

Community Services Report to
Community Development Committee
2024 June 26

ISC: UNRESTRICTED
CD2024-0554

Response to the Noise Policy Notice of Motion

PURPOSE

The purpose of this report is to fulfill Council's direction from Notice of Motion EC2023-0642, reporting back with information about excess noise, its effect on Calgarians' health, and possible approaches for The City's noise management role.

PREVIOUS COUNCIL DIRECTION

On 2023 September 12 Council directed Administration to report back in Q2 2024 with: a draft noise policy vision; a review of existing City of Calgary noise rules compared to health guidelines and leading practices in other jurisdictions; and reports that outline the scope and cost of: city-wide noise mapping, closing the gap between Calgary's current practice and that of leading jurisdictions, and a soundscape assessment pilot project.

RECOMMENDATION:

That the Community Development Committee recommends that Council direct Administration to provide interested researchers with data and information to further their understanding of Calgarians' exposure to noise.

CHIEF ADMINISTRATIVE OFFICER/GENERAL MANAGER COMMENTS

GM Katie Black concurs with the content of this report.

HIGHLIGHTS

- Environmental noise is an issue of public health. Exposure to traffic noise above 53 decibels throughout the day and 45 decibels at night increases the risk of adverse health effects.
- City-wide noise exposure has not been estimated or measured in Calgary. Supporting the collection of more data would allow for a better understanding of the scope and scale of noise in Calgary and would help The City evaluate whether noise policy should become an area of focus.
- The City of Calgary does not have the expertise or capacity to perform detailed acoustical engineering. Developing this expert capacity would require several years of effort and many hundreds of thousands of dollars of expenditure, in addition to any potential enforcement and infrastructure redesign costs.

DISCUSSION

The City of Calgary's Community Standards Bylaw 32M2023 is the primary tool by which noise is regulated within the city. The bylaw sets maximum sound levels for day and night times in residential, non-residential, and downtown areas and has different rules for different types and durations of sound. Enforcement of 32M2023 is the responsibility of the Community Safety team in the Emergency Management & Community Safety business unit. Additionally, target thresholds for sound levels near roads are provided by the Surface Transportation Noise Policy.

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Noise is measured using devices such as sound meters. When measured in decibels, sound pressure level is not linear, but logarithmic in scale. This means that people perceive 53 (dBA) as around twice as loud as 50 (dBA) and that 60 (dBA) feels ten times louder than 50 (dBA). Attachment 2 provides examples of the sound level of common indoor and outdoor sound sources.

Excessive environmental noise is an issue of public health. The World Health Organization has published recommended maximum average exposures for different types of noise including road traffic, railway noise, airplane noise, wind turbine noise, and others. People exposed to excess noise are likelier to develop ischemic heart disease, hypertension, and cognitive impairment.

Calgarians' environmental noise exposure has not been collected or calculated. This absence of data is typical of the North American approach to municipal environmental noise management, where it is assumed that a suburban built form provides sufficient protection from excess environmental noise. In colder climates, thermal insulation in homes is also thought to provide enough protection from outside noise to make additional investigation unnecessary.

In the past few years, The City has undertaken some noise analysis as part of city-building. Calgary has traditionally required noise studies when developers propose roadways in new communities, has measured noise as part of responding to requests for noise walls next to homes, and for bylaw enforcement. More recently, sound levels have been estimated or collected in targeted situations as part of evaluating park space activations and recreation planning.

Spikes in sound level that disturb peaceful enjoyment of a home or outdoor space tend to be more noticeable than consistently high levels of background noise. The establishment of a team tasked with noisy vehicle enforcement is underway in Community Safety. The briefing note to the Community Development Committee on 2024 June 26 provides information about noise monitoring's proposed use to improve officer deployment and the feasibility of using automated systems to enforce noisy vehicle regulations in Calgary.

Investigation into the population-level environmental noise exposure of Calgarians and its impact on health is not an activity The City could undertake directly due to a lack of expertise and capacity. However, many of the datasets required for a third party to generate a sound model are already collected by The City. Administration could provide support to interested researchers by lending The City's authority and providing access to data and asset inventories.

The Noise Policy Notice of Motion directed Administration to investigate and report back on several possible projects. The following table outlines the work performed and where additional detail about each investigated project can be found.

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Deliverable	Attachment #	Expected Cost	Recommended City Action
Draft Noise Policy Vision	3	Absorbed in existing budget	Complete – adoption not recommended
Noise Mapping Scoping Report	4	\$150K* (if City-led)	Support researchers
Noise Management Gap Analysis	5	Absorbed in existing budget	Provided for information
Noise Strategy Scoping Report	6	\$450K*	Not recommended
Soundscape Assessment Pilot Project Scoping Report	7	\$50K*	Not recommended

*Deliverables requiring further work would require staff to be redirected from existing priorities.

During the noise management gap analysis, it became apparent that The City of Calgary has not extensively considered the growing tension between the goals of becoming a vibrant, year-round cultural destination and Calgarians’ wellness and housing needs. If further research is conducted, Council will need to contemplate the trade-offs between the nighttime vibrancy and related economic sustainability of entertainment-focused districts, and the health and wellness of nearby residents.

EXTERNAL ENGAGEMENT AND COMMUNICATION

- Public engagement was undertaken
- Dialogue with interested parties was undertaken
- Public/interested parties were informed
- Public communication or engagement was not required

Initial conversations about the interaction between the Culture + Entertainment District and the surrounding residential developments were held with the Calgary Municipal Land Corporation, the Calgary Stampede, and the Event Centre project team.

IMPLICATIONS

Social

It is possible that Calgary is typical of many North American cities in that historically disadvantaged communities are particularly exposed to excess levels of noise. The City is not well-positioned to directly undertake the research to determine whether this is the case but could provide information and support to interested researchers.

Environmental

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Excess environmental noise is an issue of public health. Investigation into the degree to which Calgarians are exposed to unhealthy sound levels would help define the scope and severity of the problem.

Economic

As Calgary positions itself as more of an entertainment and nightlife-focused destination, particularly with the development of the Culture + Entertainment district, there will likely be more tension between vibrant, noisy entertainment venues and nearby residents. If faced with restrictive times and levels at which venues can generate noise, businesses may be less economically sustainable, but the nearby residents' quality of sleep and overall health could be improved. The City will need to determine the appropriate balance between these competing priorities.

Service and Financial Implications

No anticipated financial impact

Administration will not require additional funding to deliver on the recommendation. If approved, datasets and information that are relevant to noise mapping will be made available to interested researchers using existing staff capacity.

RISK

By not investigating possible excess noise levels while championing data-driven decision-making, The City could face some reputational risk. This is mitigated by supporting researchers interested in investigating sound levels in Calgary. Funding the development of a Noise Strategy could raise public expectations that The City would begin regulating noise in a coordinated way. A future decision not to prioritize noise policy could expose The City to reputational risk.

ATTACHMENTS

1. Previous Council Direction, Background
2. Common Noise Sources and Levels
3. Draft Noise Policy Vision
4. Noise Mapping Scoping Report
5. Noise Management Gap Analysis
6. Noise Strategy Development Scoping Report
7. Soundscape Assessment Pilot Project Scoping Report
8. Presentation

Department Circulation

General Manager/Director	Department	Approve/Consult/Inform
Katie Black	Community Services	Approve
Michael Thompson	Infrastructure Services	Consult
Debra Hamilton	Planning & Development Services	Inform
Doug Morgan	Operational Services	Inform

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Carla Male	CPFS	Inform
Jill Floen	Law & Legislative Services	Inform
Chris Arthurs	People, Innovation & Collaboration	Inform

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