

APPENDIX B

Agency Scoping Meeting

APPENDIX B-1

Meeting Notes

Meeting Notes

Agency Scoping Meeting

April 9, 2018 1:00-2:30PM

1. Attendance and Location

a. List of attendees:

Brandon Weston, UDOT	Lisa Lloyd, EPA (by phone)	Chris McCandless, CWC
John Thomas, UDOT	Sindy Smith, PLPCO/ RDCC (by phone)	Ned Hacker, WFRC
Naomi Kisen, UDOT	Sonja Wallace, PLPCO/RDCC	Eric Sorenson, MWDSL&S
Lance Kovel, USDA Forest Service	Jay Kinghorn, UT Office of Tourism (by phone)	Madeline Galang, SLCO
Mary DeLoretto, UTA	James Toledo, UT Division of Indian Affairs	Jake Young, SLCO
Autumn Hu, UTA	Sandy Wingert, DEQ WQ	Greg Baptist, SLCO
Vince Izzo, HDR	Joel Karmazyn, DEQ AQ (by phone)	Ryan Kump, Sandy City
Terry Warner, HDR	Trent Bristol, DNR Forestry, Fire and State Lands	Matthew Shipp, Cottonwood Heights
Carol Snead, HDR	Carly Castle, SLCDPU	Danny Astill, Murray City
Matt Wilson, USACE	Patrick Nelson, SLCDPU	Harris Sondak, Town of Alta
		Chris Cawley, Town of Alta

b. Location: HDR Conference Room - 2825 E Cottonwood Pkwy #200, Cottonwood Heights, Utah 84121

2. Introductions

Vince Izzo welcomed the participants to the meeting and asked all to introduce themselves.

3. Meeting Presentation: NEPA Process and Agency Involvement

Brandon Weston welcomed the agencies to the scoping meeting. He presented slides explaining the meeting purpose, team roles, NEPA process, project background, draft project purpose...

Question: When should agencies provide comments on the purpose?

Answer: Agencies can provide comments on the draft purpose with other scoping comments (due May 4). Vince noted that a preliminary draft of the full chapter on Purpose and Need (Chapter 1 of the EIS) will be released to the agencies later in May and suggested agencies wait until they can view the full chapter before they make comments on the Purpose and Need.

Brandon continued the presentation, describing the need for transportation improvements, alternatives to be considered, and resources to be considered. He asked for agency input to

the resources that should be studied in the EIS. Meeting participants were asked to fill out an Environmental Checklist for the project. Suggested additions to the initial resources presented on the slide included:

- Water quality
- Riparian areas
- Scenic resources of the canyon (not just byway)
- Businesses – ski areas, canyon recreation vendors
- Emergency access
- Fuel management (forest health and fire hazards)

Brandon concluded the slide presentation, describing the roles of cooperating and participating agencies, coordination plan, and project schedule.

Question: What is the best way for agencies to provide scoping comments?

Answer: Agencies should provide formal written comments on agency letterhead. The letters will be included in the Scoping Report.

4. Meeting Presentation: Project EIS Story Map

John Thomas presented the story map for the project (to be made available on the website). The story map explains the project background and includes initial concepts for parking areas, UTA park-and-ride lots and pullouts, avalanche control, roadway improvements, intersection improvements, enforcement and operations, and tolling.

Example improvements include:

- Park-an-ride improvements at Fort Union/Wasatch
- Use of Gravel Pit area for parking
- Straighten curve at Lisa Falls
- Add toilets, parking, UTA pullout at trailheads
- Avalanche shed or bridge at avalanche zone
- Additional lane
- Intersection improvements on Wasatch Blvd
- Enforcement areas (snow tires/chains) on North/South LLC roads (S.R. 210 and 209)
- Incident management trucks
- “Platooning” outbound traffic

5. Discussion

Question: Is a project goal to get more people into the canyon?

Answer: That is not a specific goal. UDOT is looking at measures to reduce congestion. This includes reducing the number of cars during peak periods and reducing avalanche closures.

Question: Is UDOT looking for input on alternatives?

Answer: Yes – UDOT will look at alternatives that are requested/recommended in scoping. UDOT will work with cooperating and participating agencies to develop screening criteria to identify alternatives for detailed evaluation in the EIS.

Question: How does this effort overlap with the work of the Central Wasatch Commission (CWC)?

Answer: CWC supports the project and is a participating agency. CWC is still forming and will have an Executive Director named by the end of the month (April).

Question: Sandy City asked if S.R. 209 was part of the study area, noting that traffic can back up to 2300 E and this road is part of the overall system.

Answer: UDOT will consider the park and ride on 9400 S. and the intersection of S.R. 209 and S.R. 210 as part of the study area. The focus is on S.R. 210.

John Thomas said that UDOT would be happy to meet with any agency, including other staff and members of the organization, to talk about the project, concerns, issues, and possible solutions.

Meeting notes, Draft Coordination Plan, presentation materials, and the compiled environmental checklist will be provided to cooperating and participating agencies.

The meeting was adjourned at 2:30PM.

These minutes were prepared by Carol Snead.

APPENDIX B-2

Meeting Presentation

Little Cottonwood Canyon EIS Agency Scoping Meeting

April 9, 2018

MEETING PURPOSE

□ Review and Discuss

- Project background and environmental study goals
- SAFETEA-LU* and SAFETEA-LU coordination
- Agencies' and local governments' roles
- Project purpose and need
- Alternatives
- Environmental checklist
- EIS milestone and review timelines

*Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users

LITTLE COTTONWOOD CANYON EIS TEAM

❑ UDOT – Lead Agency

Project Manager – John Thomas

Environmental Lead – Brandon Weston

❑ HDR – Lead EIS Consultant

Project Manager – Vince Izzo

NEPA Lead – Carol Snead

- Fehr & Peers – Traffic
- SWCA – Cultural Resources
- Dynamic Avalanche Consulting – Avalanche Control
- Gerhart Cole – Geotechnical Engineering
- Penna Powers – Public Involvement

NEPA ASSIGNMENT

- ❑ UDOT has been assigned FHWA's NEPA responsibilities:
 - All NEPA classes of action: CEs, EAs, and EISs
 - Environmental laws, rules, and orders
 - Consultation with agencies
- ❑ Responsibilities under NEPA Assignment:
 - UDOT reviews and approves environmental documents
 - UDOT is now legally responsible and liable for all NEPA decisions
- ❑ UDOT must still comply with the same laws as before
- ❑ Increases efficiency in the environmental process

Map of the Study Area

Area Map

Salt Lake City

Valley City

Kearns

West Jordan

South Jordan

Draper

Sandy

Millcreek

Holladay

Park City

Cottonwood Heights

Legend

- Snowbird Ski and Summer Resort
- Alta Ski Area
- S.R. 210 Study Limits
- LCC Creek
- City Boundary
- Land Ownership**
 - Bureau of Land Management
 - National Forest
 - National Wilderness Area
 - Private (No color)

Data Source: Imagery and Base Map AGRC

Map Labels:

- Fort Union Blvd.
- Cottonwood Heights
- Bengal Blvd.
- Creek Rd.
- Wasatch Blvd.
- Lone Peak Wilderness
- Twin Peaks Wilderness
- Mt. Olympus Wilderness
- LCC Creek
- Sandy
- Alta Ski Area
- Town of Alta
- Snowbird Ski and Summer Resort

Map Features:

- S.R. 210 Study Limits (Yellow line)
- LCC Creek (Blue line)
- City Boundary (Dashed line)
- Land Ownership (Color-coded areas)
- Wilderness Areas (Green areas)
- Alta Ski Area (Light green area)
- Snowbird Ski and Summer Resort (Red dashed area)

WHY NEPA? (NATIONAL ENVIRONMENTAL POLICY ACT)

□ NEPA

- Must be completed for all federal actions (for example, funding, permits, and land transfers)
- Requires lead agencies to evaluate alternatives and consider the effects of the project on the natural and human environment

PROJECT BACKGROUND

- ❑ More than **2.1 million people per year** visit Little Cottonwood Canyon for its ski resorts and abundant winter and summer recreation opportunities. The road into the canyon is a scenic byway, affording views of stunning peaks and alpine forests.
- ❑ Visitation to the canyon causes **congestion** on State Route (S.R.) 210 during peak periods. **Limited parking spaces** in the canyon create unsafe conditions, with motorists parking on the road. **Avalanche mitigation requires road closures**, which contribute to congestion.
- ❑ Numerous studies have identified traffic issues in the canyon.
- ❑ Senate Bill 277 authorized UDOT to make transportation improvements where congestion mitigation would improve economic development associated with recreation and tourism.

DRAFT PROJECT PURPOSE

To provide an integrated transportation system that improves the convenience of multiple transportation modes and the safety, reliability, and mobility for residents, visitors, and commuters who use S.R. 210. Through transportation improvements, the project would strive to mitigate congestion and improve recreation and tourism experiences for all users. The transportation improvements will consider the character, resources, diverse uses, and scale of Little Cottonwood Canyon.

WHY IMPROVEMENTS ARE NEEDED

- ❑ Transportation issues in Little Cottonwood Canyon diminish the quality of recreation experiences for canyon visitors.
- ❑ Congestion in the canyon causes traffic backups on Wasatch Boulevard, affecting access to adjacent neighborhoods.
- ❑ Dispersed parking along the roadway degrades natural resources over a broader area and affects safety of pedestrians and motorists.
- ❑ Population growth and increased tourism will increase demand and, without transportation system improvements, the number of vehicles entering and parking in the canyon will increase, exacerbating the problem.

ALTERNATIVES

No Action – required by NEPA

A Combination of Facilities and Operational Improvements

- Transportation System Management (TSM)
- Travel Demand Management (TDM)
- Tolling and/or high-occupancy vehicle (HOV) programs
- Improved transit service
- Improved information sharing (e.g., driver alert systems)
- Roadway improvements
- Added parking

Other Alternatives Identified during the Scoping Process

INITIAL RESOURCE CONSIDERATIONS

- Water supply
- Recreation resources
- Wildlife
- Vegetation and wetlands
- Historic and archaeological resources
- Scenic byway and visual considerations
- Neighborhood and community impacts
- Environmental justice
- Air quality
- Noise
- Others?

ENVIRONMENTAL CHECKLIST

Help the LCC team determine which resources should be considered in the EIS.

The image shows a hand using a blue pen to fill out a 'Scoping Environmental Review Checklist' form. The form is titled 'Scoping Environmental Review Checklist' and features the 'LTDOT' logo in the top right corner. The 'Project Name' is 'Little Cottonwood Canyon EIS' and the 'Project Location' is 'Salt Lake City/Cottonwood Heights'. The form is divided into several sections, each with a list of requirements and checkboxes for 'No', 'Yes', or 'Potentially Applicable'. The sections include:

- PROJECT INFORMATION**
 - Project Name: Little Cottonwood Canyon EIS
 - Project Location: Salt Lake City/Cottonwood Heights
- 1. AIR QUALITY**
 - 1.1 Conformity Determination
- 2. WATER RESOURCES AND WETLANDS**
 - 2.1 Section 401 State Certification
 - 2.2 Section 402 UPODES Permit
 - 2.3 Section 404 Permit
 - 2.4 Section 9 Bridges
 - 2.5 Section 10 Permits
 - 2.6 Wild and Scenic Rivers
 - 2.7 Floodplains (F.O. 11988 and 13660)
 - 2.8 Wetlands (F.O. 11980)
- 3. WILDLIFE**
 - 3.1 Section 7 ESA
 - 3.2 Bald and Golden Eagle Protection
 - 3.3 Migratory Bird Treaty Act
 - 3.4 NPS Special Use Permit
 - 3.5 FWS Refuge Permit
- 4. HISTORIC AND CULTURAL RESOURCES**
 - 4.1 Section 106
 - 4.2 NAGPRA Compliance
 - 4.3 Archaeological and Historic Data Preservation
- 5. SOCIAL AND ECONOMIC IMPACTS**
 - 5.1 Uniform Act: Displacement of persons or businesses
 - 5.2 American Indian Religious Freedom Act
 - 5.3 Tribal Implications
- 6. ENVIRONMENTAL JUSTICE**
 - 6.1 Impacts to minority and low-income populations

The form also includes a 'Comments' column on the right side for additional notes. The hand is currently marking the 'Potentially Applicable' checkbox for the 'Section 402 UPODES Permit' requirement.

