Appendix B: Frequently Asked Questions and Answers

Question 1- What are considered Noise Sensitive Land Uses?

Answer – This is land use which may be adversely impacted by noise from transportation sources, including: residential developments, seasonal residential developments, hospitals and nursing homes, schools and day care centres.

Question 2- Why is the Outdoor Living Area not the resident's entire back yard?

Answer- The Outdoor Living Area living area's definition is prescribed by the Ministry Of Environment, Conservation and Parks (MOECP) in order to provide a consistent and predictable location to be assessed for noise levels. The Region's current policy copies this approach. Since many residential properties rear yards have close proximity to regional roads and are very different sizes and shapes, it is important to apply a consistent standard for the assessment of noise effects and to differentiate the different impacts based on the setback of homes from the road.

Question 3- Why do we calculate noise and not measure noise and why is the daytime average that is used measured over 16 hours between 7am and 11pm?

Answer- 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. The noise analysis software used by the Region (Stamson 5.1) slightly over predicts actual measured average noise at the receiver.

The purpose of calculating the daytime average is in order to capture both peak traffic and non peak traffic noise generation. This practice is also consistent with both local municipalities and provincial practices.

Question 4- Are staff looking at other ways to reduce traffic noise impacts on the community?

Answer- Yes, Staff have reviewed; "quiet pavements", planning policy, changing warrant levels and existing development requirements.

Quiet Pavements:

• This review included consultation with the University of Waterloo and Design and Construction. Quiet pavements are specially designed porous asphalt roads which are intended to reduce noise generated from pavement and tire interaction. Staff concluded that these pavements were approximately 30% more expensive to construct and also provided only a temporary non-perceptible (less than 3dBA) noise reduction. As such, this technology is not considered a feasible approach to

reducing road noise. Staff; however, will continue to monitor industry advancements in this field for potential improvements which may provide justification for their use.

Planning Policy:

Reducing traffic noise at its source is a primary long term goal. This can be improved by maintaining and building new quality active transportation facilities on regional corridors. The Integrated Mobility Plan's "15 minute" community approach is intended to reduce single vehicle traffic trip generation. Staff believe this approach will contribute to reduced traffic noise at the source. Additionally, it will support our continued positive progress with the declared climate emergency and ultimately provide an overall better community health and wellbeing. This new more aggressive planning approach on all regional corridors will help to promote a more active lifestyle (walking, cycling and active recreation), thus reducing noise levels from single vehicle transportation sources. This longer term planning approach will also contribute to a reduction in the risk of both chronic and acute disease, making the Region of Waterloo a healthier place to live for all residents and visitors. 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.

Changing Warrant Levels:

 Staff reviewed lowering noise warrant levels triggering mitigation to 58 dBA in order to mitigate noise complaints and provide a quieter urban backyard area. Doing this would be inconsistent with current MOECP guidelines and would also result in the Region building noise walls in many more locations at significant expense.

Staff's opinion is that current policy and warrant levels strike an even balance for placing sound attenuation only where it is required.

Question 5- Did staff consider any policy changes during this review?

Answer- Yes, staff reviewed reducing the resident's 50% cost share portion under Part C of the Noise Policy to a lower amount, such as 25%. Although this reduction could potentially incentivize more noise walls being built in existing areas where concerns are received, it would also mean more cost to all taxpayers for building noise walls in locations where not everyone wants them. This process under Part C still requires a 2/3rds majority of affected residents in order to proceed with building a wall.

Staff also reviewed the potential effects of using lower noise level (Decibel) thresholds for meeting the warrants for a noise wall. The use of that lower decibel thresholds would

not be consistent with current MOECP Guidelines and the policies of other peer municipalities.

Ultimately staff decided to not recommend any policy changes for the following reasons:

- 1. With any of the these changes, the Noise Policy would be inconsistent with Provincial guidelines and the policies of peer municipalities; and
- 2. The changes would likely result in the construction of more noise walls rather than less, resulting in large financial impacts to the Region. In addition, the installation of more noise walls would not be in keeping with the Region's strategic goal of encouraging more active participation as noise walls cut off rearyard connections to active transportation facilities on the adjacent Regional road.