



Noise Management: Issues and Opportunities A City of Ottawa Discussion Paper

By-law & Regulatory Services Services des règlements municipaux

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Introduction

This discussion paper presents a series of issues with respect to noise and disturbances within the City of Ottawa. Feedback collected from this paper will be used to inform the Noise By-law Review currently underway. Recommendations will be submitted to the Community and Protective Services Committee in May 2017.

Background

In 2004, following extensive research, and public and stakeholder consultation, City Council enacted By-law No. 2004-253 respecting noises, commonly referred to as the Noise By-law, which was also a harmonization of the noise regulations of the former municipalities that now comprise the City of Ottawa. Since its enactment, the by-law has been amended a number of times to address a variety of issues and functions.

The by-law regulates a number of categories of noise common to most cities including:

- unusual noise
- bells, horns and shouting
- air conditioners, heat pumps, compressors, condensers, chillers, cooling towers and similar devices
- exhaust fans, exhaust systems, intake fan generators, commercial dryers or similar devices
- pump or filtration systems
- construction
- in-fill housing construction
- loading and unloading
- deliveries
- idling motor vehicles
- mufflers
- motor sports
- go-kart activities
- unnecessary motor vehicle noise
- power equipment
- heavy-duty equipment
- refuse collection
- sound reproduction and amplification devices
- Confederation Line Project construction and maintenance
- Various exemption provisions

Approximately 10,000 Service Requests related to noise are received by By-law & Regulatory Services annually. Overall, the by-law has been effective in addressing concerns about noise in the city.

Scope

The scope of this review will be limited to those items of concern identified by Council in the By-law Review Strategy Report adopted in June 2015. These include:

- Low Frequency Bass and Vibration
- Construction Noise
- Exemption Process (Construction and Events)
- Waste Removal/Lifting Equip
- Snow Removal
- Car Alarms
- Motorcycles
- Wind Chimes
- Noise concerns with residents backing onto non-residential uses

The review will also address a number of minor clarifications and 'housekeeping' issues.

The By-law Review will not address operational issues such as hours of operation and staffing for By-law & Regulatory Services Branch. The Branch will be addressing these issues separately through a Core Service Review, which will provide recommendations to Council in late 2017 and will consider any changes in requirements as a result of the Noise By-law Review.

Low Frequency Noise and Vibrations

Where specific noise levels are defined in the Noise By-law, all readings are based on dB(A) decibel readings, which do not capture low-frequency noise, such as bass from a stereo. Staff was asked to explore options to better regulate this type of noise.

Background

The A-Weighting of decibels, abbreviated as dB(A), measures sound as it is perceived by a typical human ear. While this measurement is most useful for determining how loud a sound is, and if it is likely to disturb people, it does not account for low frequency noise which may or may not be heard, and may be felt in the form of vibration.

While there are alternative sound measurements which capture more low-frequency sound, such as the dB(C) or dB(Z) weighted scales, the City's By-law Enforcement Unit is not currently equipped or trained to take these types of readings. This is common for municipalities across Canada. Of the seven cities included in our review, only Calgary and Vancouver include specific dB(C) readings in their by-laws.

The other cities studied including Toronto, Hamilton, Halifax, Winnipeg, and Edmonton. These cities utilize the same approach to managing base noise as Ottawa. This involves use of a general prohibition against "unusual noise or noise likely to disturb" which provides By-law Enforcement Officers the ability to issue a charge without the requirement for specific sound readings.

Options

A. Implement dB(C) Standards

Establishing set dB(C) limits may remove ambiguity from enforcement by creating quantitative standards. While this may make enforcement a "black and white" issue, it also removes the ability of officers to exercise their discretion based on specific local conditions – a 55 decibel noise might go unnoticed in the downtown core while the same noise, in a quiet suburb, could be disturbing.