SAFETEA-LU 6002 REQUIREMENTS

- ❑ SAFETEA-LU 6002 (the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users)
 - A part of the “federal transportation funding bill”: SAFETEA-LU
 - Section 6002 specifically addresses the NEPA process
 - Requires the lead agency (UDOT) to identify and coordinate with other agencies, local governments, tribal representatives, and the public during the EIS process
 - Section 6002 directs UDOT to:
 - Identify and invite cooperating and participating agencies
 - Develop a coordination plan
 - Develop a coordinated schedule (in an approved coordination plan)
 - Identify milestone-based opportunities for coordination

COORDINATION PLAN

- Required for an EIS
- Describes the agency coordination and consultation plan
- Lists agencies roles and responsibilities
- Identifies opportunities for public involvement
- Describes the communication methods that will be used
- Communicates upcoming meeting dates and the current project schedule
- Communicates the expected document review schedule

You can review and provide comments!

www.udot.utah.gov/littlecottonwoodeis

SAFETEA-LU 6002

☐ Cooperating agencies

- Normally identified during the NEPA process (not a new category)
- Agencies that have regulatory authority over the project (for example, issue a permit or transfer land) or manage land in the project area
- Participate in the scoping process and coordinate on development of resource-specific information

☐ Participating agencies

- New category under SAFETEA-LU
- Provides additional opportunities for other federal, state, and local agencies that have an interest in the project or project area to participate
- Work with team and other agencies throughout the process
- Provide feedback and comments
- Provide supplemental information
- Cooperating agencies are always participating agencies

COOPERATING AGENCY EXPECTATIONS

USDA Forest Service
US Army Corps of Engineers
US Environmental Protection Agency
Utah Transit Authority
SLC Department of Public Utilities

- ☐ Work with UDOT to develop information and conduct environmental analyses specific to respective areas of expertise
- ☐ Review and provide input to preliminary draft documents prior to public release
- ☐ Share the responsibilities of Participating Agencies

PARTICIPATING AGENCY EXPECTATIONS

- ❑ Participate in the NEPA process starting at the earliest possible time
 - Milestone-based meetings (development of the purpose and need, identification of a range of alternatives, and alternatives screening)
- ❑ Participate in the scoping process
 - All agencies and the public encouraged to provide input
- ❑ Identify, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts

TEAMWORK

☐ Our commitment to you:

- Keep you informed
- Involve you in analysis and decision-making
- Provide early notification of upcoming reviews and events
- Deliver review documents on time
- Respond in a timely manner

☐ Partnering expectations:

- Open communication
- Timely document review
- Early communication of concerns
- Foster consensus

EXPECTED SCHEDULE

EIS Notice of Intent – March 9, 2018

Public Scoping – March 9 to May 4, 2018

Purpose and Need – Spring through summer 2018

Alternatives Development – Spring through fall 2018

Draft EIS – Winter through summer 2019

Final EIS/ROD – Spring 2020

AGENCY REVIEW TIMES

Coordination Plan – 30 days

Purpose and Need – 30 days

Range of Alternatives – 30 days

- Identify alternatives that should be considered for evaluation
- Provide input on the alternatives screening process

Draft EIS – 45 Days

CURRENT AND UPCOMING EVENTS

☐ Scoping Period

- March 9 to May 4, 2018
- Scoping comments due by May 4, 2018

☐ Public Scoping Meeting

- April 10, 2018 – 4 PM to 8 PM
- Cottonwood Heights City Hall

AGENCY POINT OF CONTACT

What do we need from you?

- Contact information for your agency lead on this project
- Each agency's specific issues
- Milestone reviews

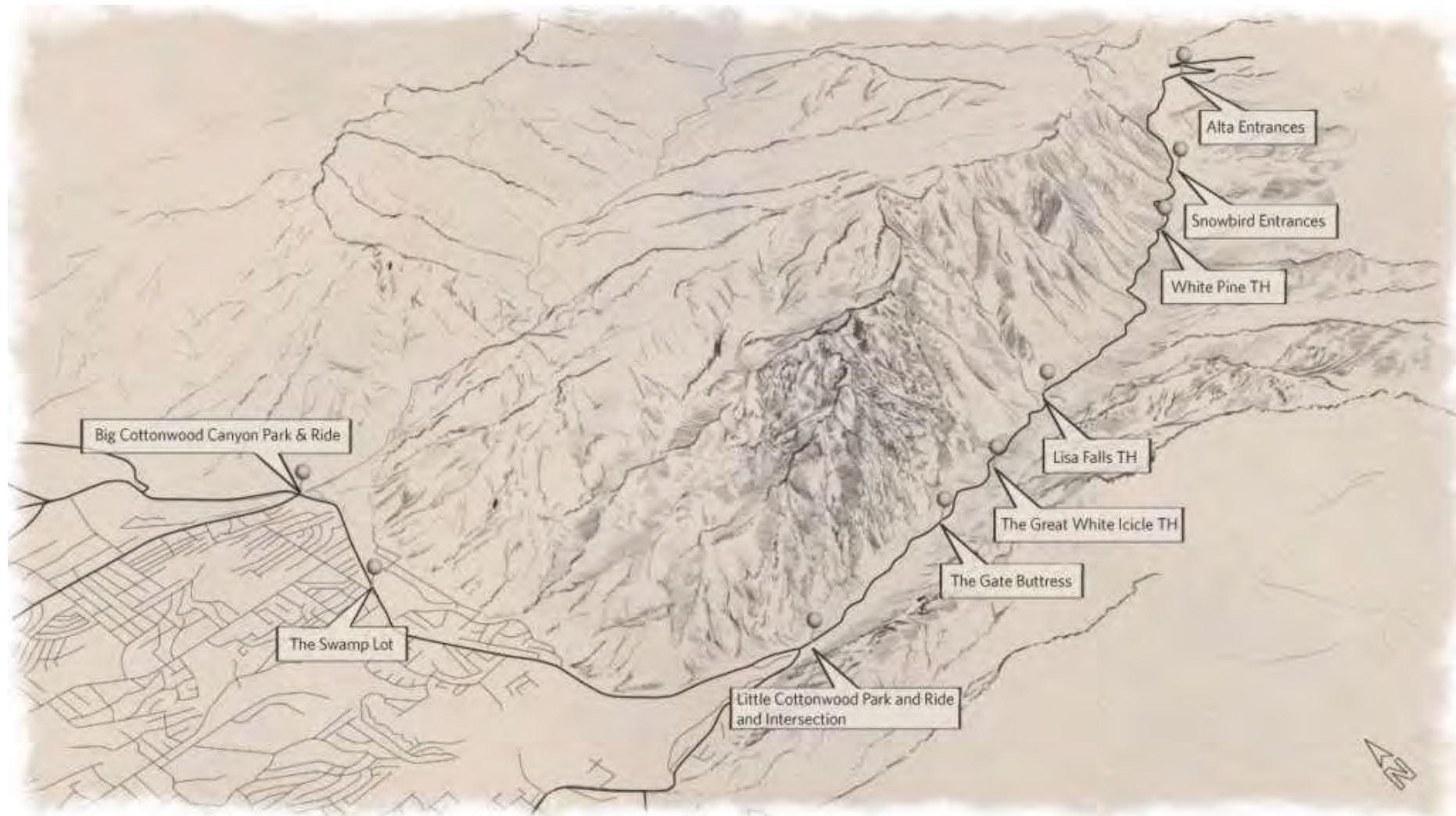
TEAM CONTACT INFORMATION

John Thomas
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Website
www.udot.utah.gov/littlecottonwoodEIS

Email
littlecottonwoodeis@utah.gov

FINAL QUESTIONS?



APPENDIX B-3

Environmental Checklist

LITTLE COTTONWOOD CANYON EIS ENVIRONMENTAL CHECKLIST

Compiled Results from Agency Scoping Meeting

April 9, 2018

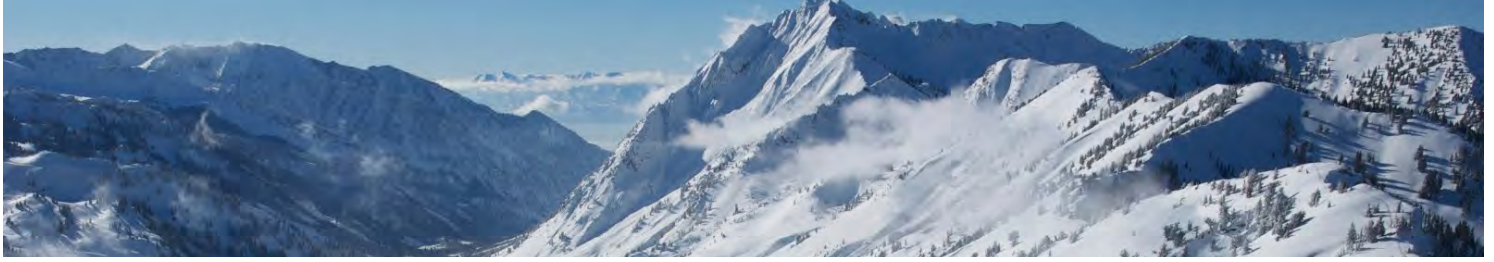
FAST ACT - Lead Agency for a project in consultation with participating agencies, shall develop, as appropriate, a checklist to help project sponsors identify potential natural, cultural, and historic resources in the area of the project.

Resource or issue	Is the resource or issue present in the area?	Would there be impacts on the resource?	Resource or issue	Is the resource or issue present in the area?	Would there be impacts on the resource?
Sensitive biological resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Section 4(f)/6(f) wildlife ¹² and/or waterfowl refuge, historic site, recreational site, park	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Wildlife corridors	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Water bodies/watery quality - 303(d) listed for metals - Impacts to culinary water supply	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Wetland areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Existing development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Riparian areas/Streams	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Planned development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
100-year floodplain	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Title VI / environmental justice populations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Prime or unique farmland or farmland of statewide or local importance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Utilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Visual resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Hazardous materials - Dumps at Grit Mill, Tanner capped heavy metal soil	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Designated scenic road/byway	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Sensitive noise receivers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Archaeological resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Air quality	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Historical resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Other (list) - Watershed - Business/economy - Local resident access - Wildfire hazard	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable

¹² Section 4(f)/6(f) of the U.S. Department of Transportation Act of 1966 (49 U.S. Code § 303, as amended); see <[Section 4\(f\)](#)>.

