

LCC EIS Draft Alternative Report FAQ

The following comment and question themes were frequently submitted to the Utah Department of Transportation (UDOT) during the June 8 - July 10, 2020 public comment period for the Draft Alternatives for the Little Cottonwood Canyon Environmental Impact Statement (EIS).

Subject: BUS ALTERNATIVES

1. Were electric buses considered, they seem to work really well during the winter in Park City?

For the alternatives analysis, UDOT considered diesel buses, electric buses, and hybrid buses. Discussions with UTA noted that electric buses may be possible for winter operations in Little Cottonwood Canyon, though they are ~80% more expensive. For the EIS analysis, UDOT will assume diesel buses to consider the greatest potential impacts for bus operations and to allow any bus type to operate in the canyon. However, if an enhanced bus alternative is selected in the Record of Decision, UDOT will evaluate all available bus technologies and their ability to operate in Little Cottonwood Canyon prior to purchasing any buses.

2. Can other buses be added that include winter and summer stops at trailheads while still maintaining the buses with direct service to the resorts?

Bus service to the trailheads is not needed to meet the project purpose of improving mobility, as the majority number of vehicles who enter the canyon in the winter are going to the ski resorts. The main concern with mobility is during the winter when skiers arrive during the same peak travel period in the morning. By addressing the main users (resort skiers), the recreational users that wish to travel to the trailheads should have improved mobility on S.R. 210. Additional stops within the canyon would also add travel time to all travelers on the bus, making transit a less attractive option. This is why the bus service is direct, so that Alta riders do not need to stop at Snowbird or vice versa.

During the summer, traffic is dispersed throughout the day, so there is not a peak mobility concern that would warrant summer bus service. In the future, if the USDA FS identifies a need to increase service to the trailheads, they can work with UDOT, UTA, and/or others to evaluate transit service independent of the UDOT S.R. 210 EIS process.

3. Why do the bus alternatives need snowsheds? They are really only needed for a few days a year.

Snowsheds are needed to improve the safety and reliability of the roadway. The construction of snowsheds reduce road closures, which cause extensive backups in the residential neighborhoods along S.R. 210 and S.R. 209, by an estimated 80%. This backup makes it difficult for residents to leave or return home and increases emergency response times.

The snow sheds will also reduce the amount of artillery used by UDOT for avalanche mitigation and provide for increased safety to all roadway motorists during periods of high avalanche danger.

Subject: EIS PROCESS AND IMPLEMENTATION

4. What are the environmental impacts of each alternative and why weren't those included in this report?

At this phase of the analysis, preliminary environmental impacts were analyzed in order to determine reasonable alternatives to be carried forward. During the next phase of the process, the Draft EIS will be assessing the environmental impacts of each alternative in greater detail in order to determine a preferred alternative. Impacts that will be assessed in the Draft EIS include, but are not limited to, noise, air/water quality, wildlife, wetlands, cumulative impacts, property and minority/low-income populations.

5. Why wasn't water quality one of the screening criteria, given the importance of the watershed to the Salt Lake Valley?

Watershed impacts are one of the environmental impacts that UDOT will evaluate in greater detail in the Draft EIS. It was unrealistic to do water quality modelling for each of the 105 originally proposed alternatives.

6. Will a cost/benefit analysis be performed as part of the Draft EIS?

No, a cost benefit analysis is not required as part of the National Environmental Policy Act (NEPA), and UDOT does not historically look at this factor in an EIS.

7. Will the impacts of construction be analyzed?

Yes, the impacts of construction will be analyzed in the Draft EIS, including best management practices (BMP) for water quality.

8. When will construction start for the selected alternative?

Construction cannot start until completion of the EIS process, which occurs with the signing of the record of decision (ROD); expected in December 2021. Currently, only partial funding has been identified, which means any selected alternative would be constructed in phases as funding becomes available.

9. Is the cost of an alternative an actual screening criterion in the EIS process or just something the lead agency takes into consideration?

