

Report

Date August 21, 2024 File:
Subject Townend Road Traffic Study Findings and Options for Traffic Calming

PURPOSE

To provide Council with an analysis of the issues raised by residents of Townend Road related to increased traffic volumes and speeds, and to offer solutions to address those concerns.

BACKGROUND

Townend Road is a narrow road with an unposted speed limit of 50 km/h (Figure 1 – road sections shown in red and green). The road formerly had a dead end and was used primarily by residents who have homes along the road. Townend Road is not connected to York Road/Trillium Terrace (Figure 1 – roads shown in blue). A dog kennel has since opened at the western end of Townend Road, after which North Cowichan began receiving complaints from residents alleging that the road has sightline issues, speeding, increased traffic volume, and excessive noise emanating from the kennel.

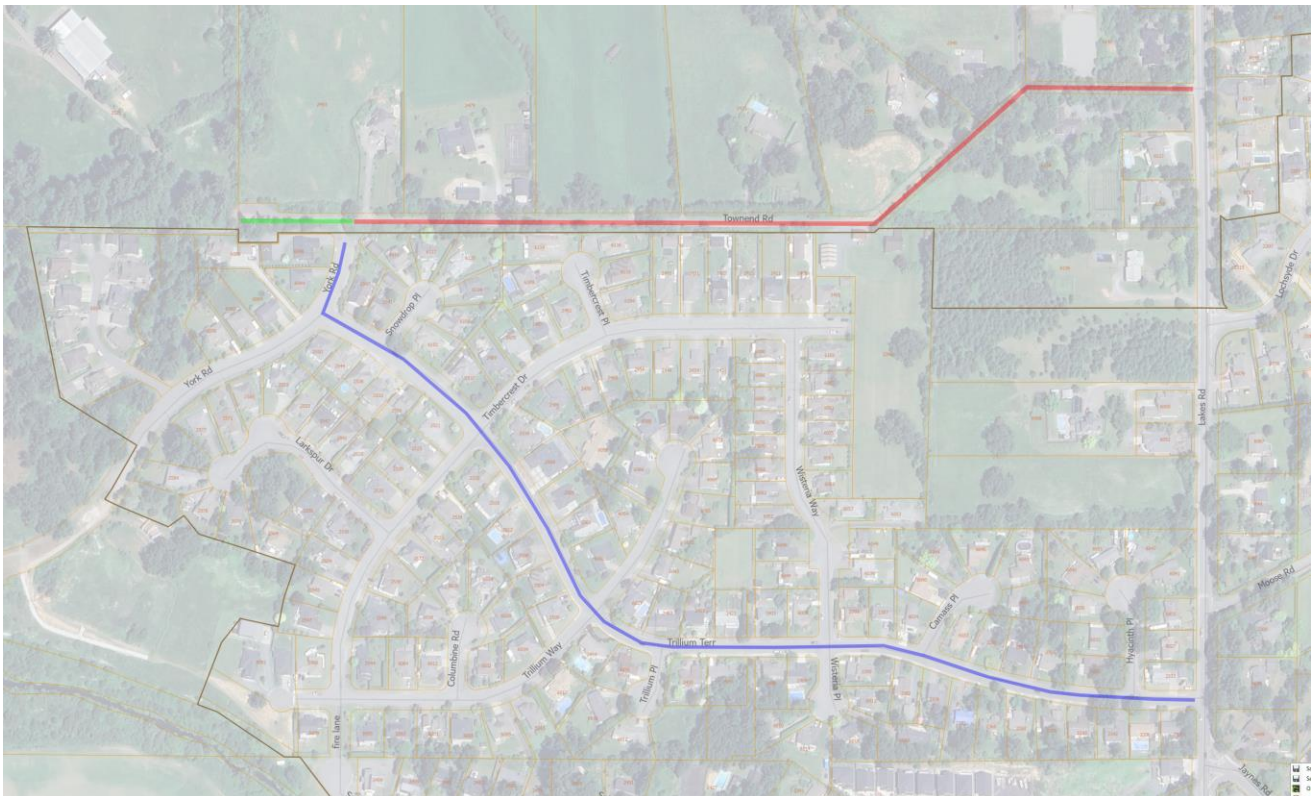


Figure 1 – Townend Road location map

At the Regular Council meeting on October 23, 2023, a Townend Road resident presented a community petition detailing the issues residents of both Townend Road and the Timbercrest subdivision were experiencing. Council then directed staff to prepare a report with options to address traffic and noise issues on Townend Road.