APPENDIX B-4

Initial Concepts Presentation



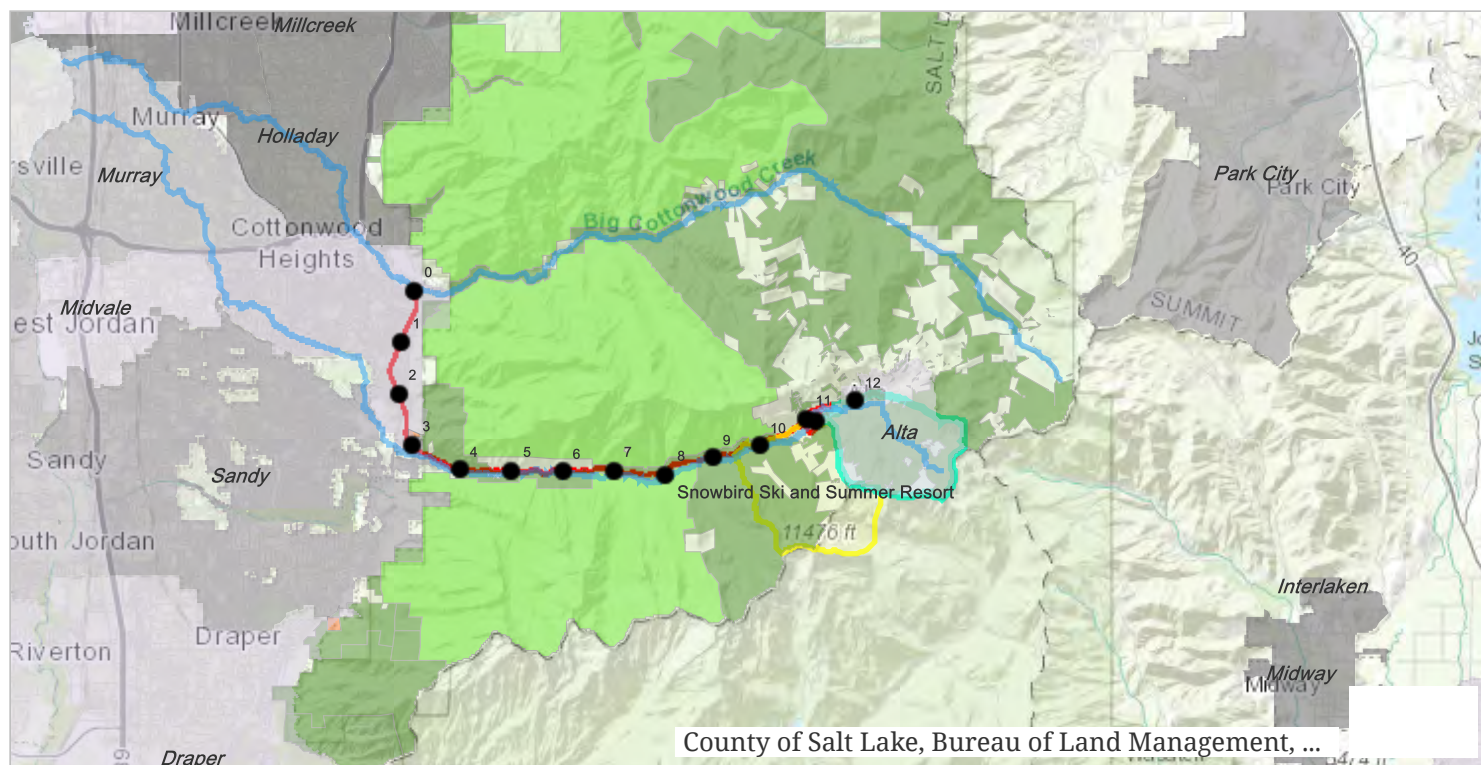
Little Cottonwood Canyon EIS

In March 2018 the Utah Department of Transportation initiated an Environmental Impact Statement for State Route 210.



The environmental review, consultation, and other actions required by applicable federal environmental laws for this action are being, or have been, carried out by UDOT pursuant to 23 United States Code 327 and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

Project Study Area



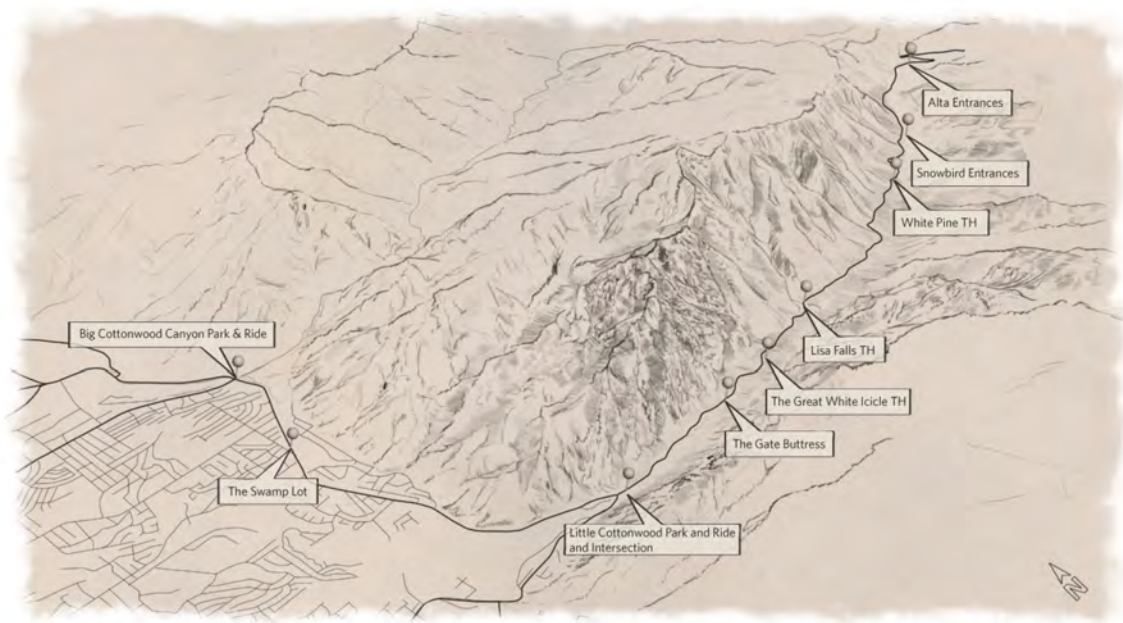
The Project Study Area is the extent of S.R. 210 running south from Fort Union Blvd. to Alta in the canyon. The route is highlighted in red.

Purpose and Need

To provide a balanced, integrated transportation system that improves the convenience of multiple transportation modes, and the safety, reliability, and mobility for residents, visitors and commuters who use S.R. 210. Through transportation improvements the project would strive to mitigate congestion and improve recreation and tourism experiences for all users. The transportation improvements will consider the character, resources, diverse uses, and scale of Little Cottonwood Canyon.

Project Strategies

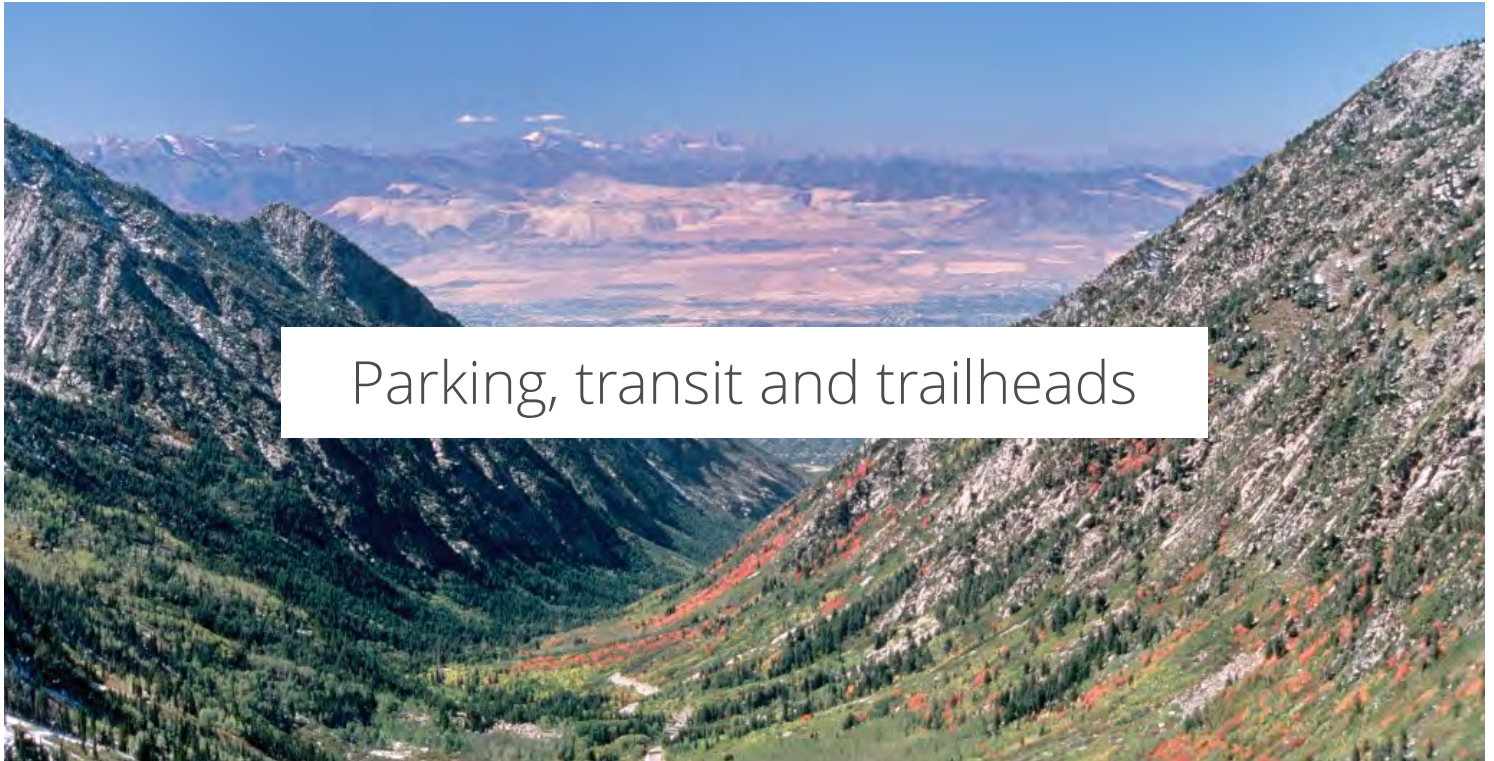
This story map reviews multiple strategies the Little Cottonwood EIS team will evaluate to improve peak day mobility.



