

Region of Waterloo
Transportation Services
Transportation

To: Planning and Works Committee
Meeting Date: April 4, 2023
Report Title: Region of Waterloo Noise Policy Implementation Guideline
– 2023 Review

1. Recommendation

For information.

2. Purpose / Issue:

At the May 10th 2022 Planning and Works Committee meeting staff were directed to:

- 1) Conduct a review of the Region's current Noise Policy; and
- 2) Investigate the feasibility and cost implications of placing noise walls on all Regional back-lotted roads which currently do not have noise walls.

3. Strategic Plan:

Environment and Climate Action, Healthy, Safe and Inclusive Communities and Responsive and Engaging Public Service. Regular review of the Region's Noise Policy supports each one of the strategic objectives through staff's assessment of current industry best practices, policy impacts related to growth and being responsive to Regional Council and the community's policy-related questions.

4. Report Highlights:

Staff Review of the Current Noise Policy;

- 1) Staff undertook a thorough review of the current Noise Policy, a copy of which is included in Appendix A, including the following aspects:
 - The current methodology for how noise is assessed;
 - Whether or not the current noise level (decibels) thresholds are appropriate;
 - A comparison of the Region's Noise Policy with Ministry of Environment Conservation and Parks policy (MOECP);
 - A comparison of the Region's Noise Policy with the current noise policies of

several peer municipalities; and

- During this review, staff, through discussions with residents and with local and Regional Councillors, heard some frequently-asked questions about traffic-related noise and how it is addressed in the Region's Noise Policy. Some of the key questions and the answers are as follows:
 - Why do we calculate noise and not just measure it?

Calculating noise levels is required when projecting noise into the future. All levels of local and provincial government calculate noise to ensure traffic growth is accounted for when analyzing current and future noise levels impacting noise sensitive land use.
 - Are staff looking at other ways to reduce noise impacts?

Yes, staff reviewed use of quiet pavements in addition to longer term planning strategies in order to reduce all vehicle trips with the new Integrated Mobility Plan.
 - Did staff consider a policy change?

Yes, staff considered several potential noise level warrant changes in order to continue to provide a balanced approach to noise mitigation with consideration given to cost, future planning trends and our overall community well being.

More detailed answers to these and other questions are located within Appendix B.

- 2) Based on this Policy review, staff concluded that the Region's current Noise Policy provides a reasonable and consistent way to assess the impacts of noise on sensitive land uses and is consistent with industry best practices, MOECP guidelines and with the current noise policies of several peer municipalities in Ontario. The conclusions of this review are consistent with the conclusions determined by staff after a similar review of the Noise Policy conducted in 2019/2020. Please refer to Appendix C for the full staff report summarizing this previous review and presented to Council on September 15, 2020.

Review of Placing Noise Walls on all Regional Back-Lotted Roads currently without a Noise Wall;

- 3) Staff reviewed both the feasibility and costs associated with placing noise walls on all Regional back-lotted roads currently without noise walls. The approximate cost of installing the additional noise walls would be \$154 million for approximately 55 km's of new noise wall on back-lotted Regional roads. Staff assessed that building more noise walls is currently unwarranted, would have a significant negative financial impact and would also create barriers to what is considered to be vital access to active transportation infrastructure on adjacent Regional road

corridors. Please refer to Appendix D for a more detailed assessment of the impacts of these additional noise walls.

Review of Noise Related Health Impacts;

- 4) Staff have reviewed the ongoing environmental noise research from the World Health Organization (WHO) and The Ministry of Environment Conservation and Parks. Health Canada currently does not have exposure guidelines for environmental noise. Based on this review, staff concluded that on balance the Region's current Noise Policy does conform with the basic principles related to noise warrant levels and exposure as recommended by the WHO and the MOECP.

Additional Initiatives to Reduce Traffic Noise

- 5) Measures to reduce exposure to noise from transportation sources is a priority with the Region's current noise policy. Strategies already in place include policy such as: separating loud land uses from sensitive land uses and passive mitigation such as, mandating minimum building setbacks for new developments. These basic strategies play a key role to reduce road traffic noise exposure. Moving forward with the Integrated Mobility Plan's approach will put more focus on reducing auto trips and promoting all active transportation trips. Consideration of trucking hubs to transfer goods from larger trucks into smaller trucks are all part of possible traffic reduction strategies in our urban environments.

Asphalt design strategies like "Quiet" Pavements' were revisited. This pavement design was found to be ineffective in reducing noise substantially, has a shorter life cycle and is far more expensive to construct.

5. Background:

In 2018 staff were directed by Regional Council to form a working group in order to complete a comprehensive Noise Policy review. This working group consisted of Regional Councillors and staff members. This working group reviewed the entire Policy including the following key areas: noise threshold levels, methodology for noise calculation, MOECP guidelines and what other similar Ontario municipalities were doing with their noise policies. In September of 2020 staff brought forward an updated Noise Policy which Council endorsed (Appendix C). It should be noted that no noise calculation methodology changes or noise level warrant changes were recommended from this review. Staff's intention during the 2019 policy review was and continues to be the alignment of Regional policy with MOECP regulations and guidelines.

6. Area Municipality Communication and Public/Stakeholder Engagement:**Area Municipality Communication:**

Nil.

Public/Stakeholder Engagement:

Nil.

7. Financial Implications:

Nil.

8. Conclusion / Next Steps:

The Region's Noise Policy has been reviewed twice in the past 4 years. These reviews have included: noise threshold levels, noise calculation methodology, comparison to other similar municipalities' practices, review of provincial best practices and review of present and future planning strategies.

It should be noted that as the community continues to grow, the Noise Policy needs to be reviewed in "lock-step" with future Transportation Master Plans. Measures to reduce exposure to noise from transportation sources is a priority with the Region's current Noise Policy. Moving forward, the new Integrated Mobility Plan's approach will put more focus on reducing auto trips and promoting all active transportation trips. Reduced auto trips will, in turn, have a positive effect on reducing community noise levels from what could be realized from a "Business-As-Usual" regime.

Staff believes that the current Noise Policy continues to represent best practice for noise mitigation in an urban environment. The current Noise Policy also strikes a balance between the need to mitigate traffic-related noise and the need for fiscal responsibility and avoidance of evolving into a "walled community". As research continues to progress related to noise impacts in urban environments, staff plan to continue its evaluation of those impacts to the community. Monitoring long term planning strategies geared toward reducing carbon emissions by 80% by 2050 and reducing road traffic will help greatly to inform both the next steps and the impacts as the community continues to grow.

Staff will also continue to monitor any changes and/or updates from the Ministry of Environment Conservation and Parks regarding its guidelines and best practices for managing traffic noise in urban environments. When changes to the MOECP guidelines do occur, staff will conduct a review of the Region's Noise Policy in light of those MOECP changes to ensure the Region's Noise Policy continues to align with best practices.

9. Attachments:

Appendix A: Noise Policy Implementation Guideline (October 22, 2019)

Appendix B: Frequently Asked Questions and Answers

Appendix C: Noise Policy Implementation Guideline Review and Update: Report to Region of Waterloo Committee of the Whole, dated September 15, 2020

Appendix D: Feasibility and Cost Assessment for Noise Walls on All Back-lotted Regional Roads currently without Noise Walls

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