

APPENDIX 21

Phased Implementation of Preferred Alternative



Memo

Date: Wednesday, July 13, 2022

Project: Little Cottonwood Canyon EIS

Preparer: UDOT Department of Transportation

Subject: S.R. 210 EIS – Evaluation of Supplemental Draft EIS – Phased Implementation of Bus

Service with Gondola Alternative B

Introduction

In the Draft Environmental Impact Statement (EIS) for the Little Cottonwood Canyon State Route (S.R.) 210 Project, the Utah Department of Transportation (UDOT) identified two of the primary alternatives, Gondola Alternative B and the Enhanced Bus Service in Peak-period Shoulder Lane Alternative, as being preferred by UDOT and sought public input on each. Following issuance of the Draft EIS and consideration of public comment, UDOT has identified its preferred primary alternative as Gondola Alternative B with phased implementation of components of the Enhanced Bus Service Alternative pending Gondola Alternative B's completion.¹

This memo contains UDOT's assessment of whether the preferred alternative, and particularly the phased approach that would include implementing components of the Enhanced Bus Service Alternative pending implementation and completion of Gondola Alternative B, would result in significant new environmental impacts that require preparing a supplemental draft EIS.

Requirement to Prepare a Supplemental EIS

According to Federal Highway Administration (FHWA) National Environmental Policy Act (NEPA) regulations at 23 Code of Federal Regulations (CFR) Section 771.130:

An EIS must be supplemented whenever the Administration determines that:

- (1) Changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or
- (2) New information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS.

¹ Between the release of the Draft and Final EISs, UDOT also modified Gondola Alternative B to eliminate the mobility hubs and concentrate parking at the base station in a higher-capacity parking structure. See Section 2.2.6.4, Other Alternative Refinements Considered as Part of the Final EIS, and Appendix 2H, Base Station and Bus Stop Modifications from Draft EIS, of the Final EIS.



However, a supplemental EIS will not be necessary where:

- (1) The changes to the proposed action, new information, or new circumstances result in a lessening of adverse environmental impacts evaluated in the EIS without causing other environmental impacts that are significant and were not evaluated in the EIS; or
- (2) The Administration decides to approve an alternative fully evaluated in an approved final EIS but not identified as the preferred alternative. In such a case, a revised ROD [Record of Decision] must be prepared and circulated in accordance with § 771.127(b).

According to FHWA NEPA guidance:

Whenever there are changes, new information, or further developments on a project which result in significant environmental impacts not identified in the most recently distributed version of the draft or final EIS, a supplemental EIS is necessary (40 CFR 1502.9(c)). If it is determined that the changes or new information do not result in new or different significant environmental impacts, the FHWA Division Administrator should document the determination. (After final EIS approval, this documentation could take the form of notation to the files; for a draft EIS, this documentation could be a discussion in the final EIS.) ²

Based on this FHWA guidance, UDOT provides the discussion below, which will be included in the Final EIS.

Changes to the Implementation of Gondola Alternative B

Based on public input and recognizing that safety, mobility, and reliability are issues on S.R. 210 today, and that it will likely take years to secure funding and complete construction of Gondola Alternative B, UDOT has determined that the preferred alternative should include implementing components of the Enhanced Bus Service Alternative, pending completion of Gondola Alternative B.

This phased implementation would consist of improved bus service, which requires constructing mobility hubs at the gravel pit and at 9400 South and Highland Drive and bus stops at the Snowbird and Alta resorts. The bus service, mobility hubs, and resort bus stops would be smaller than described in the EIS for the Enhanced Bus Service Alternative in 2050 since the initial service would be temporary and would be sized to accommodate only earlier years of service until the gondola system is completed. This would be consistent with the phased approach discussed in Chapter 19, Construction Impacts, of the Final EIS for the Enhanced Bus Service Alternative. See Section 19.2.2.1, Construction Phasing, of the Draft and Final EISs ("UDOT could start with initial smaller mobility hubs and fewer buses and build the bus service as ridership demand increases"). UDOT would start with a bus service adjusted to be closer to the implementation-year demand, and therefore smaller mobility hubs at the gravel pit and at 9400 South and Highland Drive and a reduced number of total buses would be required than for full buildout of the Enhanced Bus Service Alternative. The bus service would likely start with 10-to-15-minute service instead of the 5-minute service evaluated to meet the demand in 2050. To encourage ridership, UDOT would also construct the bus stops for the Snowbird and Alta resorts as described for the Enhanced Bus Service Alternative in the Final EIS. To make the bus service more attractive to use, tolling would be

² See FHWA Technical Advisory T 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents* (October 30, 1987), Section XII.



implemented with the start of the phased bus service as described for all alternatives in the Draft and Final EISs.