Little Cottonwood Canyon EIS Mobility Improvement Concepts
Improvement Locations



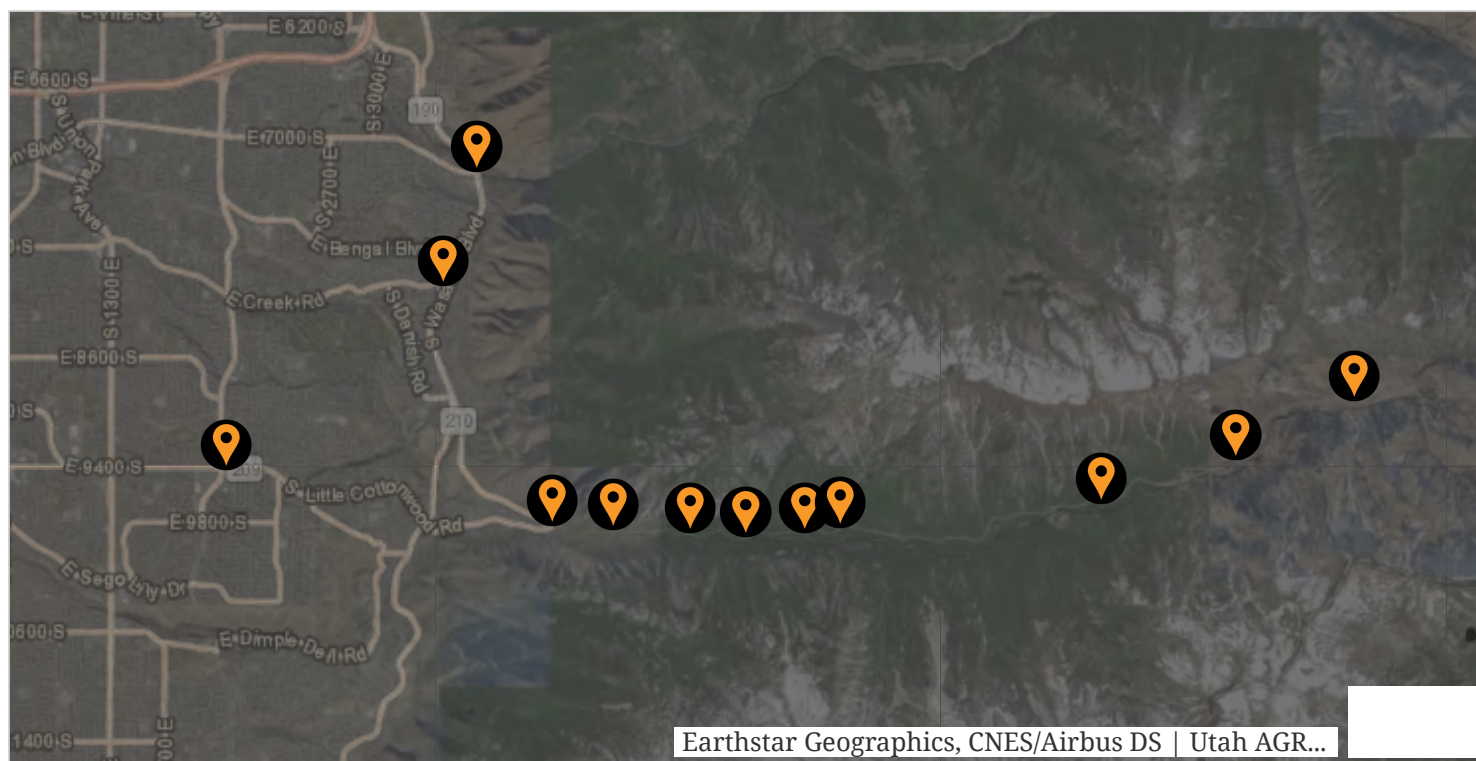
To use this story map click on the strategy topic along the left in the table of contents and scroll down in the main pane to review potential improvements.



Parking, transit and trailheads

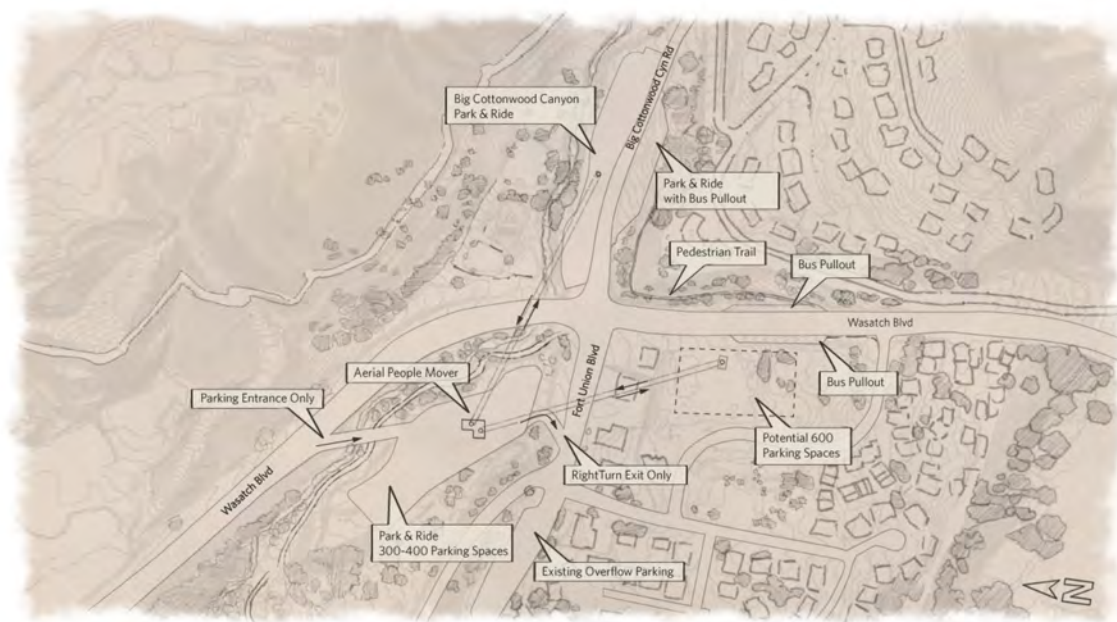


Strategy Map



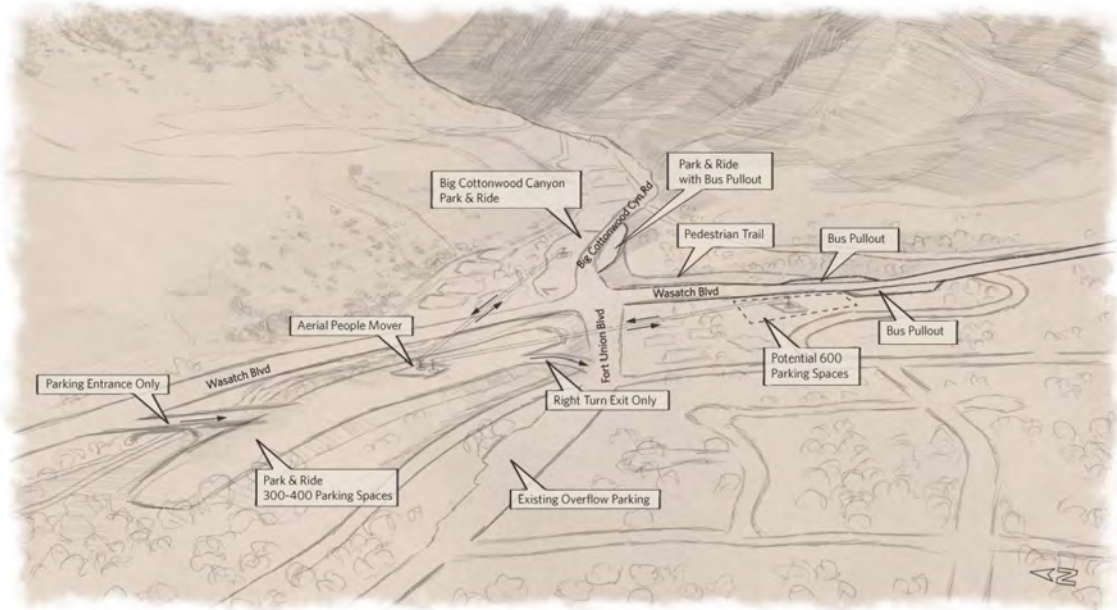
Enhancements to park and rides, new transit stops, increased transit service, car pool areas, improved trail head amenities and expanded parking are being studied at these locations.

Concept Sketches



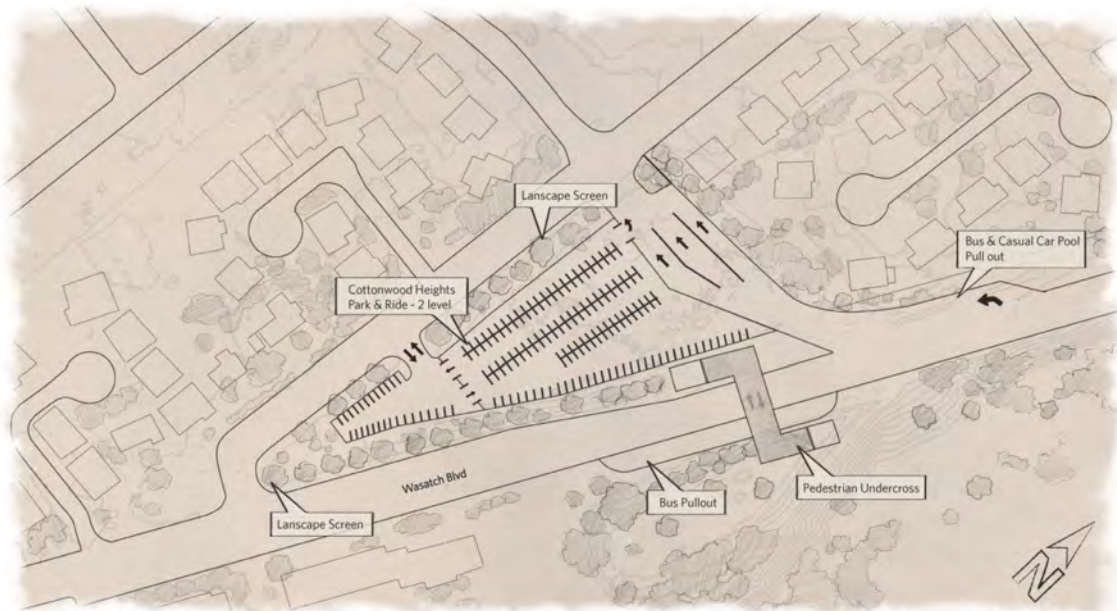
Little Cottonwood Canyon EIS Mobility Improvement Concepts





