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3 **MINUTES OF THE CENTRAL WASATCH COMMISSION MOUNTAIN**
4 **TRANSPORTATION SYSTEM (“MTS”) SUMMIT HELD SATURDAY, NOVEMBER 14,**
5 **2020 AT 8:00 A.M. THE MEETING WAS CONDUCTED ELECTRONICALLY WITHOUT**
6 **A PHYSICAL LOCATION, AS AUTHORIZED BY THE GOVERNOR’S EXECUTIVE**
7 **ORDER DATED MARCH 18, 2020.**
8

9 **Participants:** Annalee Munsey, Aaron London, Lorin Simpson, Helen Peters, Holly Lopez,
10 Douglas Fry, Joan Degiorgio, Megan Anderson, Randy Doyle, Harris Sondak,
11 Nate Furman, Dennis Goreham, Bob Kollar, Chris Cawley, Mark Thurber,
12 Ryan Park, Patrick Nelson, Roger Borgenicht, Theresa Heinrich, Wayne
13 Niederhauser, Bob Pruite, Monica Z [REDACTED], Chris McCandless, Jeff Robinson,
14 Ed Marshall, Mike Marker, Patrick Shea, Autumn Hu, Caroline Rodriguez,
15 Shawn Marquardt, Laura Briefer, Aaron Deheyzar, Colby Hartman, Jenny
16 Wilson, Kain Katz, Mike Christenson, Dan Knopp, Andy Beerman, Barbara
17 Cameron, David Stein, Carl Fisher, Chris Cushing, Ken Sanders-Smith, Mike
18 Reberg, Newel Jensen, Nathan Rafferty, Sean Thompson, Val Oveson, Abi
19 Holt, Michael Allegra, Marc Calaf, Kayla Kinkead, John Knoblock, Jeff
20 Silvestrini, Del Draper, Allison Aafedt, Bert Granbeg, Max Doilney, Michael
21 Maughan, Bob Paxton, Ellen Birrell, Jim Bradley, Lisa Hartman, Tamara Prue,
22 Chris Robinson, William McCarvill, Laura Hanson, Josh Brag, Carolyn
23 Keigley, Kenneth Tingley, Lisa Bagley, Myrna Groomer, Robert Sampson,
24 Ned Hacker, Rachel Ridge, Steve Van Maren, Sophia Bellina, Andrew
25 Nielson, Catherine Kanger, Carlton Christensen, Kerry Doane, Bob Katlan,
26 Lauren Vistor, Grant Amana, Sam Floors, Mike Peterson, Robert Douglas,
27 Dave Fields, George Vargyas, Kirk Nichols, Kyle Maynard, Martin Ritter,
28 David Carroll, Mark Walton, Norm Henderson, Julianna Christie
29

30 **Staff:** Executive Director Ralph Becker, CWC Deputy Director Blake Perez, CWC
31 Attorney Shane Topham, Communications Director Lindsey Nielsen, Office
32 Administrator Kaye Mickelson
33

34 **1. Opening Remarks.**
35

- 36 • **CWC Transportation Committee Chair: Mayor Dan Knopp.**
37

38 Chair Chris Robinson welcomed those present to Day 2 of the Mountain Transportation System
39 (“MTS”) Summit. He thanked the participants for their time and commitment. Chair Robinson also
40 thanked the Summit Facilitator, Julianna Christie for her work. He addressed the importance of trying
41 to reach a consensus on an MTS system. Chair Robinson hoped that the Summit participants would
42 help the CWC reach this goal during the Summit discussions and CWC meetings in December. He

1 reported that the Utah Department of Transportation (“UDOT”) was working to have their
2 Environmental Impact Statement (“EIS”) completed by the end of next year. Chair Robinson believed
3 it was important to move transportation discussions forward to influence the process.
4

5 CWC Transportation Committee Chair, Mayor Dan Knopp noted that in areas throughout Europe,
6 mass transit and high capacity options are favored. He felt it was important to apply some of those
7 transit options to the Central Wasatch. Buses and cars are short-term solutions but long-term solutions
8 need to be cleaner.
9

10 **2. Welcome (Julianna).**

11 **• Revisit Ground Rules.**

12 Ms. Christie welcomed the Summit participants and believed that Day 1 of the Summit had mainly
13 been focused on establishing the process. Day 2 would be more efficient. Ms. Christie shared the
14 agenda for Day 2 of the Summit:
15
16

- 17 • Review summary of Day 1 conclusions and agreement;
- 18 • Continuation of detailed discussions related to Draft Alternative Modes and Demand
19 Management Strategies:
 - 20 ○ After the presentation of each element, Integrative Decision-Making Process;
 - 21 ○ Clarifying questions;
 - 22 ○ Reaction round;
 - 23 ○ Polling (capturing support or objections); and
 - 24 ○ Capture results and any framework for further evaluation.
- 25 • Wrap up Day 2 of the Summit: and
 - 26 ○ Review accomplishments and agreements reached; and
 - 27 ○ Discuss next steps.
- 28 • Closing remarks from CWC Chair Chris Robinson.