Under the phased approach of the preferred alternative, the impacts of project implementation would include the impacts of widening Wasatch Boulevard, building snow sheds, building improved trailheads, and restricting upper-canyon parking as described in the EIS for those sub-alternatives, which would occur as construction funding becomes available. See Section 19.2.2.1, *Construction Phasing*, of the Draft and Final EISs ("Snow sheds, Wasatch Boulevard improvements, and trailhead improvements would be implemented based on construction funding."). The impacts associated with phased implementation of the primary alternative—offering improved bus service pending completion of the gondola—would consist of the impacts described in the Final EIS from implementing the Enhanced Bus Service Alternative (which, as stated in the Draft and Final EISs, could be incrementally scaled up as demand increased), followed by the impacts of Gondola Alternative B.³

When the gondola system becomes operational, there would no longer be a need for enhanced bus service, and the impacts associated with operation of the enhanced bus service would cease. At that time, UDOT will work with stakeholders to assess what would happen with the buses, mobility hubs, and bus stop facilities, and, if applicable, the NEPA compliance activities that would occur prior to decisions being made. UDOT determined that implementing the preferred primary alternative in phases, by implementing improved bus service pending completion of the gondola system, would not cause new or different significant environmental impacts from those analyzed in the Draft EIS, and thus no supplementation is required. The major impact categories assessed are as follows:

- Up to about 35 acres of land for the mobility hubs (33 acres) and resort bus stops (2 acres) would be converted to transportation use that would not be converted under Gondola Alternative B alone (that is, without phasing with improved bus service). Impacts would be minor since the land for the mobility hubs would be in an existing paved area for the 9400 South and Highland Drive mobility hub and/or an inactive aggregate mine for the gravel pit hub. The bus stops would both be located on USDA Forest Service lands in mostly paved or previously disturbed areas used for existing bus stops, parking areas, or mining. The analysis of the Enhanced Bus Service Alternative concluded that the conversion of this land was consistent with relevant land use plans. See Section 3.4.3.2, S.R. 210 North Little Cottonwood Road to Alta, and Section 3.4.3.3, Mobility Hubs Alternative, under Section 3.4.3, Enhanced Bus Service Alternative, in Chapter 3, Land Use, of the Final EIS.
- An additional 0.85 acre of wildlife habitat would be impacted for the bus stops at Snowbird Resort and for Alta Resort. As described in the analysis of the Enhanced Bus Service Alternative, these areas have minimal habitat value and have been previously disturbed by ski resort and mining activities. See Section 13.4.2.2, S.R. 210 – North Little Cottonwood

³ Similar impacts were also evaluated in the Draft EIS as part of Gondola Alternative B, which included mobility hubs at the same locations that are part of the enhanced bus service alternatives and part of the phased implementation described in this memo. The differences between Gondola Alternative B as described in the Draft EIS, and Gondola Alternative B as described in the Final EIS with phased implementation as described in this memo, are that bus service would begin in the near term and would go all the way to Snowbird and Alta instead of starting in a number of years when gondola service begins, with buses shuttling only between the mobility hubs and the base station.



Road to Alta, under Section 13.4.2, Enhanced Bus Service Alternative, in Chapter 13, Ecosystem Resources, of the Final EIS.

