

Noise Meeting Summary Report

APPENDIX E

Noise Meeting Display Boards

Project Purpose and Need



Purpose

Improve traffic flow and safety, accommodate high traffic volumes, and increase multi-modal travel options and connections at the US 6 and Wadsworth interchange and along Wadsworth Boulevard between 4th Avenue and 14th Avenue.

Needs

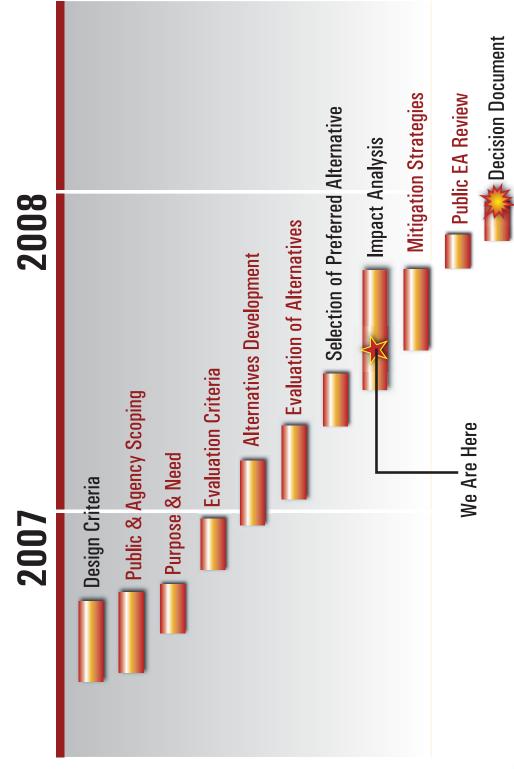
- Improve safety for motorists, pedestrians, and bicyclists
- Correct design deficiencies that contribute to safety concerns and operational inefficiencies
- Increase infrastructure capacity to meet current and future traffic volumes
- Support multi-modal connections







