LITTLE COTTONWOOD CANYON EIS

ALTERNATIVES DEVELOPMENT & SCREENING PROCESS



PROJECT PURPOSE

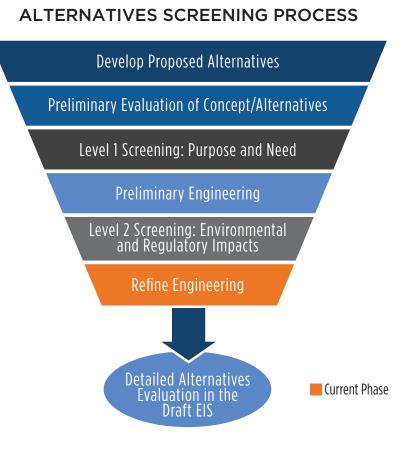
The Utah Department of Transportation (UDOT) began an Environmental Impact Statement (EIS) in the spring of 2018 for Little Cottonwood Canyon and Wasatch Boulevard in partnership with Utah Transit Authority and the USDA Forest Service. The purpose of the EIS is to provide an integrated transportation system that improves the reliability, mobility and safety for all users on S.R. 210 from Fort Union Boulevard through the town of Alta. Ultimately, the partners seek to deliver transportation options that meet the needs of the community while preserving the value of the Wasatch Mountains.

PRELIMINARY EVALUATION OF CONCEPTS & ALTERNATIVES

UDOT conducted a three level screening evaluation of alternatives brought forward from stakeholders and from previous studies. The process started with a preliminary evaluation of concept level alternatives to determine if they were feasible. As part of the preliminary evaluation, UDOT considered 105 suggested concepts and alternatives to determine if they:

- Meet project objectives
- Meet NEPA requirements
- If the project study area
- ✓ Are technically feasible
- Are operational improvements that are in process and are considered independent safety improvements
- Are improvements considered within a larger alternative

There were 35 concepts carried forward into Level 1 screening, from the 105 concepts and alternatives evaluated. Some of the concepts and alternatives that were not carried forward to Level 1 screening were combined into larger alternatives, while others were determined to be outside the project study area or not technically feasible.









LEVEL 1 SCREENING CRITERIA

If a concept level alternative was determined to be feasible the alternative was further developed so that Level 1 screening could be conducted. Level 1 screening was based on the project purpose.

Criterion	Measure
Improve mobility in 2050 ^a	 Substantially improve peak-hour per-person (defined as the 30th-busiest hour^b) travel times in Little Cottonwood Canyon for uphill and downhill users in 2050 compared to travel times with the No-Action Alternative in 2050 Meet peak-hour average total person-demand on busy ski days in Little Cottonwood Canyon Substantially reduce vehicle backups on S.R. 210 and S.R. 209 through residential areas on busy ski days (30th-busiest day) By 2050, meet UDOT's goal of level of service (LOS) D in the weekday AM and PM peak periods on Wasatch Boulevard
Improve reliability and safety in 2050	 Substantially reduce the number of hours and/or days during which avalanches delay users Substantially reduce the avalanche hazard for roadway users Improve roadway safety at existing trailhead locations Reduce or eliminate traffic conflicts between motorized and nonmotorized transportation modes at key trailhead locations Reduce or eliminate roadside parking to improve the safety and operational characteristics of S.R. 210

a All alternatives that pass screening will be designed for Level 2 screening using current transportation safety standards for pedestrian, bicyclists and motorists. b The travel demand during the 30th-busiest hour in 2050 would be about 1,555 vehicles or about 3,260 people.

LEVEL 2 SCREENING CRITERIA

The alternatives that passed Level 1 screening were then evaluated with Level 2 screening. Level 2 screening was based on impacts to the natural and built environments. UDOT developed a preliminary engineering design for each alternative in order to evaluate the expected impacts for each Level 2 criterion.

Criterion	Measure
Cost	Alternative's cost compared to other alternatives that pass Level 1 screening
Consistency and compatibility with local and regional plans	 Alternative's consistency with local and regional land use and transportation plans^a Alternative's compliance with the Wilderness Act of 1964 and consistency with the 2003 Revised Wasatch-Cache Forest Plan
Compatibility with permitting requirements	Permit requirements
Impacts related to Clean Water Act	 Acres and types of wetlands and other waters of the United States^b
Impacts to natural resources	Acres of floodplainAcres of critical habitat
Impacts to the built environment	 Number and area of parks Number of community facilities Number of potential property acquisitions including residential and business Number of Section 4(f)/Section 6(f) uses^c Number of cultural resources (for example, historic and archaeological resources) affected

a This criterion is a secondary objective that will be used to meet local community desires after environmental impacts are considered and to make minor shifts to alternatives' alignments. It will not be used to determine whether an alternative is reasonable or practicable.

b Based on Clean Water Act requirements, an alternative with a substantially greater number of wetland impacts could be eliminated from detailed study in the EIS. UDOT will not use the criteria listed in this table to eliminate alternatives from detailed study in the EIS before considering whether the alternatives would comply with the Clean Water Act Section 401(b)(1) Guidelines. Each alternative will be evaluated individually regarding cost, existing technology and logistics before the other criteria in this table are considered.

c Based on the requirements of Section 4(f) of the Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Fund Act of 1965, an alternative with substantially greater Section 4(f) or Section 6(f) impacts could be eliminated from detailed study in the EIS.