The cost of an alternative is considered as part of the level 2 screening process as described in [Section 2.2, Level 2 Screening in the Draft Alternatives Development and Screening Methodology and Preliminary Screening Report](#). UDOT will use the screening results to determine whether any of the alternatives would have substantially greater impacts or costs without having substantially greater benefits. Alternatives that have the same or similar benefits to other alternatives but have substantially greater impacts or costs will be eliminated and considered unreasonable for NEPA purposes.

10. How will the preferred alternative be selected? Who makes this decision?

As the lead agency for the EIS, UDOT will be selecting a preferred alternative that will be identified in the Draft EIS. UDOT will seek input from the cooperating agencies (USDA FS, Salt Lake City Public Utilities, UTA, U.S. Army Corps of Engineers, and U.S. Environmental Protection Agency) in determining the preferred alternative. UDOT will also work with the USDA FS regarding how their NEPA decisions may impact National Forest Service managed lands. The selection of the preferred alternative will be made using an objective, data-driven approach and analysis that is informed by the public input received during the various comment periods throughout the process.

Subject: GONDOLA ALTERNATIVE

11. Why was the gondola capacity limited to 1,000 people per hour?

The purpose of the LCC EIS 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. Traffic modelling shows that to improve mobility, a reduction of 30% of the personal vehicles from S.R. 210 would smooth traffic flow and eliminate queueing at the S.R. 209/210 merge. During the peak-hour, that equates to a needed reduction of about 1,000 people or 500 cars per hour. The Gondola Alternative and associated parking garage can accommodate that capacity. While there is currently no need to increase the capacity of the gondola beyond the Gondola Alternative as outlined in the screening report, the 3S system can operate at a higher capacity.

12. Does the Park and Ride gondola base station alternative include widening of Wasatch Boulevard?

Yes, the gondola alternative does include widening Wasatch Boulevard. Widening of Wasatch Boulevard is part of all the alternatives being considered in the EIS.

13. Why doesn't the gondola have snowsheds included? Will the DEIS analyze a gondola option with snowsheds?

Initial evaluation of the gondola indicated that snowsheds would not be needed to improve roadway reliability as it relates to avalanche closures. However, snowsheds would add reliability and safety benefits to the roadway users of the gondola alternative and will be evaluated as part of the gondola alternative.

Subject: OTHER ALTERNATIVES

14. Was a rail alternative considered?

Yes. In the June 8, 2020 screening report, UDOT did consider five rail alternatives as part of the alternative development and screening process. The primary alternative evaluated was a rail line from the existing UTA TRAX Historic Sandy Station to the town of Alta.

The analysis in the June 8 Screening report noted the cog rail alternative would have 48 more home acquisitions as compared to the other alternatives, the highest number of recreational site and historic property impacts, and a cost of \$1.7 billion, which is up to three times greater than the other alternatives. In addition, this alternative would eliminate access to two key recreation resources in Little Cottonwood Canyon (the Grit Mill and Lisa Falls Trailheads).

Because of the high number of residential, recreation site, and historic property impacts, UDOT eliminated the cog rail alternative from further evaluation in the EIS based on the information in the June 8 Screening Report. However, during the public comment period, UDOT received comments that refine the cog rail alternative, including options that could reduce cost and environmental impact. Based on those comments, UDOT is in the process of further evaluating the cog rail alternative. The revised analysis will be included in a Screening Report Addendum expected to be released in Fall 2020.

15. Why does the rail alternative have so many impacts? Did UDOT consider keeping the rail alignment within their existing roadway right-of-way?

From the Historic Sandy Station (9000 S 165 E – Blue Line) to Wasatch Boulevard, the rail alignment was placed in UDOT right-of-way in the center of 9000 S/9400 S, similar to UTA light rail in downtown Salt Lake City. On S.R. 210 in Little Cottonwood Canyon, UDOT needed to maintain vehicle traffic, so the rail alignment could not be placed within the existing roadway area. Instead, the rail alignment was placed on the north side of S.R. 210 away from Little Cottonwood Creek and to limit interference with

left hand turns into and out of Snowbird. Because of the steep canyon walls in Little Cottonwood Canyon, the rail alignment required extensive hillside excavation, which substantially increased the cost of the alternative. In addition, the rail alignment directly impacted the Gate Buttriss, Grit Mill, and Lisa Falls parking areas.

