LITTLE COTTONWOOD CANYON EIS

PURPOSE AND NEED & ALTERNATIVE SCREENING CRITERIA

PROJECT OVERVIEW

LITTLE COTTONWOOD CANYON (LCC) BY THE NUMBERS

ANNUAL VISITORS

2.1 MILLION

REGIONAL POPULATION GROWTH BY 2050

Salt Lake County	37% GROWTH
Utah County	108% GROWTH
Combined new residents	1 MILLION

LCC EIS PURPOSE

UDOT's purpose is to substantially improve safety, reliability, and mobility on S.R. 210 from Fort Union Boulevard through the town of Alta for all users on S.R. 210.

WHAT ARE RELIABILITY AND MOBILITY?

Reliability refers to the degree of certainty and predictability in travel times on the transportation system.

Mobility refers to the ability and level of ease to travel along a roadway.

NEED FOR THE PROJECT

- Decreased mobility in winter during the morning (AM) and afternoon (PM) peak travel periods related to visits to ski areas, with the greatest traffic volumes on weekends and holidays and during and after snowstorms.
- Decreased mobility on Wasatch Boulevard resulting from weekday commuter traffic.
- Safety concerns associated with avalanche hazard and traffic delays caused by the current avalanche-control program in Little Cottonwood Canyon. Periodic road closures for avalanche control can cause 2-to-4-hour travel delays, or longer, which can cause traffic to back up in the neighborhoods at the entrance of the canyon.
- Roadway elements do not meet current design standards; for example, shoulders that are narrow, and horizontal and vertical curves that are steep and/or sharp.
- Limited parking at trailheads and ski areas leads to on-road parking that reduces mobility and safety for all users.

OBJECTIVES

Avalanche Mitigation

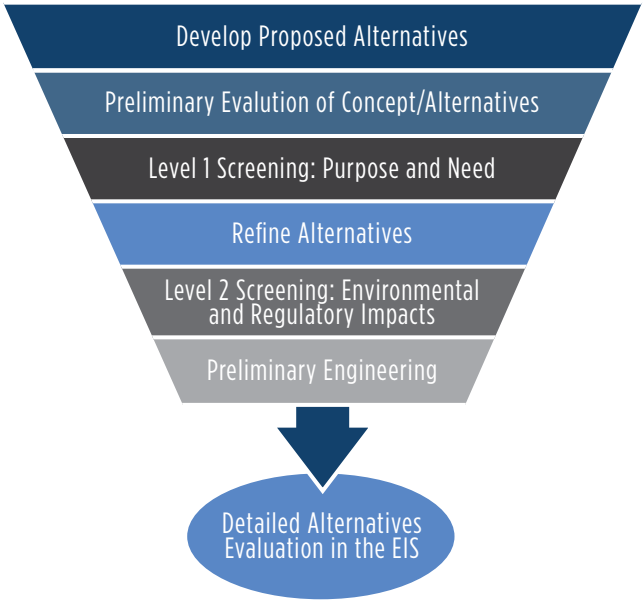
Wasatch Boulevard

Trailhead Parking

Little Cottonwood Mobility

ALTERNATIVE DEVELOPMENT AND SCREENING PROCESS

The alternatives development and screening process will provide critical information about how well an alternative satisfies the project's purpose and meets the transportation needs, and whether it is reasonable under the National Environmental Policy Act (NEPA), practicable under the Clean Water Act, and prudent and feasible under Section 4(f) of the Department of Transportation Act of 1966. The alternatives development and screening process will consist of the phases shown in the figure to the right. The key phases in the screening process are Level 1 screening based on the project purpose and need and Level 2 screening based on environmental and regulatory evaluation. The criteria used for Level 1 and Level 2 screening are shown below.



LEVEL 1 SCREENING CRITERIA (PURPOSE AND NEED)

Criterion	Measure
Safety, Reliability, Residential Access and Mobility	
Improve reliability and safety by 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 existing trailhead locations • Reduce or eliminate on-road parking to improve the safety and operational characteristics of S.R. 210
Improve mobility by 2050	• Substantially improve peak-hour (defined as the 30th-busiest hour) travel times for uphill and downhill users in 2050 compared to travel times with the No-Action Alternative • Meet peak-hour average total person demand on busy ski days • Substantially reduce vehicle backups on S.R. 210 and S.R. 209 through residential areas on busy ski days • By 2050, meet UDOT's goal of Level of Service (LOS) D in the weekday AM and PM peak periods on Wasatch Blvd

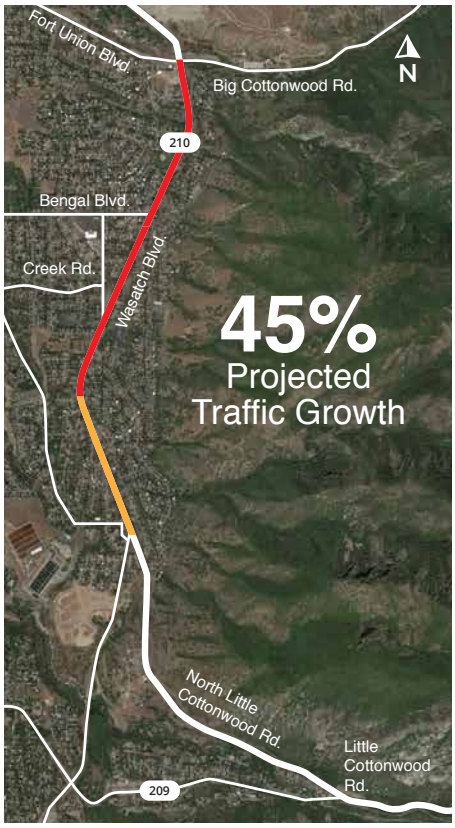
LEVEL 2 SCREENING CRITERIA

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 • 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
Impacts to natural resources	• Acres and types of sensitive habitat • Acres of floodplain • Acres of critical habitat
Impacts to the built environment	• Number and area of parks • Number of community facilities • Number of potential property acquisitions including residential, business and utility acquisitions • Number of Section 4(f)/Section 6(f) uses • Number of cultural resources (for example, historic and archaeological resources) affected

