

Vehicle Noise Mitigation Study Final Report

ISSUE

A consultant was retained to research, review, engage stakeholders, provide a cost estimate, and ultimately recommend possible mitigation measures in response to vehicle noise concerns.

BACKGROUND

History

City Council, at its Regular Business meeting held on June 25 and 26, 2018, considered a report regarding traffic concerns on Spadina Crescent from 33rd Street to University Bridge and resolved, in part:

- “2. That a letter be written to SGI and Board of Police Commissioners to work together to revisit the application of amendments to include a decibel limit for all vehicles in general.”

The Administration sent letters to Saskatchewan Government Insurance (SGI) and Board of Police Commissioners requesting that they work together to revisit the application of amendments with regards to the enforcement of traffic noise. Highlights from SGI's response are as follows:

- SGI spoke with the Saskatoon Police Service (SPS) and the Crown Traffic Prosecutor regarding traffic noise enforcement, and convictions have been realized, and concluded enforcement is occurring.
- The number of tickets issued each year varies, which does not indicate a drop in enforcement, but perhaps more warnings would have occurred.
- Most jurisdictions have similar regulations to Saskatchewan, and all rely on subjective enforcement.
- SGI notes that aftermarket mufflers are not marked, rated, or have any markings, resulting in subjective enforcement still being required.

Highlights from the Board of Police Commissioner's response are as follows:

- The number of cars with modified muffler systems has increased in recent years.
- Some city events, such as Cruise Night, provide opportunity for increased traffic noise.
- Legislation to address vehicle noise is provided in *The Traffic Safety Act*, *The Vehicle Equipment Act*, and the Saskatoon Noise Bylaw. *The Traffic Safety Act* outlines a very subjective charge. *The Vehicle Equipment Act* and Saskatoon Noise Bylaw are more objective and require officers to have a minimal amount of mechanical knowledge, specialized equipment, and training.
- Enforcement has occurred over the past five years.
- 41% of all traffic noise violations are issued on 8th Street.

- The Saskatoon Police Service Traffic Unit completed a multi-faceted educational campaign this past June which included:
 - social media messaging (hash tag #KeepItDown);
 - voluntary testing clinics were set up for motorcyclists at various locations;
 - noise checkpoints were completed with very few surpassing the upper noise threshold limits; and
 - Traffic Unit representatives spoke with local media outlets to inform the public of the issue.
- Concurrently with the educational campaign, Traffic Unit members received training and information about traffic noise.
- Consultation with SGI occurred regarding repeat offenders who would not remove the offending equipment despite receiving subsequent tickets. SGI agreed to provide compliance letters to the offenders and provide 30 days to fix the issue, or face registration cancellation.
- Discussion on mitigation measures was provided.

The Standing Policy Committee on Transportation, at its meeting held on November 4, 2019, considered the Vehicle Noise Update report, and resolved:

- “1. That the Administration work with partnering agencies on options to mitigate vehicle noise within the city including on 8th Street, Spadina Crescent, and 22nd Street, and report back; and
2. That the Administration provide details in relation to SGI compliance letters and the number of cancellations of registrations.”

The Administration consulted with the following agencies:

Saskatchewan Government Insurance

SGI and SPS are working together to leverage SGI's Unsafe Vehicle Program to address subsequent tickets for non-compliant mufflers. Through SGI's Unsafe Vehicle Program, SGI sends the current registered owner a letter advising that they have 30 days to comply with the instructions on the inspection ticket. This could be due to excessive noise, non-compliant automotive glass, prohibited lighting, or any other type of equipment that enforcement has identified as illegal in accordance with *The Vehicle Equipment Regulations*, 1987.

In 2018, SGI issued 2,001 non-compliance letters and in 2019, they issued 3,341 noncompliance letters. SGI does not document the number of compliance letters that were sent for excessive noise, nor does SGI document how many registrations were cancelled as a result of excessive noise.

Saskatchewan Ministry of the Environment

Noise pollution is not currently tracked by the Ministry of Environment since noise pollution is not included in *The Environmental Management and Protection Act*, 2010.

