



Town of Newmarket
395 Mulock Drive P.O. Box 328,
Newmarket, Ontario, L3Y 4X7

Email: info@newmarket.ca | Website: newmarket.ca | Phone: 905-895-5193

Carol Avenue Traffic Review Staff Report to Council

Report Number: 2024-12

Department(s): Engineering Services

Author(s): M. Kryzanowski, Manager, Transportation Services

Meeting Date: March 18, 2024

Recommendations

1. That the report entitled Carol Avenue Traffic Review dated March 18, 2024, be received; and,
2. That a copy of this report be forwarded to York Regional Police; and,
3. That a copy of this report be forwarded to York Region, and that Newmarket staff work with York Region to reduce any potential causes of traffic infiltration from Yonge Street; and,
4. That the Carol Avenue/Park Avenue intersection be rehabilitated to improve both traffic and pedestrian operations; and,
5. That staff consider Category 1 (temporary traffic calming measures) in 2024 for Carol Avenue; and,
6. That staff be authorized and directed to do all things necessary to give effect to this resolution.

Purpose

The purpose of this report is to address concerns from a community petition and from additional concerns raised during the community consultation process. The report outlines the recommendations and next steps.

Background

At its regular meeting of June 19, 2023, the Committee of the Whole received a petition from the Carol Avenue community regarding speeding and traffic concerns (Agenda Item #10.1). The petition requested traffic calming measures to address the following:

1. Crossing Carol Avenue eastbound from Avenue Road is needed to reach the mailbox and the sidewalks leading to schools and parks.
2. Cars turning right from Park Avenue southbound on Carol Avenue have a limited line of sight and only 200 metres to reach a pedestrian crossing at the Avenue Road intersection.
3. Accelerating vehicles travelling southbound after the stop sign seem to be distracted and unable to notice a pedestrian in such short distance from Park Avenue to Avenue Road.
4. Cars have been observed speeding southbound to catch the green light at Eagle Street to the point where they will pass a slower moving car to do so.

The petition also provided the following comments:

5. The painted lines on Carol Street were tried a few years ago but do not have any effect.
6. The recently installed “urban shoulders” have not made a significant change to traffic speeds.

At the Committee of the Whole meeting, the following recommendation was adopted:

2. That staff be directed to conduct a speed and traffic calming analysis on Carol Avenue between Park Avenue and Eagle Street.

On July 25, 2023, Town staff met on site with the Ward Councillor and some local residents to better understand the petition and traffic issues.

It should be noted that the ‘lines’ referred to in the petition were the yellow centre line, and the urban shoulder pavement markings that were added in 2023. Furthermore, the southbound posted speed limit sign was moved from south of Avenue Road to a mid-point between Avenue Road and Park Avenue at the request of the residents at the meeting in July.

Discussion

As per the Public Consultation and Support policy, on September 1, 2023, the Town issued a letter to the households within the community to solicit any additional input or concerns. The Town received a number of submissions from households within the community and a few from outside the study area. The comments re-confirmed the issues noted in the petition and provided several additional specific issues or additional

commentary that can be grouped into themes. Each group or specific issue raised by the respondents and the petition will be addressed in this report.

Speeds

The initial petition had indicated speed as an issue. The follow-up public consultation indicated issues with speed in both directions and particularly southbound speeding to catch the traffic light at Eagle Street. As well, additional comments included: requesting speed humps, lowering the speed limit to 30 km/h, and lack of speed enforcement.

Carol Avenue is designated as a residential collector road. As such, Town staff have routinely monitored the road's speed and volume, particularly the section between Avenue Road and Eagle Street. From the numbers collected, it can be seen that the VivaNext construction on Yonge Street, the recent re-construction of Lorne Avenue, and the impact of the COVID-19 pandemic on traffic patterns have affected traffic volumes and speeds.

Table 1 illustrates current and historic traffic information for Carol Avenue. The date indicates the month and year that the information was collected. The speed and volume information is divided into northbound and southbound directions. The operating speed is the speed at which 85% of the traffic is traveling at or below. The operating speed is used in the industry to determine mitigation measures. The daily volume is the average daily traffic volume over the 7-day count period.

Table 1. Traffic Information

Section	Date	Northbound			Southbound		
		Average Speeds	Operating Speeds	Daily Volume	Average Speeds	Operating Speeds	Daily Volume
Eagle to Avenue	June 2007	46	53	1350	47	55	1650
	April 2012	47	54	1100	44	51	1400
	October 2014	45	52	1225	46	53	1550
	September 2020	45	52	1200	44	51	1675
	May 2022	43	49	1400	42	49	2100
	October 2022	44	51	1375	42	49	1850
	May 2023	46	52	1375	43	49	2000
	October 2023	46	52	1250	44	51	1725
Section	Date	Northbound			Southbound		
		Average Speeds	Operating Speeds	Daily Volume	Average Speeds	Operating Speeds	Daily Volume
Park to Avenue	April 2012	38	44	1200	37	43	1500
	October 2023	39	45	1300	40	46	1800

A full examination of the speeds in Table 1 reveals that there is minimal fluctuation between the operating speeds over time and, generally, the speeds are similar in both directions. The speeds between Avenue Road and Park Avenue appear to be lower

than the section from Avenue Road to Eagle Street. Seeing that Carol Avenue is a collector road, these speeds would not warrant aggressive measures such as speed humps (Category 2). But Category 1 measures, such as solar speed board signs, flexible bollards, York Regional Police enforcement, or urban shoulders can be considered. The residents were correct in that the addition of the urban shoulders has had minimal impacts on speeds at this location.

