

What Transportation Improvements Did We Consider and Analyze?

Minimal Action

Provides a range of local transportation improvements without major highway widening or dedicated transit components. Includes:

- Transportation management program
- Interchange modifications
- Auxiliary lanes for slow-moving vehicles
- Curve safety modifications
- Sediment control programs
- Frontage road improvements
- Bus service in mixed traffic

Many elements of the Minimal Action Alternative are included in the other action alternatives.

Transit Alternatives

Three transit alternative components are evaluated in the PEIS. All would run from Eagle County Airport to C-470:

- **Rail with Intermountain Connection** combines heavy rail between Vail and C-470 with the existing Intermountain Connection to the Eagle County Airport. An electric rail is analyzed although a specific technology has not been selected.
- **Advanced Guideway System** is a high-speed elevated transit system. The specific technology has not been selected but magnetic levitation (maglev) and monorail are considered.
- **Bus-in Guideway (Dual-Mode and Diesel)** consists of a bidirectional guideway within the I-70 highway median dedicated to special buses with guideway attachments. Buses would also travel outside the guideway to destinations off of the highway. Both dual-mode electric/diesel and diesel buses are considered.

Highway Alternatives

Highway alternative components fall into two categories:

- **Six-Lane Highway Widening** (for 55 mph and 65 mph design speeds) provides six-lane highway widening, providing an additional lane in each direction at two locations:
 - Dowd Canyon (milepost 169 to milepost 173)
 - Eisenhower-Johnson Memorial Tunnels to Floyd Hill (milepost 213.5 to milepost 247)

Through Idaho Springs, structured (stacked) lanes are proposed to minimize impacts. In all other locations, the highway would be widened at grade.

- **Reversible High Occupancy Vehicle/High Occupancy Toll Lanes** would add one to two reversible travel lanes in the direction of peak traffic demand. Only high occupancy vehicles (carrying three or more passengers) or other cars paying a toll could use the lane(s).

Variations of design elements were evaluated within these highway alternative elements. These include reduced shoulder, median, or clear zone widths, and changes to vertical profiles, such as structured lanes.

Combination Alternatives

Combination alternatives combine all the transit components with six-lane highway widening for a multi-modal solution. Alternatives considered fall into four main combinations:

- Combination Six-Lane Highway with Rail and Intermountain Connection
- Combination Six-Lane Highway with Advanced Guideway System
- Combination Six-Lane Highway with Bus in Guideway (Dual-Mode and Diesel)

Each Combination alternative includes variations that construct the transit and preserve the six-lane highway footprint or construct the six-lane highway and preserve the transit footprint.

No Action

The No Action Alternative includes only ongoing highway maintenance and improvements with committed funding sources likely to be implemented by the 2035 planning horizon. These include several interchange upgrades, park and ride facilities, tunnel enhancements, and general improvements such as resurfacing, repairs, sediment control, and routine maintenance.

Preferred Alternative

The Preferred Alternative is a multimodal solution that includes non-infrastructure related components, Advanced Guideway System, highway improvements as part of a Minimum Program of improvements, and future stakeholder involvement.

- A Maximum Program of Improvements similar to the Combination Six-Lane Highway with Advanced Guideway System Alternative could be implemented if additional improvements are necessary.
- Responsive and adaptive to future trends in the Corridor.
- Incorporates triggers to phase implementation of transportation solutions consistent with the Corridor vision.

Stakeholder involvement occurred throughout alternatives development and evaluation process.

Define Alternative Elements

(types of solutions)



Screen Alternatives

(comparison of alternatives according to performance and other criteria)



Refine Alternatives

(reasonable range of alternatives for PEIS analysis)



Select Preferred Alternative

(recommended solution)