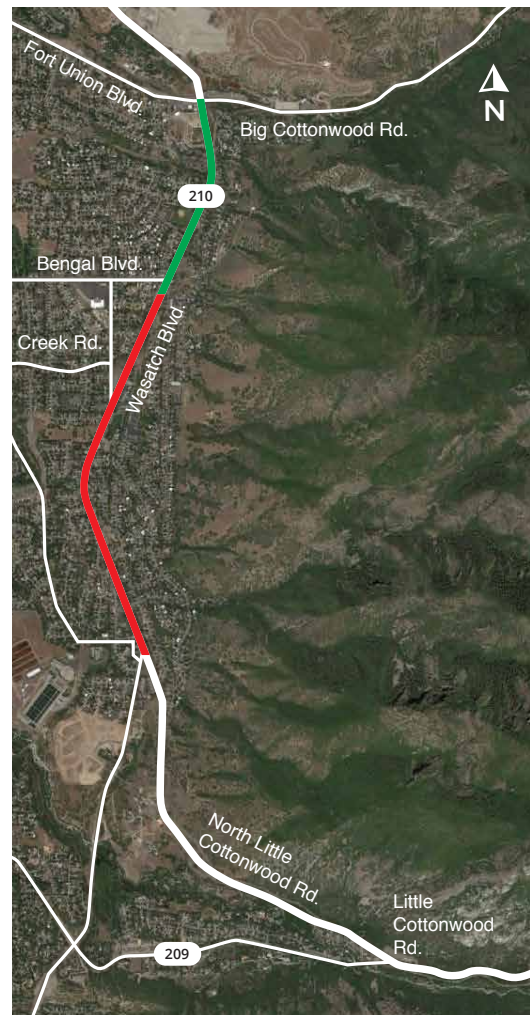
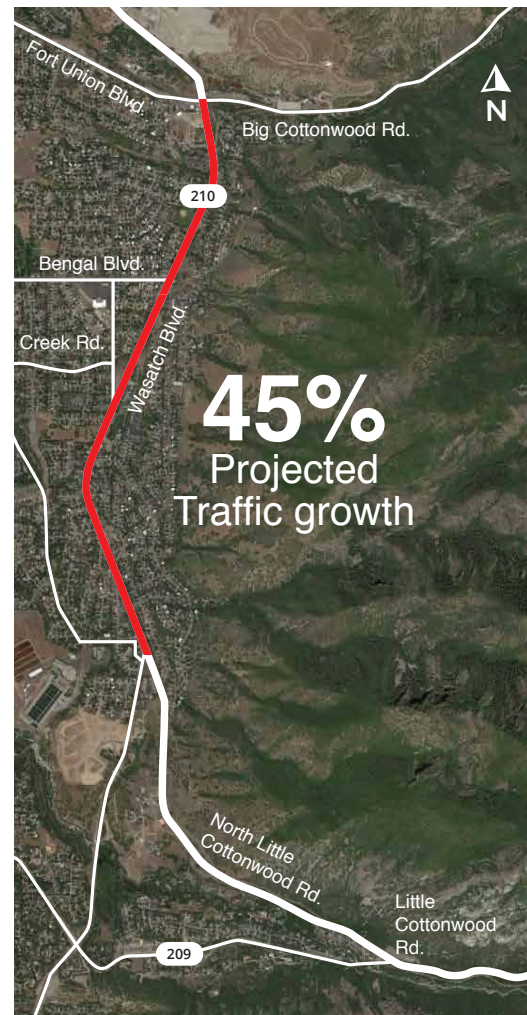


# IMPROVING MOBILITY AND SAFETY FOR WASATCH BOULEVARD

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.

## INITIAL EVALUATION FOR IMPROVING WASATCH BOULEVARD

Wasatch Boulevard Screening Criteria	Measure
Reduce delay and improve capacity (improve regional mobility)	Achieve a level of service D or better on Wasatch Boulevard and intersections in 2050
Consider the Wasatch Boulevard Master Plan Corridor Study	Meet the overall objectives identified in the master plan corridor study while addressing UDOT's safety and mobility requirements
Improve safety	Meet UDOT's safety standards (such as lane and shoulder widths, access and sight distance) for all roadway users including passenger and freight vehicles, cyclists, pedestrians and recreational users

The official scoping period for the Little Cottonwood Canyon EIS runs March 5, 2019 through May 3, 2019. Please submit comments to [littlecottonwoodeis@utah.gov](mailto:littlecottonwoodeis@utah.gov) or [udot.utah.gov/littlecottonwoodeis](http://udot.utah.gov/littlecottonwoodeis)

*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.*

# LITTLE COTTONWOOD CANYON EIS

## FINDING SOLUTIONS FOR TODAY

UDOT recently adjusted the Little Cottonwood Canyon EIS to focus on projects based on greatest benefit.



