

FRONT RUNNER 2X

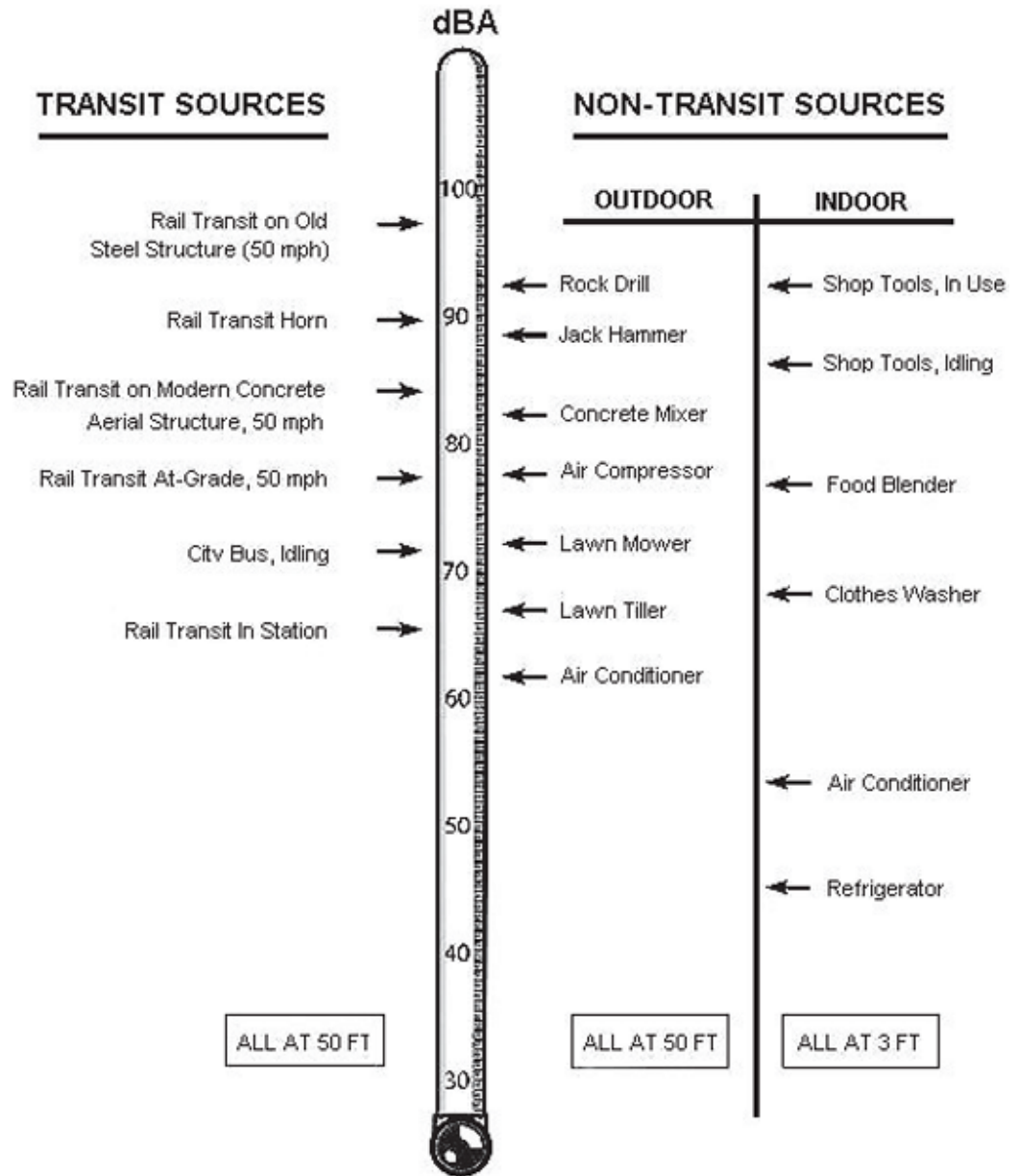


Noise and Vibration

The noise and vibration analysis for the Bluffdale FrontRunner Station followed Federal Transit Administration (FTA) guidance to evaluate existing conditions, future operations, and potential effects on nearby homes. Existing modeled noise levels in the neighborhood are approximately 61 dBA (day-night), which accounts for both current FrontRunner service and freight train activity—the primary contributor to noise and vibration in this area.

With the addition of the new station and increased FrontRunner frequency, noise levels are expected to change by 0.1 to 0.2 dBA. This change is below the federal threshold used to identify noise impacts, and therefore no mitigation is required. Station announcements are not included in FTA impact assessments, but calculations show they would be about 50 dBA at nearby homes—a level comparable to a quiet indoor conversation at a distance.

Vibration was also evaluated following FTA criteria for “Heavily Used” rail corridors. A change in vibration levels that would exceed the impact threshold of +3VdB would occur for any homes within 95 feet of the track. The nearest homes are about 124 feet away and, therefore, there would be no vibration impact and no mitigation is required.



A comparison visual illustrating noise levels from familiar sources.

Source: FTA 2018