To address this challenge would require an approach similar to Vancouver. As the only city studied that makes extensive use of dB(C) readings, Vancouver has established standards for different types of noises based on the time of day as well as the character of the neighbourhood (Quiet Zone, Intermediate Zone, Activity Zone, Event Zone).

Enforcement based on meter readings also requires investigating officers to enter the homes of residents to take readings at the point of reception, even when the violation is obvious. This approach is more time consuming for officers and more intrusive for residents.

It also means that if an officer cannot attend during the actual violation, it is unlikely the offending party can be successfully charged.

If dB(C) limits are to be established, the City of Ottawa will be required to invest in new sound level meters and additional officer training. Implementation would carry an initial cost of \$163,000, with an annual operating cost of approximately \$20,000. Total lifecycle costs would be seven times higher than the existing dB(A) meters utilized by By-law & Regulatory Services.

This figure does not include the cost of additional staff time required to address each case. Based on existing complaint volumes where a metered standard would apply, and an average of 15 minutes per call, as much as 1,600 additional person hours would be required to meet service demand. This would have to be addressed by hiring additional staff, or reducing service standards for other enforcement areas.

B. Clarify Existing Standards for Nuisance Noise

Section 2 of the City's Noise By-law, entitled "UNUSUAL NOISE, NOISE LIKELY TO DISTURB" states that "No person shall cause or permit any unusual noise or noise likely to disturb the inhabitants of the City."

Under this prohibition, a witness statement from the complainant and the officer's qualitative assessment of the level of disturbance are sufficient to enforce the provision.

While this general provision includes all types of noises, this can be made more explicit by adding a reference to "bass noise", defined as "any low frequency sound which may be heard or felt in the form of vibrations and which may be considered likely to disturb the inhabitants of the City". This addition will ensure that By-law Officers have the ability to enforce low frequency noise, without the expense of new equipment and training and with minimal disruption for residents.

Preferred Option

Staff is recommending Option B. This approach provides more cost-efficient and effective enforcement with much less intrusion upon residents who have already been disturbed by a violation.

Construction Noise

Staff was asked to examine the following aspects of noise regulation for construction:

- Providing more protected time to ensure neighbourhoods undergoing intensification remain liveable
- Restricting construction noise to start Saturdays at 9 a.m. (instead of 7 a.m. and the same as the start time applied to Sundays) and should not be regularly permitted after 8 p.m. any day of the week (currently permitted until 10 p.m.)
- Limiting construction noise to 85 dB(A), as recommended in the original 2004 consultant's report.

Background

Ottawa is booming. Over the past five years, unprecedented levels of both private sector and public sector construction have been experienced. While the benefits of this construction are undeniable, the City has also experienced a 13% increase in construction related noise complaints over the previous five-year period (2007-2011). More than half (52%) of these complaints have been concentrated in just four wards (Somerset, Rideau-Vanier, Kitchissippi and Capital).

Looking forward, staff is expecting a decrease in construction noise in these wards, resulting from the completion of major infrastructure projects as well as a forecasted decline in condominium construction.

Since the enactment of the Noise By-law in 2004, Council has enacted a number of amendments to address construction related noise:

- Infill Construction In July 2009, Council enacted amendments to restrict noise from infill developments to between the hours of 7 a.m. to 8 p.m., Monday through Friday and between the hours of 9 a.m. and 7 p.m. on Saturdays, Sundays and statutory holidays.
- **Confederation Line** In January 2013, provisions were added to address specific requirements of Phase 1 of the O-Train Confederation Line project, including specific provisions for tunnelling operations.
- Lansdowne Park Redevelopment In March 2013, Council enacted amendments to accommodate concrete pouring activities at the site of the New Lansdowne.
- **Construction Exemptions** In November 2013, Council enacted amendments to modify the process used to grant exemptions for municipally-run projects.

The issues under consideration for further review can be divided into two categories: permitted period and permitted level.

Permitted Period

Periods to permit construction were the subject of extensive consultations during the initial by-law harmonization in 2004. At that time, 79% of respondents agreed with the recommended time restrictions.