Avalanche mitigation



Wasatch Boulevard



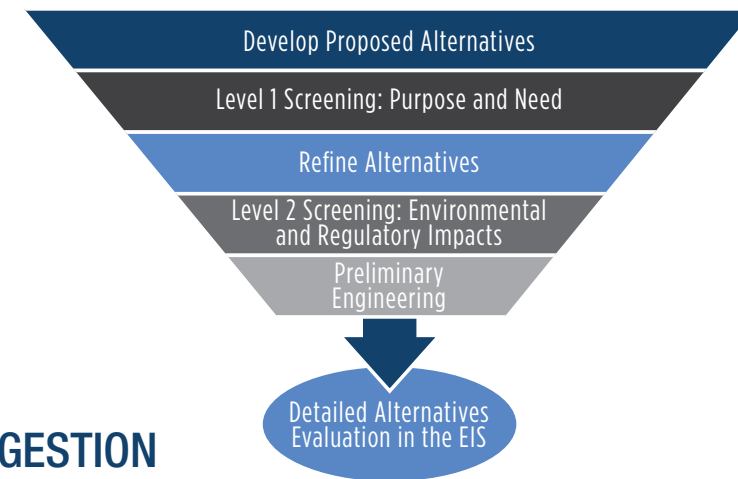
Trailhead Parking



Roadway Capacity

## ALTERNATIVES EVALUATION PROCESS

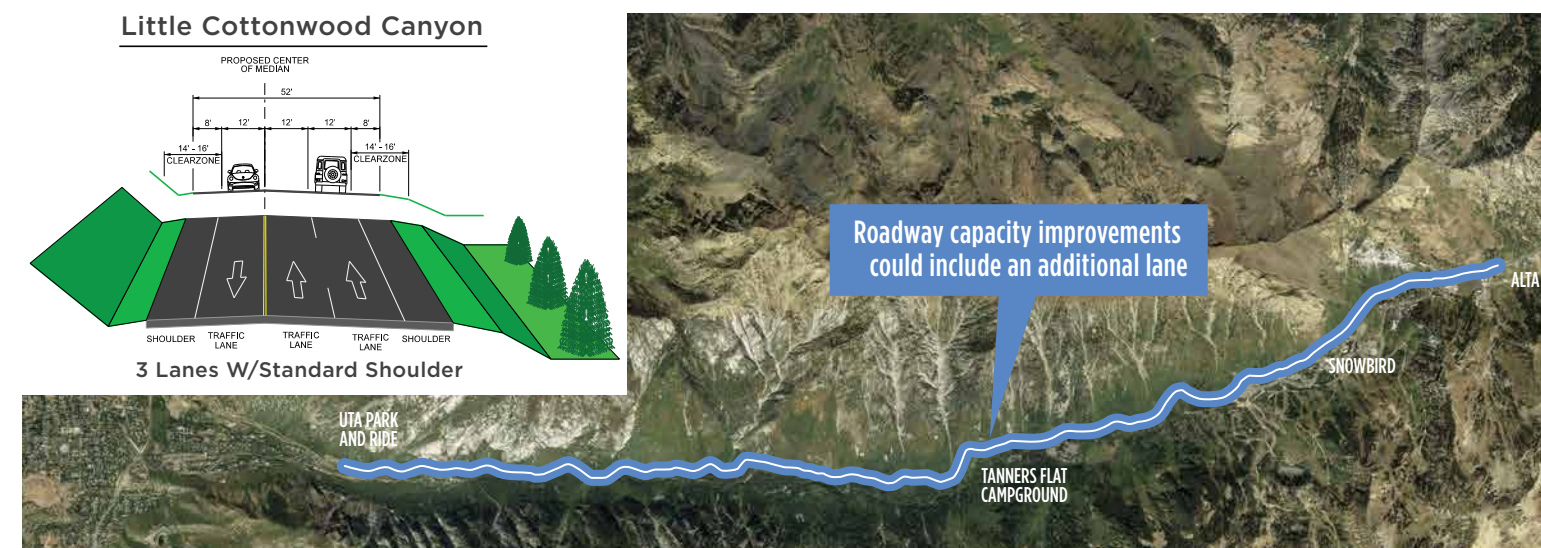
UDOT has developed, with public and agency input, a Purpose and Need Statement for the project that will guide the development of project alternatives. The Purpose and Need explains why a project is necessary, what it should achieve and will serve as the criteria in determining a range of project alternatives. An alternative must meet the Purpose and Need in order to be considered for further study.



