



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: October 12, 2021

From: Lloyd Bie, P.Eng.
Director, Transportation

File: 10-6450-09-01/2021-
Vol 01

Re: Barnes Drive and Flury Drive - Traffic Calming Update

Staff Recommendation

1. That Option 3 to establish a 30 km/h speed limit on Barnes Drive and Flury Drive as described in the staff report titled "Barnes Drive and Flury Drive – Traffic Calming Update" dated October 12, 2021, from the Director, Transportation, be endorsed; and
2. That should Option 3 be endorsed, Traffic Bylaw No. 5870, Amendment Bylaw No. 10301, to revise the posted speed limit on Barnes Drive and Flury Drive to 30 km/h, be introduced and given first, second and third reading.

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

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

Staff Report

Origin

In April 2021, staff received a petition from eight residents of Barnes Drive and Flury 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

Barnes Drive and Flury Drive are local streets that form an internal subdivision ring road in the east Cambie area. The ring road is only accessible by vehicle from Bath Road, which connects westward to No. 5 Road south of Bridgeport Road (Figure 1). The default speed limit for both streets is 50 km/h; warning signs advising of a 30 km/h speed limit through the curved section of the roadway at the northeast corner are in place. A total of 52 addresses are located on the streets, which have a relatively narrow pavement width, no pedestrian facilities and on-street parking generally permitted on the shoulders.

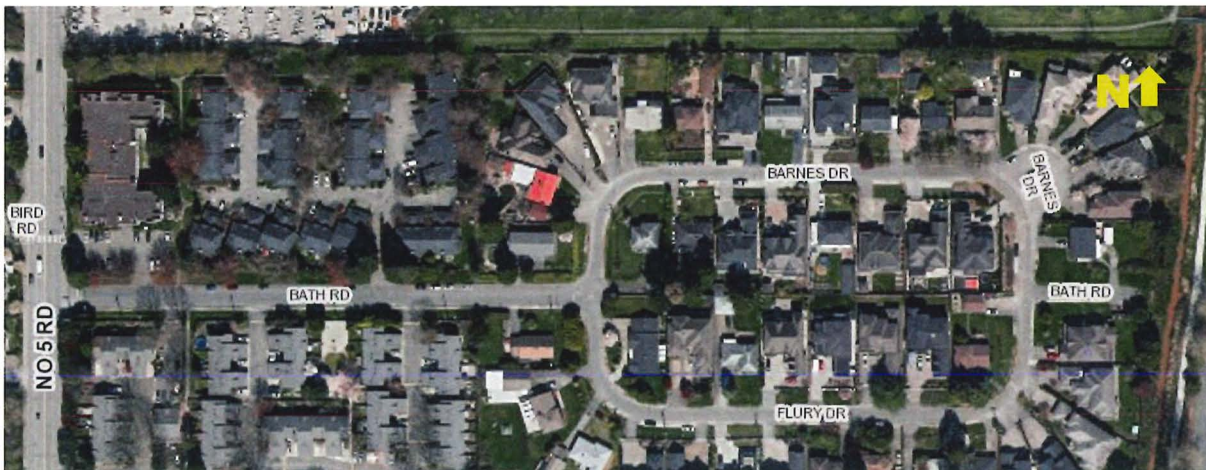


Figure 1: Barnes Drive and Flury Drive

The residents' petition requested an in-pavement speed limit marker specifying 30 km/h at the northeast corner. Staff responded to the request by reviewing traffic data and other related information to assess the actual site conditions and quantify any concerns including:

- Traffic Speed Study: Counts taken October 14-21, 2020 on Barnes Drive indicated an average speed of 26 km/h with the highest speed recorded being one motorist travelling 56 km/h.
- Sightlines: A site assessment confirmed that the sightlines at the four corners are adequate.

- Crash History: Within the last five years (2016-2020), the roadways recorded four vehicle incidents, none of which was speed-related.

Engagement with Neighbourhood

Online Stakeholder Meetings

Staff held two online meetings in June 2021 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	Attendees	Purpose	Feedback/Outcome
June 9, 2021	13	<ul style="list-style-type: none"> • Present staff's technical assessment • Discuss need for traffic calming measures 	<ul style="list-style-type: none"> • Majority of attendees indicated: <ul style="list-style-type: none"> ○ no traffic calming measures needed ○ wish to retain on-street parking ○ did not support speed humps • Some interest expressed for: <ul style="list-style-type: none"> ○ 30 km/h speed limit and signage ○ measures that are non-intrusive, aesthetically pleasing, and do not impact parking or trees
June 23, 2021	9	<ul style="list-style-type: none"> • Present revised traffic calming measures based on feedback from first meeting 	<ul style="list-style-type: none"> • Consensus achieved on content of neighbourhood survey comprising the following options: <ol style="list-style-type: none"> (1) Do nothing option (2) Traffic calming option with one 30 km/h advisory sign at entrance to neighbourhood that is not an enforceable regulatory sign (3) "Other" option to be described by the respondent

Neighbourhood Survey

From late June to late July, residents were surveyed to determine the level of support for and obtain comments on the proposed traffic calming measures determined through the engagement phase. A total of 52 surveys were mailed out to each discrete address; 43 responses were received including five responses with a duplicate address. The five responses are included in the analysis as they represent a separate tenant of the house. Thus, the percent support for each option is calculated based on the number of responses for that option divided by a total of 57 units.

The results indicate that there is no majority support for any single proposed option nor any other option suggested by residents (Figure 2). However, there is notable combined support (63% of respondents or 47% of total households) for either an advisory or enforceable 30 km/h speed limit.

