

Vehicle Noise Mitigation Study Final Report – October 2023 Update

ISSUE

Saskatchewan Government Insurance (SGI) has implemented a new vehicle noise policy. To align with the provincial policy, changes to Bylaw No. 8244, The Noise Bylaw are recommended to include a noise level limit for motor vehicles and update the noise level limit for motorcycles.

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council:

1. That a noise level limit of 101.3 dB for motor vehicles be added to Bylaw No. 8244, The Noise Bylaw to align with SGI's vehicle noise policy;
2. That the noise level limit for motorcycles be increased to 101.3 dB in Bylaw No. 8244, The Noise Bylaw to align with SGI's vehicle noise policy;
3. That the Noise Bylaw be updated to extend the ability for police officers to order sound testing of both motorcycles and motor vehicles and to create the corresponding offence for failure to comply with such an order; and,
4. That the City Solicitor be requested to prepare the appropriate bylaw amendments to Bylaw No. 8244, The Noise Bylaw, effective January 1, 2024.

BACKGROUND

City Council, at its 2023 Preliminary Business Plan and Budget Meeting held on November 28 and 29, 2022, considered the [Vehicle Noise Mitigation Study Final Report – Follow-Up](#) and resolved, in part:

- “2. That the Administration report to the appropriate Committee on a potential standard for measuring vehicle noise (Society of Automotive Engineers) and the ability for City of Saskatoon to add a vehicle noise limit to our bylaws.”

DISCUSSION/ANALYSIS

Vehicle noise in Saskatoon is regulated by the City of Saskatoon Bylaw No. 8244, The Noise Bylaw, the Saskatchewan *Traffic Safety Act* and the Saskatchewan *Vehicle Equipment Regulations*. Appendix 1 presents the relevant sections of each piece of vehicle noise legislation.

In the Noise Bylaw, there are noise level limits for motorcycles but not for other vehicles like cars and trucks. According to the Noise Bylaw, any motorcycle that emits any sound exceeding 92 dB(A) at idle or 96 dB(A) at any speed greater than idle is too loud and a violation. These standards are based on manufacturing standards that must be met for a motorcycle to be made or imported into Canada.

The Saskatoon Police Service (SPS) enforces vehicle noise violations. When a ticket is issued, the provincial legislation is commonly used by police officers rather than the Noise Bylaw. The provincial legislation also carries stricter penalties.

A major advantage of enforcing via the Saskatchewan *Vehicle Equipment Regulations* is the ability for police officers to issue a vehicle inspection ticket in addition to a summary offence ticket. This vehicle inspection ticket requires vehicle owners to take their vehicle for inspection (at the cost of the vehicle owner) to a SGI certified vehicle inspection station and to complete all necessary repairs as part of the SGI's Unsafe Vehicle Program. If the vehicle owner does not fix the vehicle to comply with the excessive vehicle noise policy, the vehicle's registration could be suspended or cancelled.

In June 2023, SGI announced a new provincial policy on excessive noise that includes objective criteria (Appendix 2).

All light vehicles (such as passenger cars, pickup trucks, minivans, Sport Utility (SUV)s, and motorcycles) in Saskatchewan must be equal to or quieter than 101.3 dB when tested in accordance with SGI's vehicle noise policy. The policy and noise test are consistent with methods established by the Society of Automotive Engineers (SAE).

Standards for measuring vehicle noise are discussed in the [Vehicle Noise Mitigation Study Report](#) completed by Systèmes de Contrôle Actif Soft dB Inc. (Soft dB) in February 2022. The information is highlighted below.

Subjective and Objective Criteria

The use of a subjective criterion (rather than a numerical noise-level limit) to assess if a vehicle is excessively noisy has been challenged in courts several times in North America. Using a subjective assessment without the use of equipment is less robust than using an objective measurable method based on noise level limits. The perception of excessive noise may vary from person to person and subjective assessments may lead to more uncertainty in compliance, possibility of vague arguments and arbitrary enforcement.

A challenge with objective/measurable (noise level-based) criteria is the technical resources (mostly sound level meters) and expertise required to enforce and prosecute using objective criteria.

Cities have successfully argued in court that requiring a police officer to use a sound level meter unreasonably restricts cities' ability to control the level of noise in the community. Most of the time, courts have agreed that officers are capable of determining when noise from motor vehicles is unreasonably disturbing the peace.

Method of Measurements

Noise-level based regulations used in the Canadian municipal and provincial regulations for motor vehicles and motorcycles are based on stationary measurements of the

exhaust noise.

The main methodology for measuring exhaust noise is based on SAE J1492 (Measurement of Light Vehicle Stationary Exhaust System Sound Level Engine Speed Sweep Method) for passenger cars and SAE J2825 (Measurement of Exhaust Sound Pressure Levels of Stationary On-Highway Motorcycles) for motorcycles. The use of a standardized methodology ensures that tests are repeatable and reliable.

Jurisdictional Scan

In most major cities in Canada, vehicle noise is regulated by both municipal and provincial regulations. In most recent provincial and municipal regulation updates, the trend has been towards the use of the noise level limits to further strengthen the enforceability of noise bylaws.

The jurisdictional scan completed for the Vehicle Noise Mitigation Study Report has been updated (Appendix 3). Noise level limits were reviewed in 16 Canadian municipalities.

Based on the updated jurisdictional scan:

- Three cities (i.e., Calgary, Kelowna and Red Deer) have a regulation that includes noise level limits for motor vehicles. The noise limit values ranged from 90 dBA to 96 dBA.
- Seven cities (i.e., Calgary, Edmonton, Guelph, Kelowna, Saskatoon, Toronto and Windsor) have a vehicle noise regulation with a noise level limit for motorcycles.
- Two cities (i.e., Edmonton and Red Deer) use sound level meters and allow peace officers to conduct traffic stops in collaboration with local police services.

Due to the rollout of the provincial policy on vehicle noise and the existing provisions under provincial legislation, SPS can already refer vehicles for noise testing under the provincial excessive noise program. SPS supports SGI's new program for vehicle noise testing (Appendix 4). It is anticipated that enforcement of vehicle noise violations would continue to be led by the SPS.

To align with SGI's vehicle noise policy, it is recommended that the Noise Bylaw be updated to add a noise level limit of 101.3 dB for motor vehicles and the noise level limit be increased to 101.3 dB for motorcycles. The Noise Bylaw will also require consequential amendments to extend the ability for a police officer to order sound testing for both operators of motorcycles and operators of motor vehicles and to create the corresponding offence for failure to comply with such an order. There are no proposed changes to the fines for excessive vehicle noise.

FINANCIAL IMPLICATIONS

The cost implications to prepare the necessary bylaw amendments are nominal and are provided for in the existing operating budget.

POLICY IMPLICATIONS

Upon approval by City Council, the City Solicitor be requested to prepare bylaw amendments to Bylaw No. 8244, The Noise Bylaw, effective January 1, 2024.

OTHER IMPLICATIONS

Privacy, social, and environmental implications have not been assessed at this time.

NEXT STEPS

Prepare bylaw amendment to Bylaw No. 8244, The Noise Bylaw.

APPENDICES

1. Vehicle Noise Legislation
2. SGI Vehicle Noise Policy
3. Jurisdictional Scan
4. Saskatoon Police Service Feedback

Report Approval

Written by: Mariniel Flores-Vongkhamchanh, Transportation Engineer

Reviewed by: Nathalie Baudais, Engineering Manager
Jay Magus, Director of Transportation

Approved by: Terry Schmidt, General Manager, Transportation and Construction

Admin Report - Vehicle Noise Mitigation Study Final Report – October 2023 Update.docx