Saskatchewan Health Authority

The Saskatchewan Health Authority recognizes that there are negative health effects due to excessive noise, such as hearing impairment, sleep disturbances, mental health effects, and cardiovascular effects. Highlights from Saskatchewan Health Authority's response are as follows:

- Noise mitigation strategies are most effective when implemented at the source.
- Interventions to address noise are more effective when implemented across divisions, work groups, or different organizations with a common mandate to reduce noise.
- Recognizes the importance of routine measurements of traffic noise levels.
- Cites several examples for noise mitigation strategies employed by other jurisdictions, including Toronto, European Commission, and the World Health Organization.

The Saskatchewan Health Authority does not intend to develop provincial noise mitigation strategies.

City Council, at its Regular Business Meeting held on May 25, 2020, considered the Vehicle Noise Update report, and resolved:

- “1. That City Council advocate to the Provincial Government regarding the implementation of new legislation or regulations related to aftermarket noise modification on vehicles and fines for noise non-compliant vehicles.
2. That the Administration work towards retaining a consultant in 2020/21 to research, review, engage stakeholders, cost estimate, and ultimately recommend possible mitigation measures for the City of Saskatoon through the next budgeting cycle. The Administration can report on possible revenue sources to fund the project. This report will be shared with the Saskatchewan Health Authority, Saskatoon Police Service and Saskatchewan Government Insurance.
3. That Administration report back on funding options at the earliest opportunity to contract a vehicle noise mitigation specialist as highlighted in the report of the General Manager, Transportation and Construction dated May 4, 2020; and
4. That City Council advocate to the Provincial Government regarding establishing higher fines for non-compliant vehicles.”

Resolutions one and four were completed via a letter from the City of Saskatoon to the Province in 2021.

Resolution three was addressed when City Council, at its Regular Business Meeting held on July 27, 2020, considered the Municipal Economic Enhancement Program – Reallocation Prioritization List, and resolved:

“That the budget allocations as shown in the attached Final Reallocation List be approved; and that the Administration be directed to take appropriate action to deliver the initiatives.”

On the referenced Final Reallocation List was the Vehicle Noise Study with a funding amount of \$50,000.

Resolution two is partially complete via this report, however the Administration was unable to complete the project in time to meet the 2022-2023 multi-year budgeting cycle. The initial version of the consulting report was provided to the Administration in September 2021, and the report was refined via two revisions. The Administration was also impacted by competing priorities required of Transportation staff.

In November 2021, the Minister responsible for SGI introduced amendments to *The Traffic Safety Act* in the Saskatchewan Legislative Assembly. According to Bill 50, the amendments aim to:

- Allow police to immediately suspend driver's licences and impound vehicles if a driver is charged with stunting, racing, or excessive speeding.
- Clarify rules around road and speed signs in municipalities.
- Clarify that suspended drivers can legally drive to take part in SGI-mandated driver evaluations under approved supervision.

Bill 50 will be debated by the Assembly during the spring sitting of the Legislature and will be passed before the end of the legislative session in May 2022. According to the proposed Bill, most amendments will come into force on receiving Royal Assent while others (sections 6 and 14) come into force once Cabinet adopts relevant Regulations. .

On the face of it, the proposed amendments are expected to have a positive impact on the issue of vehicle noise as the higher the speed of a vehicle, the greater the noise. If the amendments succeed in reducing the number of drivers stunting, racing, or excessively speeding, then it is expected to benefit the vehicle noise issue notably on streets in Saskatoon like Spadina Crescent, 8th Street, and 22nd Street.

Current Status

Through a competitive procurement process, Systèmes de Contrôle Actif Soft dB Inc. (Soft dB), an acoustical engineering consultant, was retained to research, review, engage stakeholders, provide a cost estimate, and ultimately recommend possible mitigation measures for vehicle noise. The completed Vehicle Noise Mitigation Study Report is included as Appendix 1. Highlights of the report include:

- Strategic themes have been identified: public consultation, complaints management, public awareness, vehicle noise data collection and analysis, and enforcement.

- Guiding principles for the mitigation strategy are:
 - The strategy's main goal should be with a public health perspective, focusing on reducing the impacts of vehicle noise on the community with health and welfare impacts as one of the main success indicators.
 - Design and implement the vehicle noise strategy for the entire city.
 - Develop a data collection and analysis plan with acoustical data, public feedback, and complaints data.
 - Fifteen specific recommendations are provided.

The consultant report has been shared with the Saskatchewan Health Authority, SPS and SGI.

