

Noise Level Contour Lines Proposed Action Year 2035



US 50 West Noise Impact Assessment

Receptor Criteria

Residential receptors within approximately 500 ft of Proposed Action

CDOT Noise Abatement Criteria (NAC)

2035 traffic noise impacts occur when 66dBA; or future noise levels increase by 10 dBA or more over existing conditions

Impacts exceeding CDOT NAC threshold?

- 44 - Type B - residential receptors would be at or above the NAC threshold and impacted by traffic noise
- No receptors are expected to experience a 10-dBA increase
- The largest increase at 2035 is predicted to be 8 dBA

Noise Abatement Criteria

For a noise abatement action to be feasible it must:

- Provide at least 5 dBA of noise reduction.
- Not have any "fatal flaw" issues (safety, maintenance, access, drainage).
- Not exceed 20 feet in height.

For an abatement action to be reasonable, it must:

- Meet the minimum design goal of at least 7 dBA of noise reduction.
- Meet the cost/benefit index of not more than \$6,800/receptor/dBA of benefit.
- Have support from more than 50 percent of the potentially benefiting receptors.

Locations of Traffic Noise Abatement Barriers Evaluated



Noise Mitigation

Of the 6 noise impacted developments evaluated, one noise abatement barrier was found to be feasible and reasonable. Would reduce noise levels for 18 residential receptors at the Stonegate Village