**Background**

There have been three noise analyses conducted on the North Metro rail line. As the project made changes a noise analysis was done to determine locations of mitigation measures, including the implementation of Quiet Zones and installation of noise walls.

- **December 2008** – Analysis which assumed double track and compared diesel powered commuter rail to electric commuter rail.

- **December 2010** – Analysis which assumed single track with passing track sections and electric commuter rail.

- **October 2015** – Analysis during final design, which included actual track alignment, passing track as well as single track, electric powered commuter rail, and existing topography.

An additional study will be required for the section from 124th Avenue to Highway 7 when funds become available for completion.

**How Does RTD Keep Trains Quiet?**

- The rail is continuously welded, so there is no "clickety-clack" that you hear with freight trains.

- The trains are powered by overhead electricity so engine noise is minimal.

- "Quiet Zones" at all at-grade crossings, eliminate the need for the train to sound their horn through the crossings, except in an emergency or during maintenance activities.

**Determining Impacts**

- Noise impact levels are identified by determining the existing noise levels in multiple locations along the corridor (this includes any existing noise - traffic, buses, school bells, etc), then comparing those levels to projected noise levels after the train is in place (existing noise plus future train, buses, bells on gates etc.)

- Impacts are affected by a number of factors, including but not limited to: distance from the tracks, adjacent topography, speed of train at that location, ambient noise levels prior to construction.

- Following both the Federal Transit Administration guidelines and RTD’s moderate noise impact policy, impacts are categorized as severe, upper moderate, lower moderate or no impact.

- RTD mitigates for all severe and upper moderate impacts. Mitigation on the North Metro rail line is Quiet Zones and noise walls.

*For more information or to request a presentation, call 303.299.2895*
Final Noise Wall Locations

Between 88th Avenue and Thornton Parkway

Wall (NB) 1
- West side of tracks
- 816' long
- 7-9' tall
- 60' feet from track

Wall (NB)
- West side of tracks
- 377' long
- 6-ll' tall
- 26'- 42' from track

Wall (NB) 3
- West side of tracks
- 962' long
- 10-14' tall
- 22'-30' from track

North of 104th Avenue

Wall (NB) 4
- West side of tracks
- 406' long
- 14'tall
- 60' from track

Wall (NB) 5
- East side of tracks
- 775' long
- 8'-14'tall
- 58' from track

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