

THE CORPORATION OF THE
CITY OF WHITE ROCK
CORPORATE REPORT



DATE: February 12, 2024
TO: Mayor and Council
FROM: Corrine Haer, P.Eng., Manager, Engineering
SUBJECT: Speed and Traffic Calming Update

RECOMMENDATIONS

THAT Council:

1. Approve the speed and traffic calming project prioritization outlined herein; and
 2. Direct staff to process and proceed with project prioritization.
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EXECUTIVE SUMMARY

The purpose of this corporate report is to provide Council with an overview and prioritization of various speed and traffic calming initiatives across the City following the completion of the Integrated Transportation and Infrastructure Master Plan (ITIMP) which included public engagement and surveys and the Speed & Traffic Calming Study Conceptual Designs.

With Council endorsement, these efforts will inform future capital project requests, operational improvements and will help guide future grant applications.

INTRODUCTION

In 2022, Council approved the ITIMP to optimize the City's transportation network and guide improvements over the next 20 years and beyond. The ITIMP builds upon the vision to provide a safe and efficient multi-modal transportation network that meets residents' and visitors' present and future needs. The ITIMP prioritizes safety and pedestrian facilities at the top of the transportation hierarchy of improvements.

There is a critical need to identify and develop traffic calming measures to support the vision and priorities of the City's ITIMP. Survey results from the ITIMP engagement reveal that improvements to walking, cycling, and transit are the most significant factors in getting people to reduce reliance on automobiles. The results also show that residents want improvements to the pedestrian network, registering as the highest priority element of the City's transportation system. Traffic calming measures support these objectives.

In 2023, staff received feedback from residents requesting various traffic calming measures. In alignment with the ITIMP objective, staff undertook several initiatives to address these concerns and formulate a strategic plan moving forward. These initiatives included review of site

conditions, transportation standards, a pedestrian improvement study and a speed and traffic calming study.

Conceptual design of various locations and recommendations across the City are included in Appendix A and with Council's endorsement, will inform future capital project requests and guide the City's efforts on grant applications.

ANALYSIS

Staff Technical Review

Staff receive feedback from residents regarding various traffic calming concerns in person, by email, through phone or through delegations to Council. The majority of requests are resolved through actions guided by a review of site conditions, transportation standards and relevant City policies and procedures. In some instances, staff inquire with White Rock RCMP if there is the potential for added enforcement to resolve an issue.

For locations requiring further consideration, a table has been included below (Table 1).

Table 1 – Staff technical review summary

Location	Concern	Comments	Priority
Emerson Park	Speeding	<i>Short term</i> - Operations and Engineering are working together to determine a solution to provide the perception that travel lanes are narrower than they are in order to encourage slower speeds through the park zone.	High priority
Foster & Prospect	All-way stop	<p><i>Complete</i> - "Yield to Oncoming Traffic" signage has been installed at this intersection to highlight to drivers that the intersection is a two-way stop.</p> <p><i>Medium term</i> - Any decision to install all-way stop control must be based on an engineering study. Upon review of the location and the Manual of Uniform Traffic Control Devices (Canada), it has been identified that an all-way stop should not be installed where another traffic device controlling right of way is within 250m, unless there are a threshold of five collisions per year over a three-year period. Unfortunately, Johnston Road is less than 200m away, in addition, this intersection currently has an average of 0.5-2 collisions per year over a 5-year period.</p> <p>Staff will continue to monitor this location and review accident statistics when they are available from ICBC.</p>	Medium priority

Pedestrian Improvement Study

In alignment with the ITIMP, a pedestrian improvement study was initiated at two locations to address resident safety concerns. This study was completed by a consultant and was used to support two grant applications, including a submission to BC Vision Zero and a submission to TransLink. Staff are waiting to hear back regarding the results of those applications.

A table summarizing the recommendations has been included below (Table 2).

Table 2 – Pedestrian Improvement Study Summary

Location	Concern	Comments	Priority	Budgetary estimate
Oxford & Russell	Pedestrian activated crosswalk	<i>Short term</i> - A traffic warrant was conducted and recommended a pedestrian activated crosswalk supplemented with a zebra crosswalk. Staff submitted a grant application to TransLink to support these efforts.	High priority	\$115K
Roper & George	Crosswalk	<i>Short term</i> - A traffic warrant was conducted and recommended a zebra crosswalk crossing George at Roper Avenue. Staff submitted a grant application to BC Vision Zero to support these efforts.	High priority	\$11K

Speed and Traffic Calming Study

In alignment with the ITIMP, a speed and traffic calming study was initiated for eleven sites to address resident safety concerns and enhance vehicle and pedestrian safety. Traffic calming is the combination of physical measures that reduce the negative effects of motor vehicle use, alters driver behavior and improve conditions for non-motorized street users enhancing safety and preserving neighborhood livability.