Regarding the request to reduce the posted speed limit to 30 km/h, the Town does not yet have a policy in place to support this change. The speed limit reduction to 30 km/h on Lorne Avenue was supported as a pilot project and it is currently being monitored and reviewed to determine whether a lower posted speed limit policy should be recommended to Council for implementation. If such a policy is developed, Carol Street could be evaluated to see if it falls within the policy for change.

Finally, drivers speeding towards a traffic signal to catch the green light is a challenging and universal issue which is not easy to solve since good safety practice dictates that traffic signals be visible from a suitable distance.

Intersections that have warranted traffic signals always have higher traffic volumes and need additional right-of-way control when compared to non-signalized intersections. The signal timing length at the Carol/Sandford/Eagle intersection is very short, resulting in short wait times for the light to turn green; however, drivers are conditioned by the majority of traffic lights, which have much longer wait times, resulting in their speeding up to catch the green light, regardless of the shorter turn-around time. This is where more frequent police enforcement might help make a difference.

It is recommended that Category 1 measures be continued on Carol Avenue and that York Regional Police be forwarded a copy of this report to enforce speeds on Carol Avenue on a more frequent basis. Although Town staff do not have any jurisdiction over police enforcement, staff can still make the request. Residents also calling the police for enforcement has been seen to have greater influence on obtaining enforcement action.

Carol Avenue / Park Avenue Intersection

Many of the respondents noted that they have witnessed vehicles not stopping, or simply doing a rolling-stop through the Carol/Park intersection, particularly with eastbound motorists on Park Avenue turning right to travel south on Carol Avenue. It was requested at the on-site meeting in July 2023 that the eastbound stop bar be moved closer to the intersection, allowing better sight visibility and more of an opportunity to stop.

Stop compliance and rolling stops are a police enforcement issue. By forwarding this report to the York Regional Police, staff hopes to encourage them to undertake more stop compliance enforcement at this location.

To increase visibility and stop compliance, rather than simply moving the painted stop-bar closer to the Carol/Park intersection as requested by the residents, staff is

recommending that the intersection be made into a proper AODA-compliant crossing and that it be upgraded with proper boulevard aprons and ladder pavement markings on all three legs of the intersection. This will help make the intersection more prominent, thereby creating a safer pedestrian crossing.

Carol Avenue / Avenue Road Intersection

Residents also indicated concerns about the right-of-way control and the pedestrian crossing conditions at the Carol Avenue and Avenue Road intersection. The community indicates difficulty in crossing Carol Avenue (at Avenue Road) and residents requested either an all-way stop control or the implementation of a formal crossing, such as a Pedestrian Crossover (PXO).

In response, the Town took counts of intersection turning movements over 5-hour periods in 2014 and 2023, as per standard methodology. The counts captured peak traffic from 7:00 am to 9:00 am, and from 3:00 pm to 6:00 pm. Measurements revealed eight pedestrians crossing at Avenue Road in 2014 and seven crossing in the same location in 2023.

While all-way stop controls are not to be used as a speed control measure or for pedestrian crossing purposes only, Transportation staff still undertook an all-way stop control review of the intersection. Based on the 2023 information and the recently approved updated all-way stop control policy, the Carol Avenue at Avenue Road intersection does not warrant an all-way stop control. Unwarranted all-way stop controls can create traffic safety issues, particularly with pedestrian safety and stop compliance.

The Town is currently recommending a new Pedestrian Crossover (PXO) policy. Based on the preliminary testing analysis, a PXO would not be warranted in this area, even with the new, more easily attainable warrants that are being proposed. The pedestrian volumes would need to be significantly higher for a PXO to be warranted.

On another note, while the urban shoulders did not provide much speed reduction, they did lessen the distance required by pedestrians to cross Carol Avenue. Currently, the curb-to-curb distance is approximately 9.5 metres. The urban shoulders reduced this distance to between 6.0 and 6.5 metres. This adds some safety to crossing the road. To enhance safety even further, when Carol Avenue is reconstructed at some time in the future as supported by the Asset Management Capital Plan, it is recommended that sidewalks be introduced on the west side of the road (they already exist on the east side) and that the roadway be reduced in width to the current collector road standard of 9.0 metres.

Other Concerns

The following is a list of other concerns raised during the public consultation process.

Lorne Avenue and Park Avenue: Several concerns were raised regarding traffic operations on these two roads. This is outside of the scope of this review and will be

considered in a separate study to be done in the future when the work queue allows, and as noted during monitoring of the Lorne Avenue pilot project traffic calming measures.

Increased Volumes on Carol Avenue: Based on the historical information in Table A, the volumes on Carol Avenue have increased somewhat, but not significantly. Carol Avenue is a collector road expected to carry volumes between 1,500 to 5,000 per day. The combined north/south totals in Table 1 are, at most, 4,000 vehicles per day, which falls within acceptable limits.