16. Why wasn't the La Caille proposal evaluated and presented to the public with the other alternatives?

The La Caille gondola proposal was submitted during the public comment period, after the initial draft alternatives were developed and evaluated. This proposal, along with any other new proposed alternatives, will be evaluated by UDOT using the same screening criteria as the existing alternatives.

17. Is UDOT considering a tunnel alternative based on the Boring Company technology?

Yes, UDOT is in the process of evaluating a tunnel alternative based on the Boring Company technology. The results of the evaluation will be included in the Screening Report Addendum expected to be released in Fall 2020.

Subject: PROJECT PURPOSE

18. Why isn't UDOT considering summer transit service?

No substantial mobility issues occur during the summer months, as no defined peak travel period exists that causes reduced mobility on S.R. 210 in Little Cottonwood Canyon. During the winter, peak travel periods are associated with the opening and closing of the lifts. Although many commenters noted that trailhead parking and parking in general is limited, thus limiting recreational activities, that does not substantially reduce mobility on S.R. 210. In working with the USDA FS, UDOT did not identify a need to increase summer trailhead use as part of the S.R. 210 project. In the future, if the USDA FS identifies a need to increase use at the trailheads, they can work with UDOT, UTA, and/or others to evaluate transit service independent of the UDOT S.R. 210 EIS process.

UDOT has received comments that the gondola would provide a summer tourist value. The USDA FS (a cooperating agency in preparation of the EIS) will advise UDOT regarding the expected impacts from gondola summer service and associated recreation use to National Forest System land and forest resources in accordance with the Revised Forest Plan Wasatch-Cache National Forest (USDA Forest Service, 2003).

19. Why are we spending taxpayer dollars to benefit two private businesses and not focusing on all canyon users?

UDOT is seeking to improve mobility, reliability and safety for all users of S.R. 210, regardless of destination. The majority of the users on S.R. 210 in Little Cottonwood Canyon during the winter access the ski resorts. By focusing the transportation solutions on the main users, the transportation mobility

would improve for other users that want to access the canyon outside of the ski resorts, as well as residents who live along S.R. 209/S.R. 210.

20. The EIS study area is too limited in scope, why isn't UDOT addressing regional transportation needs?

UDOT developed this study area to include an area that's influenced by the transportation operations on Wasatch Boulevard and in Little Cottonwood Canyon, and to provide logical termini (endpoints) for the project. The intersection of S.R. 190/Fort Union Boulevard was selected as the western terminus because it's the point where traffic splits between Big Cottonwood Canyon and Little Cottonwood Canyon. Traffic south of this intersection is mostly related to trips in and out of Little Cottonwood Canyon and commuter traffic on Wasatch Boulevard. The end of the paved road in Little Cottonwood Canyon was selected as the eastern terminus because this is where S.R. 210 terminates in the town of Alta at Albion Basin Road. The Little Cottonwood Canyon Project does not include Albion Basin Road.

Potential transportation solutions in the study area would have independent utility because they would be usable and a reasonable expenditure even if no additional transportation improvements in the area are made. The study area from Fort Union Boulevard is also long enough to address environmental matters on a broad scope along Wasatch Boulevard and in Little Cottonwood Canyon.

None of the S.R. 210 alternatives would restrict UDOT from considering alternatives for other reasonably foreseeable transportation improvements currently included in the regional transportation plan or being considered by local municipalities.

Subject: TRANSIT STOPS AND MOBILITY HUBS

21. People travel to Little Cottonwood Canyon from all over the Salt Lake valley and prefer to ride transit closer to home. Why is UDOT not considering increasing transit connectivity throughout the valley as part of the alternatives?

