

US 50 West Noise Impact Assessment

Receptor Criteria

Residential receptors within approximately 500 ft of Proposed Action

Noise Sensitive Receptors?

Purcell Blvd. to Wills Blvd. **YES**

McCulloch Blvd - No

Impact Criteria

2035 noise levels resulting from Proposed Action at residential receptor(s) that may exceed CDOT Noise Abatement Criteria (NAC) of 66dBA; or future noise levels that increase by 10 dBA or more over existing conditions

Impacts exceeding CDOT NAC threshold?

Purcell Blvd. to Wills Blvd. **YES**

- Five - 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 4 dBA

Abatement Criteria

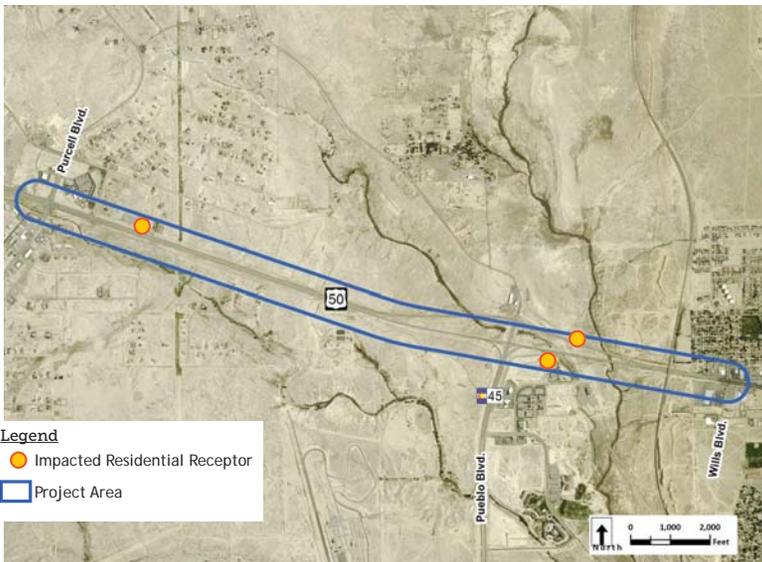
Noise barriers found to be both feasible and reasonable are recommended (See CDOT criteria below)

Feasible and reasonable noise abatement barriers?

NO

Conclusions - No noise abatement actions would be both feasible and reasonable. Barriers evaluated for residences exceeding CDOT NAC threshold along Holiday Drive, Capri, and North Pointe Gardens would not be reasonable, because the cost/benefit criterion would exceed CDOT's limit for reasonableness

Noise Impacts for Proposed Action - Year 2035



Noise Abatement Criteria (CDOT Noise Abatement Guidance 2013)

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 benefitting receptors.