As the City has striven to develop through intensification, additional measures were put in place to regulate noise from infill construction, requiring that infill construction end two hours earlier each day and start two hours later on Saturdays, as compared to time restrictions on other types of construction activity.

During public and stakeholder consultations, the City will seek input from the construction industry about the potential impacts further restrictions could have on construction costs, timelines and labour force.

Staff is not prepared to make a recommendation until these consultations are completed.

Permitted Level

During noise exemption periods, the current by-law limits noise to 90 dB(A). This was based on Occupational Health and Safety Limits in place at the time, however, the Ministry of Labour has subsequently reduced this threshold to 85 db(A) for a period of no more than eight hours a day.

This revised limit coincides with regulations from the Ministry of Environment, as well as the recommendations made in the 2004 Noise By-law armonization report.

Preferred Option

It is recommended that the Noise By-law be amended to reflect the lower limit of 85 db(A).

Exemption Process (Construction)

In most cities, noise caused by public construction projects is automatically exempt.

Ottawa has regulated specific conditions under which exemptions are issued for City construction projects, as well as third party construction projects that have a significant impact on municipal services. These regulations serve to limit unnecessary noise and ensure residents have timely notification of disruptions whenever possible.

Staff has been asked to re-examine the provisions for these exemptions, particularly as they relate to application times and noise on weekends.

Background

Construction exemptions are currently available in four categories:

- Public Sector Construction:
 - Automatically exempt
 - Exempt by application, 11 days or less
 - Exempt by application, over 11 days duration
- Private Sector (11 days or less, only)

Public Sector Construction

Any "work undertaken for the immediate health, safety or welfare of the inhabitants of the City" is automatically exempted. This exemption provides for emergency repair work, but it does not address other vital municipal work, nor does it balance noise considerations against other priorities, such as maintaining mobility.

For planned projects, noise exemptions are issued by the Chief of By-law & Regulatory Services with the consent of the Ward Councillor(s) representing impacted communities. Project Managers must apply for exemptions under one of two processes, depending on the duration of the project. There are separate processes for projects either under or over 11 days in duration.

If a Ward Councillor does not agree with the exemption, it is referred to Standing Committee and Council for a final decision. In order to account for the timelines of Council meetings, a 60-day application period is required.

Any exemption may be revoked by a joint decision of the Chief of By-law & Regulatory Services and the General Manager, Planning, Infrastructure and Economic Development (formerly the Deputy City Manager, Planning and Infrastructure), should conditions of the exemption not be followed, or in the event of significant noise impacts not foreseen during the evaluation.

In practice, this exemption process has proven to be time and resource intensive. The process involves engaging staff in the department sponsoring the project as well as staff in Planning, Infrastructure and Economic Development and Emergency and Protective Services. The application then goes to the offices of impacted Councillors. Following this process, essentially all exemption applications are ultimately approved.

This high rate of approval reflects that there are often other vital considerations to be made in the public interest, and contrasts sharply with private construction exemptions, which are denied unless there is a clearly defined public interest or where such noise is unavoidable, such as the continuous pouring of concrete. These exemptions may be no more than 11 days in duration.

Reviews from other jurisdictions show that other municipalities are granted much broader authority to deliver services for the benefit of the public. For example, Winnipeg exempts "an activity, work or undertaking performed by or through the City in respect of public services, facilities or installations".

Options A. Status Quo

The current process, while resource and time intensive, places noise concerns of residents at the forefront. The additional oversight provided by Councillors and the technical expertise in noise management provided by By-law & Regulatory Services ensures that noise impacts from municipal construction are minimized to the greatest extent possible.

B. Blanket Municipal Noise Exemption

This change would have minimal effect on construction noise levels, given that municipal exemptions for construction have been granted almost universally. The chief benefit of this exemption is a reduction in the administration and processing requirements across departments, as well as a reduction in ambiguity about work that is permitted and necessary.