City of Saskatoon's Current Approach

The City of Saskatoon currently uses enforcement to mitigate vehicle noise. The SPS enforce vehicle noise violations via *The Traffic Safety Act*, *Vehicle Equipment Regulations*, and City of Saskatoon Bylaw No. 8244, The Noise Bylaw.

The Traffic Safety Act, Section 215 states that: "No person shall create or cause the emission of any loud and unnecessary noise from a motor vehicle, a part of a motor vehicle or any thing or substance that the motor vehicle or a part of the motor vehicle comes into contact with." *The Vehicle Equipment Regulations*, Section 18 states that: "The vehicle shall have a muffler that effectively reduces combustion noise."

A summary of the number of offences issued under this act, and under the regulations is outlined below.

Year	Number of Vehicle Related Loud Unnecessary Noise Tickets	Number of Inadequate Muffler Tickets
2018	24	70
2019	26	135
2020	37	216

Saskatoon Bylaw No. 8244, The Noise Bylaw Section 5.1 states:

- “(a) No person shall operate a motor vehicle in such a manner that it makes, continues, causes to be made or continues or suffers or permits to be made or continued any unreasonably loud or excessive noise.
- (b) in determining whether the noise from a motor vehicle is unreasonably loud or excessive, a justice may consider any of the factors mentioned in subsection 5(2); and
- (c) no person shall operate a motorcycle within the City of Saskatoon that is capable of emitting any sound exceeding 92 dB(A), as measured by a sound level meter at 50 centimetres from the exhaust outlet while the engine is at idle; or emitting any sound exceeding 96 dB(A), as measured by a sound level meter at 50 centimetres from the exhaust outlet while the engine is at any speed greater than idle.”

Although there are enforcement mechanisms under the municipal bylaw and provincial acts and regulations, tickets issued by the SPS are generally issued under the provincial act or regulations. SPS occasionally provides voluntary testing clinics for motorcyclists to assess compliance with the Noise Bylaw, Section 5.1 (c).

SPS also uses less blunt instruments to obtain compliance. In this case, SPS uses social media campaign #KeepItDown to educate motorists about the impact of noisy vehicles on their fellow citizens.

Approaches in Other Jurisdictions

A jurisdictional scan of 16 Canadian cities was completed by the consultant. Details of the jurisdictional scan are included in the consultant's report in Appendix 1. In summary, seven cities have vehicle noise regulations with a noise level limit for motorcycles. Two cities have a regulation that includes noise level limits for motor vehicles. Only two provincial regulations include noise level limits (one had limits for motorcycles only, the other had limits for both motorcycles and motor vehicles).

Several cities have included noise checking events as part of their vehicle noise strategy. Many of the cities have used awareness and/or enforcement campaigns as part of their vehicle noise mitigation strategy. Two cities have conducted pilot projects that include the development or trial of technology dedicated to vehicle noise enforcement.

The City of Toronto and City of Montreal have noise control officers who are trained bylaw enforcement officers with expertise in noise measurements and noise control management. They are responsible for processing the noise complaints and enforcing some of the noise bylaw regulations.

The City of Regina launched Project SPEED focusing on speeds, street racing and excessive vehicle noise, including a lobbying initiative to implement stricter measures regarding vehicle standards and inspection policies to try and tackle the vehicle noise caused by vehicle modification and work with the province on awareness and education campaigns.

Summary of Recommendations

The recommendations made by the consultant have been grouped into the following themes:

Themes	Recommendations	Cost (\$)
Public Engagement	1. Develop and carry out a multifaceted public consultation strategy to solicit input from the public on the vehicle noise issue.	75,000 ¹
Complaints Management	2. Establish and implement an improved complaints management system for vehicle noise.	100,000 ¹
	3. Review and update vehicle noise information for future 311 Customer Service System.	0
Public Awareness	4. Promote and advertise official 311 Customer Service System once operational.	10,000 ¹