Little Cottonwood Canyon EIS Mobility Improvement Concepts

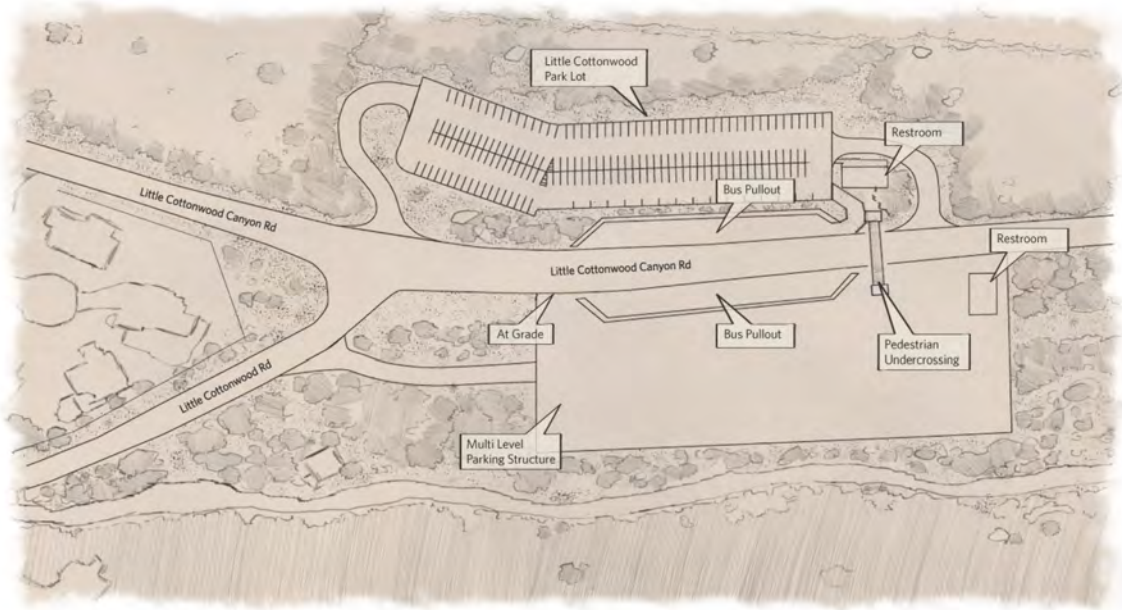
Big Cottonwood Canyon Base Park & Ride



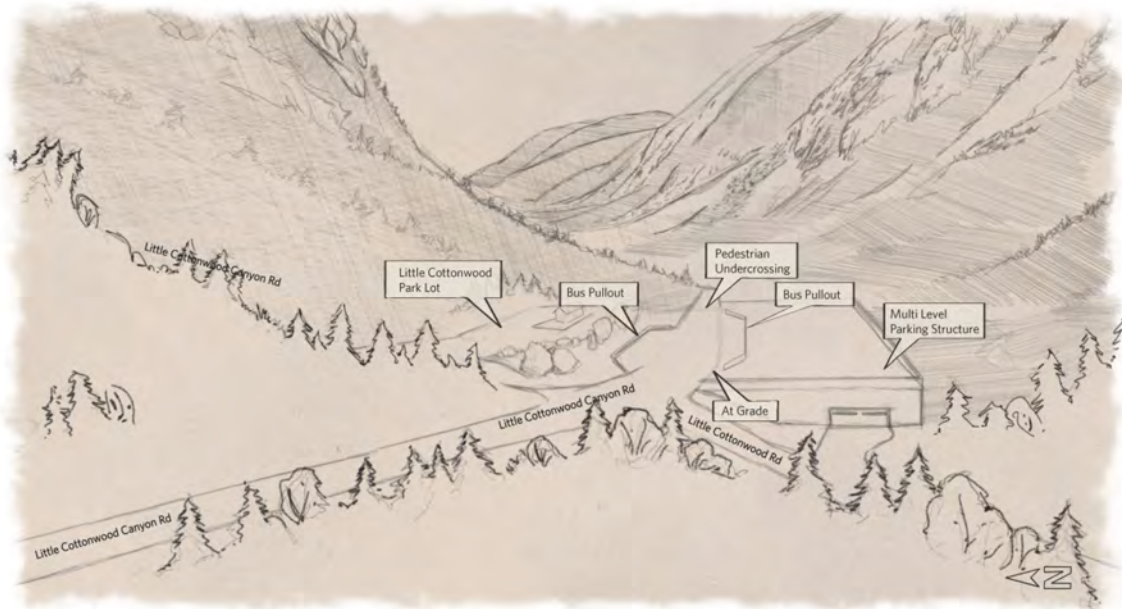
Little Cottonwood Canyon EIS Mobility Improvement Concepts

Swamp Lot





Little Cottonwood Canyon EIS Mobility Improvement Concepts
 Little Cottonwood Canyon Base Park & Ride

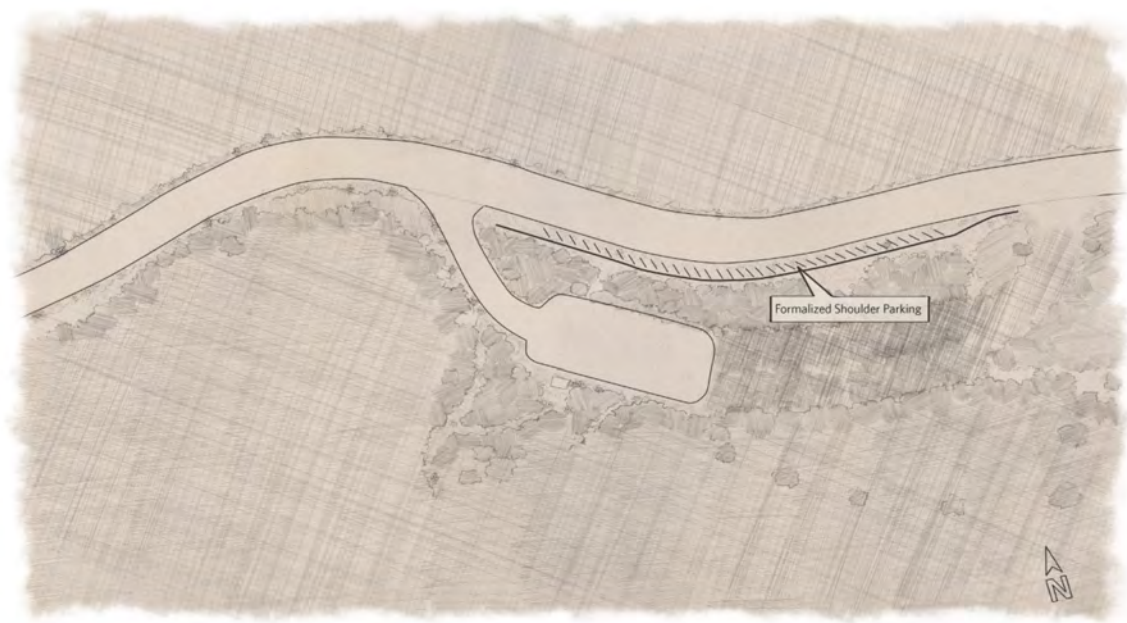


Little Cottonwood Canyon EIS Mobility Improvement Concepts
 Little Cottonwood Canyon Base Park & Ride



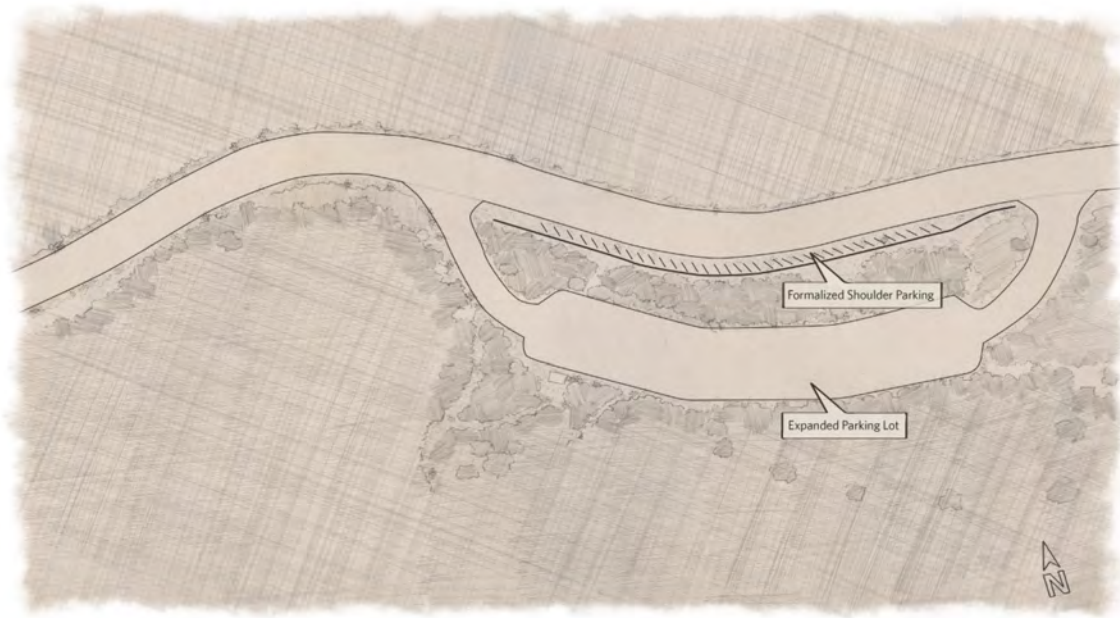


Little Cottonwood Canyon EIS Mobility Improvement Concepts
Lisa Falls trail Head



Little Cottonwood Canyon EIS Mobility Improvement Concepts
White Pine Trail Head - Formalized Shoulder Parking





Little Cottonwood Canyon EIS Mobility Improvement Concepts

White Pine Trail Head - Formalized Shoulder Parking and Extended Parking Lot





Avalanche Mitigation

Photo: Mt. Superior Avalanche Credit: Bill Nalli



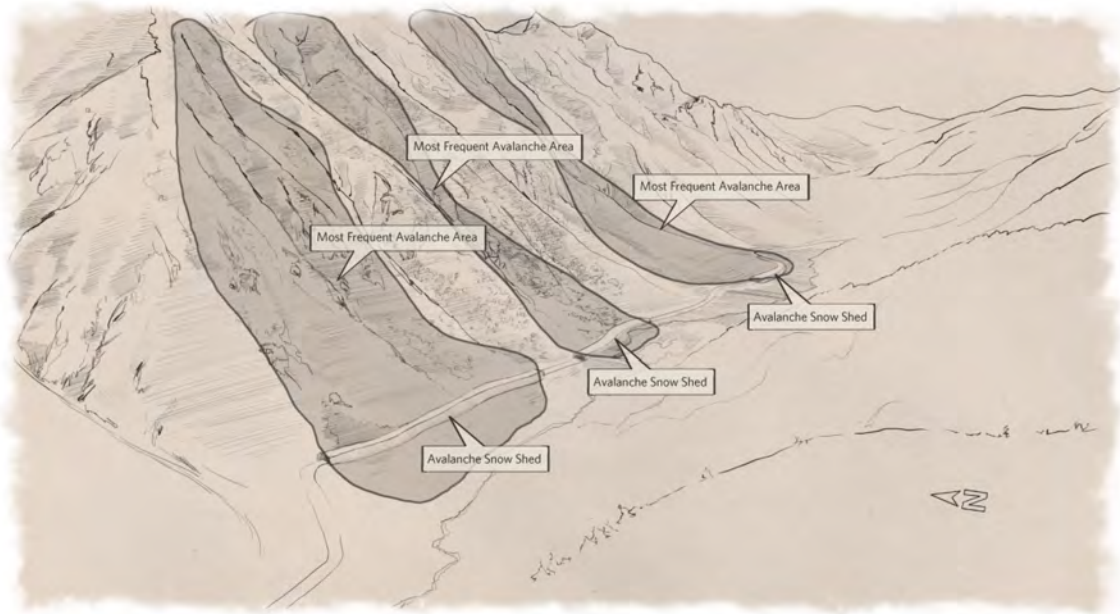
Strategy Map



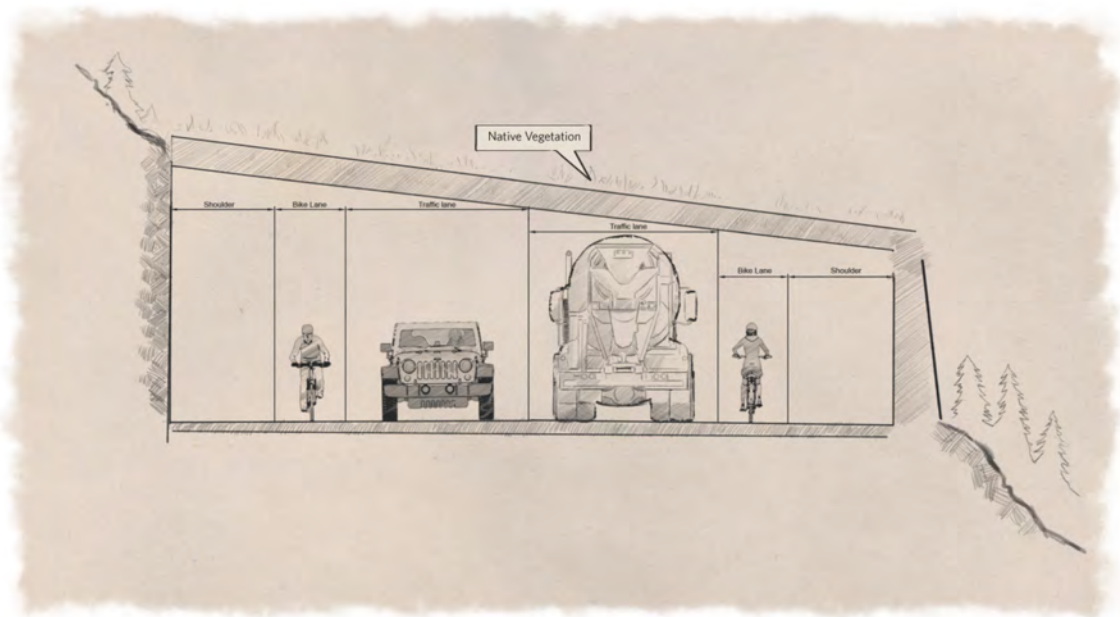
Salt Lake County Assessor, USDA FSA | Source: USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, N... Powered by Esri

