

What Was The Measured Difference Between Yay and Nay Votes for Olafson's Motion?

The power or intensity of sound is often measured using the decibel (dB), which is the unit for the “sound pressure level,” or SPL, relative to a 0 value set at the typical threshold of perception for an average human. While human perception of loudness in relation to SPL can vary, psychoacousticians attribute, in general, a doubling of perceived loudness to a 10 dB change in SPL. A 1 dB change in SPL would correspond to about a 7% increase in perceived loudness to most humans. The chart below shows the unaltered trace of SPL (in dB) measured from the Senate audio tape of the voice vote on Sen. Olafson's motion to table. The scale on the y-axis is “relative” dB, with reference to a maximum value determined by the analytical software used to evaluate the audio tape. The measured difference between the relative SPL for the Yay and Nay votes is 1.43 dB (-15.22 dB - (-16.65 dB)) in favor of the Nay votes. The 1.43 dB difference would correspond to a difference in loudness of about 10% in favor of the Nay vote. The visual impression of a sound wave chart (Audacity™ software, not shown) further supports the impression of a stronger Nay vote.

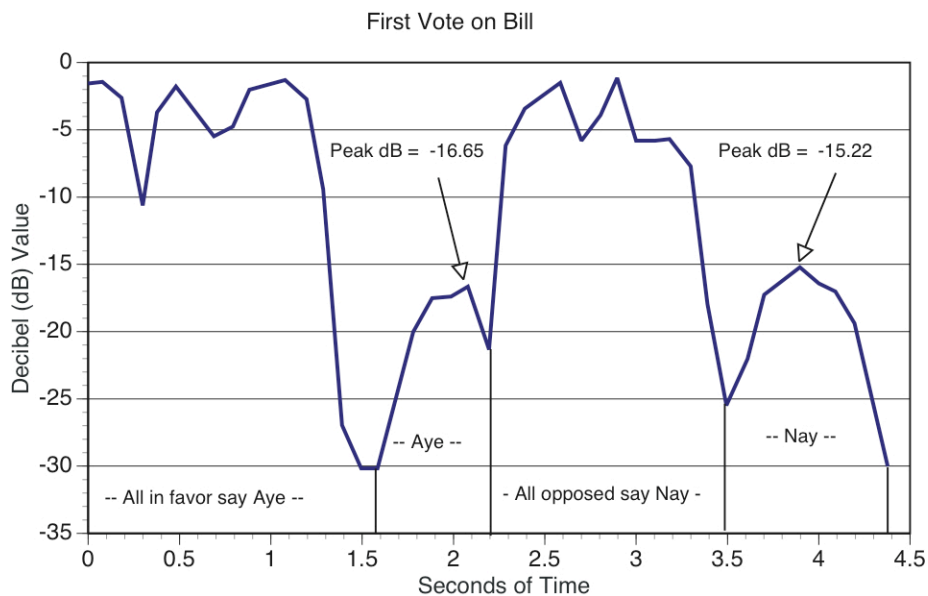


Figure 1. Relative sound pressure levels for the voice vote to table the amendment to HB 1450. Sound analysis by Michael Howard Hove using AudioLeak™ software.