NEED FOR IMPROVEMENTS TO WASATCH BLVD.

EXISTING CONDITIONS (2015)
P.M. PEAK-PERIOD

FUTURE NO-ACTION CONDITIONS (2050) *P.M. PEAK-PERIOD*



LEVEL OF SERVICE

A | NO DELAYS
Highest quality of service.
Free traffic flow with few restrictions on maneuverability or speed.

B | NO DELAYS
Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability.

C | MINIMAL DELAYS
Stable traffic flow, but less freedom to select speed.

UDOT Goal

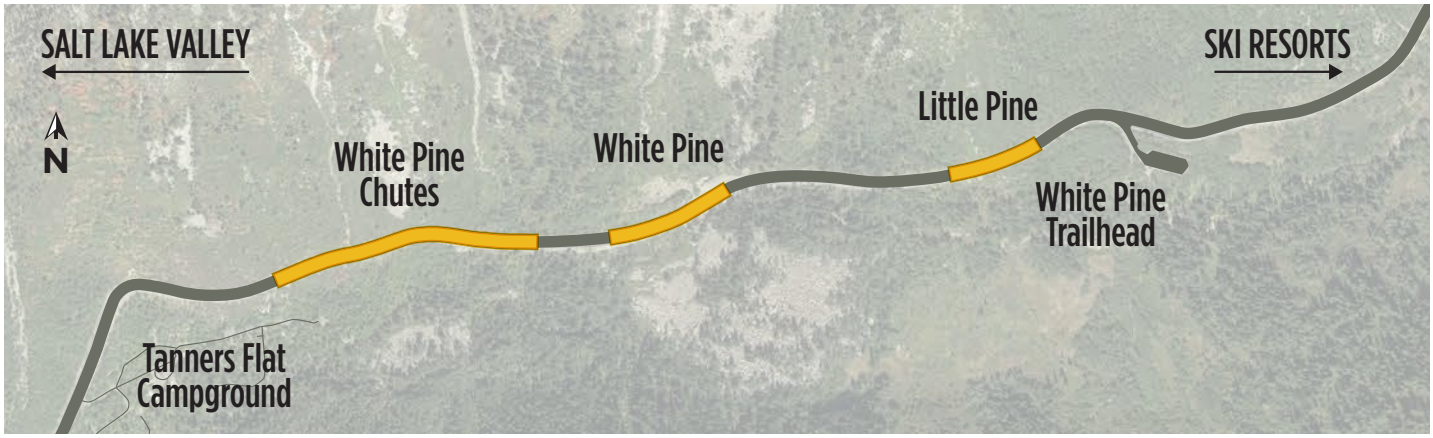
D | NOTICEABLE DELAYS
Traffic flow becoming unstable. Speed subject to sudden change.

E | CONSIDERABLE DELAYS
Unstable traffic flow. Speed changes quickly and maneuverability is low.

F | CONSIDERABLE DELAYS
Heavily congested traffic. Demand exceeds capacity and speed varies greatly.

NEED FOR AVALANCHE MITIGATION

KEY AVALANCHE LOCATIONS



ON AVALANCHE CLOSURE DAYS, TRAVEL TIMES FROM I-215 TO ALTA RANGE FROM

45 TO 120 MINUTES

COMPARED TO

28 MINUTES

UNDER IDEAL CONDITIONS.

CURRENT AVALANCHE HAZARD INDEX (AHI)

Hazard Category	AHI	
Very Low	Less than 1	
Low	1 to 10	
Moderate	10 to 40	
High	40 to 150	← LCC AHI=90 *(Mitigated)*
Very High	Greater than 150	← LCC AHI=7,304 *(Unmitigated)*

Source: Dynamic Avalanche Consulting 2018

PROJECT TIMELINE

PUBLIC SCOPING
Spring 2019
- Open House and Comment Period

DRAFT PURPOSE AND NEED AND ALTERNATIVE SCREENING CRITERIA
Summer to Fall 2019

ALTERNATIVES DEVELOPMENT AND REFINEMENT
Spring 2020

DRAFT EIS
Fall 2020
- Public Hearing and Comment Period

FINAL EIS/ROD
Spring 2021

ONGOING STAKEHOLDER ENGAGEMENT

- Open House
- 90-day Public Comment Period

- 38-day Public Comment Period

- Open House
- Public Comment Period

- Public Hearing
- 45-day Public Comment Period

- Notification of action in the Federal Register

Current Phase

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

UDOT Keeping Utah Moving
Little Cottonwood Canyon ENVIRONMENTAL IMPACT STATEMENT
Wasatch Boulevard to Alta
UTA