DISCUSSION

From April 18 to 26, 2024, staff conducted a traffic study to determine the volume and speed of vehicles travelling along Townend Road. The study took place on the straightest, flattest section of the road to capture the highest vehicle speeds and determine if speeding was occurring.

The findings of the traffic study are summarized below:

1. The 85th percentile speed was 38.0 km/h (85% of drivers travel at or below 38 km/h). The 85th percentile speed is a critical measure of whether a road is a candidate for traffic calming.
2. The average speed was 30.2 km/h.
3. The maximum speed was 56.8 km/h.
4. The Average Daily Traffic (ADT) was 139 vehicles per day on weekdays and 69 per day on the weekend.

Based on the outcome of the traffic study, it is apparent that speeding is not an issue on Townend Road. The narrow road has a natural traffic-calming effect. Its narrow nature forces drivers to slow down when pedestrians are present, and it requires vehicles to pull off into a driveway or a spot with a widened shoulder to allow oncoming vehicles to pass. In fact, narrowing travel lanes and allowing cars to park on both sides of the road in residential areas are often used to control vehicle speeds by making drivers somewhat uncomfortable speeding. While the ADT of 139 vehicles per day during the week may seem high for a road such as Townend, it should be noted that if a vehicle travels from Lakes Road to the west end of Townend Road and back to Lakes Road once in the morning, that vehicle will have registered as two vehicles when in fact it is the same vehicle. This means the number of vehicles travelling Townend Road on a given weekday is closer to 70 per day.

To be a candidate for traffic calming, Townend Road would have to have more than 1000 vehicles per day or an 85th percentile speed greater than 55 km/h. As neither the volume nor the speed criteria have been met, additional traffic calming is not triggered. It should also be noted that no accidents along Townend Road have been reported to ICBC in the last five years.

However, while traffic calming is not triggered, the traffic study reveals that Townend Road is not suitable for a 50 km/h speed limit. Given the narrow nature of the road, a speed limit of 30 km/h would be more appropriate. Posting a 30 km/h speed limit signage will also allow RCMP enforcement.

OPTIONS

Option 1 – Install Warning Signs & Change Posted Speed Limit (Recommended Option)

THAT Council directs staff to install signage at appropriate locations along Townend Road to advise drivers that the road narrows, that drivers should share the road, that there are blind corners ahead, and that there is a 30 km/h maximum speed limit signage.

Pros:

- 1) Brings Townend Road up to standard for a narrow road with sharp/blind corners.
- 2) Will allow for RCMP enforcement of speeds above 30 km/h.

Cons:

- 1) Signs are susceptible to vandalism requiring replacement.
- 2) It will likely have little effect on reducing speeds on the straight stretch of Townend Road where higher speeds can be achieved. Drivers tend to drive roads at a speed suitable to the road geometry.
- 3) RCMP resources are limited.

Cost Estimate: \$1,000

Option 2 – Same as Option 1 Plus Install Speed Tables

THAT Council directs staff to install signage at appropriate locations along Townend Road to advise drivers that the road narrows, that drivers should share the road, that there are blind corners ahead, that there is a 30 km/h maximum speed limit signage, and speed tables.

Pros:

- 1) The same pros as listed in Option 1.
- 2) Lowers vehicle speeds at speed hump locations.

Cons:

- 1) All cons as listed in Option 1.
- 2) Speed humps are unlikely to reduce current 85th percentile vehicle speeds significantly.
- 3) Can increase speeding and vehicle noise due to speeding between humps.

