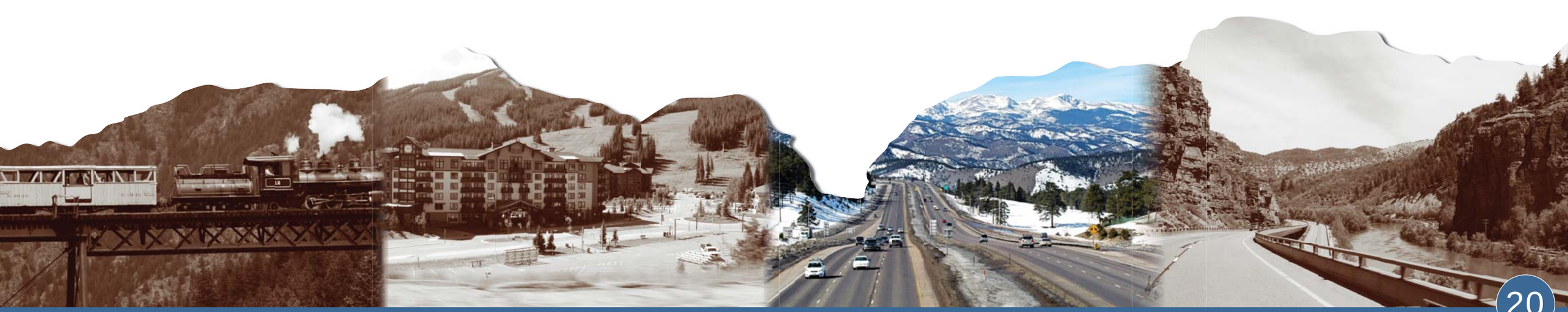
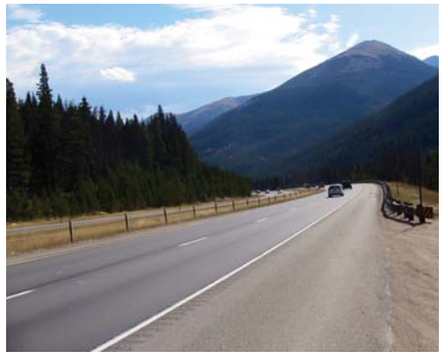


Climate and Air Quality Resources

Types of Impacts

- Entire Corridor, with the exception of Jefferson County in the Denver metro area, is in attainment with National Ambient Air Quality Standards (NAAQS). The Denver metro area exceeds NAAQS for ozone.
  - None of the Action Alternatives will result in emissions that exceed NAAQS.
  - Air pollutant emissions in 2035 and 2050 are predicted to be less than current day emissions even though traffic volumes will be higher.
  - Stricter regulations and lower-polluting vehicles are primarily responsible for future emissions decreases.
- Emissions of mobile source air toxics (or MSATs) are directly related to vehicle miles traveled, which are similar among all alternatives. Alternatives that move traffic closer to residences could result in localized increases in MSATs for residences adjacent to the highway.
- Visibility in the Corridor is good now and expected to improve due to reduction in particulate tailpipe emissions from lower-polluting cars.
- Greenhouse gas emissions, particularly carbon dioxide, vary slightly among alternatives. The variation has little effect on global emissions, but the lead agencies are working to reduce greenhouse gas emissions from transportation on a state-wide and national level.
- Construction will result in fugitive dust emissions, particularly in tunnel boring.



Mitigation Strategies

- The lead agencies will support policies and programs to improve air quality in the Corridor, such as:
  - Local efforts to collect and interpret air quality data
  - Local, state, and federal efforts to reduce air pollutants
  - Engine idling management
  - Evaluating options for winter maintenance that create less dust emissions
- Lead agencies will continue to work on national and statewide levels to develop strategies to manage greenhouse gas emissions and protect transportation systems from effects of climate change.
- During construction activities, CDOT will control emissions using best management practices applicable to the project-specific emissions. Strategies may include but are not limited to:
  - Implementing fugitive dust control plans
  - Using cleaner fuels
  - Maintaining construction equipment
  - Controlling blasting activities on windy days
- More specific mitigation measures and best management practices will be developed in Tier 2 processes.