29 Ms. Christie revisited Zoom protocols and ground rules. She noted that questions and discussions
30 would rely more heavily on the Zoom chat box during Day 2 of the Summit. This would increase
31 efficiency and move forward transportation discussions.
32

33 **• Review Problem Statement and Criteria.**

34 Ms. Christie shared the following problem statement with the Summit participants:
35
36

- 37 • In what ways might we explore regional, year-round transportation solutions for the Central
38 Wasatch Mountains region that minimizes congestion, improves safety, and addresses current
39 and future environmental concerns?
40

41 Ms. Christie shared some of the decision-making criteria with the Summit participants. She noted
42 that the list was based on learnings from interviews with Stakeholders, prior conversations with the
43
44
45
46
47
48

1 CWC Board, and feedback from Day 1 of the MTS Summit. The criteria would be used as a guidepost
2 for the MTS process:

- 3
- 4 • Minimize congestion in the adjacent neighborhoods and roadways leading to the mountains;
- 5 • Protect the watershed for several hundred thousand residents and businesses;
- 6 • Incentivize transit and disincentivize cars;
- 7 • Provide emergency egress;
- 8 • Address the needs of canyon residents, property owners, employees, and businesses;
- 9 • Protect the environment and wilderness;
- 10 • Is it safe in mountain conditions;
- 11 • Consider visual impact;
- 12 • Is it frequent, convenient, and reliable;
- 13 • Provide equitable access for all users;
- 14 • Is it cost-effective (capital, operation and maintenance, and life cycle);
- 15 • Include the viewpoints of all MTS Summit participants;
- 16 • Minimize congestion as one recreates and utilizes the canyons; and
- 17 • Preserve the quality of user experience and the feeling of the natural setting.

18

19 **3. Review Summary of Day 1 Conclusions/Agreement (Julianna).**

20

21 Ms. Christie reviewed the learnings from Day 1 of the MTS Summit. She shared poll results related
22 to the Salt Lake Valley Connections and Wasatch Back/Wasatch Front via I-80.

- 23
- 24 • Salt Lake Valley Connections:
 - 25
 - 26 ○ Regional transit hubs (56% favor, 14% opposition, 21% need more information, 9%
 - 27 no answer);
 - 28 ○ High capacity transit along 9400 South (53% favor, 14% opposition, 29% need more
 - 29 information, 5% no answer);
 - 30 ○ Year-round bus service from various economic hubs (51% favor, 20% opposition,
 - 31 23% need more information, 7% no answer);
 - 32 ○ Enhanced current transit system (78% favor, 11% opposition, 5% need more
 - 33 information, 5% no answer);
 - 34 ○ No action (15% favor, 69% oppose, 11% need more information, 6% no answer).
 - 35
- 36 • Wasatch Front/Wasatch Back via I-80:
 - 37
 - 38 ○ Improve the frequency of the SLC-PC Connect (66% favor, 6% opposition, 17% need
 - 39 more information, 11% no answer).
 - 40

41 **4. Continuation of Detailed Discussion of Draft Alternative Modes and Demand**
42 **Management Strategies (Blake and Julianna).**

43

- 44 • (See Addendum Page for Outline of Transportation Elements).
- 45

1 **Big Cottonwood Canyon:**

2
3 CWC Deputy Director, Blake Perez outlined the elements that were included in the Draft Alternatives
4 and Design Your Transit tool related to Big Cottonwood Canyon. They included:

- 5
6
 - 7 • Seasonal express buses to resorts;
 - 8 • Bicycle and pedestrian improvements;
 - 9 • Variable tolling;
 - 10 • Year-round local bus;
 - 11 • Reduced on-road parking;
 - 12 • Paid parking at resorts; and
 - 13 • No action.

14 Mr. Perez addressed a question raised regarding rail and aerial solutions in Big Cottonwood Canyon.
15 He noted that the answer to this question was discussed during the MTS Expert Panel on
16 September 18, 2020. Rail and aerial transportation solutions could be done in Big Cottonwood
17 Canyon. However, due to the geography and length of the canyon, a rail or aerial gondola system
18 would be far more expensive than any other option. Mr. Perez reported that Big Cottonwood Canyon
19 is a 15-mile canyon with 5 to 8 miles that are particularly steep and winding. As a result, rail and
20 aerial solutions were not recommended for Big Cottonwood Canyon.

21
22 Maps of Big Cottonwood Canyon were shown along with graphs from the Design Your Transit Tool.
23 Mr. Perez reported that the median result for the Design Your Transit tool was 320. Anything with a
24 score higher than 320 indicated that it was a highly invested option. The modes and Demand
25 Management Strategies that were highly invested in for Big Cottonwood Canyon were seasonal
26 express bus, variable tolling, year-round local bus, and bicycle and pedestrian improvements.

27
28 For seasonal express buses to resorts, Mr. Perez reported that most visitors during peak winter hours
29 are headed to ski resorts. Proposed concepts included:

- 30
31
 - 32 • 10-minute headways or better during peak demand hours; and
 - 33 • 15-minute headways during off-peak hours.

34 The seasonal express bus would begin at the Midvale Trax Station, with one stop at the mouth of the
35 Big Cottonwood Canyon mobility hub, and then move directly to each resort. The service would run
36 from the beginning of the ski season to the end of the ski season. (From the end of November to the
37 end of March.) Implementation of seasonal express buses to resorts had a timeline of approximately
38 two to four years. There would be an estimated travel time of 45 minutes to Solitude and 50 minutes
39 to Brighton. Mr. Perez shared charts related to cost estimates. For a total number of 40 buses, there
40 would be a capital investment of \$60 million, operations and maintenance costs of \$10 million, and
41 life cycle costs of \$480 million. He noted that the life cycle of a bus is generally 12 to 15 years.

42
43 Pros and cons related to seasonal express buses to resorts included:

- 44
 - 45 • Pros:
 - 46 ○ Reduce traffic congestion;
 - 47

- Increase transit use; and
- The convenience of direct service.

- Cons:

- Not a year-round service;
- May not be cost-effective, given the operations and maintenance and life cycle costs;
- Seasonal labor costs;
- Unknown funding source; and
- May need a dedicated bus transit lane.