This 3D map showcases the avalanche paths in the canyon that pose the highest risk to road closures and that are challenging to control. The Little Pine and White Pine areas are highlighted. Due to the frequency of avalanches and proximity of the road to these paths, UDOT is studying the feasibility of adding snow sheds. See sketches below. Avalanche control closures could be reduced with the implementation of snow sheds over the road in these strategic locations.

Concept Sketches



Little Cottonwood Canyon EIS Mobility Improvement Concepts
Snow Shed Locations



Little Cottonwood Canyon EIS Mobility Improvement Concepts
Snow Shed Typical

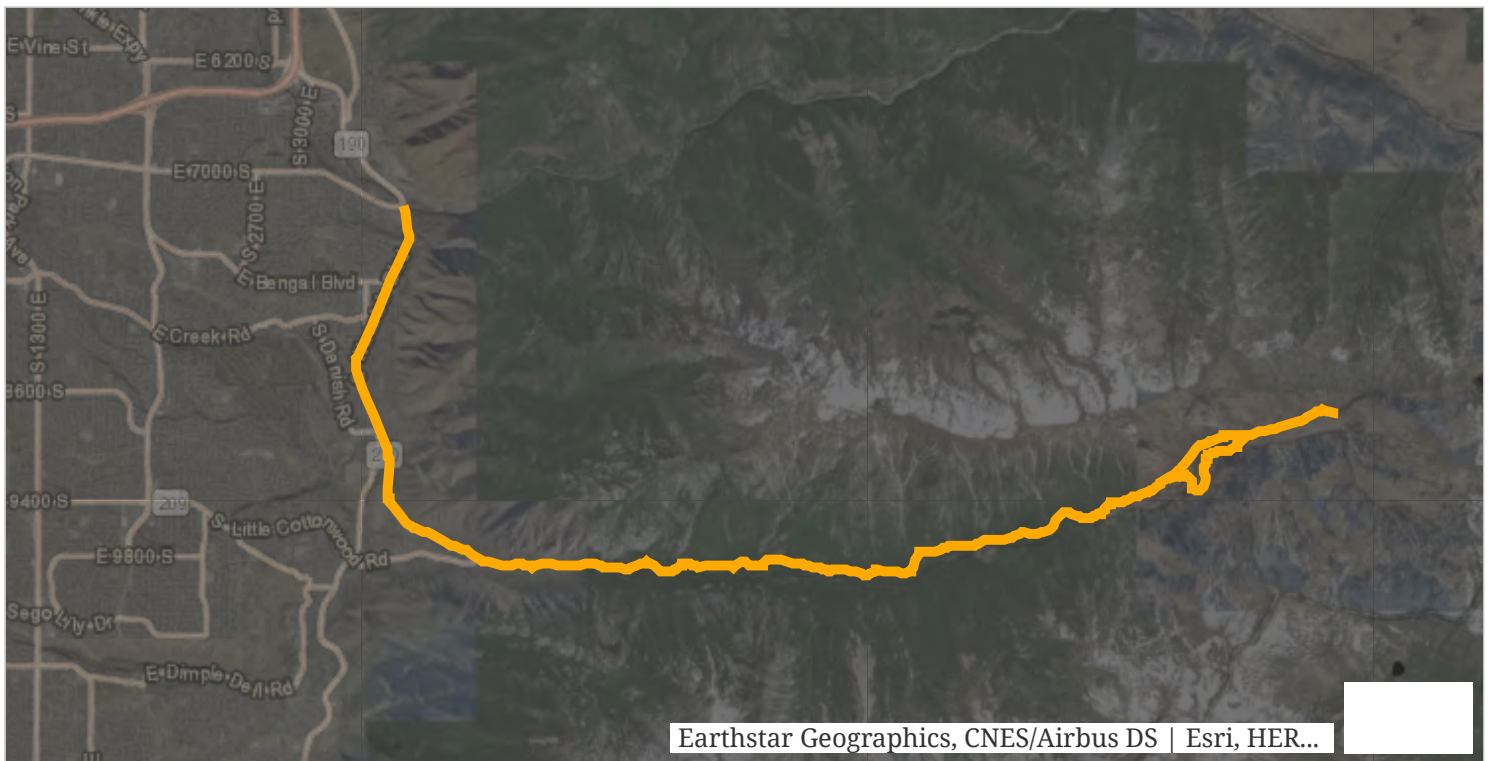




Roadway Capacity & Geometry Enhancements



Strategy Map



Adding capacity to the existing roadway is a strategy under consideration for S.R. 210.

The EIS study area extent of S.R. 210 is characterized as a blend of an urban commuter corridor and a rural mountain roadway. Both experience congestion due to different reasons. We will be evaluating traffic at a 2050 horizon for these sections of roadway.



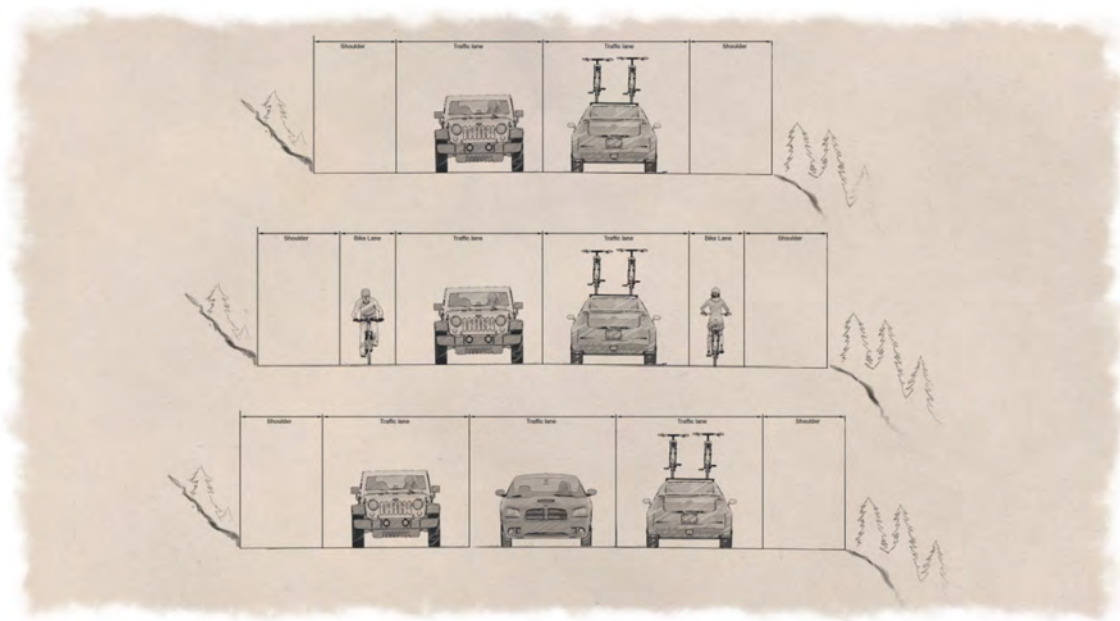
At specific locations along the canyon section of S.R. 210, sharp turns in the road create significant reductions of vehicle speed and safety concerns during inclement weather. This creates a ripple effect of delay during peak times.

The project team is evaluating these locations and possible geometry modifications to mitigate the slow down of traffic.

The locations identified are the "big turn" just down canyon from Snowbird Entry 1 and the sharp turn at the Lisa Falls parking area. Both are highlighted with arrows on the map.