Cost Estimate: \$21,500

(\$1,500 for supply and installation of signs, \$20,000 for installing four speed humps)

Option 3A – Townend Road Closure & York Road Extension

THAT Council direct staff to consult with residents of Townend Road and the Timbercrest neighbourhood regarding:

- 1) Closing the west end of Townend Road, east of York Road.
- 2) Extending York Road to Townend Road.
- 3) Re-routing all traffic to and from the kennel through Timbercrest (Trillium Terrace and York Road).

Pros:

- 1) Returns traffic on Townend Road to pre-kennel levels.
- 2) Maintains existing traffic-calming nature of Townend Road.

Cons:

1. This will consume a considerable amount of staff time to prepare for, undertake, and report back to Council on the outcome of the consultation.
2. A new turnaround will need to be constructed at the new end of Townend Road, requiring property acquisition (or a Statutory Right of Way at minimum), potentially the removal of Garry Oak trees, and the extension of the York Road storm drain system.
3. Extending York Road requires widening what is now Townend Road, property acquisition and/or the removal of large trees, and the installation of storm drain infrastructure.
4. 2493 & 2521 Townend Road will need to be re-addressed to York Road, requiring owners to update their mailing addresses and staff to update pertinent documents and files.
5. Requires residents of Townend Road and the Timbercrest neighbourhoods to agree to the change in traffic flow.

Cost Estimate: To be determined.

Some effort will be required to develop a cost estimate for this option. However, it is safe to say that this option would cost significantly more than Options 1 or 2. Should Council choose this option, Engineering will have to prepare a conceptual design and cost estimate.

Option 3B – (One-Way Townend Road & Connect to York Road)

THAT Council direct staff to consult with residents of Townend Road and the Timbercrest development regarding:

- 1) Turning the portion of Townend Road east of York Road into a one-way road entering from Lakes Road and exiting onto York Road.
- 2) Keeping the section of Townend Road west of York Road as a two-way road.

Pros:

1. Eliminates head-on conflicts between vehicles along the length of Townend Road.
2. Vehicle trips down Townend Road are halved, increasing life of road.

Cons:

1. 85th percentile speed may increase due to reduction in vehicle-vehicle conflicts.
2. May not reduce the number of vehicles entering Townend Road.
3. Widening the portion of Townend Road west of York Road requires the removal of established trees, and the extension of the York Road storm drain system.
4. Requires residents of Townend Road and the Timbercrest neighbourhoods agreeing to the change in traffic flow.

Cost Estimate: To be determined.

Some effort will be required to develop a cost estimate for this option. However, it is safe to say that this option would cost significantly more than Options 1 or 2. Should Council choose this option, Engineering will have to prepare a conceptual design and cost estimate.

IMPLICATIONS

Installing signage to advise drivers that the road narrows, that drivers should share the road, that there are blind corners ahead, and 30 km/h maximum speed limit signage will make the road safer for drivers and pedestrians and allow for enforcement should excessive speeding occur. The expected cost is not more than \$1,000 and will take less than a day to be installed.

Installing speed humps would not appreciably decrease vehicle speeds, cost upwards of \$20,000, and would increase road noise due to accelerating and decelerating between humps.

Redirecting all, or even a portion, of the current Townend Road traffic through the Timbercrest neighbourhood would require consultation with residents of Timbercrest and Townend neighbourhoods. It is very likely to result in numerous other complaints/concerns being raised by the Timbercrest neighbourhood regarding the diversion of traffic. While the costs associated with Option 3A and 3B have not been calculated for this report, the total associated administrative, engineering, legal, and construction costs would be in the hundreds of thousands of dollars.

RECOMMENDATION

THAT Council directs staff to install signage at appropriate locations along Townend Road to advise drivers that the road narrows, that drivers should share the road, that there are blind corners ahead, and 30 km/h maximum speed limit signage.

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