Feeder bus service to the transit hub(s) from locations outside the EIS study area (locations such as downtown Salt Lake City) can be addressed outside the EIS process by UTA adding or changing its current bus service routes. Also, private vendors could develop feeder bus services to the transit hub locations(s).

Without the transit hub(s), regional feeder bus services would not function. If UDOT selects a transit hub(s) alternative in the project's Record of Decision, it is likely that UDOT would phase construction by starting with a smaller parking garage and expanding as warranted, based on demand. This phased expansion would allow UTA and private vendors to evaluate how the transit hub(s) concept is operating so they can determine the viability and type of feeder service.

22. Why doesn't the bus or gondola stop at popular backcountry destinations?

The alternatives were designed to improve mobility on S.R. 210, and the primary users are skiers traveling to the ski resorts. Therefore, to improve mobility the alternatives focused on the greatest number of users. To make the bus system or gondola operate efficiently and therefore an attractive option to users, point-to-point service was designed. If the bus system or gondola has numerous stops, the time and efficiency of the service decreases, which may make the service less attractive for the majority of users. By improving overall mobility to the greatest number of users, other canyon users such as backcountry skiers would benefit from reduced traffic congestion.

23. Why isn't UDOT proposing a parking deck with a large mobility hub at the mouth of the canyon at the existing park and ride lot?

A parking structure at the entrance of Little Cottonwood Canyon would focus all traffic to one pinch point similar to the conditions that exist today. This would not alleviate the severe traffic congestion and delay for both people going up the canyon and for surrounding residents.

24. Is congestion going to be a problem at the mobility hubs at the gravel pit or at the base of the canyon when people are trying to park?

UDOT has designed the mobility hubs to address the increase in traffic so heavy congestion is not anticipated. With any of the proposed alternatives, it would not be possible to address the busiest ski day at the entrance to the canyon. The alternatives are designed to address the 30th busiest hour, which is standard practice in transportation planning. On the busiest ski day during the peak morning hour, some congestion could still be anticipated at the intersection of S.R. 210/S.R. 209.

Subject: TRAVEL DEMAND MANAGEMENT

25. Why did UDOT set as its goal removing 30% of vehicles instead of something much higher like 60-80%?

In order to improve average travel times, it is not needed to remove 60-80% of vehicles. The roadway capacity for a two-lane mountain road such as Little Cottonwood Canyon can be approximately 900 to 1,100 vehicles/hour. In order to have only 900 to 1,100 vehicles per hour in 2050, about 30% of the vehicle traffic would need to be removed from S.R. 210 to stabilize traffic flow and reduce queueing along S.R. 209/S.R. 210.

26. Would the toll system be a booth or electronic system?

The specific toll technology will be determined at the time of implementation, as technology is rapidly changing. However, a toll booth similar to Mill Creek Canyon would not be used as it would require

vehicles to stop, causing additional congestion. The system would be electronic, allowing vehicles to seamlessly pass through the system without reducing speed. The system would be similar to the toll collection system utilized in the I-15 HOV lanes and could include license plate readers for vehicles without transponders (out-of state, rentals, etc.)

27. How will eliminating roadside parking be enforced when people already park in designated no parking areas now? Is enforcement being evaluated in the EIS?

UDOT will continue coordinating with local law enforcement agencies to enforce roadside parking restrictions.

28. The alternatives should consider a transit only alternative with no vehicles being allowed in Little Cottonwood Canyon.

A bus-only alternative was evaluated as part of the screening process. A bus only alternative would need to meet a peak hour demand of about 3,200 persons without increasing roadway capacity. For the bus-only alternative to meet the demand, the bus headways would need to be about 1.6 minutes from mobility hubs at both Fort Union Boulevard/Wasatch Boulevard (gravel pit area) and 9400 South/Highland Drive. This would equal about 75 buses per hour using UTA's current buses, which have a total capacity of about 42 people. UTA guidance suggests that headways less than 5 minutes would be infeasible because it would require about 5 minutes to load and unload a bus, particularly if riders were stowing and retrieving ski gear. Although there are larger buses available, they would not be able to navigate the narrow ski resort parking areas.