For bicycle and pedestrian improvements, Mr. Perez reported that facilities along or parallel to the roadways were lacking. This made it difficult for users to access destinations safely. Recommended bicycle and pedestrian improvements included:

- Continuous bicycle lane;
- Bicycle lanes that serve all users and skill types;
- Bicycle amenities (bicycle racks at trailheads); and
- Pedestrian facilities (protected crossings at key trailhead locations).

No pros and cons were shared for this element.

For variable tolling, this Demand Management Strategy encourages visitors to travel by transit, improve vehicle occupancy, and potentially generate revenue for additional transportation improvements, recreational facilities, and enforcement. When the cost for drivers increases, so does the incentive to use transit. Mr. Perez reported that transit vehicles will be allowed to travel toll-free. There were two key factors to consider:

- A variable tolling structure could be implemented on a schedule to meet higher demand; and
- There should be convenient and economic transit options offered in the canyon.

Implementation for variable tolling had a timeline of approximately one to three years. Estimated capital costs were shared from the Big Cottonwood Canyon 3T Improvement Project. There would be a capital investment of \$1 million, operations and maintenance costs of \$300,000, and life cycle costs of \$12 million. Revenue projections were not provided in the Draft Alternatives but in the Big Cottonwood Canyon 3T Improvement Project, there was a recommended tolling structure. It estimated \$1.3 million of revenue before accounting for the administrative costs of the program.

Pros and cons related to variable tolling included:

- Pros:
 - Disincentivizes vehicles;
 - Incentivizes transit;
 - Potential new revenue source;
 - Reduce traffic congestion and vehicle use; and
 - Improved air quality.

1 • Cons:

- 2
- 3 ○ Equitable access;
 - 4 ○ The possible need for a policy change to accommodate for a wider range of uses of the
 - 5 toll revenue; and
 - 6 ○ Cost and maintenance of setting up the system.
- 7

8 Year-round local buses would provide access to trailheads, businesses, and communities. The
9 proposed bus service would include:

- 10
- 11 • 15-minute service on weekends and holidays; and
 - 12 • 30-minute service on weekdays.
- 13

14 Implementation for the year-round local bus had a timeline of approximately two to four years. Mr.
15 Perez shared charts related to cost estimates. For a total number of 12 buses, there would be a capital
16 investment of \$18 million, operations and maintenance costs of over \$9 million, and life cycle costs
17 of over \$327 million. Chair Robinson asked if the year-round local buses would stop at more
18 locations than the express buses to resorts. Mr. Perez confirmed this to be the case. He suggested
19 that during the winter months, the year-round local bus could serve the trailheads, businesses, and
20 communities since there would already be an express bus to the resorts. During the summer months,
21 the year-round local bus could also include stops at the resorts.

22

23 Pros and cons related to year-round local bus included:

24

- 25 • Pros:

- 26 ○ Year-round service;
 - 27 ○ Serve dispersed recreation users;
 - 28 ○ Provide service to trailheads; and
 - 29 ○ Reduce traffic congestion and on-road parking.
- 30

31

- 32 • Cons:

- 33 ○ Adequate frequency and capacity to keep up with the growing demand;
 - 34 ○ Financing new transit services and costs; and
 - 35 ○ Additional roadway improvements to accommodate transit in the canyon.
- 36

37

38 For reduced on-road parking, Mr. Perez shared that there are approximately 2,300 roadside parking
39 spaces available in Big Cottonwood Canyon. The proposals for this element included:

- 40
- 41 • Limit free on-road parking near popular trailheads and adjacent to resort parking lots; and
 - 42 • On-road parking not be permitted for at least half a mile in each direction of popular trailhead
43 and transit stops.
- 44

45 Mr. Perez reported that this element would be phased in over time to allow for the expansion of transit
46 services and additional parking improvements in the Valley. He noted that there would be costs
47 associated with ongoing enforcement. Implementation for reduced on-road parking had a timeline of
48 two to four years.

1
2 Pros and cons related to reduced on-road parking included:

- 3
4 • Pros:
- 5
 - 6 ○ Disincentivizes vehicles;
 - 7 ○ Improved safety around popular nodes; and
 - 8 ○ Protect water quality by removing cars from the shoulder.
 - 9
- 10 • Cons:
- 11
 - 12 ○ Equitable access concerns;
 - 13 ○ May be difficult to enforce; and
 - 14 ○ Tied to other transit improvements.
 - 15

16 For paid parking at resorts, Mr. Perez reported that Solitude initiated the first paid parking program
17 in the Cottonwood Canyon ski resort area. Brighton also began to offer priority parking for those
18 carpooling. He noted that anecdotal feedback had been positive. There had been an increase in transit
19 ridership as well as an increase in the number of occupants per car. Implementation for paid parking
20 at resorts had a timeline of approximately zero to four years.

21
22 Pros and cons related to paid parking at resorts included:

- 23
- 24 • Pros:
- 25
 - 26 ○ Encourage carpooling;
 - 27 ○ Disincentivize vehicles;
 - 28 ○ Reduce congestion; and
 - 29 ○ Potential new revenue to offset transit costs.
 - 30
- 31 • Cons:
- 32
 - 33 ○ Additional cost to the user; and
 - 34 ○ Affordable equitable fare structure.
 - 35

36 For the no-action option, Big Cottonwood Canyon would remain as it is. However, short-term transit
37 improvements would still be pursued.

38
39 Pros and cons related to no action included:

- 40
- 41 • Pros:
- 42
 - 43 ○ No major construction impacts on the watershed.
 - 44
- 45 • Cons:
- 46
 - 47 ○ Continued and growing traffic congestion impacts;
 - 48 ○ Limited mobility;

- 1 ○ No year-round transit service; and
- 2 ○ Road shoulder impacts to the stream and vegetation.

