



Governance and Priorities Committee Report

Date: April 30, 2014 **From:** Brad Dellebuur, Manager, Transportation

Subject: Consideration of 40 kmh Speed Limits – Richmond/Douglas/Bay/Gorge

Summary

Following receipt of a staff report on a neighbourhood pilot project to reduce speed limits, Council passed the following motion at its November 28, 2013 meeting:

That Council request that the Governance and Priorities Committee consider adding the following arterial roads to Schedule B of the Streets and Traffic Bylaw, subject to public consultation and staff analysis:

- Richmond Road
- Douglas Street south of Belleville Street
- Bay Street, and
- Gorge Road

and that the following information be provided for consideration:

- City wide speed data
- James Bay Pilot Report, and
- Schedule B of the Streets and Traffic Bylaw.

Staff analysis on whether reduced speed limits on the above-noted streets were warranted has been completed. Based on a review of operating speeds, and roadway features/physical environment, there is no technical data to support the reduction in speed limits on the arterials.

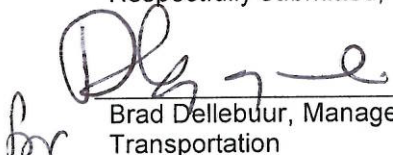
However, Council has the authority to change speed limits if they wish as staff are providing the technical analysis. Should Council wish to proceed, this report recommends a process to consult and then proceed with a final report back to Council prior to a bylaw revision.

The recommended consultation approach on a proposed change to a 40kmh speed limit on Richmond Road, Douglas Street south of Belleville, Bay Street and Gorge Road would include opportunities for the public to provide feedback. In addition, feedback would be sought from impacted stakeholders, such as delivery and transportation companies, tourism, business community and affected neighbourhood associations.

Recommendation:

That the existing 50kmh speed limit be maintained on Richmond Road, Douglas Street south of Belleville Street, Bay Street, and Gorge Road, consistent with vehicle operating speeds and user expectations associated with current road design.

Respectfully submitted,


for Brad Dellebuur, Manager
Transportation


Dwayne Kalynchuk, P.Eng.
Director of Engineering and Public Works

Report accepted and recommended by the City Manager:


Jason Johnson

Date: May 2, 2014

Purpose

To provide Council with analysis on setting appropriate speed limits on several arterial streets in the City of Victoria.

Background

Following receipt of a staff report on a neighbourhood pilot project to reduce speed limits, Council passed the following motion at its November 28, 2013 meeting:

That Council request that the Governance and Priorities Committee consider adding the following arterial roads to Schedule B of the Streets and Traffic Bylaw, subject to public consultation and staff analysis:

- Richmond Road
- Douglas Street south of Belleville Street
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- Gorge Road

and that the following information be provided for consideration:

- City wide speed data
- James Bay Pilot Report, and
- Schedule B of the Streets and Traffic Bylaw.

City-wide speed data (85th percentile speeds, and study date) is shown on Figure 1 and Figure 2. The November 18, 2013 Neighbourhood Pilot Projects to Reduce Speed Limits staff report, including Schedule B of the Streets and Traffic Bylaw (the list of streets with speed limits other than 50kmh), is also attached.

Issues & Analysis

While the default 50kmh speed limit for municipalities in British Columbia is contained in the Motor Vehicle Act, Council has the authority to set alternative speed limits on individual streets by bylaw. An amendment to Schedule B of the Streets and Traffic Bylaw would be required.

1. Setting Speed Limits - Provincial Practice:

Staff reviewed the recommended practice used in British Columbia, which includes the Institute of Traffic Engineering's (ITE) guidelines for reviewing and setting speed limits. The 85th percentile speed is cited as a good indicator of the appropriate speed limit on a street.

The 2003 document "Review and Analysis of Posted Speed Limits and Speed Limit Setting Practices in British Columbia" noted that speed zoning has been used for many years in British Columbia to influence motorist behaviour. Speed zoning is the process of establishing a safe and reasonable speed limit on a highway segment. Speed limits are primarily set for safety reasons, i.e., to reach a balance between travel time and crash risk, and to provide a basis for enforcement of inappropriate speeding behaviour.