A significant number of vehicles were counted traveling southbound on Carol Avenue, indicating the possibility of an infiltration issue being created somewhere on the arterial roads, probably from Yonge Street. This is further verified by the intersection count at Carol Avenue at Sandford and Eagle Streets. The morning and afternoon peak hour counts indicate that about 50% of southbound traffic on Carol Avenue goes straight through this intersection, while 50% of the northbound traffic on Sandford Street in both the morning and afternoon turns right onto Eagle Street. York Region will be contacted by Town staff to help examine this issue and determine if any counter-infiltration measures are needed.

Prevent Cars from Travelling North Through the Carol/Sandford/Eagle Intersection: Closing off or blocking travel routes is not a recommended option in a local community, because the road network was built for all of the public to use. Furthermore, this action, if implemented, would likely not work since any northbound vehicle can divert to Donlin Avenue or Dixon Avenue and access Carol Avenue using that alternative route.

Concerns with Sight Line Due to a Hedge: The hedge in question is located along the south-eastern frontage of #216 Carol Avenue. With the improvements to the Carol/Park intersection, the issue with the sight lines of the hedge should be mitigated. Typically blocked sight lines occur at corners or in daylight triangles. This hedge is along the property line, about 30 metres away from the corner. It will be looked at as part of the intersection improvements that are being proposed to Council in this report.

Boulevard Signs Do Not Work: The boulevard sign program is part of an educational package that can be easily deployed on any street. These signs are meant to educate drivers about their speeds and to slow them down. Like many traffic calming measures, boulevard signs do not have a dramatic effect on speeds, but they have been shown to lower the overall operating speeds by a few km/h in some locations. Staff must be selective in the type of traffic calming tool being used, because some traffic calming measures have an effect on speeds in some locations while not in others.

Concerns about Backing out of Driveways: Trouble backing out of the driveway is a common concern heard with many speed reviews undertaken by the Town. The volumes and speeds on Carol Avenue have been relatively consistent, with good sight lines from all driveways. This concern is not seen to be a larger issue on this street than on any other street within the Town's boundaries and could be addressed through

education, or by reversing into the driveway so that residents can drive forward when leaving.

No Parking – West Side from Avenue Road to Park Avenue: Parking restrictions can help with sight lines, and parking can also be used as a passive traffic calming measure. With the proposed upgrades to the Carol Avenue at Park Avenue intersection, it is not recommended that any changes to street parking occur at this time. This issue will be monitored and revisited after the intersection changes are introduced, if necessary.

Concerns Regarding Access at the Beechwood Crescent / Park Avenue Intersection: The Beechwood Crescent at Park Avenue intersection is in close proximity to the intersection at Carol Avenue and Park Avenue. In fact, the two intersections are within 20 metres of each other. This proximity can create challenges with turning right or left when maneuvering southbound on Beechwood Crescent. The improvements that are being proposed to the intersection at Carol and Park Avenues will provide some improvement to this location.

Conclusion

The next steps can be divided into immediate, short-term, and longer-term actions that are being recommended, as shown below.

Immediate

1. Once approved by Council, the Town will forward this report to York Regional Police to encourage more speed and stop compliance enforcement.
2. The Town will work with York Region to determine if traffic operations on Yonge Street can be improved to reduce potential infiltration through the community.

Short-Term (2024)

1. Determine appropriate “Category 1” traffic calming measures for Carol Avenue.
2. Undertake improvements at the Carol Avenue at Park Avenue intersection.

Longer-Term

1. Re-design Carol Avenue using a ‘Complete Streets’ approach, including sidewalks on both sides of the road, a narrower road platform, and other design elements that can enhance safety for all users of the road.

Business Plan and Strategic Plan Linkages

Well-planned and connected... strategically planning for the future to improve information access and enhance travel to, from, and within Newmarket.

Consultation

The Town received a petition on June 19, 2023, which was presented at the Committee of the Whole meeting. Town staff then attended an on-site meeting with the Ward Councillor and some residents on July 25, 2023. Town staff mailed a letter dated September 1, 2023, to the community for further input. The Town received emails from 17 households with additional concerns and observations.

All households within the community will receive a copy of this report and a date and time for the Committee of the Whole at which the matter will be heard so that they can provide a written or oral deputation, if they so wish.

Human Resource Considerations

None.

Budget Impact

The Carol Avenue at Avenue Road intersection improvements are estimated to be approximately \$10,000.00. This will be funded through the Transportation Business Unit and the PWS Curb and Sidewalk budget, which both have sufficient funds.

The longer-term cost for reconstructing Carol Avenue would form part of the Asset Management Capital Plan and would be funded through the Capital Projects budget.

Attachments

None.

Approval

Rachel Prudhomme, Director, Engineering Services

Peter Noehammer, Commissioner, Development and Infrastructure Services

Contact

For more information or questions regarding this report, please contact Mark Kryzanowski, Manager, Transportation Services, at 905-895-5193 extension 2508 or MKryzanowski@newmarket.ca