3

4 **Little Cottonwood Canyon:**

5

6 Mr. Perez outlined the elements that were included in the Draft Alternatives and Design Your Transit

7 Tool related to Little Cottonwood Canyon. They included:

- 8
- 9 • Snowsheds;
- 10 • Bicycle and pedestrian improvements;
- 11 • Rail;
- 12 • Aerial;
- 13 • Variable tolling;
- 14 • Enhanced bus;
- 15 • Reduced on-road parking;
- 16 • Year-round local bus;
- 17 • Paid parking at resorts;
- 18 • Enhanced bus with roadway widening; and
- 19 • No action.

20

21 Maps of Little Cottonwood Canyon were shown along with graphs from the Design Your Transit

22 Tool. Mr. Perez reminded the Summit participants that the median result for the Design Your Transit

23 tool was 320. Anything with a score higher than 320 indicated that it was a highly invested option.

24 The highest invested options for Little Cottonwood Canyon were identified as snowsheds, enhanced

25 bus, aerial, rail, variable tolling, and bicycle and pedestrian infrastructure.

26

27 For snowsheds, there were two snowshed alternatives presented in the UDOT Little Cottonwood

28 Canyon EIS. They included:

- 29
- 30 • Snowsheds with berms; and
- 31 • Snowsheds with a roadway realignment and no berms.

32

33 Mr. Perez reported that the snowsheds would cover State Road 210 at the White Pine Chutes, White

34 Pine, and Little Pine. A snowshed was estimated to reduce Little Cottonwood Canyon closures due

35 to avalanche mitigation by approximately 45 hours per year. Implementation for snowsheds had a

36 timeline of two to four years. Mr. Perez shared an infographic created by UDOT. Snowsheds with

37 berms had an estimated \$72 million cost and snowsheds with a roadway realignment and no berms

38 had an estimated \$86 million cost.

39

40 Pros and cons related to snowsheds include:

- 41
- 42 • Pros:
 - 43
 - 44 ○ Reduce congestion;
 - 45 ○ Improve emergency egress;
 - 46 ○ Provide better ski resort connections; and
 - 47 ○ Improve safety and reliability along State Road 210.

- 1
2 • Cons:
3
4 ○ May not be economical or cost-effective;
5 ○ May impact the watershed;
6 ○ Doesn't incentivize vehicles;
7 ○ Could have high costs; and
8 ○ Impact bicycle lanes.
9

10 For bicycle and pedestrian improvements, Mr. Perez reported that this was similar between Big
11 Cottonwood Canyon and Little Cottonwood Canyon. Recommended bicycle and pedestrian
12 improvements included:

- 13
14 • Continuous bicycle lane;
15 • Bicycle lanes that serve all users and skill types;
16 • Bicycle amenities (bicycle racks at trailheads); and
17 • Pedestrian facilities (protected crossings at key trailhead locations).
18

19 No pros and cons were shared for this element.
20

21 For rail, the cog rail system was introduced as one of the Draft Alternatives. The alignment would
22 be from the mouth of Little Cottonwood Canyon with service up to Snowbird and Alta. The travel
23 time would be 42 minutes to Alta and 36 minutes to Snowbird. There could also be potential whistle
24 stops to provide access to popular trailheads and dispersed recreation.
25

26 It would be a year-round service with an initial capacity of 1,000 passengers per hour. To
27 accommodate those numbers, there would need to be three-car trains at 15-minute headways.
28 Mr. Perez reported that the capacity of this mode could be increased by double-tracking or additional
29 train frequency. There could also be future connections with the existing Light Rail and FrontRunner
30 regional services. Implementation for rail had a timeline of three to five years for design and
31 permitting and two construction seasons.
32

33 Mr. Perez shared some of the rail options and costs received from Stadler Rail and UDOT:
34

- 35 • Option 1A: Singletrack starter line adjacent to the road, with a diesel-electric. This option
36 closely aligns with the UDOT Little Cottonwood Canyon EIS. It would include snowsheds,
37 embankment walls, park and ride with pedestrian tunnels, maintenance facility, single track
38 with some double track siding, grade crossing for hikers, signaling, and platforms. The
39 estimated cost was approximately \$542 million.
40 • Option 1B: Double track UDOT alternative. The option presented by UDOT in their rail
41 alternative had a double-track the entire way. The cog rail construction cost was
42 approximately \$795 million to \$827 million. Adding in the operation and maintenance
43 facility, parking structure, and snowsheds, the estimated total cost would be over \$1 billion.
44 • Option 2: Adding a rail, pedestrian, and bicycle corridor in the existing rail corridor. This
45 option was not considered during the UDOT Little Cottonwood Canyon EIS but was provided
46 by Stadler Rail. One of the benefits of this option was that it would avoid most avalanche
47 paths. However, stream impacts would need to be mitigated. The estimated cost was
48 approximately \$583 million to \$600 million.

1
2 Pros and cons related to snowsheds included:

3
4 • Pros:

- 5
- 6 ○ Reduce traffic congestion;
- 7 ○ Increase transit use;
- 8 ○ Improve emergency egress;
- 9 ○ Connection to the regional transit system;
- 10 ○ Safe and reliable;
- 11 ○ Sensitive to ridgelines;
- 12 ○ Can accommodate future demand;
- 13 ○ Good life cycle costs; and
- 14 ○ Move people efficiently to desired locations.

15
16 • Cons:

- 17
- 18 ○ High capital costs;
- 19 ○ Exposed to roadway conditions; and
- 20 ○ Potential impacts to stream and water sources during construction.

21
22 For aerial, there were two proposals to consider:

- 23
- 24 • UDOT Little Cottonwood Canyon EIS aerial alternative; and
- 25 • La Caille Base Station.

