

# Southwest Anthony Henday Drive Noise Study: Fact Sheet



## THE STUDY

Alberta Transportation is conducting a Noise Monitoring and Modeling Study for the 20 kilometres of Anthony Henday Drive between the Highway 16A Interchange and the Queen Elizabeth Highway 2 Interchange in southwest Edmonton.

The study will determine noise levels in the area and will compare them with studies conducted in 2007 and 2013, and against Alberta Transportation noise level guidelines.

The study is being conducted based on a ministerial commitment to proceed with the study in 2016, prior to the original 2018 timeline.

### Monitoring

Thirteen monitoring locations will be located throughout the study area (at the same locations as in 2007 and 2013). Monitoring will be conducted over a 24-hour period, during downwind conditions. The thirteen locations will be separated into four separate monitoring periods to ensure suitable results from all locations under appropriate wind conditions.

The noise level (dBA) and frequency data will be recorded every 15 seconds, with simultaneous digital audio recording so that sound technicians can listen to particularly high recorded sound levels to see whether they are traffic noises, or other noises, such as barking dogs or chirping birds close to the microphone. Portable weather monitoring stations ensure accurate local meteorological conditions are obtained.

The data received from the monitoring will be used to calibrate and verify the noise model, which will be used to create a map of noise levels in the study area.

### Modeling

A computer noise model of the entire study will be developed that takes into account:

- Traffic on southwest Anthony Henday Drive, as well as all intersecting Edmonton roads and interchanges

- Elevation contours
- Residential property lines
- Residential and commercial structures

Noise levels in the model will be calculated in keeping with the Alberta Transportation Noise Policy and consistent with previous studies. Colour noise maps will be calculated for the entire study area, along with a sensitivity analysis that will account for fluctuations in future traffic volumes, heavy trucks and speed.

## THE TIMELINE

Noise monitoring began a few weeks ago, however, due to construction in the area, monitoring at all locations could not be completed. Next spring, as soon as weather permits, monitoring will resume at all locations. Sites completed in 2016 will be redone to ensure a standardized baseline.

Monitoring will take approximately six weeks, followed by the completion of the noise modeling and analysis. The final report is expected in late summer 2017.

## ALBERTA TRANSPORTATION NOISE POLICY

Alberta Transportation Noise Attenuation Guidelines for Provincial Highways:

*"For construction or improvements of highways through cities and other urban areas, Alberta Transportation will adopt a noise level of **65 dBA L<sub>eq</sub>24** measured 1.2 m above ground level and 2 m inside the property line (outside the highway right-of-way).*

## FOR MORE INFORMATION

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Visit our webpage at

[Transportation.Alberta.ca/6000.htm](http://Transportation.Alberta.ca/6000.htm)