near the childcare centre. Additional information relating to this feedback is included (attachment 2).

Following the most recent consultation, a report was presented to the Local Traffic Committee on 27 August, recommending the installation of flat-topped humps in both Wilkinson and Watson Streets on a six month trial basis along with the reopening of Watson Street southbound access. This recommendation was fully endorsed by the Committee at that meeting.

Conclusion

A number of crashes in Glenroy in 2019 prompted the implementation of various traffic safety improvements. These improvements were implemented on a trial basis in October 2019, with feedback from residents on the effectiveness of the treatments collected via survey in February 2020. Whilst some treatments (such as the speed limit reduction, stop signs and channelised turn lanes) were effective, others have inadvertently created additional issues that required extensive further investigation. These issues included congestion at the childcare centre and Hodge/Tenbrink Street intersection and instances of vehicles using Wilkinson and Watson Streets at speed to bypass Tenbrink Street and Ryan Road when travelling north. There were also concerns raised regarding safety and accessibility of public transport in the area.

In May 2020 following further investigation, a suite of treatments was presented to Glenroy residents for consideration. These treatments included:

- full closure of Wilkinson Street at Tenbrink Street;
- re-routing the 907 bus to reduce congestion at the Hodge and Tenbrink intersection;
- installation of a median to restrict right turns from Watson into Hodge Street; and
- reopen Watson Street southbound closure.

Multiple concerns were raised by residents which included the proposed closure of Wilkinson Street, rerouting of the buses and congestion within the Hodge and Tenbrink intersection. Following this inconclusive feedback, and with a low number of responses received from Wilkinson Street residents, it was determined that further investigation was required.

Glenroy residents were again contacted in July 2020 and supplied with an informative fact sheet and requested to provide feedback on two separate treatments. The majority of respondents supported the trial installation of flat-topped road humps in both Wilkinson and Watson Streets. Written feedback provided by residents highlighted the importance of the bus service to be located centrally within the area and the need to reopen Watson Street to alleviate congestion in Hodge Street.

The cost of trialling flat-topped road humps in Wilkinson and Watson Streets is approximately \$40,000 with the possibility of permanent retention at no additional cost. Should trials be ineffective, the flat-topped road humps can be removed and reused in alternate locations at a nominal cost.

Based on investigations carried out by Council staff, feedback provided from Glenroy residents and endorsement of the proposed treatments by the LTC, the following treatments are proposed for implementation:

- installation of three flat-topped humps in Wilkinson Street on a trial basis for six months;
- installation of two flat-topped humps in Watson Street on a trial basis for six months; and
- reopening of Watson Street southbound access, only in conjunction with the installation of flat-topped road humps.

Recommendation

That the Council endorses the following:

- a. retention of:
 - i. Stop signs at the Hodge Street/Tenbrink Street intersections;
 - ii. Channelised right turn lanes on Tenbrink Street at the Hodge Street intersection;
 - iii. A speed zone reduction from 60kmph to 50kmph on Ryan Road and Tenbrink Street; and
 - iv. Barrier railing at the intersection of Tenbrink and Wilkinson Streets.and
- b. Implementation of:
 - i. Installation of flat-topped humps in Wilkinson street on a trial basis;
 - ii. Installation of flat-topped humps in Watson street on a trial basis; and

- iii. Reopening Watson Street southbound access.

Attachments

- 1. Fact sheet – (DOC20/125040).
- 2. Detailed feedback – July 2020 (DOC20/152656).
- 3. Council report – May 2020 (DOC20/69134).
- 4. Council report – September 2019 (DOC19/136369).