26
27 Mr. Perez shared information from the UDOT Little Cottonwood Canyon EIS aerial alternative.
28 There would be an aerial base station at the mouth of Little Cottonwood Canyon at the current park
29 and ride lot. There would be no parking at the base station, so a bus would be needed in order to use
30 the aerial gondola system. There would be a bus delivery system from the Gravel Pit and Highland
31 Drive. This element could move approximately 1,000 passengers per hour and there would be a
32 gondola leaving every two to three minutes. There are no snowsheds included in this alternative and
33 the implementation timeline was approximately three to five years.

34
35 Mr. Perez shared information from the UDOT Little Cottonwood Canyon EIS. From the mobility
36 hub at the Gravel Pit, it would take approximately 63 minutes to reach Alta and 53 minutes to reach
37 Snowbird. The costs associated with the proposal are approximately \$383 million and includes buses,
38 the aerial system, trailhead parking, and tolling.

39
40 Pros and cons related to the UDOT Little Cottonwood Canyon EIS aerial alternative included:

41
42 • Pros:

- 43
- 44 ○ Reduce traffic congestion;
- 45 ○ Increase transit use;
- 46 ○ Improve emergency egress and ingress;
- 47 ○ Safe and reliable;
- 48 ○ Reduce air pollution;

- 1 ○ Ability to move a high amount of people to desired locations;
- 2 ○ Low operation and maintenance and life cycle costs; and
- 3 ○ Relatively small footprint.

4
5 ● Cons:

- 6
- 7 ○ More transit transfers and less convenience;
- 8 ○ Impacts on the viewshed and view quality;
- 9 ○ Seasonal service;
- 10 ○ Limited by the bus system; and
- 11 ○ Bus operation challenges (ability to deliver the headways, seasonal labor, and
- 12 associated facilities).

13
14 Mr. Perez shared information on the La Caille Base Station. The proposal would move the base
15 station from the park and ride station to La Caille. The base station was designed to accommodate a
16 large number of people, could be adapted for year-round use, and was flexible to serve buses, trains,
17 and gondola options. It would come with a parking structure that has approximately 1,500 stalls. The
18 gondola could potentially eliminate 1,800 vehicles from the roads per hour. Mr. Perez reported that
19 the 3S has a capacity of up to 5,000 people and with the La Caille Base Station option, up to 3,700
20 passengers per hour could use this option. Implementation for the La Caille Base Station had a
21 timeline of two to four years.

22
23 Pros and cons related to the La Caille Base Station included:

24
25 ● Pros:

- 26
- 27 ○ Moves more passengers per hour than the UDOT Little Cottonwood Canyon EIS
- 28 alternative;
- 29 ○ Reduce vehicles on the road; and
- 30 ○ Comes with land preservation and easements in Little Cottonwood Canyon.

31
32 ● Cons:

- 33
- 34 ○ Potential negative impacts on traffic along Wasatch Boulevard; and
- 35 ○ Impacts on viewshed.

36
37 For variable tolling, the points were similar to those discussed during the Big Cottonwood Canyon
38 elements. However, there were differences in capital costs, operation and maintenance, and life cycle
39 costs. They had been provided in the UDOT Little Cottonwood Canyon EIS and assumed 30% of
40 capital costs. There would be a capital investment of \$5 million, operations and maintenance costs
41 of \$1.5 million, and life cycle costs of \$55 million. This Demand Management Strategy would
42 encourage visitors to travel by transit, improve vehicle occupancy, and potentially generate revenue
43 for additional transportation improvements, recreational facilities, and enforcement.

44
45 Pros and cons related to variable tolling included:

- 1 • Pros:
- 2
- 3 ○ Disincentivize vehicles;
- 4 ○ Protect the environment by reducing the number of vehicles;
- 5 ○ Reduce congestion; and
- 6 ○ Potential new revenue source.
- 7
- 8 • Cons:
- 9
- 10 ○ Equitable access.
- 11

12 For enhanced bus, this was presented in the UDOT Little Cottonwood Canyon EIS alternatives. This
13 would involve direct service to ski resorts and originate from the Gravel Pit site and the current 9400
14 South and Highland Drive Park and Ride. There are proposed five-minute headways to resorts with
15 departing buses alternating between ski resorts. Implementation for enhanced bus has a timeline of
16 three to five years.

17
18 Pros and cons related to enhanced bus included:

- 19
- 20 • Pros:
- 21
- 22 ○ Reduce traffic congestion;
- 23 ○ Increase transit use;
- 24 ○ Protect watershed, wilderness, and visual quality; and
- 25 ○ Improve ski resort connections.
- 26
- 27 • Cons:
- 28
- 29 ○ Not a year-round service; and
- 30 ○ May not meet future demand.
- 31

32 Mr. Perez reported that according to UTA, some of the turnaround times and headways will be
33 difficult. They will require a significant seasonal labor force. With all of the additional buses, a
34 maintenance facility will also be required.

35
36 For reduced on-road parking, 1,400 informal parking spots had been identified in Little Cottonwood
37 Canyon. The proposal would limit on-road parking near trailheads and resorts, with a distance of at
38 least one-half mile in each direction of popular trailheads and transit stops. This element would need
39 to be phased in with the expansion of transit service. Implementation for reduced on-road parking
40 had a timeline of two to four years.

41
42 Pros and cons related to reduced on-road parking included:

- 43
- 44 • Pros:
- 45
- 46 ○ Disincentivize vehicles;
- 47 ○ Improved safety around popular nodes; and
- 48 ○ Protect water quality by removing cars from the shoulder.