Although the gondola alternative could meet the 3,200 person per-hour demand, there is not a need to require everyone to take the gondola to improve mobility on S.R. 210. To improve mobility, about 30% of the vehicles need to transfer to the gondola. This would allow those users who want to pay a toll to continue to use their personal vehicles.

Subject: VISITOR CAPACITY

29. Why doesn't UDOT limit ticket sales at the resorts to reduce traffic?

UDOT does not have the ability to limit how private businesses operate.

30. Will improvements to the bus service or from the gondola cause a latent demand and increase the number of skiers in the canyon or increase the potential for resort expansion?

Latent demand is a concept that when additional roadway capacity is added, more vehicles would use the expanded route because of improved travel times. Some commenters noted that with reduced travel time on S.R. 210 to the ski resorts, more people will now use the roadway to go skiing. However, the proposed reasonable alternatives identified by UDOT have a limited number of parking either at the transit hub or at the ski resorts. Once those parking spaces are filled, maximum capacity is reached and no more users can be accommodated. As UDOT did not increase the number of parking spaces at the ski resorts, improvements to S.R. 210 could not cause a latent demand beyond current levels of vehicles.

Any potential resort parking expansion on National Forest System lands would require authorization from the USDA FS through the ski area special use permits, under which the ski resorts are operating. This is a separate process independent of the EIS between the USDA FS and each ski resort.

31. Why isn't a visitor capacity analysis part of the EIS?

The project purpose of the EIS is not intended to increase visitation in the canyon, but to improve overall transportation mobility. It is possible that visitation in the canyon may increase as a result of projected population growth and increasing recreation demands along the Wasatch Front.

Recreation use and associated impacts to the environment will be analyzed as they relate to the purpose and need and transportation alternatives considered in the EIS.

The USDA FS (a cooperating agency in preparation of the EIS) will advise UDOT regarding the expected impacts from transportation improvements and associated recreation use to National Forest System land and forest resources in accordance with the Revised Forest Plan Wasatch-Cache National Forest (USDA Forest Service, 2003).

At this time, the Forest Service is not considering a visitor capacity analysis. Through its implementation and monitoring of the management protocols and objectives in the Forest Plan, the Forest Service has determined that many areas in the canyon may handle increased use without significant resource impacts, with the construction and sustained operations and maintenance of infrastructure designed to accommodate current and future visitor demands.

The Forest Service will analyze the alternatives during the EIS process and disclose any direct, indirect, and cumulative environmental impacts that could result from those alternatives to National Forest System lands.

It is anticipated that alternatives in the EIS will be developed to improve safety and enhance watershed protection near Forest Service trailheads in the canyon, including reduced roadside parking, improved and formalized parking lots (maintaining current area parking capacities), planned implementation of stormwater/ runoff best management practices, and increased toilet capacity.

Subject: WASATCH BOULEVARD

32. Did UDOT consider expanding Highland Drive instead of Wasatch Boulevard?

UDOT did consider improvements to Highland Drive during the evaluation process. UDOT modeled the expected traffic volumes in the project area in 2050 using the Wasatch Front Regional Council's (WFRC) travel demand model. The travel demand modeling for the project included Highland Drive being built as a five-lane road and connecting from 9800 South to the Draper city limits. Even with Highland Drive being expanded to five lanes (four travel lanes and a center turn lane), the results of the travel demand model showed a need to expand the traffic capacity on Wasatch Boulevard to meet future regional growth.

33. What is the growth projection data that was used to model 2050 traffic on Wasatch Boulevard, as it seems like the majority of growth in Salt Lake County is occurring in the southwest quadrant?

The data used for the analysis was developed by the Kem G. Gardner Policy Institute at the University of Utah and is used by a variety of local and state governments statewide for long-term planning. This data supports the development of the Wasatch Front Regional Transportation Plan, which was recently updated in 2019 for the 2050 planning horizon. This data is the best available to UDOT.

