



To: Public Works and Transportation Committee **Date:** April 28, 2008
From: Victor Wei, P. Eng.
 Director, Transportation **File:** 10-6460-01/2008
Re: **REQUEST FOR REVIEW OF FEDERAL VEHICLE DESIGN REGULATIONS AND SUPPORTING MEASURES TO IMPROVE ROAD SAFETY IN CANADA**

Staff Recommendation

That Council send a letter and a copy of the attached report to:

- (a) the federal Minister of Transport requesting consideration of the appropriate legislative changes to vehicle design regulations with a view to enhancing road safety for vulnerable road users, such as pedestrians and cyclists, on urban roadways in light of the current collective efforts by all levels of government in encouraging sustainable transportation;
- (b) the provincial Minister of Transportation and the Insurance Corporation of British Columbia requesting greater driver training and education for all road users of how to safely share the road, greater enforcement of and penalties for aggressive driving, and greater ease for municipalities to implement speed limits on local minor streets; and
- (c) the Transportation Association of Canada requesting a review of the vehicle design dimensions used in developing roadway design standards, particularly for densely populated urban environments.

Victor Wei, P. Eng.
 Director, Transportation
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ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
R.C.M.P.	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Sustainability	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Engineering.	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
REVIEWED BY TAG	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REVIEWED BY CAO (Acting) YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	

Staff Report

Origin

At the February 20, 2008 meeting of the Public Works and Transportation Committee, Mr. Thang Vu gave a presentation on the need for a review of the federal *Motor Vehicle Safety Act* (MVSA) and *Motor Vehicle Transport Act* (MVTA), primarily with respect to vehicle design regulations, with the intent of improving traffic and cycling safety in Richmond as well as across Canada. Mr. Vu requested that the Committee pass a motion that City Council write to the federal Minister of Transportation requesting that public hearings be convened to create a national discussion on the MVSA and the MVTA. Following the presentation, the Committee passed the following referral:

That:

- (1) *the matter of communicating with the Federal Government, and the Minister of Transportation, to encourage national public hearings on the Motor Vehicle Safety Act (MVSA) and the Motor Vehicle Transport Act (MVTA) be referred to the Traffic Safety Advisory Committee and to the Richmond Community Cycling Committee for review and comment; and*
- (2) *staff consider input from the advisory committees and submit a report detailing specific areas of improvement to the MVSA and the MVTA.*

This report summarizes the comments of the Traffic Safety Advisory Committee and the Richmond Community Cycling Committee and proposes that Council send a letter to the appropriate transportation agencies requesting a review of legislation and standards within their respective jurisdictions in order to improve road safety across Canada.

Analysis

1. *Motor Vehicle Safety Act (MVSA) and Motor Vehicle Transport Act (MVTA)*

The MVSA and its accompanying regulations regulate the manufacture and importation of motor vehicles and motor vehicle equipment to reduce the risk of death, injury and damage to property and the environment. The MVSA regulations identify vehicle safety standards for various aspects of vehicles (e.g., braking and lighting systems, occupant restraint systems, rollover protection, side door strength, rear impact guards, etc). The MVSA regulations are periodically revised to reflect new standards and requirements; for example, a recent update was raising the upper weight limit for child restraint systems from 22.7 kg to 30 kg in 2007.

The MVTA regulates extra-provincial motor carrier operations (e.g., buses and trucking) to ensure that operators meet the safety performance measures of the National Safety Code for Motor Vehicles, which covers safety ratings, facility audits, driver and carrier profile systems, trip inspection reports, driver hours of service, commercial vehicle maintenance and inspections, and load security.

2. *Comments from the Traffic Safety Advisory Committee (TSAC)*

Mr. Vu attended the March 6, 2008 meeting of TSAC to present his proposal and answer any questions from Committee members. Mr. Vu noted that should public hearings on the MVSA

and MVTA be convened, he would like the particular area of focus to be maximum vehicle weight, as he believes that this criterion is the primary determinant of the level of road safety and influences, for example, road design and speeding behaviour of motorists.

Overall, the Committee agrees that a review of the MVSA and its regulations would be beneficial and that such a review should not focus primarily on vehicle weight, but instead encompass a holistic approach to road safety that includes not only engineering measures but also education and enforcement initiatives. Specific areas for review suggested by Committee members include:

- improving vehicle design features that would minimize injuries to vehicle occupants as well as other road users (particularly pedestrians and cyclists) in the event of a crash, such as design changes to vehicle fenders, requirement for side guards on trucks and buses, and warning labels or alerts when vehicle doors are to be opened;
- automobile advertising standards, with consideration given to curtailing advertisements that show vehicles being driven at excessive speeds or in an unsafe manner;
- greater training and education for drivers with respect to sharing the road with vulnerable users such as cyclists and pedestrians, and for cyclists with respect to obeying traffic rules and regulations;
- potential enforcement tools and measures that would further help address traffic safety issues such as speeding; and
- vehicle design regulation changes to address maximum speeds of vehicles, as excessive speed remains one of the most dominant contributing factors to injuries and fatalities in vehicular crashes.