The following fundamental concepts have been used to establish realistic speed zones in BC:

- The majority of motorists drive at a speed they consider reasonable, and safe for road, traffic, and environmental conditions. Posted limits which are set higher or lower than dictated by roadway and traffic conditions are ignored by the majority of motorists.
- The normally careful and competent actions of a reasonable person should be considered legal.
- A speed limit should be set so that the majority of motorists observe it voluntarily and enforcement can be directed to the minority of offenders.
- A driver's choice of speed can impose risks on other road users. Crash severity increases with increasing speeds because in a collision, the amount of kinetic energy dissipated is proportional to the square of the velocity. Crashes, however, appear to depend less on speed and more on the variation in speeds. The likelihood of a crash occurring is significantly greater for motorists traveling at speed slower and faster than the mean speed of traffic.
- Maximum speed limits are set for ideal road, traffic, and environmental conditions.

Establishing safe and realistic uniform speed zones is important because it invites public compliance by conforming to the behaviour of the majority of motorists and provides a clear reminder to violators.

Speed data collected on these arterial streets indicate the 85th percentile speed is in the range of 47-50kmh, confirming the appropriateness of a 50kmh speed limit.

2. Speed Limits – Evaluation based on Roadway Features/Physical Environment:

Staff at the Université de Québec, while working for the Québec Ministry of Transport on the impact on driver behaviour of lowering posted speed limits, developed a model in 2011 for setting 'credible' speed limits in urban areas. The model included eight key parameters that were found to have a significant impact on the operating speed of drivers – the number of vehicle lanes, width of the lateral visual clearance, length of consistent environment, number of commercial buildings, type of surroundings, number of institutional entrance/exit points, percentage of the street with on-street parking that is continuously occupied, and available pavement width - see <http://www.ite.org/membersonly/itejournal/pdf/2013/JB13AA40.pdf> for more information.

The model was designed to propose a credible speed limit, according to the roadway features and the road environment.

Staff used the model to evaluate the four streets to determine if an alternate speed limit was appropriate. The results indicated that lowering the speed limit below 50kmh was not supported or warranted.

According to the authors, if a speed limit was implemented that was lower than what was suggested by the model, it was unlikely drivers would respect the posted speed limit (without the presence of accompanying measures like traffic calming or police enforcement). Lowering the posted limit on these arterial streets would also mean lower-classified side streets would have a higher default limit. Given the hierarchy of street classification and the existing use of these streets - intuitively, lower posted limits would be more appropriately considered on minor streets. This would also be consistent with the 2013 Council motion forwarded to Union of British Columbia Municipalities, calling for a reduced default speed limit in municipalities.

Should Council wish to proceed with a speed limit change, staff would undertake the following public engagement.

Public Engagement

Should Council wish to implement 40kmh speed limits on Richmond Road, Douglas Street south of Belleville, Bay Street and Gorge Road, public consultation is recommended. The recommended consultation approach on a proposed change to a 40kmh speed limit on these streets would include opportunities for the public to provide feedback. In addition, feedback would be sought from impacted stakeholders, such as delivery and transportation companies, tourism, business community and affected neighbourhood associations.

Active consultation could be completed over the course of four weeks but would require lead time to adjust other workplan items.

Greater direction from Council on where in the public participation spectrum this issue would reside would be needed to guide development of both public information and tools to support consultation.

Recommendation

Maintain 50 km speed limit on Richmond Road, Douglas Street south of Belleville, Bay Street and Gorge Road. (staff recommendation)

Impacts:

- Consistent with vehicle operating speeds and user expectations associated with current road design.
- Would not create the situation of having lower speed limits on arterials roads and higher limits on local (side) streets.

Alternate Recommendation

Consult the public and impacted stakeholders on a proposed change to a 40kmh speed limit on Richmond Road, Douglas Street south of Belleville, Bay Street and Gorge Road.

Impacts:

- Technical data does not support changing the speed limit from 50kmh to 40kmh on Richmond Road, Douglas Street south of Belleville, Bay Street and Gorge Road.
- Consultation could be impacted without having technical data that supports a change in speed limit.
- Consultation is not currently in workplan. Workplans would need to be adjusted.
- Based on public feedback heard through earlier discussions on this topic, strong public opinions exist in both support and opposition to 40km/h limit.

Conclusion

Based on a review of operating speeds, and roadway features/physical environment, staff recommend maintaining the existing speed limit on Richmond Road, Douglas Street south of Belleville Street, Bay Street, and Gorge Road.

Attachments:

November 18, 2013 staff report - Neighbourhood Pilot Projects to Reduce Speed Limits.

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▲ Traffic Speed

Figure 2: Traffic Speeds – east half of Victoria