34. Why wasn't the design speed for Wasatch Boulevard less than 50 mph?

The current posted speed limit in the area is 50 mph, which UDOT used as a baseline. If the speed limit were lowered in the future, final design and construction of a Wasatch Boulevard alternative could accommodate a lower speed limit.

35. Why didn't the alternatives evaluate or reduce speed limits on Wasatch Boulevard?

The evaluation of speed limits is done outside the EIS process. To determine speeds on state roads, UDOT conducts a speed study. The posted speed limit is based on the 85th-percentile speed while giving consideration to the road surface, shoulders, sight distance, development, pedestrian activity, and crash data. Using these criteria, the posted speed limit for Wasatch Boulevard is 50 miles per hour. To ensure mobility on state roads and equity between cities, UDOT must apply the speed study policy equally on state roads within each city. Wasatch Boulevard south of 9400 South is posted at 35 miles per hour. That portion of Wasatch Boulevard is a city road, and therefore the local government can post the speed limit.

36. Isn't allowing room for shoulder running buses on Wasatch Boulevard essentially making the five-lane alternative into a seven-lane alternative?

A shoulder running lane would be designated for buses only and not a general travel lane. The roadway shoulder width used is required to meet UDOT design standards for safety. The shoulder is to allow for buffered bicycle lanes and for vehicles to pull out of traffic in an emergency.

37. Why wasn't a multi-use path considered on the west side of Wasatch Blvd in addition to the east side?

The current alternatives being considered include one 10-foot multi-use path on the east side of Wasatch Boulevard. UDOT coordinated with Cottonwood Heights on the location of the multi-use path. Cottonwood Heights determined the east side of Wasatch Boulevard was the best option to provide pedestrian connectivity. To include a multi-use path on both sides of Wasatch Boulevard would require additional home relocations, therefore only one multi-use path was considered.

38. Did UDOT consider increasing transit instead of adding more roadway capacity for Wasatch Boulevard?

UDOT did consider a transit only alternative on Wasatch Boulevard. The traffic modeling conducted for Wasatch Boulevard under no build conditions included The Wasatch Front Regional Council's (WFRC) 2019–2050 *Wasatch Front Regional Transportation Plan* (RTP; WFRC 2019) express bus service (to be implemented between 2040 and 2050) on Wasatch Boulevard, running from the Little Cottonwood Canyon park-and-ride lot at the intersection of S.R. 209/S.R. 210 to I-215/3900 South, where the express bus route would connect to another express bus route heading to the University of Utah. In addition, the No-Build conditions include UTA light rail transit from Draper to downtown Salt Lake City. Even with these transit projects that serve Cottonwood Heights and Draper residents, the traffic analysis still showed congested traffic conditions on Wasatch Boulevard if no roadway capacity improvements are made.

39. Is UDOT considering how the COVID-19 pandemic may alter future travel demand on Wasatch Boulevard with more people working from home?

It is difficult to predict how the pandemic may reduce vehicle miles travelled (VMT) in the long-term. Some commenters felt that workers would continue to work at home after the pandemic, resulting in fewer vehicles on the road. While currently some roads are seeing a decrease in traffic, others are seeing an increase. Not enough data currently exists to accurately model how the pandemic may affect traffic in the long-term.

Similar comments were provided to UDOT for transportation improvement projects during the 2008-2011 economic slowdown. Commenters felt more people would shift to telecommuting or use transit. The U.S. economic slowdown that started in late 2007, along with higher gas prices, had resulted in a leveling off of VMT. The prior peak VMT in Utah occurred in 2007 at 26.82 billion VMT. Since the low of 25.88 billion VMT in Utah in 2008, VMT increased past pre-recession levels to 32.20 billion VMT in 2018.

In addition, many factors influence travel demand—for example, population growth, employment growth, and differences in the availability and cost of housing in different parts of a metropolitan area. Therefore, while the COVID-19 pandemic has reduced the growth in VMT in the short term, it is likely that VMT will continue to increase, especially in rapidly growing regions such as the Wasatch Front.