## IMPROVING MOBILITY AND REDUCING CONGESTION

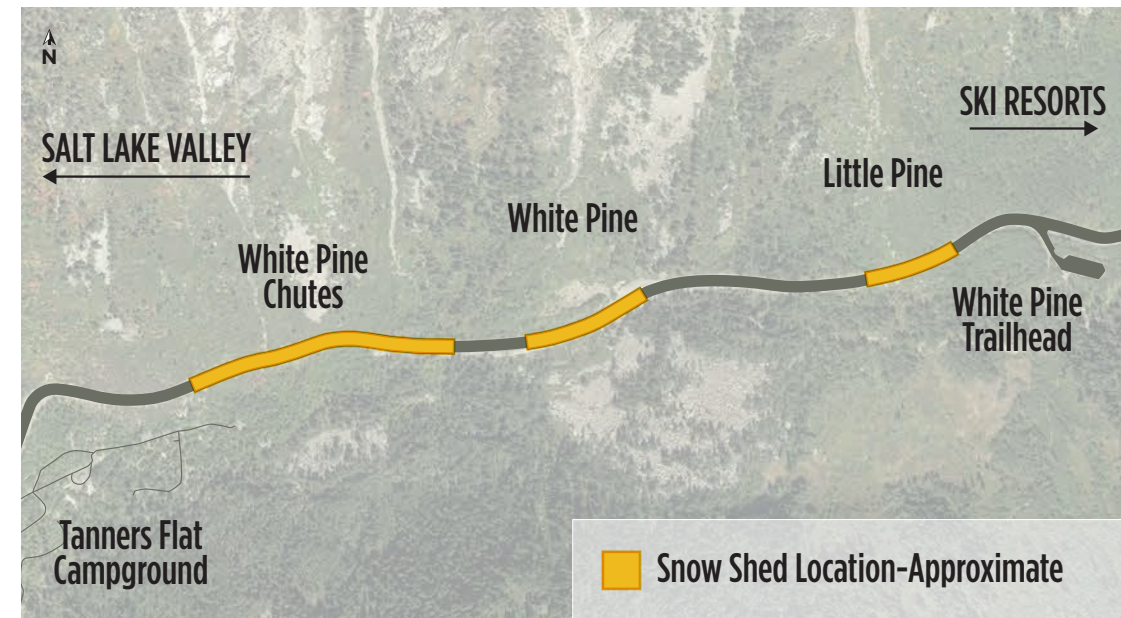
### INITIAL EVALUATION FOR INCREASED ROADWAY CAPACITY

Roadway Capacity Screening Criteria	Measure
Improve overall mobility and reduce congestion in 2050	<ul style="list-style-type: none"> <li>Reduce travel time over 2050 No-Build congested conditions</li> <li>Support transit use</li> </ul>



# IMPROVING CANYON ROADWAY RELIABILITY WITH AVALANCHE MITIGATION

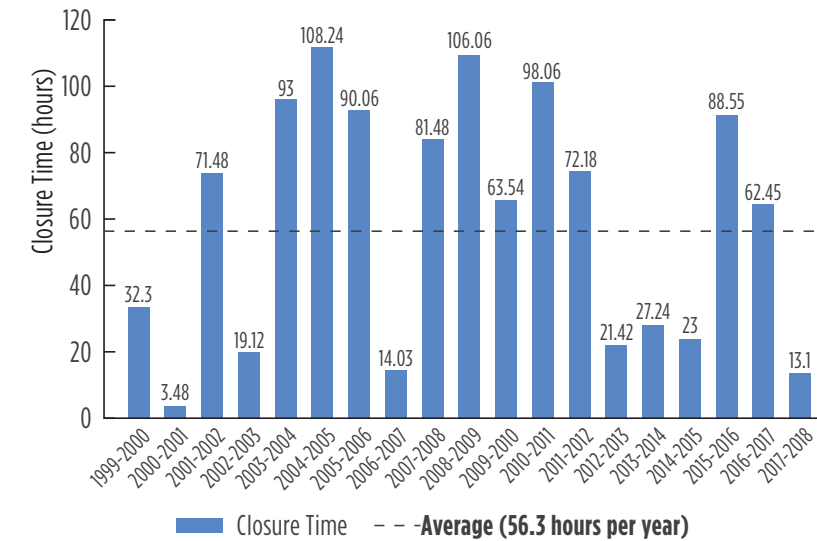
## KEY AVALANCHE LOCATIONS



MOST TRAFFIC CONGESTION AND DELAYS ARE CAUSED BY AVALANCHE ROAD CLOSURES.