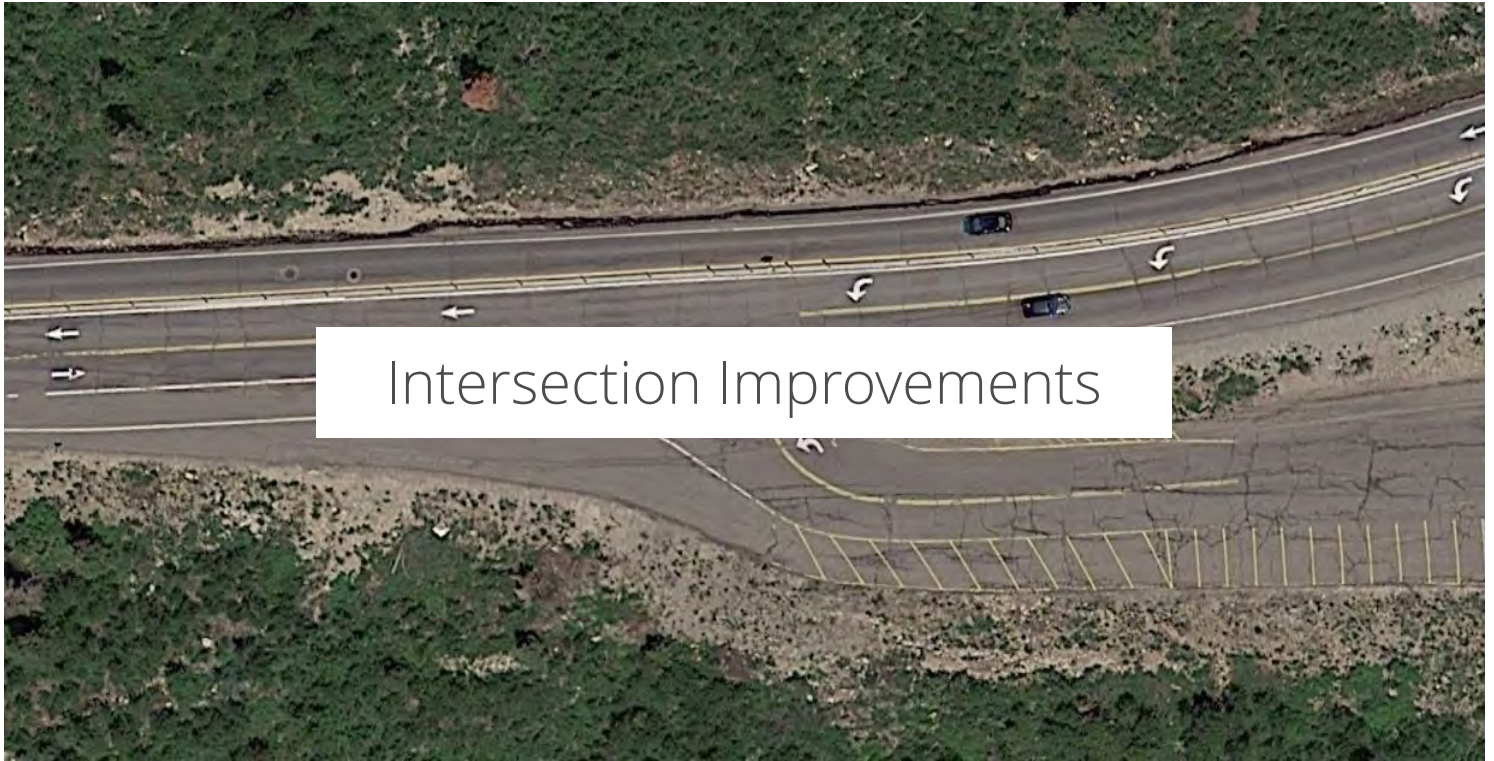
Concept Sketches

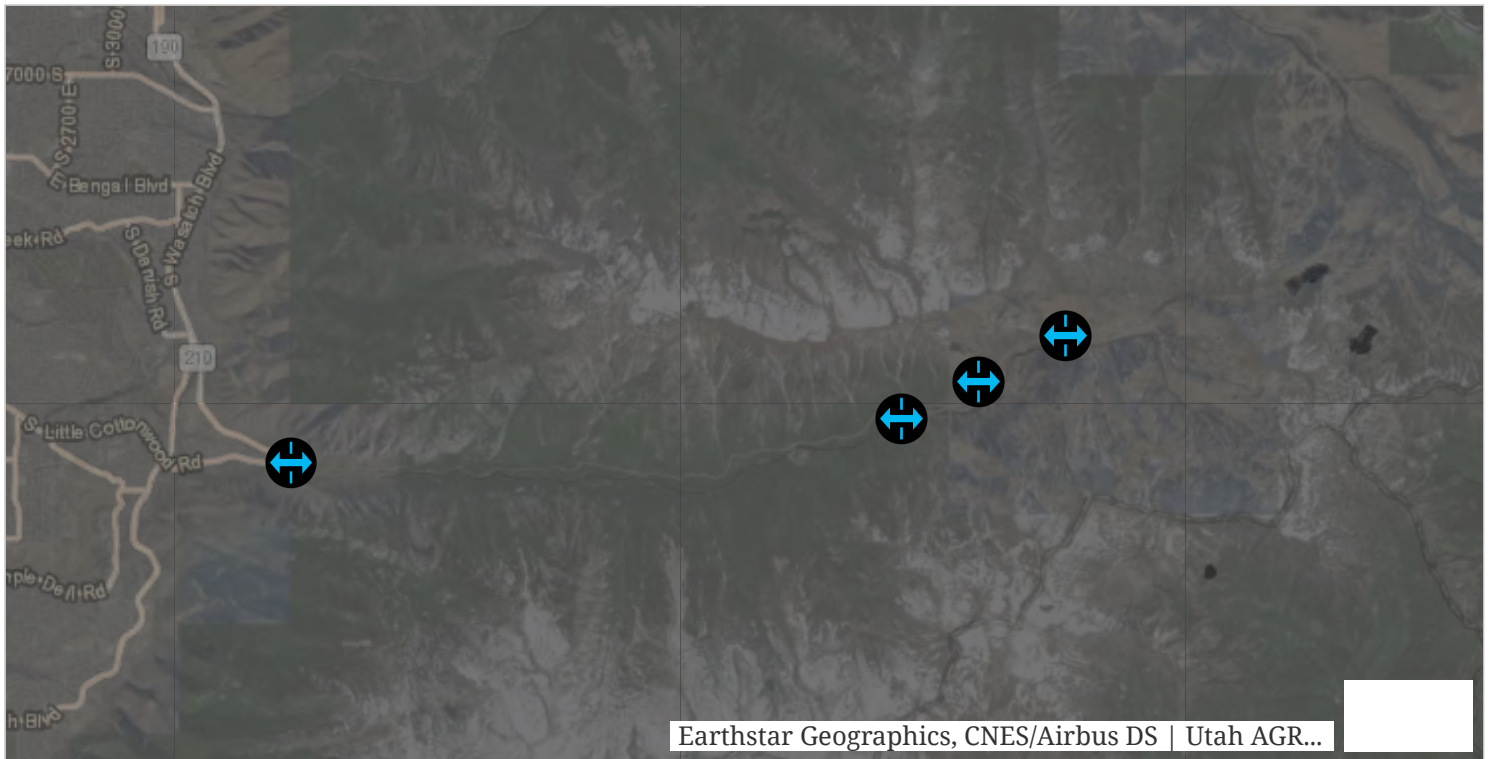
Below is a concept sketch of cross sections under consideration for the canyon section of S.R. 210.



Little Cottonwood Canyon EIS Mobility Improvement Concepts
Roadway Typical







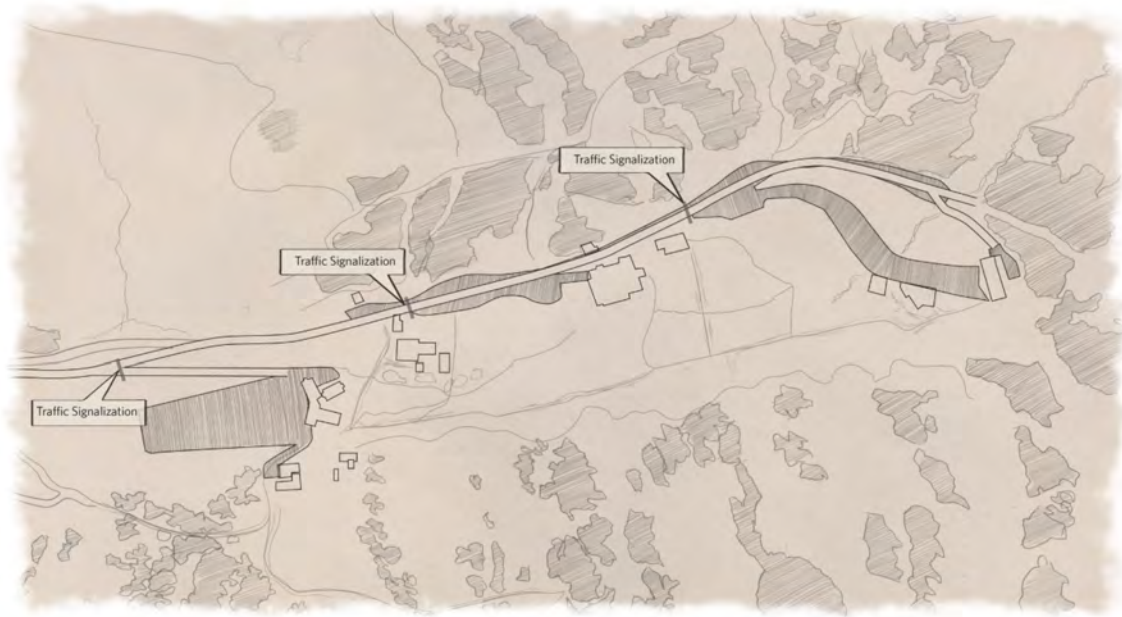
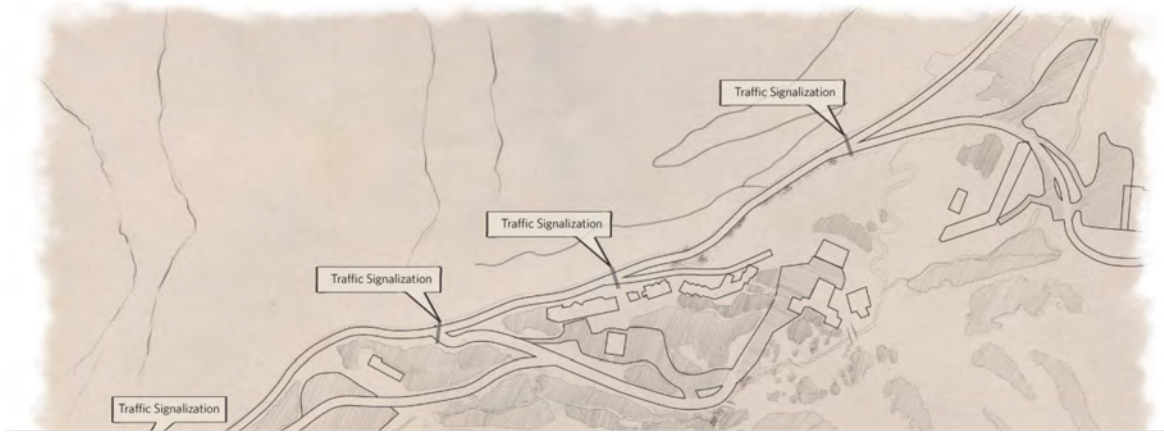
Intersections highlighted on this map are being studied for improvements. Heavy peak traffic at these locations in the mornings and evenings and during special events can result in significant travel time delays. Modifications to the intersection alignment, geometry and potential signalization are being considered and the costs and environmental impacts are being studied.

These four intersections are:

- The "Y" Intersection at the canyon base.
- Snowbird Entry 1 Gad Valley.
- By-Pass Road turn at Snowbird Entry #4.
- Alta Wildcat Parking Area Entrance.

