

DATE OF MEETING MAY 3, 2021

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SUBJECT OPAL ROAD TRAFFIC CALMING

OVERVIEW

Purpose of Report

To advise Council of the current operations on Opal Road and seek Council's consideration regarding additional measures to further control illegal and unsafe traffic movements at the intersection of Opal Road and Rock City Road.

Recommendation

That Council direct Staff to continue to monitor operations and modify the intersection if necessary.

BACKGROUND

Opal Road is a local road located in the Rock City Neighbourhood, which provides a short connection between Rock City Road and Uplands Drive. In 2006, Opal Road residents expressed concerns about safety stemming from the speeds and volumes of traffic using Opal Road as a shortcut. That year, speed humps were chosen as the most appropriate form of traffic calming. In 2018, residents raised fresh concerns, and in response, another traffic calming review showed the average daily volume on Opal Road was above the capacity for a local road. A partial closure of the intersection with Rock City Road was chosen to reduce non-resident traffic.

The intersection of Opal Road and Rock City Road was modified in September 2019 to restrict vehicles from making turns from Rock City Road onto Opal Road. The restrictions succeeded in reducing traffic on Opal Road but the change also generated significant public concern. Council requested a follow-up report at their regular meeting of May 4, 2020, which was presented to Council on November 16, 2020. At that meeting, Council requested Staff monitor the situation and bring forward findings in May 2021.

DISCUSSION

Traffic volumes and speed data have been collected regularly since 2018 to evaluate intersection operations. Data was collected before and after the September 2019 intersection modification. In the "after" data collection, it was found traffic volumes were reduced to levels commensurate with a local road's capacity. Speeds were also reduced. However, there continued to be illegal and unsafe movements at Rock City/Opal. Additional measures were installed at the intersection in October 2020 to control illegal movements. Data collected in October showed a continued decline in volumes.

Data collection was carried out again the week of April 12, 2021. This time, the data showed an increase in the number of illegal movements. In the afternoon peak hour, illegal movements increased from 9 (October 2020) to 38, of which 35 are illegal left turns from Opal Road to Rock City Road.

The situation with the illegal movements is less than ideal; however, taking more measures to further restrict movements would have a negative impact on adjacent residents. The original goal, set in 2018, was to reduce volumes and speeds on Opal Road to acceptable levels. This goal has been achieved.

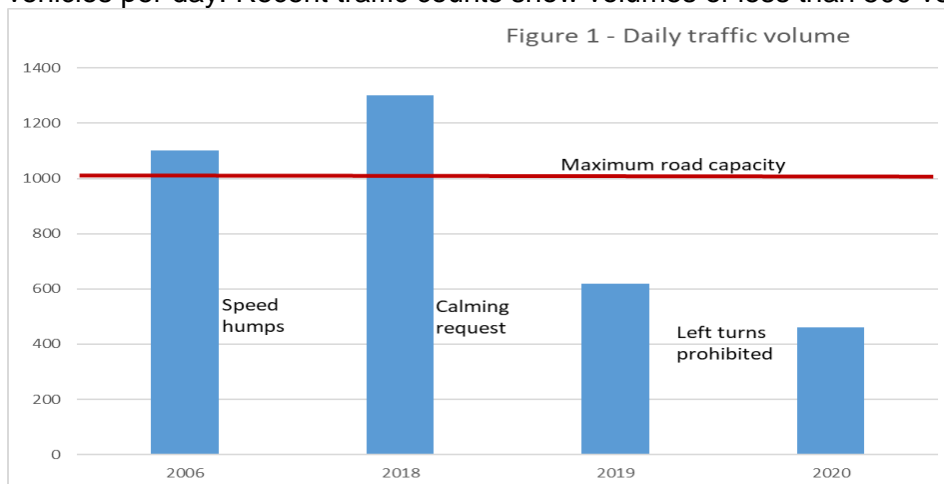
The level of risk surrounding illegal movements is likely low. Traffic volumes on Opal Road and Rock City Road are low, and, the number of illegal movements are also low. Drivers have time to consider their illegal movement and clear visibility to judge gaps in traffic before carrying it out. This suggests the likelihood of a collision is low.

If restricting the movements further is desirable, then turn control options could include:

- Rebuild the concrete island to enlarge it;
- Add more median barrier, either concrete or delineators; and/or,
- Add more obstruction on the shoulders.

These changes have not been budgeted and funds would be reallocated to accommodate the project costs. Legal movements would still be permitted which would leave openings which could theoretically be used for illegal movements. It would take complete closure of the road connection to eliminate all illegal movements.

If removal of traffic calming is contemplated, the predictable outcome would see a return to 2018 operation with volumes in excess of thresholds desirable for a local road. The 2018 volumes were 1300 vehicles per day, 30% higher than the maximum local road capacity of 1000 vehicles per day. Recent traffic counts show volumes of less than 500 vehicles per day.



Changes to the intersection affects traffic at the intersections of Rock City Road at Departure Bay Road, and Rock City Road at Uplands Drive. These two intersections are monitored regularly and analyzed for traffic signal needs. Both intersections are slated for data collection this year. Traffic signals for Departure Bay Road at Uplands Drive are in the Financial Plan for 2027. When the volumes reach signal warrant thresholds at either intersection, the Financial Plan can be adjusted to accommodate traffic signal installation.

OPTIONS

1. That Council direct Staff to continue to monitor the operations and modify the intersection if necessary.
 - Advantages are that speeds and volumes on Opal Road remain controlled without additional expenditure.
 - The disadvantage of this option is that it allows a few drivers to flout the law and disrupt the neighbourhood.
 - Financial Implications: None.
2. That Council direct Staff to increase turn control measures at the intersection.
 - The advantage is that illegal movements would likely be further reduced.
 - The disadvantage of this option is that some drivers may still find routes around the new modifications.
 - Financial Implications: Unplanned expenditure which would require adjustment to the Financial Plan.
3. That Council direct Staff to remove the existing turn control measures.
 - The advantage of this option is that shortcutting through Opal Road could reduce travel time for drivers traveling between Rock City Road and Uplands Drive.
 - The disadvantage of this option is that volumes and speeds on Opal Road would revert back to pre-2018 numbers, undoing and disrupting the local neighbourhood.
 - Financial Implications: \$20,000 unplanned expenditure which would require project budgets to be reallocated.
4. That Council give Staff alternate direction.

SUMMARY POINTS

- Opal Road was not planned and constructed to be a thoroughfare between Rock City Road and Uplands Drive.
- Turning restrictions have been installed at Rock City Road and Opal Road to calm traffic and have achieved this effect.
- Drivers are continuing to make illegal and unsafe movements at the intersection.

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