

TRAFFIC SAFETY COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

SUBJECT: SAFETY CONCERNS AT PARKER STREET AND MACDONALD AVENUE

RECOMMENDATIONS:

1. THAT Council endorse proposed upgrades to the intersection of Parker Street and MacDonald Avenue, as outlined in this report, to address traffic safety concerns.
2. THAT Council send a copy of this report to Mr. Lawrence Chan for information.

REPORT

The Traffic Safety Committee, at its meeting held on 2022 January 26, received and adopted the attached report seeking Council approval for proposed improvements to address traffic safety concerns at Parker Street and MacDonald Avenue.

Respectfully submitted,

Councillor D. Johnston
Chair

Councillor J. Wang
Vice Chair

Copied to:	Chief Administrative Officer Deputy CAO/CFO GM Corporate Services GM Engineering GM Community Safety OIC RCMP
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TO: CHAIR AND MEMBERS
TRAFFIC SAFETY COMMITTEE

DATE: 2022 January 17

FROM: GENERAL MANAGER ENGINEERING

FILE: 38000-20
Ref: Traffic Safety

SUBJECT: SAFETY CONCERNS AT PARKER STREET AND MACDONALD AVENUE

PURPOSE: To recommend safety improvements at Parker Street and MacDonald Avenue.

RECOMMENDATIONS:

1. **THAT** the Committee recommend that Council endorse proposed upgrades to the intersection of Parker Street and MacDonald Avenue as outlined in this report to address traffic safety concerns.
2. **THAT** the Committee recommend that Council send a copy of this report to Mr. Lawrence Chan for information.

REPORT

INTRODUCTION

On 2021 September 22, the Traffic Safety Committee heard from Mr. Lawrence Chan regarding safety and vehicle speed concerns on Parker Street near MacDonald Avenue. In particular, Mr. Chan has requested for the intersection of Parker Street and MacDonald Avenue to be converted to an all-way stop control as a traffic calming measure. The Committee requested that staff investigate and provide a report back to the Committee for information. This report provides a summary of the analyses conducted, recommendations, and additional information in response to concerns raised.

POLICY

Traffic safety initiatives are aligned with the City of Burnaby Corporate Strategic Plan by supporting the following goal and sub-goal of the plan:

Goal

- A Safe Community
 - Transportation safety – Make City streets, pathways, trails and sidewalks safer

BACKGROUND

Concerns raised at the intersection of Parker Street and MacDonald Avenue included vehicle speeds and the need for traffic calming measures on Parker Street for the safety of all road users.

Parker Street is classified as a Major Collector Secondary and has a grade of 10% descending from east to west. It has abutting sidewalks, two full time parking lanes, and two travel lanes. MacDonald Avenue is classified as a Local Residential Street. Sidewalks were recently installed on both sides of MacDonald Avenue south of Parker Street.

There is an existing marked crosswalk with overhead signs across Parker Street on the west side of the intersection. This crosswalk is two blocks (200 m) from the Kitchener Elementary and is an important connection between residential areas and the school.

Figure 1: Existing Conditions at Parker Street and MacDonald Avenue (recently completed sidewalks shown in blue)



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DISCUSSION

A number of technical analyses were completed as part of the safety review. The safety review included:

- A review of traffic volume, pedestrian volume and vehicle speed data available on file;
- Warrant analysis for all-way stops;
- Assessment for pedestrian crossing control; and
- Traffic calming mitigation measure assessment.

Vehicle and pedestrian volume data for the intersection, and speed data for this section of Parker Street had been collected in 2019 February. Land use and infrastructure in the area is sufficiently similar for this data to be considered valid. New data was not collected as ongoing sidewalk construction on MacDonald Avenue may have affected the results.

A site visit was conducted in early 2021 December. This visit occurred in good weather during morning rush hour and included verifying existing conditions and taking sight distance measurements.