Noise from municipal construction would be addressed during the environmental assessment and planning stage of each project. This would provide the opportunity to address noise holistically, in relation to community needs and project benefits.

This will also provide opportunity for the community to understand the noise requirements of a project and enable staff to address concerns before a project is approved.

Private Sector Construction

The existing Noise By-law provides for private sector construction exemptions where:

- Construction has a significant impact on public services and infrastructure, such as road closures or utility access, or
- Continual operations are imperative to the completion of the project, such as the continuous pouring of concrete.

Private Sector construction exemptions are limited to 11 days or less.

When an application for a private sector noise exemption is submitted, City staff first examine construction plans to ensure that any potential impacts on public services have been minimized to the extent possible.

Where disruption of public services is unavoidable, staff must then examine the impact of service disruption against the noise impacts in the immediate vicinity of construction and attempt to strike the best balance between the two.

Overall, the administration of this program has been effective in balancing the needs of the private sector with the needs of nearby residents.

Consideration was given to a blanket exemption for continuous pouring of concrete, however this was ultimately rejected due to the disruption caused by back-up warning devices.

Staff has examined the implementation of broadband warning devices, also known as white-noise beepers, which could significantly reduce noise for construction, deliveries, snow clearing and waste removal. While mandating the use of such devices was determined to be out of the scope of the Noise By-law Review, this emerging technology merits closer consideration. The City could examine options to adopt this technology within its own fleets as well as promoting its use within the private sector.

Preferred Option

Staff is recommending no changes to the exemption criteria for construction.

Snow Removal

Background

In recognition of the importance of prompt and effective snow removal for maintaining accessibility, mobility and public safety, the City has traditionally exempted all snow removal activities from the Noise By-law.

Unfortunately, the marked increase in private residents using for-hire snow removal services has led to situations where residential neighbourhoods experience prolonged and/or repeated overnight noise disruption. As such, the City is exploring options to create a better balance between residents needs for both mobility and restful sleep.

The approach to managing noise from snow removal in other cities varies greatly and is largely tailored to climate. Ottawa, Toronto and Halifax all have complete exemptions for snow removal. While Hamilton does not have a specific exemption, snow removal is considered "reasonable noise" for the purposes of its by-law.

Ottawa experiences an average of 235.7 cm of snowfall annually, spread over 75 days between October and April. This is the largest amount of snowfall of the cities listed below.

An additional consideration is geographic size. Ottawa covers an area larger than Toronto, Edmonton, Calgary, Winnipeg and Vancouver combined. Only Halifax is larger in terms of area, although its population is significantly smaller and there is much less infrastructure and competing land use. All of these factors must be considered when examining the varied approaches in each jurisdiction.

Table 1 - Noise with Respect to Snow Removal

City	Avg. Annual Snowfall	Regulation
Ottawa	235.7 cm	Noise exempt.
Toronto	115.4 cm	Noise exempt.
Hamilton	118.1 cm	Snow removal is considered "reasonable noise."
Halifax	230.5 cm	Noise exempt.
Winnipeg	110.6 cm	Snow blowers may not be used overnight within 150 m of a residential property.
Edmonton	121.4 cm	No exemption. 65 dB(A) daytime limit _{ii} , 50 dB(A) overnight.
Calgary	126.7 cm	No exemption. Power equipment may not be used during the night time.
Vancouver	48.2 cm	No exemption. Power equipment may not be used during the night time.

Table 2 - Ottawa, Days with Snowfall, By Amount - 30-year average

Snowfall Amount	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
>0.2 cm	15	11	8	3	0	0	0	0	0	1	6	13
> 5 cm	3	3	3	0	0	0	0	0	0	0	1	4
> 10 cm	1	1	1	0	0	0	0	0	0	0	0	1
> 25 cm	0	0	0	0	0	0	0	0	0	0	0	0

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Options

A. Status Quo

Continuing exemption for snow removal is the best option for keeping our city and economy moving during the winter months. However, it does not address the potential sleep deprivation that can result from repeated overnight disruptions in residential neighbourhoods.

