



**To:** Public Works and Transportation Committee  
**From:** Lloyd Bie, P.Eng.  
Director, Transportation  
**Re:** **Kittiwake Drive – Traffic Calming Update**

**Date:** September 6, 2022  
**File:** 10-6450-09-01/2022-  
Vol 01

**Staff Recommendation**

That Option 3 to implement a pilot project for the temporary installation of two speed cushions on Kittiwake Drive for a trial period of six months, as described in the staff report titled “Kittiwake Drive – Traffic Calming Update” dated September 6, 2022 from the Director, Transportation, be endorsed.

Lloyd Bie, P.Eng.  
Director, Transportation  
(604-276-4131)

Att.1

REPORT CONCURRENCE		
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>
RCMP	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Fire-Rescue	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b>	<b>APPROVED BY CAO</b>

## Staff Report

### Origin

In October 2002, Council adopted Policy 7018 titled “Traffic Calming Related Measures- Approval Process for the Implementation of.” The Policy indicated that the Director of Transportation may implement traffic calming measures, without reference to Council, if the measures have the support of the majority of affected residents and the measures are on a local street or laneway. If any of the conditions are not met, Council approval for the implementation of traffic calming measures must be obtained.

In June 2021, staff received a petition from residents of Kittiwake Drive requesting traffic calming measures to address perceived concerns of speeding motorists. This report provides the outcome of staff’s review of the request and engagement with the neighbourhood.

This report supports Council’s Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

*Enhance and protect the safety and well-being of Richmond.*

*1.4 Foster a safe, caring and resilient environment.*

### Analysis

#### Review of Traffic Calming Request

Kittiwake Drive is a local street within a neighbourhood subdivision located south of Steveston Highway that connects No. 2 Road to Kingfisher Drive (Figure 1). There is a 50 km/h speed limit and parking is permitted on both sides of the street.



Figure 1: Kittiwake Drive

In June 2021, the City received a signed petition from 12 residents on Kittiwake Drive requesting the implementation of speed humps as a traffic calming measure to address residents’ concerns regarding speeding motorists and pedestrian safety.

Staff responded to the request by collecting current traffic data, and reviewing other traffic-related and road geometry information to assess the actual conditions and quantify any concerns including:

- *Traffic Speed Study*: A traffic speed survey was conducted over a seven-day period, from September 15<sup>th</sup> to September 22<sup>nd</sup>, 2021, and the results indicated there is a speeding issue on Kittiwake Drive. Specifically, the 85<sup>th</sup> percentile speed for westbound motorists was 67 km/h while that of eastbound motorists was 55 km/h. The 85<sup>th</sup> percentile speed indicates the highest speed that 85% of the vehicles are travelling at or below. This measurement is an industry standard for determining speed limits and assessing the level of action required to address speeding issues.
- *Crash History*: Within the last five years (2016-2020), a total of 11 crashes were recorded on Kittiwake Drive with seven of these located at the intersection with No. 2 Road. The remaining four crashes that occurred on Kittiwake Drive were not speed related and there were no pedestrian or cyclists crashes.

Engagement with Neighbourhood

*Online Stakeholder Meetings*

Staff held two online meetings in November 2021 and March 2022 with the neighbourhood to present staff’s technical assessment and then achieve consensus on options for a neighbourhood survey (Table 1).

*Table 1: Summary of Online Stakeholder Meetings*

Date	Purpose	Feedback/Outcome
November 25, 2021	<ul style="list-style-type: none"> <li>• Present staff’s technical assessment</li> <li>• Discuss need for traffic calming measures</li> </ul>	<ul style="list-style-type: none"> <li>• Advise that speed humps are not supported due to negative impact on response times for emergency services</li> <li>• Consensus to investigate traffic circles as an alternative traffic calming measure</li> </ul>
March 1, 2022	<ul style="list-style-type: none"> <li>• Present revised traffic calming measures based on feedback from first meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Consensus achieved on content of neighbourhood survey comprising the following options:                             <ol style="list-style-type: none"> <li>(1) Do nothing option</li> <li>(2) Traffic calming option with traffic circles to be installed at Kittiwake Drive-Pintail Drive and Kittiwake Drive-Pelican Court</li> </ol> </li> </ul>

*Neighbourhood Survey*

During March-April 2022, residents were surveyed to determine the level of support for and obtain comments on the proposed traffic circles determined through the engagement phase. A total of 21 surveys were mailed out to each discrete address abutting Kittiwake Drive; 13 responses were received for a 62% response rate.



The results did not find a majority support for the proposed traffic circles (33% in favour). During this period, residents of 19 addresses on adjacent roadways outside the survey area also provided their feedback: 18 were not in favour of the traffic circles and one was in favour. As the proposed traffic circles did not have the majority support, the Director, Transportation does not have the authority to implement traffic circles as per Policy 7018.

### Traffic Calming Options

While there is no majority support of the proposed traffic circles, there is a demonstrated desire from the majority (12 of 21 registered addresses, or 57%) of the residents on Kittiwake Drive for traffic calming measures. Additionally, the results of the traffic speed study confirmed speeding issues along Kittiwake Drive. Based on these combined factors, staff have identified three possible traffic calming options for consideration.

#### *Option 1: Status Quo (Not Recommended)*

With the majority of the residents on Kittiwake Drive requesting traffic calming measures, as well as the high vehicle speed recorded on Kittiwake Drive, staff do not recommend a do nothing option.

#### *Option 2: Traffic Circles (Not Recommended)*

This option would install traffic circles on Kittiwake Drive, one at Pintail Drive and the other at Pelican Court/Plover Drive. While this option is supported by the majority of those that attended the online stakeholder meetings and is anticipated to be effective in reducing vehicle speeds, it was not supported by the majority of the residents along Kittiwake Drive. Therefore, staff do not recommend this option at this time.

#### *Option 3: Trial Installation of Speed Cushions (Recommended)*

This option would install speed cushions (Figure 2) at two locations on Kittiwake Drive, one at Pintail Drive and the other at Pelican Court/Plover Drive (Attachment 1). Speed cushions are similar to speed humps that are effective in slowing down vehicles, but with cut-outs designed to not impede nor slow down emergency response vehicles (ERV's). Specifically, ERV's have a wider wheel track which permits them to cross the centre line and straddle the cushion. The gaps in speed cushions also permits the unimpeded passages of cyclists without impacting existing street drainage.



Figure 2. Speed Cushion Example

As these speed cushions would be the first to be introduced on a local roadway in Richmond, staff recommend that the cushions be installed on a trial basis for six months. Upon completion of the trial period, staff will conduct an additional traffic speed study to assess the effectiveness of the measure and report back to Council prior to the permanent installation of the speed cushions.

**Financial Impact**

The cost to implement the trial speed cushions is \$16,000, which can be funded by the approved 2022 Traffic Calming Program.

**Conclusion**

A speeding issue has been identified on Kittiwake Drive. The City engaged with residents of Kittiwake Drive to develop a traffic calming plan, however it did not receive majority support based on the survey results. Staff instead propose a pilot project to install two speed cushions on Kittiwake Drive at Pintail Drive and Pelican Court/Plover Drive, for a period six months. Afterwards, staff will assess their effectiveness in reducing vehicle speeds and report back to Council.



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Att. 1: Proposed Temporary Speed Cushions on Kittiwake Drive

### Proposed Temporary Speed Cushions on Kittiwake Drive

