Construction Noise Mitigation

The following sections identify potential construction noise mitigation strategies for the FasTracks program. These potential strategies cover the construction and operational phases of the implementation of the FasTracks program. Within each of the corridor's final decision document or environmental evaluation, mitigation measures must be developed for each impact to ensure compliance with Federal, State and Local regulations. This Construction Noise Mitigation Strategy presents suggestions and potential mitigation that can be used. This discussion is not complete and exclusive, and can be modified and refined for each specific impact identified by the individual corridors.

Construction Noise analysis for a FasTracks environmental analysis will likely take into consideration the new construction of a transit corridor (LRT, commuter rail, bus rapid transit, etc), and stations and maintenance facilities. Construction noise would present the potential for short-term impacts to those receptors located along the corridor, near station locations, and along designated construction access routes. It is possible that some construction could occur at night to minimize disruption to traffic. The primary source of construction noise is expected to be diesel-powered equipment such as trucks and earth moving equipment, as well as shorter-term but intense activities such as bridge demolitions, bridge foundations, wall construction and trackwork construction. Construction presents the potential for increased noise for area residents and businesses. Standard construction noise mitigation language to be considered for inclusion in the FasTracks corridor environmental documents should consider and incorporate the following language as applicable.

Any mitigation strategy committed to by RTD, should be incorporated into construction specifications which can be enforced by the contractor or RTD inspectors.

The following measures can be used in NEPA documents as applicable, to mitigate noise impacts:

- Communicate early on with the general public to reduce the number of noise complaints. Inform the public of any potential construction noise impacts and the measure that will be employed to reduce these impacts. Also, establish and publicize a responsive complaint mechanism for the duration of the construction.

- Construct sound barriers required for mitigation of noise impacts by the corridor's final decision document or environmental evaluation prior to transit line construction (where possible from a construction staging perspective).

- Minimize construction duration in residential areas, as much as possible.

- Minimize nighttime activities in residential areas, as much as possible.

- Re-route truck traffic away from residential streets, where possible.

- Combine noisy operations to occur in the same time period.

- Use well-maintained equipment equipped with modern mufflers.
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- Noise blankets on equipment and/or quiet-use generators. Noise blankets (also called “acoustic wraps”) are removable and reusable sound barriers made from compost materials like teflon impregnated cloth. The blankets are custom-fit to encapsulate the noisy equipment and block sounds at the source. These are commonly used on equipment such as fans and blowers, compressor housings, hydraulic pumps, etc. They are very effective because they block the source of the noise.

- Use alternative construction methods, such as sonic or vibratory pile driving in noise sensitive areas.

- Pile driving and other high-noise activities during daytime construction (generally 7am to 7pm), where possible. When construction time is restricted to certain daytime hours, the overall duration of project construction would likely increase.

Each municipality adjacent to a corridor should be contacted during final design to determine if they have noise ordinances or maximum permissible sound pressure levels emitted from construction equipment and to what hours the guidelines apply.

The contractor will be required by contract agreement, to submit a work plan outlining work schedules, traffic control, access provisions, and intended mitigation measures prior to initiating construction.