- 1
2 • Cons:
3
4 ○ Equitable access concerns;
5 ○ May be difficult to enforce; and
6 ○ Tied to other transit improvements.
7

8 For year-round local buses, there would be stops at popular trailheads, communities, and businesses,
9 to better serve growing recreation needs. Proposed concepts included:

- 10
11 • 15-minute or better weekend and holiday service (accommodate approximately 168
12 passengers per hour); and
13 • 30-minute headways for weekday service (accommodate approximately 84 passengers per
14 hour).
15

16 The implementation timeline was estimated at two to four years. 12 buses would be needed to run
17 the program. The capital investment on the buses would be \$18 million, the operations and
18 maintenance costs would be \$6.3 million and the 12-year life cycle costs would be \$244 million.
19

20 Pros and cons related to year-round local bus included:

- 21
22 • Pros:
23
24 ○ Ensure year-round access;
25 ○ Move people efficiently to desired locations;
26 ○ Increase transit use; and
27 ○ Serve dispersed recreation.
28
29 • Cons:
30
31 ○ High life cycle costs; and
32 ○ May not have the ability to meet growing demand.
33

34 For paid parking at resorts, Mr. Perez noted that the information was similar to what had already been
35 discussed during the Big Cottonwood Canyon section.
36

37 For enhanced bus with roadway widening, this would cover seasonal peak winter express buses to the
38 ski resorts. It would also include a roadway shoulder expansion for SR-210 from North Little
39 Cottonwood Canyon Road to Alta Bypass Road and provide:

- 40
41 • Transit priority during the winter months; and
42 • Pedestrian and bicycle lanes during the spring, summer, and fall months.
43

44 The implementation timeline was three to five years. Mr. Perez reported that this element would
45 reduce the amount of travel time on the bus by approximately 15 to 20 minutes. It would take
46 approximately 36 minutes from the transit hubs to the ski resorts. The estimated cost with the bus
47 was \$55 million and the roadway widening was \$211 million.
48

1 Pros and cons related to the enhanced bus with roadway widening included:

2
3 • Pros:

- 4
5 ○ Improve convenience;
6 ○ Improve reliability;
7 ○ Incentivize transit; and
8 ○ Reduce congestion.
9

10 • Cons:

- 11
12 ○ Negative impacts on the watershed; and
13 ○ Costs associated with maintaining the road, operations and maintenance, and life cycle
14 costs.
15

16 For the no-action option, Little Cottonwood Canyon would stay as it is.

17
18 Pros and cons related to no action included:

19
20 • Pros:

- 21
22 ○ No major capital projects in the canyons; and
23 ○ Maintain watersheds.
24

25 • Cons:

- 26
27 ○ Continued and growing traffic congestion impacts;
28 ○ On-road safety conflicts; and
29 ○ No year-round transit options.
30

31 **Cottonwood Canyon Connections:**

32
33 Mr. Perez outlined the elements that were included in the Draft Alternatives and Design Your Transit
34 tool related to the sub-alternative, Cottonwood Canyon Connections. They included:

- 35
36 • Aerial;
37 • No action;
38 • Rail tunnel; and
39 • Bus tunnel.
40

41 Maps were shown along with graphs from the Design Your Transit Tool. Mr. Perez reminded the
42 Summit participants that the median result for the Design Your Transit Tool was 320. Anything with
43 a score higher than 320 indicated that it was a highly invested option. The highest invested option
44 for the Cottonwood Canyon Connections was aerial.
45

46 For aerial, a base-to-base gondola connection was proposed between Alta and Brighton. The alignment
47 would parallel the existing transmission powerline corridor and have an approximately three-mile
48 alignment with a travel time between 12 to 15 minutes. There would be a capacity to move up to 5,000

1 people per hour. Implementation for aerial had a timeline of two to four years. Mr. Perez shared charts
2 related to cost estimates. For a 3S gondola, there would be a capital investment of \$115 million to \$170
3 million, operations and maintenance costs of \$5 million to \$6.3 million, and life cycle costs of \$650
4 million.

5
6 Pros and cons related to aerial included:

- 7
- 8 • Pros:
 - 9
 - 10 ○ Improve emergency egress and ingress between canyons; and
 - 11 ○ Improve connections between ski resorts.
 - 12
- 13 • Cons:
 - 14
 - 15 ○ High capital costs;
 - 16 ○ Potential impacts on watershed and hydrology (particularly sensitive water ecology
 - 17 systems and wetlands); and
 - 18 ○ Negative impacts on the viewshed.
 - 19

20 For the no-action option, the Cottonwood Canyons would remain as they are.

21
22 Pros and cons related to the no-action option included:

- 23
- 24 • Pros:
 - 25
 - 26 ○ No impacts to sensitive wetlands; and
 - 27 ○ No impacts to dispersed recreation;
 - 28
- 29 • Cons:
 - 30
 - 31 ○ No emergency egress.
 - 32

33 For tunnels, the following two different transit tunnels were presented:

- 34
- 35 • Rail tunnel; and
- 36 • Bus tunnel.
- 37

38 There was a proposed three-mile tunnel. The rail tunnel would accommodate a potential rail option
39 up Little Cottonwood Canyon to connect the Cottonwood Canyon ski resorts. The proposed
40 alignment would take the shortest path while maintaining a reasonable grade. The bus tunnel option
41 would not permit vehicles. The implementation timeline for both tunnels was 10 or more years.
42 Mr. Perez noted that there could be a phased approach to transit, with the tunnel elements included at
43 the end.

44
45 Costs were shared from the 2017 Mountain Accord Long-Term Transportation Study. The capital
46 costs for a rail tunnel were approximately \$450 million, operations and maintenance costs were
47 approximately \$10 million, and the life cycle costs were approximately \$1.5 billion. The capital

1 costs for a bus tunnel was approximately \$680 million, operations and maintenance costs were
2 approximately \$13 million, and life cycle costs were approximately \$2.3 billion.