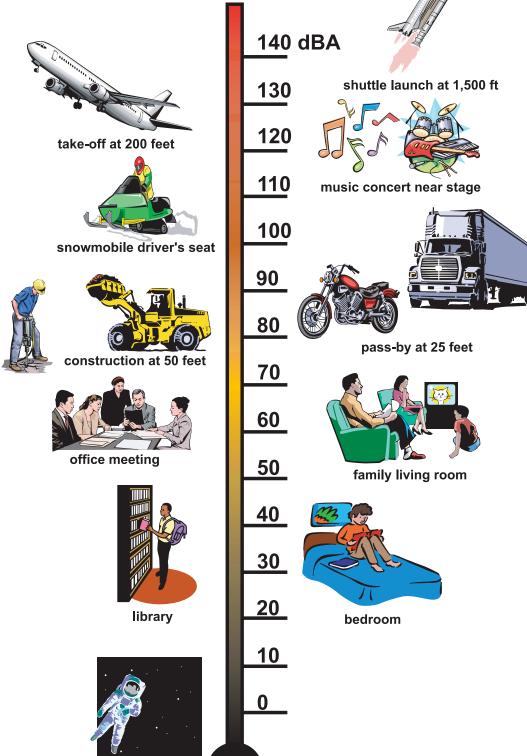
Key Decision Milestones







Sound Pressure Levels

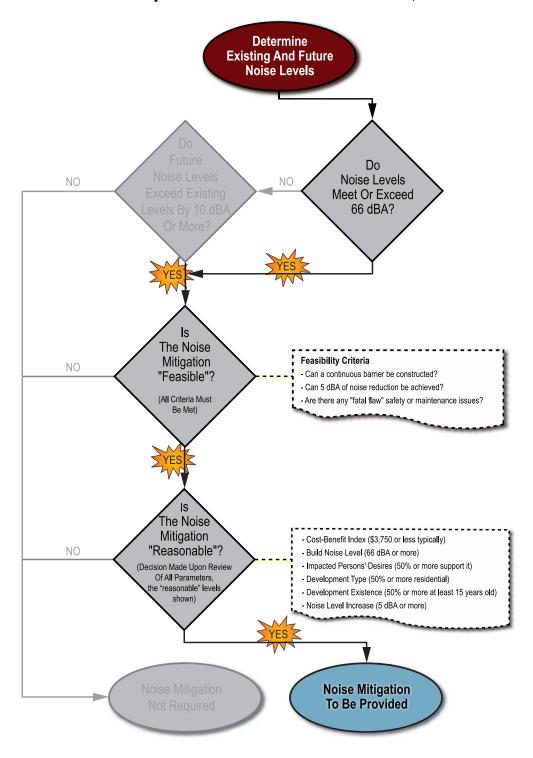




space

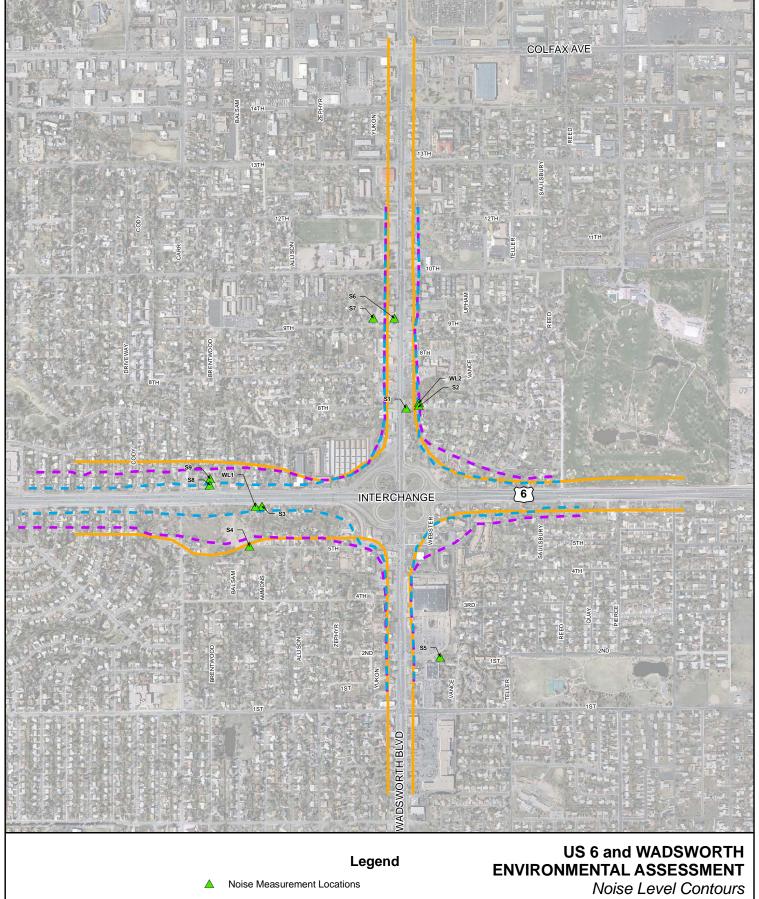


CDOT Noise Analysis Procedure Cdot Noise Analysis And Abatement Guidelines - December 1, 2002









Design Year (2035) 66 dBA Noise Contours (with proposed noise walls)

Design Year (2035) 66 dBA Noise Contours (without proposed noise walls)