- Buses would produce air pollutant emissions during their operational period, which would end when the gondola becomes operational. Air pollutant emissions were evaluated as part of the Enhanced Bus Service Alternative, which was sized to meet the demands in 2050 and included personal vehicle traffic on S.R. 210. UDOT determined that there would be no exceedance of air quality standards and that greenhouse gas emissions would be less than with the No-Action Alternative. See Section 10.4.3.2, S.R. 210 North Little Cottonwood Road to Alta, under Section 10.4.3, Enhanced Bus Service Alternative, in Chapter 10, Air Quality, of the Final EIS. With fewer buses operating, and because there would be no air pollutant emissions associated with the gondola during interim bus implementation, air pollutant emissions during phased implementation of the components of the Enhanced Bus Service Alternative would be lower than reported in the Final EIS and also would not exceed air quality standards.
- Additional noise would be produced by buses during their period of use. Noise levels from S.R. 210 with buses are evaluated as part of the Enhanced Bus Service Alternative. See Section 11.4.3.2, S.R. 210 North Little Cottonwood Road to Alta, under Section 11.4.3, Enhanced Bus Service Alternative, in Chapter 11, Noise, of the Final EIS. With phased implementation, noise levels, affected receptors, and receptors above criteria would be essentially the same as those evaluated for the Enhanced Bus Service Alternative for the period of bus operation. There would be no noise associated with the gondola system during phased implementation, so the impacts would not be additive.
- The Alta bus stop would be located within the Town of Alta archeological site (42SL52, which is about 79.8 acres) and would disturb about 1 acre in addition to the impacts from Gondola Alternative B, which would have about 0.63 acre of disturbance as reported in the EIS. Implementing Gondola Alternative B would result in an adverse effect on this site, and data recovery and construction monitoring are proposed as mitigation, as would be the case with the bus stop. The site is exempt from Section 4(f) protections because it has minimal value for protection in place. Therefore, the additional 1 acre of impact associated with implementing components of the enhanced bus service is not a new or different significant environmental impact. See Section 15.4.3, Enhanced Bus Service Alternative, and Section 15.4.6, Gondola Alternative B, in Chapter 15, Cultural Resources.

The attached table summarizes the information regarding the impact categories mentioned above as well as impacts to other resources analyzed in the EIS.

In sum, UDOT determined that any additional impacts associated with implementing components of enhanced bus service pending implementation of Gondola Alternative B were evaluated and disclosed as part of the enhanced bus service alternatives, and there would not be new or different significant environmental impacts under this phased approach. The implementation of Gondola Alternative B with phased implementation of components of the Enhanced Bus Service Alternative as described in the Final EIS is a minor variation from the alternative evaluated in the Draft EIS. In addition, because the modifications do not introduce any new modes, elements, or approaches (that is, bus service was evaluated as part of the Enhanced Bus Service Alternatives), and because all of the impacts that would occur under the phased approach are disclosed in both the Draft and Final



EISs under the impact analyses for Gondola Alternative B and the enhanced bus service alternatives, UDOT determined that implementation of Gondola Alternative B with phased implementation of components of the Enhanced Bus Service Alternative is qualitatively within the spectrum of alternatives considered in the Draft and Final EISs. See *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Federal Register 18026 (March 23, 1981), Question and Answer No. 29b.

Therefore, a supplemental draft EIS is not required.

Public Review and Comment

In determining that a supplemental draft EIS is not required for the preferred alternative, UDOT also considered that the Final EIS will be subject to a 45-day public review and comment period. A primary purpose of EIS supplementation is to provide an opportunity for public review and comment, and for agency consideration of public input, prior to an agency decision. UDOT is providing a 45-day review and comment period on the Final EIS, and thus will have the benefit of any public input on the preferred alternative and its impacts prior to identifying the selected alternative and making a decision regarding the project in the Record of Decision.



Impacts of Phased Implementation

Impact Category	Unit	No-Action Alternative	Gondola Alternative B	Additional Impacts from Gondola Alternative B with Phased Implementation of Enhanced Bus Service
Land converted to alternative use ^a	Acres	0	206–211	Up to about 35 acres of land for the mobility hubs and resort bus stops would be converted to transportation use that would not be converted with Gondola Alternative B without phasing components of the enhanced bus service. The land for the mobility hubs would be in an existing paved area and/or an inactive aggregate mine. The bus stops would both be located in paved or previously disturbed areas used for parking or mining. The analysis of the Enhanced Bus Service Alternative concluded that the conversion of this land was consistent with relevant land use plans.
Potential residential relocations	Number	0	1	None
Potential business relocations	Number	0	0	None
Recreation areas affected	Number	0	3	None
Community facilities affected	Number	0	1	None
Environmental justice impacts	Yes/no	No	No	None
Economic impacts	Yes/no	No	No	None
Existing Forest Service trails affected	Number	0	1	None
Climbing resources (existing boulders affected)	Number	0	2	None
Air quality impacts above regulations	Yes/no	No	No	Buses would produce air pollutant emissions during the phasing period, which would end when the gondola becomes operational. Bus emissions were evaluated as part of the Enhanced Bus Service Alternative. The analysis of this alternative determined that there would be no exceedance of air quality standards. There would be no air pollutant emissions associated with the gondola system during the phased implementation period.
Receptors with modeled noise levels above criteria	Number	173	213–230	Noise would be produced by buses during their period of use. Traffic noise levels are evaluated as part of the Enhanced Bus Service Alternative. With phased implementation, noise levels, affected receptors, and receptors above UDOT's noise-abatement criteria would be the same as those evaluated for the enhanced bus service for the period of bus operation. There would be no additional noise associated with the gondola system during the phased implementation period.