3
4 Pros and cons related to the transit tunnels included:

- 5
6 • Pros:
 - 7
 - 8 ○ Improved emergency egress and ingress;
 - 9 ○ Improved connections between the ski resorts; and
 - 10 ○ Disincentivize vehicles.
 - 11
- 12 • Cons:
 - 13
 - 14 ○ High capital costs;
 - 15 ○ Negative impacts on watershed and hydrology; and
 - 16 ○ Impacts on legacy mining in the canyons.
 - 17

18 **Big Cottonwood Canyon to Park City Corridor:**

19
20 Mr. Perez outlined the elements included in the Draft Alternatives and Design Your Transit Tool
21 related to the sub-alternative, Big Cottonwood Canyon to Park City Corridor. They included:

- 22
- 23 • Aerial; and
- 24 • No action.
- 25

26 Maps were shown along with graphs from the Design Your Transit tool. Mr. Perez reminded the
27 Summit participants that the median result for the Design Your Transit tool was 320. Anything with
28 a score higher than 320 indicated that it was a highly invested option. The highest invested option
29 for the Big Cottonwood Canyon to Park City Corridor were aerial and no action.

30
31 For aerial, the alignment would be a base-to-base gondola connection between Brighton and Park
32 City with no mid-mountain drop-offs or ridgeline drop-offs. It would be a proposed six-mile
33 alignment with a travel time of approximately 15 to 20 minutes and a capacity to move up to 5,000
34 people. The implementation timeline was approximately two years. Costs from the 2017 Mountain
35 Accord Long-Term Transportation Study were shared with the Summit participants. There would be
36 a capital investment of \$180 million to \$230 million, operations and maintenance costs of \$10 million
37 to \$12.5 million, and life cycle costs of \$480 million.

38
39 Pros and cons related to aerial included:

- 40
- 41 • Pros:
 - 42
 - 43 ○ Reduce congestion;
 - 44 ○ Serve as another transportation option;
 - 45 ○ Improve ski resort connections; and
 - 46 ○ Improve emergency egress and ingress.
 - 47

- 1 • Cons:
- 2
- 3 ○ Potential impacts on sensitive landscapes;
- 4 ○ Visual impacts;
- 5 ○ Impacts on dispersed recreation users; and
- 6 ○ Negative impacts on watershed and hydrology.
- 7

8 For the no-action option, the corridor would remain as it is currently.

9
10 Pros and cons related to no action included:

- 11
- 12 • Pros:
- 13
- 14 ○ No impacts on dispersed recreation.
- 15
- 16 • Cons:
- 17
- 18 ○ Continued growing vehicle traffic between Wasatch Front and Wasatch Back.
- 19
- 20 • **After Presentation of Big Cottonwood Canyon: Integrative Decision-Making**
- 21 **Process.**
- 22
- 23 ○ **Clarifying Questions Related to Big Cottonwood Canyon**
- 24

25 **Seasonal Express Buses to Resorts:**

26
27 The Summit participants asked clarifying questions related to the seasonal express buses to resorts.
28 Ms. Christie and Mr. Perez read questions from the Zoom chat box.

29
30 David Stein asked if the estimated travel times were measured from the mobility hub. Mr. Perez
31 reported that the times were projected from the Midvale Trax Station.

32
33 Randy Doyle wondered if the \$60 million capital investment would cover only the buses. Mr. Perez
34 confirmed that that was the case.

35
36 Mayor Peterson asked how the seasonal express buses would incentivize people to get out of their
37 cars and onto a bus. Mr. Perez noted that tolling would be discussed later on in the MTS Summit and
38 would better address that question. He felt the incentive of this particular element related to the direct
39 service of the buses.

40
41 Michael Allegra asked if the buses would stop mid-canyon. Mr. Perez reported that the buses would
42 not stop mid-canyon and would focus on direct service to the ski resorts.

43
44 Carl Fisher asked Mr. Perez to discuss whether the demand was related to short or long-term needs.
45 Mr. Perez noted that this was a short-term solution. He felt it would be a challenge for buses to meet
46 long-term capacity needs. Mr. Fisher asked for additional clarification on what demand looked like.
47 He felt it would be helpful to have concrete numbers. Mr. Perez reported that according to the
48 projected population growth in Big Cottonwood Canyon, by 2050, there could be as many as 3,400

1 vehicles on an average day and as many as 6,500 vehicles on a peak day. With average vehicle
2 occupancy, this could equal approximately 8,800 people on an average day and up to 17,000 people
3 on a peak winter day. He noted that a specific demand number could be looked into further in the
4 future.

5
6 Mayor Jenny Wilson asked if electric buses were being scoped for this element. Mr. Perez noted that
7 they could be. He stated that the UDOT Little Cottonwood Canyon EIS did not evaluate electric
8 buses. However, the Utah Transit Authority (“UTA”) had a successful test run with an electric bus
9 up Little Cottonwood Canyon recently. Mr. Perez was unsure whether the test run also included Big
10 Cottonwood Canyon. He noted that with electric buses, there would need to be a maintenance facility
11 to charge them. Carlton Christensen noted that UTA was currently building a new facility that could
12 handle more electric buses, but it had limited capacity.

13
14 CWC Executive Director, Ralph Becker noted that there were a lot of questions in the Zoom chat box
15 related to visitation and demand. He reported that the U.S. Forest Service was responsible for
16 managing recreation in the canyons. The Forest Service has taken the position that access does not
17 need to be limited and the mountains can accommodate visitors without damage to the environment.
18 The CWC would be moving ahead with a Visitor Use Study at the beginning of 2021. It would build
19 on other work related to visitor use.

