



La Cañada Drive, River Road to Ina Road



Noise Analysis Summary

Introduction

The La Cañada Drive, River Road to Ina Road project involves the widening of a major arterial roadway between Oro Valley and Tucson. A noise study has been prepared for this project as part of the environmental requirements under the Pima County Community Participation and Mitigation Ordinance. In addition, this project is using funds from the Federal Highway Administration (FHWA); therefore, environmental documentation in compliance with the National Environmental Policy Act (NEPA) is also required.

Noise Study Methods

The noise study for La Cañada Drive, River Road to Ina Road was conducted using Pima County's Noise Abatement Procedure (PCNAP). The FHWA Traffic Noise Model Version 2.5 (TNM 2.5) was used to predict existing and future noise levels at noise-sensitive properties (sensitive receivers) along the roadway corridor. Rubberized asphalt, which reduces roadway noise, will be applied to the new roadway. However, because this project is receiving federal funds, the FHWA would not permit the use of the credit of 3 dBA for rubberized asphalt in conducting noise level calculations, as allowed by the PCNAP. The resulting noise levels at each sensitive receiver were compared to the noise abatement criteria in the PCNAP in determining whether noise mitigation was warranted, feasible, and reasonable.

Noise Analysis – Summary of Findings

- 114 sensitive receiver locations were identified and evaluated

Existing Conditions

- 884 vehicles during highest peak-hour
- 53 to 65 dBA range for corridor

Future (2030) Conditions without noise barriers as mitigation

- 1,908 vehicles during highest peak-hour
- 56 to 71 dBA range for corridor *
- 57 sensitive receiver locations warranted mitigation evaluation

Noise Barrier Mitigation Evaluation

- 36 barriers were evaluated to provide noise mitigation at 57 sensitive receiver locations
- 6 barriers met Pima County criteria, providing 5 dBA or greater noise reduction at 12 sensitive receiver locations

Future (2030) Conditions with barriers as mitigation

- 56 to 71 dBA range for corridor *
- 47 locations will still exceed Pima County noise abatement criteria

* Rubberized asphalt will reduce noise levels by approximately 3 dBA.

Noise Mitigation Consideration

Noise barriers will only be constructed if the majority of property owners (defined as fifty percent plus one) at benefited receivers for that barrier desire the barrier.