B. Restricted Snow Clearing

This option proposes prohibiting snow clearing with powered devices, on residential properties, between the hours of 11 p.m. and 6 a.m. An exemption would be included for snow events with 5 cm or more of accumulation over 24 hours.

By including the 5 cm exemption, general mobility impacts will continue to be manageable, but the frequency of overnight noise disturbances due to snow removal would be reduced from an average of 75 days per year, to 18.

Preferred Option

Staff is recommending Option B. This approach seeks to minimize noise disruptions caused by powered snow removal equipment without causing the same level of mobility impacts as an outright ban or a ban that includes commercial properties.

Waste Removal

Staff was asked to re-examine the exemptions for waste removal from the Central Area, as defined by Schedule B of the by-law. Ottawa's condominium boom has resulted in more residents living in the Central Area, with a corresponding increase in the use of compacting equipment and the loading and unloading of containerized waste. In addition, a number of issues were identified during internal consultations that needed to be addressed through this By-law Review.

Background

In examination of this issue, a review of noise complaints related to waste collection shows that the City currently provides reasonable and effective measures to limit noise. The issue is minor and infrequent, especially compared to other noise sources, with fewer than 50 service requests in any given year.

Table 3 - Service Requests for Waste Collection Noise, By Year

Year	2012	2013	2014	2015	2016
Service Requests	43	49	11	26	29

While the total number of service requests is small, it is noteworthy that 33% of these calls are concentrated in Somerset Ward and that all of these dealt with the removal of containerized waste. Most of these (83 %) were outside of the Central Area exemption zone, where the practice of overnight removal is generally understood and accepted.

For the purposes of this review, the City has considered three unique types of refuse collection: Residential, Commercial and Public Spaces.

Residential

This work is undertaken by the City and its contractors. This includes curb/street-side collection as well as containerized waste from condominium and apartment buildings. This service is conducted Monday to Friday, between 7 a.m. and 6 p.m.

There have been no service requests related to noise from residential service. All times are strictly regulated through the Public Works & Environmental Services Department's service standards and are included in contracts when outsourced to third party vendors.

Commercial

This includes refuse from enterprises or institutions that is collected and processed privately. This type of collection is responsible for 98% of service requests related to noise from refuse collection.

Most callers also note that their complaint was made following frequent occurrences, and in most cases complaints were made between 4:30 a.m. and 7 a.m.

By-law Enforcement Officers have noted the difficulty in enforcing this provision, given that the noise generated, while loud, occurs for a very short period.

Under the existing by-law, Officers must be able to identify the equipment operator in person to issue a violation. With Officers unable to witness the disruption as it occurs, they must rely on witness statements, which need to include a licence plate number. Even so, it can be difficult to identify the equipment operator without the cooperation of the company involved.

As a result of this difficulty, the current by-law provides little deterrence.

This could be resolved by re-writing the section to utilize the same "cause or permit" language used in the general noise provision (Section 2). This would enable Officers to investigate and charge the company without needing to identify the equipment operator.

Additional deterrence could be provided by increasing fines. This combination of increased accountability and consequence should generate sufficient deterrence for commercial waste removal companies.

Public Spaces

For safety and mobility reasons, refuse is collected overnight from public waste bins along streets and in City parks and facilities. Daytime collections are limited to areas where a standard bin cannot contain a full day's worth of refuse.

The City collects more than 420 tonnes of waste each year from these bins, with much of the collection occurring early in the morning.

This is particularly true for main streets and Business Improvement Areas with a high volume of entertainment establishments, where it is important to clean up from the night life before everyone else starts their morning.

While this service is essential to maintaining vibrant and welcoming communities, and quality of life for residents, it does not necessarily meet the exemption criteria of "work undertaken for the immediate health, safety or welfare of the inhabitants of the City."

