Transportation Analysis

What will be analyzed and what will we learn?

The analysis will help us understand and compare the transportation impacts of Envision East Arapahoe land use scenarios for the study area, including:

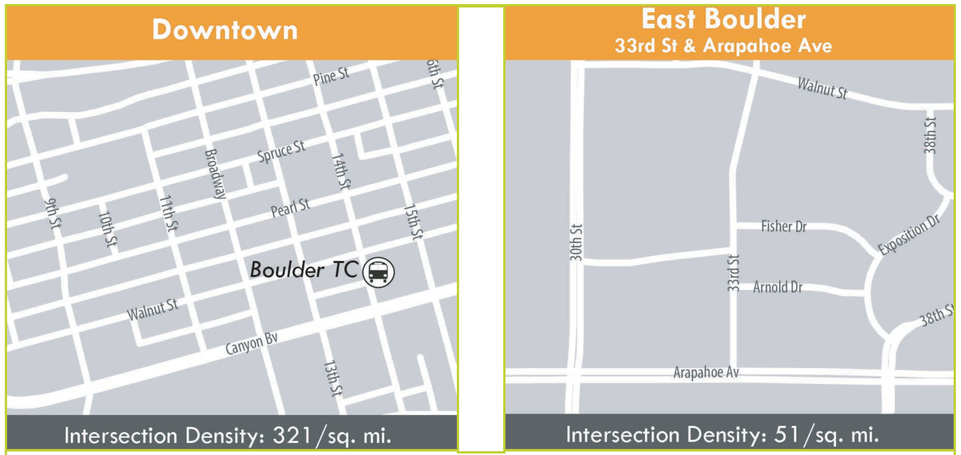
- Number of projected new trips
- Share of trips expected to use driving, walking, biking, or transit modes
- Future bus rapid transit (BRT) service and Transportation Demand Management (TDM) programs in the Arapahoe corridor
- Future projected traffic volumes and congestion

What are the key transportation assumptions?

The land use and transportation assumptions reflect the land use scenarios and their vision for the east Arapahoe corridor:

- Land use factors such as density and mix of uses
- Transportation demand management practices such as EcoPasses and managed parking
- Transportation mobility factors such as enhanced regional transit service (BRT) and a network of complete streets supporting local walking, biking, and transit connections along and across east Arapahoe

Existing Street Connectivity along East Arapahoe



Intersection density is a good indicator of street connectivity and walkability. In downtown, there are 321 intersections per square mile, whereas east Arapahoe between 30th Street and Foothills Parkway only has 51 intersections per square mile. New street connections are assumed in the Envision East Arapahoe transportation analysis.

How will we evaluate access and mobility?

Proposed access and mobility metrics include:

- Reduction in vehicle miles traveled (VMT)
- Non drive-alone mode share
- Safety for all modes
- Traffic operations and travel time in the corridor
- 15-minute neighborhood access
- Impact on reducing GhG emissions

Example of Results

Transit/pedestrian-oriented development site

- 2.6 daily trips per household
- 4,143 daily residential car trips
- 22.3 daily miles driven per household
- 3.9 annual tons of CO2 per household

Typical suburban development site

- 7.2 daily trips per household
- 20,026 daily residential car trips
- 61.7 daily miles driven per household
- 10.8 annual tons of CO2 per household

Results from Railroad Ave eBART Station Area and San Marcos Master Development plans in Pittsburgh, CA.

Source: Great Communities Collaborative