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Impact Category	Unit	No-Action Alternative	Gondola Alternative B	Additional Impacts from Gondola Alternative B with Phased Implementation of Enhanced Bus Service
Increase in impervious surface ^b	Acres	0	22.6–26.2	There would be an increase of less than 1 acre of new impervious surface in the Little Cottonwood Canyon watershed. Other alternatives with a much greater increase in new impervious surfaces (Enhanced Bus Service in Peak-period Shoulder Lane Alternative and Cog Rail Alternative) resulted in <i>de minimis</i> differences in water quality compared to the No-Action Alternative. This phased approach would result in lower impacts than those alternatives.
Water quality standards exceeded ^c	Yes/no	No	No	None
Wildlife habitat impacted	Acres	0	24–28	A total of an additional 0.85 acre of wildlife habitat would be impacted (vegetation removed) at the bus stops at Snowbird Resort and for Alta Resort. As described in the analysis of the Enhanced Bus Service Alternative, this area has minimal habitat value and has been previously disturbed by ski resort and mining activities.
Threatened and endangered species	Yes/no	No	No	None
Impacts to waters of the United States	Acres	0	0	None
Impacts to intermittent, perennial, and ephemeral streams	Acres	0	0.03-0.17	None
Impacts to Riparian Habitat Conservation Areas	Acres	0	0.14-0.83	None
Adverse impacts to cultural resources	Number	0	2	No additional sites would be impacted. Gondola Alternative B would disturb about 0.63 acre of the Town of Alta archeological site (42SL52), resulting in an adverse effect to the site. Data recovery and construction monitoring are proposed as mitigation. The Alta bus stop would impact the same site, with about 1 additional acre of disturbance, and would be subject to the same proposed mitigation. The site is exempt from Section 4(f) protections because it has minimal value for protection in place. Given the nature of the site, the size of the disturbance, and the proposed mitigation, the additional 1 acre of disturbance is not considered a new or different significant impact.



Impact Category	Unit	No-Action Alternative	Gondola Alternative B	Additional Impacts from Gondola Alternative B with Phased Implementation of Enhanced Bus Service
Hazardous waste sites affected	Number	0	2	One additional potentially hazardous waste site would be impacted. The gravel pit contains several records of leaking underground storage tanks. All of the tanks were closed in the late 1980s or 1990s. There are no known active hazardous material sites at this location. However, because the site has had continued mining and processing activities, it could contain hazardous materials. UDOT would conduct an investigation to determine the presence and extent of contamination, if present, and develop remedial measures to prevent the spread of contamination and protect worker health and safety during construction.
Floodplain impacts	Acres	0	2.1-2.3	None
Visual change ^d (primary alternative/supporting element)	Category	None	High/high	None
Section 4(f) uses (with greater–than–de minimis impact)e	Number	0	1	None
Construction Impacts	Acres	0	206–211	Additional construction footprint would be required to build the mobility hubs and resort bus stops. The additional infrastructure required would increase the overall construction footprint and could increase the potential for construction-related impacts. Construction, and its impacts, would be temporary and would not overlap with the Gondola B construction.

- ^a Land use converted acres for the gondola alternatives includes the area under the aerial easement. However, the area under the aerial easement would not change the land use or activities under the easement since it would still be available for recreation uses. Range includes different impacts of the sub-alternatives, mainly snow sheds with berms and snow sheds with a realigned road as well as a five-lane and imbalanced-lane Wasatch Boulevard.
- b Range captures the increase in impervious surface from the Wasatch Boulevard Imbalanced-lane Alternative or the Five-lane Alternative. Range does not include new impervious surface at the gravel pit or 9400 South and Highland Drive mobility hubs. These locations were not included in the quantitative water quality analysis because they are outside the Little Cottonwood Creek watershed. Range includes the impervious surface at the Gondola Alternative B base station.
- c Based on water quality modeling, numeric water quality standards in Little Cottonwood Creek would not be exceeded for any alternative for greater than 80% of the storm events.
- ^d Visual change includes landscape character change at key observation points. The visual change is for the primary alternative and supporting elements such as snow sheds.
- The Section 4(f) use with greater–than–*de minimis* impact would occur with the avalanche mitigation sub-alternatives under all primary alternatives.