However, with only one complaint over a five-year period and considering all of the economic and social benefits derived from the service, this practice should be permitted to continue. Any ambiguity with respect to the Noise By-law should be removed, by either amending the general exemption for municipal work, or the waste collection provisions.

Options

A. Status Quo

With only 158 complaints over five years, this should not be an area of concern for the Noise By-law Review.

B. Exempt All Municipal Refuse Collection

Should staff's recommendation for a modified municipal exemption not be adopted, an explicit exemption for municipal refuse collection would ensure that community standards can be maintained. This exemption would not impact noise levels within the community as this work already takes place.

C. Create Municipal Waste Exemption Zones

In addition to the exemptions for the Central Area, BIA districts and main streets would be exempted, for municipal refuse collection only. Commercial refuse collection regulations would not change.

D. Stronger Standards for Commercial Waste Collection

The City could strengthen measures against waste removal companies that repeatedly operate in violation of the by-law. By extending the reach of the provision to a "cause or permit to cause" application and by establishing corporate set fines, By-law Officers would be able to charge the company without having to identify the driver. The increased fines for corporations that are available through the *Municipal Act* would provide greater deterrence against repeat offences.

Preferred Option

Staff is recommending Options B and D.

Service Request data shows that containerized refuse collection is responsible for 98% of complaints. Regular residential and public spaces refuse collection are acceptable norms within the community and are not significant generators of noise or noise complaints.

While the overall number of complaints is small enough to warrant maintaining the status quo, implementing the changes proposed in Option D together would serve to reduce complaints further while maintaining residents' expectations for healthy and sanitary communities.

Exemption Process (Special Events)

Staff was asked to examine two aspects of special event noise exemptions:

- If applications should continue to be made Client Service Centers or if this responsibility should be transferred to Event Central (currently 2017 Operations and Special Events)
- The role of councillors in approving exemptions for special events.

Background

Life in Ottawa is greatly enriched by the broad array of festivals and special events that occur throughout the city and throughout the year.

In addition to educational and recreational opportunities provided to residents, these events are crucial to the success of our tourism industry, which is Ottawa's third largest source of employment.

The City of Ottawa embraces its festival culture and has been recognized with the "Best Festival City Award" from Festival and Events Ontario, and as one of only seven World Festival and Event Cities by the International Festivals and Events Association.

Following a review of current administrative practices, staff is not recommending changes regarding who is responsible for processing special event noise exemptions, for the following reasons:

- The organizational restructuring the occurred in 2016 accounted for this workload to remain with the Client Service Centres. 2017 Operations and Special Events would not have the administrative capacity to ensure applications are processed in a timely fashion.
- The Client Service Centres provide more flexibility and convenience for the community, with more service locations and longer hours of operations.
- The current process does not preclude 2017 Operations and Special Events from accepting applications from event organizers with whom they are engaged. They can accept the application and forward it to Service Ottawa for processing.
- Service Ottawa processes are well established and effective.

Staff will make a recommendation concerning the role of Councillors in the engagement process once all members of Council have been fully consulted.

In examination of Service Request data surrounding special events at Ottawa's two signature stadiums, Canadian Tire Centre and TD Place, staff has determined that noise on-site is well managed and not a significant source of complaints. The are occasional issues with shouting outside of venues immediately following the event but the frequency and duration are not a cause for concern.

However, after significant sporting events and concerts, there is a spike in music and shouting complaints across the city, as spectators move to entertainment districts or after-parties in private residences.

A similar trend exists for noise associated with festivals.

Most festivals are recurring annual events that are expected and accepted within the community. In 2016, there were only 59 festival-related noise complaints.

Table 4 – Festival Noise, By Year

Year	2012	2013	2014	2015	2016
Service Requests	63	66	116	27	59

Noise complaints result primarily when crowds egress from the event site or after they arrive at secondary destinations throughout the City.

In most other cities examined in this Review, specific standards or exemptions for special events and stadium events are incorporated into their Noise By-laws, including Halifax, Hamilton, Calgary, Vancouver.