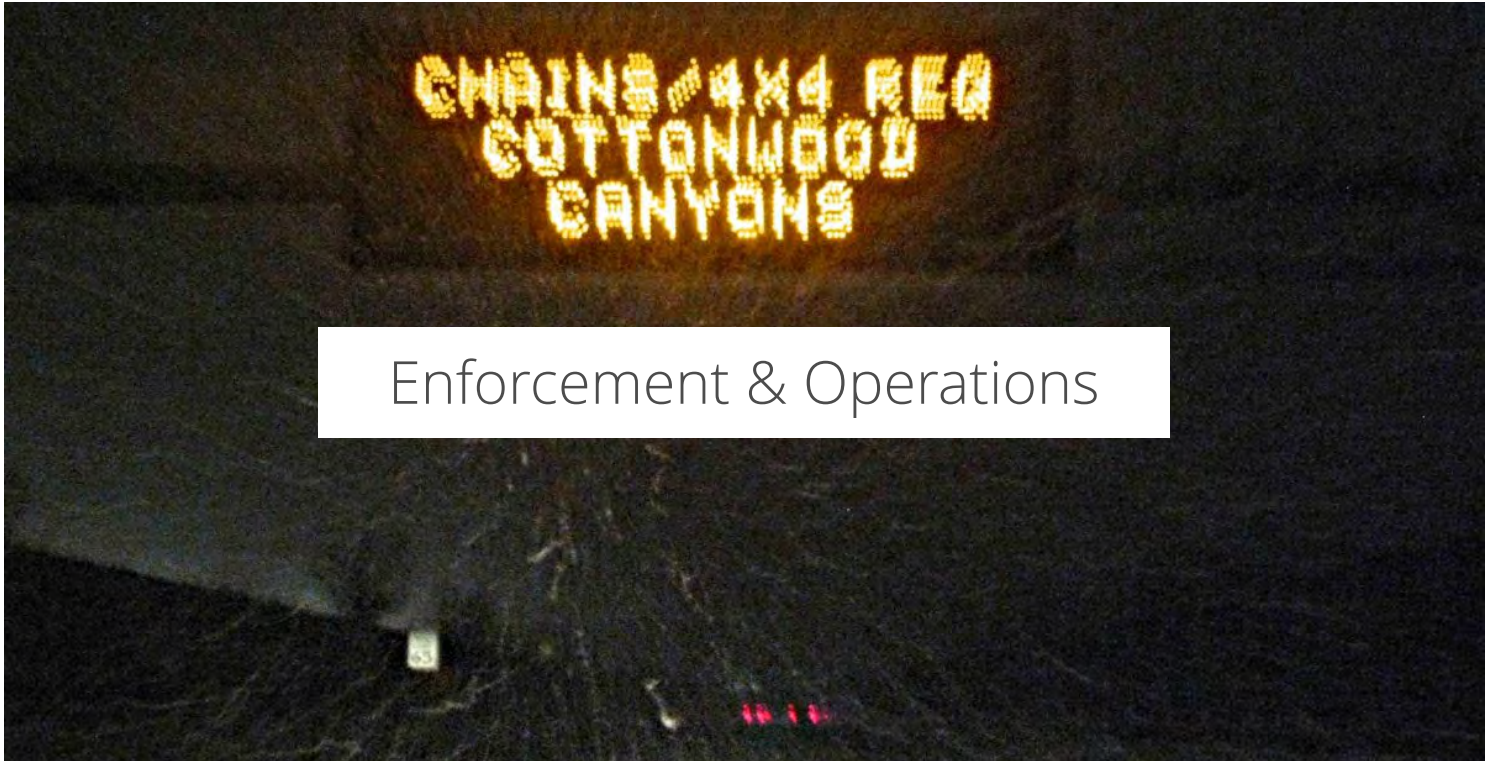
Concept Sketches

Below are draft sketches of intersection locations. More intersection concepts to be developed soon.



Little Cottonwood Canyon EIS Mobility Improvement Concepts
Alta Entry Locations





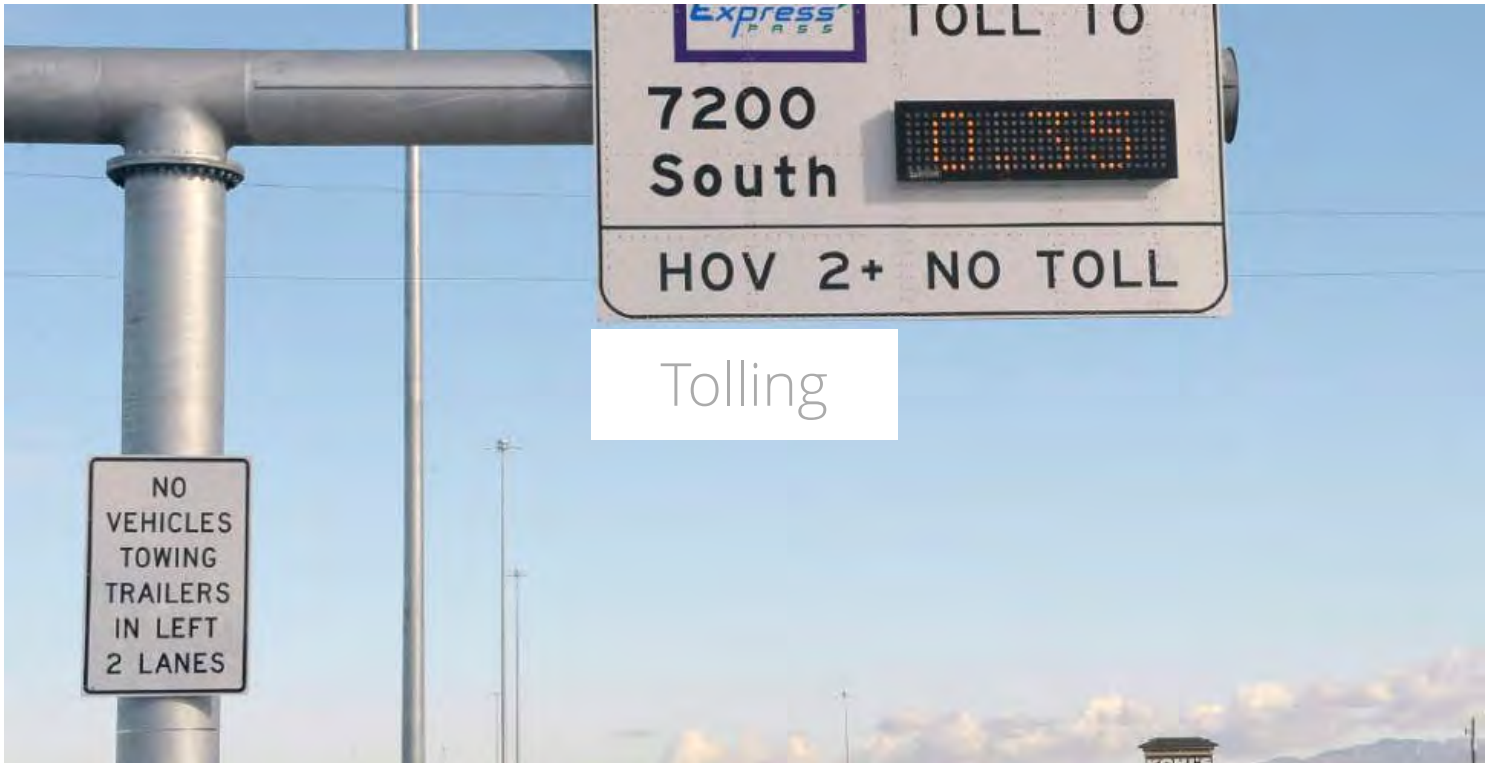


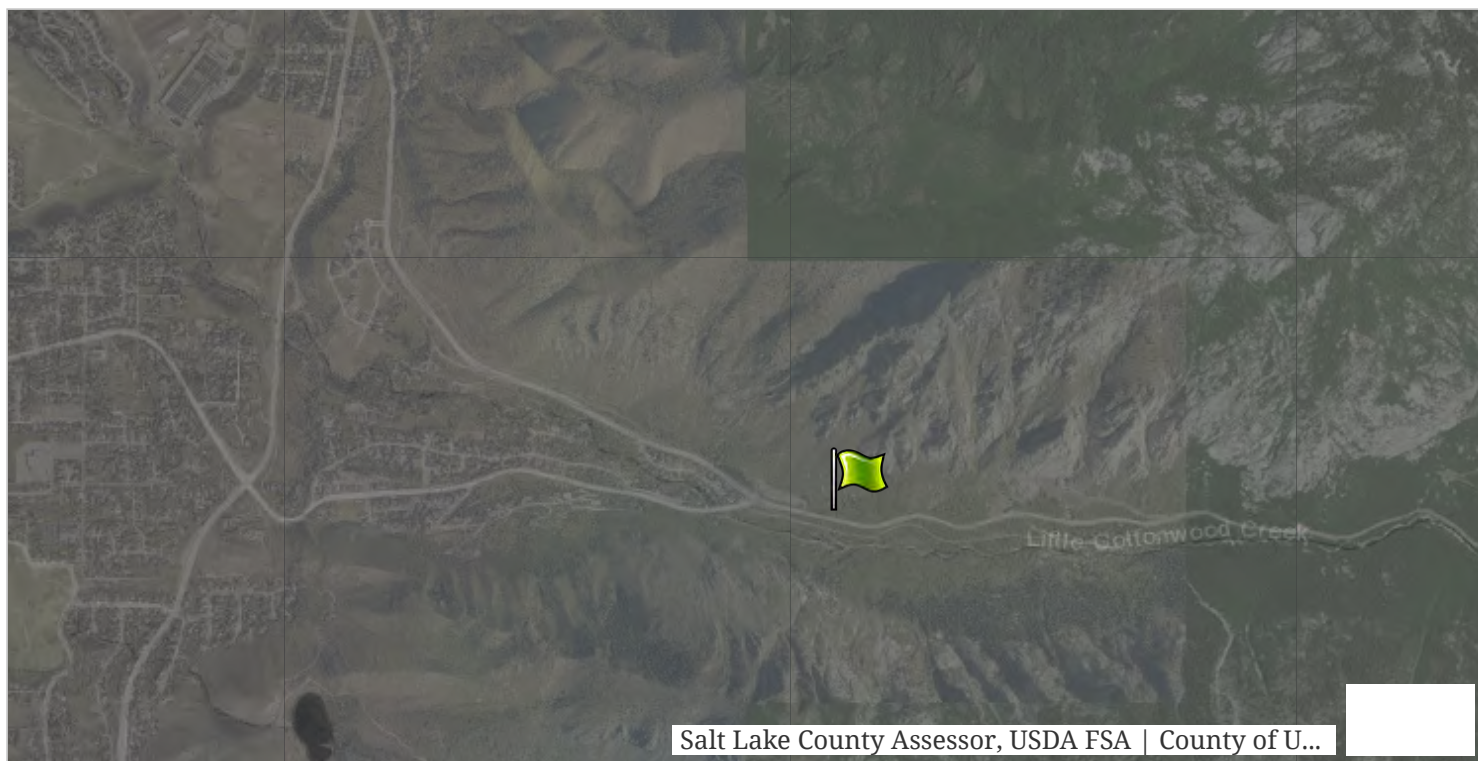
Peak canyon use during the winter months is often accompanied with snow and winter driving conditions in the canyon. State law requires chains and/or snow tires in the canyon during these times.

New locations for vehicle enforcement are being studied to remove conflicts with the traffic flow.

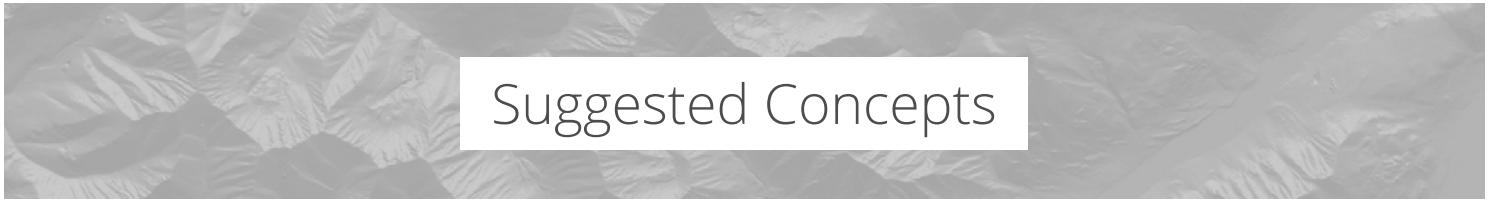
Operational improvements to canyon management are also being studied. These type of improvements include the addition of dedicated incident management teams to the canyon to assist in slide offs and accidents impacting traffic flow. Also the purchase of additional snow plows to service S.R. 210 during peak times.







During peak use 30-50% of vehicle traffic has been observed as single occupant vehicles. This project will evaluate tolling as a strategy to increase the efficiency of vehicles travelling on S.R. 210 in the canyon on peak days.





A gondola for transportation has been suggested as an alternative mode of transportation for the canyon.

Photo : Doppelmayr 3S System