3. Comments from the Richmond Community Cycling Committee (RCCC)

Mr. Vu attended the March 12, 2008 meeting of RCCC to present his proposal and answer any questions from Committee members. In general, RCCC members support a review of the MVSA and its regulations as the Committee regards the review as one potential mechanism among many that supports the ultimate goal of improving cyclist and pedestrian safety and encouraging more people to walk and cycle. Like TSAC, the RCCC also agrees that a review should be framed in the broader context of improving the safety of vulnerable road users such as cyclists and pedestrians and thus not focussed only on changes to maximum vehicle weight. To that end, the Committee suggested the following specific areas for review:

- changes to vehicle design, including maximum vehicle weight, that would lessen the severity of injuries to cyclists and pedestrians in the event of a collision;
- increased education and awareness for all road users of how to safely share the road; and
- greater enforcement of and penalties for aggressive and unsafe driving behaviour.

4. Staff Comments

4.1 Current Road Safety Initiatives by Federal Government re Vehicle Design

Road Safety Vision 2010 is Canada's national road safety plan and was endorsed in Fall 2000 by the Canadian Council of Motor Transport Administrators (CCMTA), which is a non-profit organization comprising representatives of the provincial, territorial and federal governments of Canada. The 2005 annual report on the progress achieved by the Plan identifies initiatives in the

areas of reducing the number of fatally or seriously injured vulnerable road users and new regulations to make vehicles safer. These initiatives include education campaigns, increased fines for certain infractions (e.g., speeding in work or school zones), developing frontal- and side-impact occupant protection regulations, and conducting research on driver distraction, the effectiveness of intelligent speed adaptation, and passive sensors for alcohol that would stimulate a request for breath tests.

In addition, the Plan notes that the motor vehicle manufacturing industry is improving vehicle crash avoidance capabilities and occupant protection through the voluntary enhancement of existing technologies and the introduction of innovative new technologies. Notable advancements include side door and curtain airbag systems, electronic stability control devices, restraint systems with load-limiting seat belts, automatic collision notification systems, airbag systems with occupant size discrimination controls, and adaptive cruise control systems.

4.2 Current Road Safety Initiatives by Other Jurisdictions re Vehicle Design

Staff research indicates that other countries are also actively examining potential changes to vehicle design and safety technologies in order to reduce the number and/or severity of vehicle crashes. For example, a key focus of the resulting *Road Safety Action Programme* of the European Commission (the Executive Branch of the European Union) is vehicle design regulations to improve both passive safety (crash protection) and active safety (crash prevention) for road users. Current areas of research with respect to these areas include retro-fitting of blind spot mirrors, intelligent speed adaptation, alcohol ignition interlocks, and under-run guard rails and side under-run protection for trucks.

4.3 Conclusion

As some of the areas for review suggested by TSAC and RCCC do not appear to be a priority focus within *Road Safety Vision 2010*, staff therefore concur with the Committees that:

- a review of the appropriate federal legislation, not necessarily only MVSA and MVTA, with respect to vehicle design would be beneficial as it is a potential opportunity to enhance road safety across Canada in light of the fact that as sustainable transportation is being promoted, more pedestrians and cyclists as vulnerable road users can be expected on public roadways; and
- complementary education and enforcement measures in addition to vehicle design and engineering changes should also be considered in order to maximize the safety benefits and help ensure that any legislative changes and initiatives are mutually reinforcing and supportive.

Staff also support the suggested areas of focus for the review and suggest the additional inclusion of the following areas:

- regulations that would enable municipalities to more easily implement speed limits on local minor streets including engineering and enforcement initiatives, such as establishing a de-facto speed limit of lower than 50 km/h on non-arterial roads; and
- vehicle dimension standards used when developing roadway design standards, particularly for urban environments where road rights-of-way can be constrained.

As some of the areas of focus identified by both Committees and staff are within the jurisdiction of provincial and/or industry agencies, and not the federal government, staff propose that the City send a letter to each of the appropriate agencies requesting a review of legislation and standards within their respective jurisdictions, as summarized in the table below.

Agency	Suggested Areas of Focus
Federal Government	<ul style="list-style-type: none"> • Vehicle design standards and guidelines such as fender design, side guards, labels/alerts for doors
Provincial Government	<ul style="list-style-type: none"> • Driver training and education initiatives for all road users with respect to sharing the road • Greater enforcement of and penalties for aggressive driving • Increased ability of municipalities to implement defacto speed limits of lower than 50 km/h on local roads
Transportation Association of Canada	<ul style="list-style-type: none"> • Vehicle dimension standards used when developing roadway design standards, particularly for densely populated urban environments

Financial Impact

None to the City at this time.

Conclusion

Both the City’s Traffic Safety Advisory Committee and Richmond Community Cycling Committee agree that a review of the appropriate federal legislation related to vehicle design standards would be beneficial to the overall goal of enhanced road safety for cyclists and pedestrians. Both Committees as well as staff have also identified the need for developing complementary education and enforcement strategies to maximize traffic safety benefits for these vulnerable road users.

Given that both Committees support a review and staff concur, it is therefore proposed that Council forward letters to the appropriate agencies suggesting several areas of focus for a review of legislation and standards within their respective jurisdictions in order to improve road safety and encourage sustainable transportation across Canada.



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