

May 2013

TRAFFIC NOISE AND TRANSPORTATION PROJECTS Fact Sheet

THE CITY OF EDMONTON URBAN TRAFFIC NOISE POLICY (UTNP)

When the City plans to build or upgrade a major transportation facility, such as an arterial road or an LRT, adjacent to or through a residential area it must follow the *Urban Traffic Noise Policy (C506A)* to determine *if* and *where* noise attenuation (noise barriers) should be built. The policy states:

“The City of Edmonton will seek to achieve a projected attenuated noise level below 65 dBA Leq₂₄ or as low as technically, administratively, and economically practicable, where any urban transportation facility (arterial roadways or light rail transit) is proposed to be built or upgraded through or adjacent to a developed residential area where private backyards will abut the transportation facility.”

WHAT IS “dBA Leq₂₄”?

Traffic noise levels are measured in decibels (dBA) over a 24 hour period (Leq₂₄) and are expressed as dBA Leq₂₄. This value considers both daytime and nighttime conditions, and is a standard for measuring traffic noise commonly used by major Canadian cities.

WHAT IS THE PURPOSE OF THE POLICY?

- The UTNP is in place to address traffic noise impacts within residential areas.
- The goal is to achieve a noise level of 65 dBA Leq₂₄ or lower for residential areas.
- If the predicted noise level is 65 dBA Leq₂₄ or greater, a noise barrier may be considered.

HOW IS TRAFFIC NOISE MEASURED?

When a City of Edmonton transportation project is being planned:

- 1) Noise measurements are taken to determine existing ‘base’ noise levels.
- 2) Computer modeling takes these measurements, as well as proposed infrastructure changes and projected future traffic volumes and patterns (20 years), into consideration in order to predict future noise levels.
- 3) Predicted future noise levels are then reviewed to determine the impact to residential backyards adjacent to the project.

If the modeled noise levels meet or exceed 65 dBA Leq₂₄, noise barriers are considered for the project. Further analysis is then required to see what type of noise barrier is needed, if it is technically feasible to provide a barrier and where the barrier needs to be placed in order to achieve a noticeable reduction in noise levels for adjacent properties. Affected residents are then informed that the City is considering installing noise barriers near their property.

The UTNP also notes that within existing residential areas, community stakeholders must have an opportunity to be involved in the choosing of the materials and appearance of the proposed barrier.

FOR MORE INFORMATION ABOUT THE UTNP AND TRAFFIC NOISE

Visit: www.edmonton.ca/TrafficNoise