A consultant was retained early 2023 to complete a study, along with conceptual designs, and a table summarizing the recommendations is included below (Table 3).

Table 3 – Speed & Traffic Calming Study Summary

Location	Concern	Comments	Priority	Budgetary estimate
Marine between Stayte and Finlay	Traffic calming	<i>Short term</i> - Install speed reader boards to increase awareness of the 30 km/hr limit, add additional posted speed signs and discuss rapid implementation of curb bulges with Surrey. <i>Medium term</i> – Add corner bulges throughout the stretch and add new crosswalks where warranted. Any new corner bulges should include additional green infrastructure to facilitate rainwater permeation and will need to be coordinated with Surrey and any future drainage improvements along Marine Drive.	High priority	\$784K
Marine & Parker	Crosswalk	<i>Short term</i> - Rapid implementation of curb bulges to reduce pedestrian walking distance, subject to discussions with Surrey. <i>Medium term</i> - Install concrete corner bulges. Any new corner bulges should include additional green infrastructure to facilitate rainwater permeation and will need to be coordinated with any future drainage improvements along Marine Drive.	High priority	\$275K

		<i>Long term</i> - Continue to evaluate whether any enhanced pedestrian crossing controls are warranted.		
Buena Vista & Vidal Street	Sight Distance	<i>Short term</i> - Prune vegetation to improve sight distance, reduce posted speed limit to 30km/hr, relocate the existing crosswalk on Buena Vista Avenue out of the driveway. <i>Medium term</i> - Re-configure the existing corner bulge to improve sight distance and monitoring the improvements to verify if 3-way stop control is necessary.	High priority	\$218K
North Bluff between Best and Finlay (Peace Arch Hospital)	Speeding and traffic calming	<i>Short term</i> - Install speed reader boards and additional speed limit signs. <i>Medium term</i> - Install Hospital Zone and “do not block” pavement markings at access points, narrow the lane widths on North Bluff Road and implement Leading Pedestrian Interval at Best Street and Finlay Street intersections. Note: Surrey does not support Hospital Zone or “do not block” markings here.	High priority	\$448K
Martin & North Bluff	Left turn signal	<i>Medium term</i> – Install a dedicated left-turn lane with shared right/through lane and painted bike lanes on northbound and southbound legs as well as implementing a Leading Pedestrian Interval phase for north/south pedestrian crossing. <i>Long term</i> - Connect Martin Street, north and south of North Bluff with bike lanes per the ITIMP.	High priority	\$280K
Maple between Columbia and Marine	Traffic calming	<i>Medium term</i> - Install curb and gutter on Maple Street between Columbia Avenue and Victoria Avenue. Fill sidewalk gaps along Maple Street with a multi-use path on the west side of the street. Reduce lane widths at all intersections to slow vehicle speeds and improve pedestrian connectivity.	Medium priority	\$521K
Finlay between Victoria and Columbia	Traffic calming	<i>Medium term</i> - Convert Finlay Street to one-way, northbound from Victoria Avenue to Columbia Avenue. Install a sidewalk on the east side of Finlay Street and complete intersection enhancements at Finlay Street & Columbia Avenue to enforce one-way travel and improve sight lines. Install a multi-use path on the south side of Columbia Ave between Finlay Street and Maple Street to connect to the existing bus stop.	Medium priority	\$407K
Marine & Bergstrom	Pedestrian crosswalk	<i>Short term</i> - Install speed reader boards and relocate speed limit sign. <i>Medium term</i> - Install corner bulges and crosswalk treatment, as/when warranted.	Medium priority	\$304K

Square area of Finlay, Thrift, Best and Russell	Traffic calming	<p><i>Short term</i> - Install parallel crosswalks at Best Street & Russell Avenue and install crosswalks and curb bulges at Goggs Avenue.</p> <p><i>Medium term</i> – Install speed mitigation measures along Goggs Avenue (for example, chicanes) and install protected bike lanes along Best Street and Thrift Avenue as per the ITIMP.</p>	Medium priority	\$832K
Everall & Hardie	Speed Limit Reduction	<p><i>Short term</i> - Install speed reader boards and relocating existing 30 km/h sign for better visibility.</p> <p><i>Long term</i> - Install sidewalk along the west side of the road on Everall Street and realign and reduce Everall Street width to 6.3m with moderate bends to slow vehicle speeds.</p>	Low priority	\$617K
Thrift & George	Pedestrian Activated crosswalk	<p><i>Medium term</i> - Improve concrete corner bulges, including cyclist-friendly adaptation where possible and improve cyclist mobility with painted bike lanes.</p>	Low priority	\$390K