Options

A. Status Quo

The existing application and exemption process have proven effective in balancing the interests of event organizers with the surrounding communities and should be maintained.

B. Set Noise Criteria for Events

In order to reduce the administrative burden and costs – for the City, event organizers and the community – and to ensure the maximum availability of enforcement resources for music and shouting complaints in residential neighbourhoods, special events and festivals would be required to operate under the following criteria:

- 1. Events hosted at Lansdowne Park and the Canadian Tire Centre would be exempt until 0100 hours on Friday and Saturday, and on Sundays if the following Monday is a statutory holiday. For all other days, this time limit would be 2300. This is the standard currently applied to exempt special events.
- The current Special Event exemptions will be made into regulations that apply automatically to events approved by the City through Emergency and Protective Services. The Chief of By-law & Regulatory Services, in consultation with the Councillor, would retain the ability to place additional restrictions on an event should noise issues emerge.

Preferred Option

Staff is recommending Option B. This option recognizes the cultural and economic benefits of special events programming. It provides a streamlined process for the approval of special events and enables enforcement resources to be deployed to neighbourhoods where noise disruptions are anticipated to occur.

📣 Car Alarms

Background

Complaints related to car alarms currently represent about 2% of all noise complaints made to the City. This number has declined each year, as a greater proportion of cars utilize more advanced theft deterrent systems, including GPS tracking, engine cut-offs and alarm apps linked to mobile devices.

Table 5 - Service Requests for Car Alarms, By Year

Year	2012	2013	2014	2015	2016
Service Requests	297	268	261	256	220

A detailed analysis of 2016 complaints showed that:

- Removing duplicate complaints resulted in 171 unique incidents
- Of the 171 incidents, 90 complaints did not include a license plate
- Of the 81 complaints where plates were provided:
 - o 5 complaints were out of province vehicles
 - 43 complaints were one-time events
 - 38 complaints were generated by the same 12 vehicles (on multiple dates each)

Noise from car alarms is currently regulated under Section 3(c), which exempts "the ringing of fire bells or fire alarms or the making of any other noise for the purpose of giving notice of fire or any other danger or any unlawful act for a continuous period of time of twenty (20) minutes or less."

A review of other jurisdictions shows significant variance in how this issue is regulated.

Permitted Alarm Times by Jurisdiction

- Ottawa 20 minutes
- Halifax "longer duration or more disturbing than is reasonable necessary"
- Toronto 5 minutes
- Hamilton lasting "an unreasonable period"
- Winnipeg causing "unreasonable discomfort"
- Calgary Not Specifically Regulated
- Vancouver- Not Specifically Regulated

Options

A. Status Quo

This is a very small problem that is likely to disappear on its own as technologies advance. Enforcement resources are best utilized elsewhere.

B. Five-Minute Rule for Car Alarms

A five-minute limit for car alarms is in place in the City of Toronto and can be enforced effectively according to its enforcement staff. As Ottawa already uses the same enforcement procedures as Toronto, this limitation could potentially be implemented.

However, there are a number of unknown factors to be considered:

- How many new complaints will be generated as a result of this change and how many staff hours will be required to manage Alternate Response Letters and investigations.
- Will the reduced time limit serve to effectively reduce noise?

Preferred Option

Staff recommends Option A, the status quo.

Most violations are one-off circumstances where there is no intent or disregard on the part of the vehicle owner. Repeated violations are exceptionally rare and managed effectively by the existing by-law provisions.

Motorcycles

Background

When discussing noise from any motor vehicle, it is important to understand the distinction between vehicles operating on a highway (any roadway) or on a property. Moving vehicles are governed by the *Highway Traffic Act* and fall under the jurisdiction of Ottawa Police Services. By-law & Regulatory Services cannot enforce moving violations.

When vehicles are not on a highway, such as in a resident's driveway, By-law & Regulatory Services enforces the provisions of the By-law related to unnecessary vehicle noise, mufflers and idling.