ON CLOSURE DAYS, TRAVEL TIMES FROM I-215 TO ALTA RANGE FROM **45 TO 120 MINUTES** COMPARED TO **28 MINUTES** UNDER IDEAL CONDITIONS.

## YEARLY LITTLE COTTONWOOD CANYON CLOSURE HOURS DUE TO AVALANCHE MITIGATION



## 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
Very High	Greater than 150

← LCC AHI=90 (Mitigated)  
← LCC AHI=7,304 (Unmitigated)

Source: Dynamic Avalanche Consulting 2018

**AVALANCHES POSE A SAFETY RISK TO ROADWAY USERS. LITTLE COTTONWOOD CANYON HAS THE HIGHEST AVALANCHE DANGER IN THE U.S.**

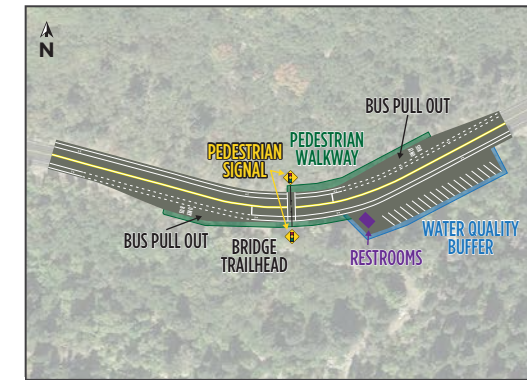
# INITIAL EVALUATION FOR IMPROVING CANYON ROADWAY RELIABILITY

## Avalanche Mitigation Screening Criteria

- Improve avalanche related roadway reliability and safety in 2050
- Substantially reduce number of hours and/or days that avalanches delay users
  - Substantially reduce the avalanche hazard for roadway users

# IMPROVING ROADWAY SAFETY AND TRAILHEAD PARKING RELATED CONGESTION

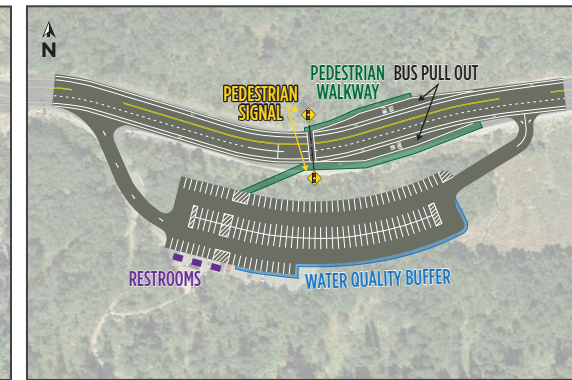
## PARKING CONCEPT BRIDGE TRAILHEAD



## PARKING CONCEPT LISA FALLS TRAILHEAD



## PARKING CONCEPT WHITE PINE TRAILHEAD



## NEED TO IMPROVE TRAILHEAD PARKING

- Pedestrian conflicts from parked cars on side of the road
- Cars parked on roadway shoulder force bicyclists into the travel lanes
- Increases sedimentation into watershed from damaged roadway shoulder
- Creates informal non-designated trailheads
- Informal trailheads contribute to erosion, mineral soil loss, the spread of weeds and loss of native vegetation

## INITIAL EVALUATION FOR IMPROVING TRAILHEAD PARKING

### Trailhead Parking Screening Criteria

- Improve roadway safety by reducing conflicts
- Reduce parking-related congestion
- Improve parking at existing trailheads to support travel modes while improving safety
- Reduce traffic conflicts at existing trailhead locations
- Keep parking levels at year 2000 levels

## WHAT TRAILHEAD OPTIONS WOULD YOU CONSIDER?

Alternative	Eliminate On-Road Parking?	Transit Stops?*	Change Trailhead Parking?
No-Action	No	No	No
Alternative 1	Yes, within ¼ mile radius of trailheads	Yes	No
Alternative 2	Yes, within ¼ mile radius of trailheads	Yes	Yes, trailhead parking will accommodate the on-road parking eliminated within a ¼ mile radius of the trailheads
Alternative 3	Yes, from canyon entrance to Snowbird Entry 1	Yes	

\*Transit stops will accommodate future transit