Traffic calming supports active transportation uptake in four ways:

- Improved perception of safety
- Decreased speed difference between modes
- Reduced noise and atmospheric nuisances
- Beautified surroundings

Each site was reviewed in terms of background context, traffic operations (speed, volume, and service where applicable), traffic calming analysis and assessment, development of traffic calming measures and alternatives, evaluation of alternatives, recommendations, conceptual design (Appendix A) and budgetary cost estimate.

Most of the projects address the needs of adjacent residents as well as the overall travelling public without significant drawbacks. Others, such as the projects on Maple and Finlay streets, will affect the parking and access of adjacent residents – consultation with these residents will be required as a first step in project planning.

Staff seek Council’s endorsement of the project prioritization identified above to support design efforts moving forward into 2024 and beyond.

FINANCIAL IMPLICATIONS

Funds of \$500,000 are requested in the draft 2024-2028 Financial Plan to support the short term, high priority projects identified in this report. These funds will also be used to support design costs for the medium-term solution on at least one location of high priority.

Additional funds will be requested in subsequent years to support these ongoing efforts to reduce speed and encourage traffic calming across the City.

COMMUNICATION AND COMMUNITY ENGAGEMENT IMPLICATIONS

This report is in response to the requests that staff receive from residents regarding various traffic calming concerns across the City. As these projects move through the design phase, community engagement will occur.

In the development of the Speed & Traffic Calming study, the City of Surrey was included in the engagement process as the stakeholder on five of the sites that border the City of White Rock and the City of Surrey jurisdiction. Engagement comprised of two workshops, including the review of existing conditions, identification of primary concerns, preliminary suggestions that developed into the concepts provided herein. The City of White Rock will continue to work with the City of Surrey on any locations that affect both jurisdictions.

ALIGNMENT WITH STRATEGIC PRIORITIES

This project is in alignment with the Infrastructure Strategic Priority that identifies that the City plan, build and maintain infrastructure to enhance quality of life and civic service delivery while mitigating and adapting to environmental impacts. Specifically, this project ensures future infrastructure resiliency by making decisions through a long-term lens.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS

White Rock RCMP and the City's Fire Department were included as stakeholders in the review and development of mitigation measures, and their input and comments are captured in the concepts provided herein for the Speed & Traffic Calming study.

The measures identified in this report highlight the continuous, collective efforts to improve the City's street safety and fluidity for drivers, residents and visitors navigating the City.

Engineering, enforcement, and education will continue to work together to promote safe streets and improve road safety in White Rock.

IMPLICATIONS FOR TREE PRESERVATION AND TREE CANOPY ENHANCEMENT

Staff will ensure existing trees within the study sites are protected, thereby enhancing and ensuring the sustainability of the City's urban forest and recognizing the environmental and esthetic benefits trees provide. Typical city tree management will follow the City's Tree Protection Bylaw No. 2407.

OPTIONS / RISKS / ALTERNATIVES

The following option is available for Council's consideration:

1. Not approve the recommendation to approve the traffic calming project prioritization outlined herein. This in turn will delay the City's response to address the safety concerns identified by the community and through the ITIMP.

CONCLUSION

In 2022, Council approved the Integrated Transportation and Infrastructure Master Plan (ITIMP) to optimize the City's transportation network and guide improvements over the next 20 years and beyond.

In alignment with the ITIMP objective, staff undertook several initiatives in 2023 to address and identify areas of concern and formulate a strategic plan moving forward. With Council's

endorsement, the traffic calming project prioritization outlined herein will inform future capital project requests and guide the City's efforts on grant applications.

Respectfully submitted,

Approved by,



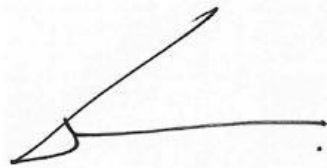
Corrine Haer, P.Eng.
Manager, Engineering



Jim Gordon, P.Eng.
Director, Engineering & Municipal Operations

Comments from the Chief Administrative Officer

I concur with the recommendations of this corporate report.



Guillermo Ferrero
Chief Administrative Officer

Appendix A: Speed & Traffic Calming Study Conceptual Designs