Table 6 - Motorcycle Noise, By Year

Year	2012	2013	2014	2015	2016
Service Requests	39	24	40	21	27

While the small number of complaints suggests that additional regulation is not required, it is noted that approximately 35% of these service requests are for repeated violations. As such, By-law & Regulatory Services will apply to the Province for an increase in the set fine to serve as a further deterrent for unnecessary vehicle noise.

Preferred Option

Staff is recommending no change, but will apply to the Province for an increase in the set fine for causing unnecessary vehicle noise and having an ineffective muffler from \$305.00 to \$400.00.

Wind Chimes

Background

Staff was asked to explore "greater consideration about placement of wind chimes" as a component of the Noise By-law Review.

There are currently no specific regulations governing wind chimes within the by-law, however the general provision for "unusual noise" still applies.

A review of related service requests shows that 15 complaints have been made concerning wind chimes over the past five years. Of these, 2 were removed immediately following notification of the complaint, 5 were removed after the City sent letters to the

occupant through the alternate response program, 7 were deemed reasonable by the enforcement officer and 1 complaint was withdrawn.

Table 7 - Service Requests for Wind Chime Noise, By Year

Year	2012	2013	2014	2015	2016
Service Requests	0	3	8	1	3

The approach currently used by the City to address wind chimes is consistent with other Canadian municipalities. None of the cities included in the study group provide specific regulation for wind chimes.

In consideration of possible regulations, the following assumptions have been made:

- Disturbance from wind chimes is most likely to be a problem at night, or during periods of high wind
- Regulating the locations where chimes may be placed is impractical given the great variance in wind speeds and directions as well as the diverse layout of individual properties and neighbourhoods.
- Regulating the specific acoustical characteristics of wind chimes is problematic for enforcement, given the various environmental factors that influence both wind chime noise and sound meter calibration.

While a regulation requiring the removal of chimes overnight would reduce disturbances, it will also have a far-reaching impact on residents with chimes that have not been subject to a complaint. For the vast majority, this would create a violation where no unreasonable disturbance exists. Such an approach is not recommended given the minimal benefits it would provide for such a large impact. This is also true for regulations that would require the removal of chimes during periods of high wind.

Comments provided by By-law Enforcement Officers affirm the difficulty with getting precise sound equivalent level tests of wind chimes, as determining if a violation occurred depends on the ability to take measurements during identical wind speed and direction and temperature.

The final option considered was a regulation requiring chimes to be removed upon a complaint being made. This presumptively determines that any wind chime noise is noise likely to disturb. Such an arbitrary measure could place the City in the position of penalizing a resident for unreasonable or even vindictive complaints from a neighbour.

Having discounted the above, and given both the small number of complaints and the effectiveness of existing enforcement, staff are recommending no changes to address this issue.

Preferred Option

Staff is recommending no specific regulation for wind chimes. While wind chimes are not a necessity, for many they add to the quality and enjoyment of their living space. In most cases, wind chimes are not a significant source of noise. In the rare cases where wind chimes do cause disruption, By-law & Regulatory Services has the regulatory tools in place to resolve the problem.

By-law Enforcement Officers would continue to assess the noise complaints on a caseby-case basis, conducting an objective and independent third party assessment to determine if the noise produced is unreasonable. Officers already have the enforcement tools required to take appropriate action as required.

End Notes

https://www.theweathernetwork.com/forecasts/statistics/precipitation/cl6105976/caon0512,

Canadian Mortgage and Housing Corporation, Market Outlook (Ottawa), Fall 2016, accessed 23 Feb 2017, https://www.cmhc-schl.gc.ca/odpub/esub/64311/64311_2016_B02.pdf?fr=1487859542286

Short term exemptions apply. Refer to City of Edmonton By-law 5M2004 for details.
 The Weather Network, Weather Statistics for Ottawa, accessed 16 Mar 2017,