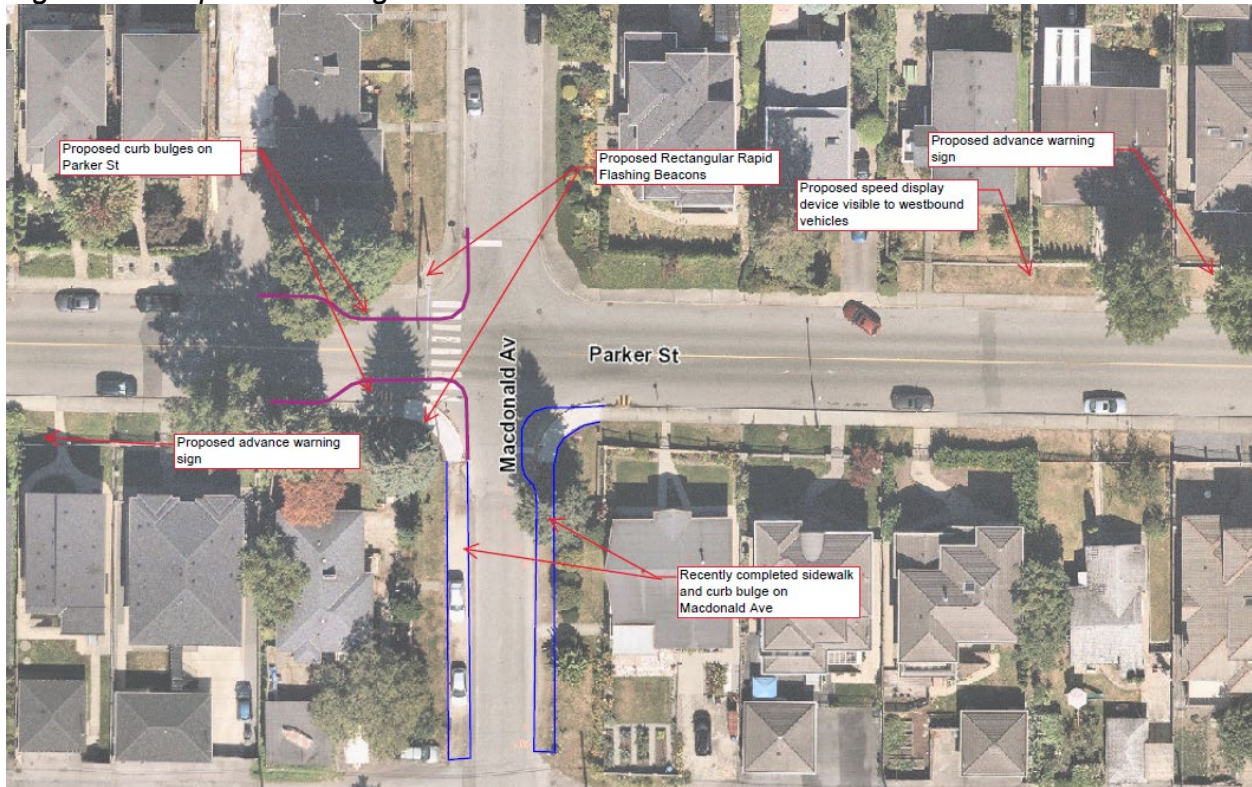
Based on the data, the findings from the warrant analysis for an all-way stop intersection on Parker Street at MacDonald Avenue indicated that the existing two-way stop should be maintained. Stop signs are typically implemented to mitigate right-of-way conflicts, and are not recommended to be used as a traffic calming measure.

An assessment of pedestrian crossing control and traffic calming mitigation measure was also conducted. The findings from the assessment indicate that there is a need for rectangular rapid flashing beacons (RRFB), and pedestrian crossing warning (WC-2) signs at the intersection. In addition, a speed display board and curb extensions are also recommended as suitable traffic calming measures. Hence, the City will undertake a design to upgrade this intersection that include the following improvements:

- New pedestrian crossing warning signs (one eastbound and one westbound on Parker Street);
- New side-mounted pedestrian signs with RRFB;
- New speed display board on the eastbound approach; and
- Curb extensions on the northwest and southwest corner.

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Figure 2: Proposed Changes at Parker Street and MacDonal Avenue



IMPLEMENTATION

Subject to Council endorsement, the recommended changes will be implemented as soon as possible as part of the City Transportation safety improvement program. Kitchener Elementary School, and residents within one block of the intersection will be advised of the changes prior to implementation.

CONCLUSIONS

A safety review was completed for the intersection of Parker Street and MacDonal Avenue. This review included an analysis of traffic volume and speed data; warrant analysis for all-way stops; assessment for pedestrian crossing control; and traffic calming mitigation measure assessment.

The findings from the safety review indicate that there is a need to upgrade the existing crosswalk, and implement additional traffic calming measures on Parker Street. It was determined that an all-way stop is not warranted.

Subject to Council endorsement, the improvements will be implemented as soon as possible and monitored for performance.

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RECOMMENDATIONS

Staff have completed a safety review of the intersection of Parker Street and MacDonald Avenue. It is recommended that Council endorse the proposed improvements as outlined in this report to address traffic safety concerns. The safety improvements include new pedestrian crossing warning signs, new side-mounted pedestrian signs with RRFB, new speed display board, and curb extensions. It is also recommended that a copy of this report be sent to Mr. Lawrence Chan for information.



James Lota, P.Eng., MBA, MPA
GENERAL MANAGER ENGINEERING

ALC:JL:jv

Copied to: Chief Administrative Officer
General Manager Community Safety
General Manager Planning and Development
General Manager Corporate Services
RCMP – OIC Burnaby Detachment Supt. Graham de la Gorgendiere
Fire Chief – Chris Bowcock