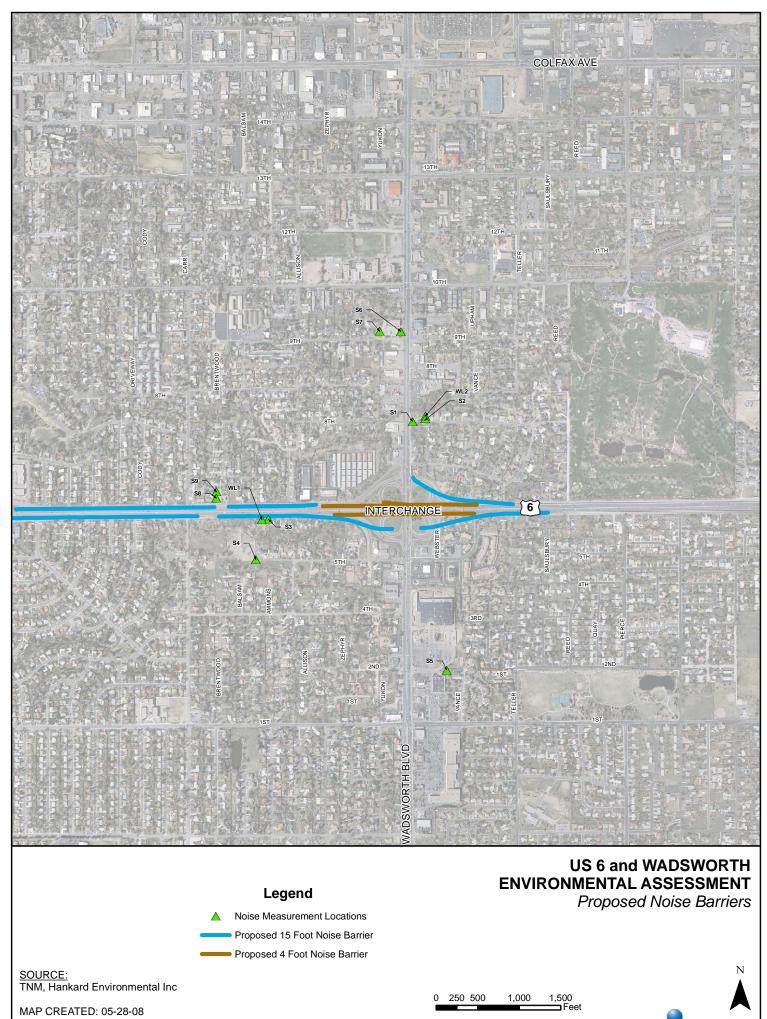
Existing (2007) 66 dBA Noise Contours

SOURCE: TNM, Hankard Environmental Inc

MAP CREATED: 05-28-08

1,500 Feet 0 250 500 1,000





Noise Mitigation

- CDOT is proposing to construct 11,000 feet of new noise walls and reconstruct 1,700 feet of existing noise walls.
- Proposed walls would be 15 feet high, which is the same height as walls to the east of Wadsworth.
- Walls are typically concrete masonry or concrete panels. CDOT will seek input to the aesthetics.
- The average cost of the walls is estimated to be \$4.8 million (at \$30 per square foot).
- Noise walls are included as part of the basic design package.
- Noise walls could be constructed early in the overall construction to help mitigate construction noise.

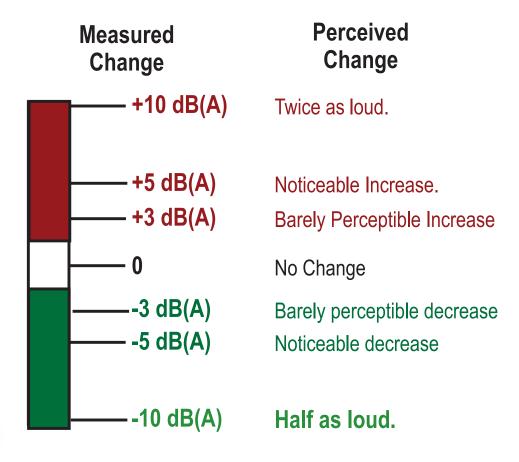






Noise Mitigation Effectiveness

- Noise walls will provide noticeable noise reduction for 330 residences (receptors).
- Typical noise reduction for residences is as follows:
 - The first row of homes adjacent to US 6 would experience an average noise reduction of 11 decibels.
 - The average noise reduction for second row receptors is 9 decibels.
 - Third row receptors would experience an average noise reduction of 7 decibels.
 - Homes 1,000 feet or farther from US 6 would not experience any change in noise conditions from noise walls.







Noise Wall Aesthetics

Standard Architectural Treatments



Considers elements such as texture, shape, color, and patterns.

Vertical Stepping/Sloping of Panels



 May create a more visually interesting design and facilitate landscaping treatments.

Horizontal/Vertical Caps



 Provides visual interest and smooths a barrier's profile, source: FHWA Highway Noise Barrier Design Handbook, 2000.

Landscaping





Integrates noise barrier with surroundings, supplements existing vegetation, and provides new vegetation.

Alignment Changes





Addresses changes in topography and shifts in alignment.

Barrier End Treatments



Creates aesthetically pleasing treatments at the ends of noise barrier systems.