Vehicle Noise Mitigation Study Final Report

Themes	Recommendations	Cost (\$)
	5. Develop a communication and media strategy aimed at raising awareness on vehicle noise issues.	75,000 ¹
	6. Review and update all existing city-produced public information on vehicle noise highlighting the legislation, enforcement processes and soft measures implemented by the City of Saskatoon.	10,000 ¹
	7. Develop formal marketing material and video material for the City and SPS websites and share on social media.	75,000 ^{1,2}
	8. Develop and install responsive signage at critical locations.	Unknown
	9. Develop short, attention-grabbing content that can be used as ads on social media or as standalone campaigns.	25,000 ^{1,2}
Data Collection and Analysis	10. Use commercially available noise and traffic monitoring systems to collect and analyze vehicle noise-related acoustical data.	50,000 ¹
Police Enforcement Process Assessment	11. Consider the development and implementation of new vehicle noise inspection procedures, potentially in collaboration with SGI, including vehicle noise inspection notices prompted by pre-screened noise and traffic monitoring data and the use of inspection sites dedicated to vehicle noise.	Unknown
Lobby the Province	13. Lobby the Minister responsible for SGI to implement higher vehicle noise fines and stronger inspection policies.	Completed
	14. Lobby the Minister responsible for SGI to implement tougher penalties for street racing, stunt driving infractions.	0
Dedicated Staff Resources	12. Dedicate internal resources to develop in-house expertise within the City of Saskatoon and in particular within the Bylaw Compliance team.	100,000 ³
	15. Create and sustain a staff position within the City of Saskatoon whose main task is to coordinate and support the development, implementation, and management of the vehicle noise strategy.	100,000 ³

Notes: 1 – One time funding only, or per occurrence

2 – The funding amount is an estimate only. City Council could allocate more funding to this item if more effort was preferred or alternately reduce funding to this item and do less.

3 – Per year, ongoing annual staffing cost

A description of the recommendations grouped by themes and their pros and cons are included in Appendix 2. Details on the themes can be found in the appended Vehicle Noise Mitigation Study Final Report.

OPTIONS

Option 1 – Status Quo

This option maintains the status quo and addressing of vehicle noise would be maintained primarily through enforcement and education efforts most likely led by the Saskatoon Police Service.

Advantages:

- This aligns with the primary approach used in other jurisdictions.
- Allows time for the expected legislative changes to be implemented and assessed prior to spending funds.

Disadvantages:

- Stronger action on addressing vehicle noise is not taken.

Option 2 – Implement a Single, Multiple, or all of the Consultant’s Recommendations

This option includes the City implementing a single, multiple, or all of the consultant’s recommendations, after being prioritized by City Council and being funded through the next multi-year budget process.

Advantages:

- Very flexible in terms of approach to addressing vehicle noise, both in terms of action items, and required funding.
- Action is taken on addressing vehicle noise.

Disadvantages:

- Funding is not currently available to proceed with any of the recommendations outside of lobbying the Minister responsible for SGI to implement tougher penalties for street racing, stunt driving infractions.
- Time is required prior to action being taken.

RECOMMENDATION

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

1. That the vehicle noise information be reviewed and updated for the future 311 Customer Service System (Recommendation 3);
2. That it pursue stronger legislative and regulatory penalties for street racing, stunt driving infractions (Recommendation 14); by advocating to the Minister responsible for SGI;
3. That the Administration implement Option 2 and prioritize based on City Council providing a ranking of each recommendation; and
4. That the Administration add the prioritized recommendations to the options portion of the next multi-year budget process.

RATIONALE

The rationale for recommendations one and two is that they can be accommodated within existing operational budgets.

The rationale for proceeding with Option 2 is the significant flexibility it provides in terms of potential actions completed and funding required. There are numerous different possibilities for actions depending on available funding based on City Council priorities.

FINANCIAL IMPLICATIONS

The estimated cost for the first two recommendations is minimal and could be accommodated in existing operating budgets. The estimated costs for the third

recommendation are included in the body of this report and will be included in the options portion of the multi-year business planning and budget process if approved.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

There are no additional implications/considerations to be considered at this time.

COMMUNICATION ACTIVITIES

As part of the development of the Vehicle Noise Mitigation Study Report, several meetings occurred with the following stakeholders:

- Crown Traffic Prosecutor
- Saskatchewan Government Insurance
- Saskatchewan Health Authority
- Saskatoon Police Service
- City of Saskatoon City Solicitor's Office
- City of Saskatoon Community Standards
- City of Saskatoon Organization Strategy Execution
- City of Saskatoon Recreation and Community Development
- City of Saskatoon Sustainability
- City of Saskatoon Transportation

Two meetings were held with each stakeholder and a group meeting with all stakeholders.

APPENDICES

1. Vehicle Noise Mitigation Study Final Report
2. Vehicle Noise Mitigation Recommendations Grouped by Themes

Report Approval

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