



Purpose of the Proposed Action

The purpose of the I-25/Arapahoe Road Interchange project is to correct major vehicular capacity and functional deficiencies and to improve operational and safety elements for multimodal travel.

Need for the Proposed Action

The existing design and capacity of the interchange no longer accommodates traffic demands. Traffic volumes have increased substantially since the mid 1980's when the last significant improvements were made to Arapahoe Road (SH 88) and to the I-25 interchange. The I-25 and Arapahoe Road interchange area experiences heavy traffic throughout the day, with high traffic volumes in all three peak periods (AM, noon and PM). Over 99,900 vehicles per day enter the interchange from either Arapahoe Road or the I-25 ramps. This volume is forecast to increase substantially, growing by 132 percent to 131,700 vehicles per day in 2035.

Travel lanes on Arapahoe Road are not consistent, with six lanes approaching the interchange from the east but only four lanes (two through lanes in each direction) extending through the interchange. Due to the geometric design constraints of the narrow two eastbound through lanes on Arapahoe Road, vehicular traffic (especially large trucks) slowly negotiate the southbound I-25 to eastbound Arapahoe Road double left turn, resulting in frequent, lengthy vehicle queueing on the southbound off-ramp that backs up onto I-25 in peak periods. The current ramp intersection Level of Service (LOS) is E/F in peak periods, with drivers experiencing 80 seconds or more of delay per vehicle during peak hours.

Project Objectives

To achieve the purpose for improving the I-25/Arapahoe Road interchange, specific objectives should be addressed:

- Sensitivity to residential impacts and preservation of community values.
- Accommodation of multi-modal travel demand.
- Accommodation of existing major infrastructure, particularly the Southwest Corridor LRT.
- Context Sensitive Solutions (CSS) that reflect community character.
- Mitigation of adverse impacts.
- Recognition of the economic importance of the interchange at the local and regional levels.
- Affordability considering anticipated construction costs and the potential for funding.