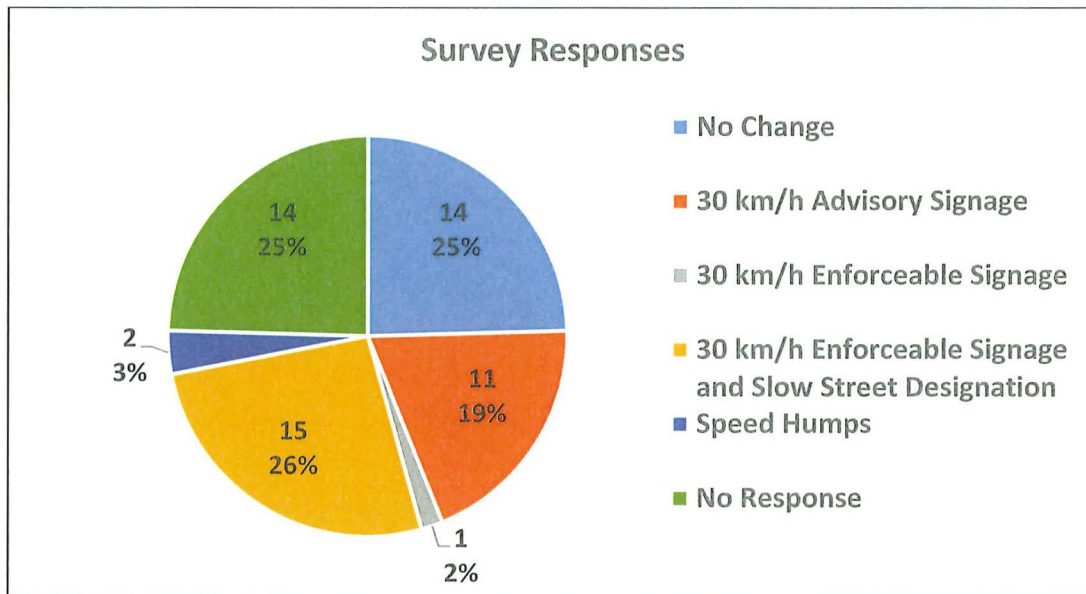


Figure 2: Survey Results for Traffic Calming Options

Traffic Calming Options

There is a demonstrated desire of a near majority of residents for a lower speed limit. Additionally, the two local streets are not through roads, have narrow lane widths, and lack pedestrian facilities, all of which support a lower speed limit. Research indicates that lower speeds reduce the frequency and severity of crashes, and also decrease the risk of a pedestrian or cyclist fatality if hit by a motorist. Based on these combined factors, staff have identified possible traffic calming options for consideration.

Option 1: Status Quo (Not Recommended)

The survey results indicate 25% support no change. As 47% of the total surveyed support either an advisory or enforceable 30 km/h speed limit, staff do not recommend a do nothing option.

Option 2: Advisory 30 km/h Speed Limit (Not Recommended)

This option would install advisory 30 km/h speed limit signage that is not enforceable by Richmond RCMP. As there is existing advisory 30 km/h signage at the northeast corner, installing additional similar non-enforceable signage along the roadways does not provide a tangible change to the current conditions nor respond to residents' desire for a change from the status quo. Therefore, staff do not recommend Option 2.

Option 3: Regulatory 30 km/h Speed Limit (Recommended)

This option would install regulatory 30 km/h speed limit signage that is enforceable by Richmond RCMP. This option is recommended by staff as it provides a material change that responds to residents' interest in a lower speed limit for the neighbourhood and better aligns with the actual operating speed on the ring road as determined by the speed survey. Establishing an enforceable 30 km/h speed limit requires Council approval to amend Traffic Bylaw No. 5870.

Option 4: Regulatory 30 km/h Speed Limit and "Slow Streets" Designation (Not Recommended)

This option is the installation of 30 km/h speed limit signage that is enforceable by Richmond RCMP plus the designation of the two streets as "slow streets." This measure was written in by 26% of survey respondents as an "other" option. While staff do support the installation of enforceable 30 km/h speed limit signage, staff do not recommend the implementation of additional measures to further define the roadways as "slow streets" as physical measures such as in-street pavement markers will further constrain the already relatively narrow roadway width and, in turn, impact the shoulder areas where residents walk and park their vehicles. A number of attendees at the online stakeholder meetings also voiced opposition to the installation of additional signage that would impact parking.

Financial Impact

The estimated cost to implement the signage associated with the recommended Option 3 is \$1,500, which can be funded by the approved 2021 Traffic Calming Program.

Conclusion

The City and residents of Barnes Drive and Flury Drive collaboratively developed traffic calming options for the neighbourhood with two online stakeholder meetings. While the survey results do not indicate a majority support for any single proposed option nor any other option suggested by residents, close to a majority of the total surveyed indicated support for either an advisory or enforceable 30 km/h speed limit.

Staff recommend an amendment to Traffic Bylaw No. 5870 to establish an enforceable 30 km/h speed limit for the streets as a tangible measure that responds to residents' desire for a change from the status quo and is anticipated to improve traffic safety and the walkability of the neighbourhood, thereby encouraging greater community wellness and social interaction.

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Supervisor, Traffic Operations
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JC:jc



City of
Richmond

Bylaw 10301

Traffic Bylaw No. 5870 Amendment Bylaw No. 10301

The Council of the City of Richmond enacts as follows:

1. **Traffic Bylaw No. 5870**, as amended, is further amended by adding a new Item 12 to Schedule B as follows:
 12. Barnes Drive and Flury Drive.
2. This Bylaw is cited as “**Traffic Bylaw No. 5870, Amendment Bylaw No. 10301**”.

FIRST READING

SECOND READING

THIRD READING

ADOPTED

CITY OF RICHMOND
APPROVED for content by originating dept.
JC
APPROVED for legality by Solicitor
LB

MAYOR

CORPORATE OFFICER