20
21 William McCarvill commented that six buses per hour with 40 passengers would equal 240 visitors
22 per hour. He wondered if this would lead to a significant reduction in vehicles up the canyon.
23 Mr. Perez shared estimated numbers. For instance, if there were 6 buses per hour, it would remove
24 approximately 100 cars from the road per hour.

25
26 Ms. Christie noted that there was interest in tying transportation to capacity in a clearer way.

27 28 **Bicycle and Pedestrian Improvements:**

29
30 The Summit participants asked clarifying questions regarding bicycle and pedestrian improvements.
31 Ms. Christie and Mr. Perez read questions from the Zoom chat box.

32
33 Kerry Doane asked if the bicycle lanes will be available in both directions. Mr. Perez responded that
34 if there was a bicycle lane on the road, it would be uphill only.

35
36 Mayor Peterson wondered if these improvements would include restrooms. Mr. Perez took note of
37 the question and mentioned the importance of facilities with transit systems. Carolyn Keigley asked
38 who would be responsible for restroom maintenance and whether restrooms would be open all year.
39 Mr. Perez took note of the question.

40
41 Dave Fields wondered what the term pedestrian meant when talking about a State Highway.
42 Mr. Perez clarified that the term pedestrian covered anyone on foot. Those walking, hiking, or
43 crossing the street would fall into this category.

44
45 Mr. Fisher wondered if having a handful of scheduled pedestrian days on the roadway might help.
46 He suggested repurposing or sharing infrastructure rather than adding more. Mr. Perez mentioned
47 the possibility of a few hours set aside for pedestrians.

1 **Variable Tolling:**

2
3 The Summit participants asked clarifying questions related to variable tolling. Ms. Christie and
4 Mr. Perez read questions from the Zoom chat box.

5
6 Mr. Fisher asked if the toll would be fee-based or occupancy-based. Mr. Perez believed that issue
7 was up for discussion. He suggested that there could be a minimum base fee that goes toward
8 recreation improvements. As demand increases, the fee could also increase.

9
10 Mr. Stein wondered how occupancy would be enforced and Mr. McCarvill asked how tolling would
11 be collected without stopping the flow of traffic. Mr. Perez noted that there would be an automatic
12 reader because a tolling station would slow down the flow of traffic. He took note of the clarifying
13 question related to occupancy.

14
15 Dennis Goreham asked about bus riders and tolling. Mr. Perez clarified that bus riders would not
16 need to pay the toll. That would be one of the incentives of choosing to use a transit option.

17
18 Ms. Keigley wondered how a toll would affect residents who use the canyon daily. She wanted to
19 know if the fees would be adjusted. Mr. Perez suggested that there could be a discounted fare for
20 residents and lower-income households.

21
22 Megan Anderson asked if the toll would be seasonal or year-round. Mr. Perez commented that it
23 would depend on the direction the decision-makers want. However, he felt that there should be a
24 year-round tolling option tied to a year-round transit option.

25
26 **Year-Round Local Bus:**

27
28 The Summit participants asked clarifying questions related to a year-round local bus. Ms. Christie
29 and Mr. Perez read questions from the Zoom chat box.

30
31 Lorin Simpson asked if the capital costs would include improvements at the trailheads. Mr. Perez
32 noted that the costs did not include trailhead improvements. Any trailhead improvements would
33 require ADA access.

34
35 Mr. Goreham wondered if there would be an on-demand service to accommodate Creekside users.
36 Mr. Perez commented that on-demand service had not been considered. He reported that UTA
37 already had a contract with Via for an on-demand service. Mr. Christensen added that any on-demand
38 system would simply connect users to the broader transit systems. It wouldn't be a substitute for
39 services like Lyft or Uber and would be limited to a specific geofenced area.

40
41 **Reduced On-Road Parking:**

42
43 The Summit participants asked clarifying questions related to reduced on-road parking. Ms. Christie
44 and Mr. Perez read questions from the Zoom chat box.

45
46 Mr. Fisher wondered why it would be a con for reduced on-road parking to be tied to other transit
47 solutions. Mr. Perez took note and stated that the various transportation elements needed to work
48 together to create a solution.

1
2 George Vargyas asked if roadside parking would be eliminated near resorts and trailheads. Mr. Perez
3 noted that no on-road parking was recommended for half a mile in each direction of these areas for
4 safety reasons.

5
6 Chair Robinson wondered what would fill the void if roadside parking was eliminated. Mr. Perez
7 clarified that the other transit options would compensate. The regional transit hubs discussed during
8 day one of the MTS Summit were mentioned. On-road parking would be augmented with additional
9 parking facilities in the Valley.

10
11 Ms. Christie made note of additional questions in the Zoom chat box. She commented that the
12 questions and discussions may not be as in-depth during the actual summit, but the chat log would be
13 used to further address topics brought up by the MTS Summit participants.

14
15 **Paid Parking at Resorts:**

16
17 The Summit participants asked clarifying questions related to paid parking at resorts. Ms. Christie
18 and Mr. Perez read questions from the Zoom chat box.

19
20 Mr. Fisher wondered if paid parking at resorts changed behaviors. Del Draper noted that anecdotally,
21 it had changed his behavior and had increased his use of transit. Mr. Fields commented that Kim
22 Mayhew from Solitude had reported that the paid parking program increased vehicle occupancy.

23
24 Mr. Doyle asked if this element would be implemented in conjunction with tolling. Mr. Perez
25 commented that it wouldn't necessarily be implemented in conjunction but it could be. He noted that
26 it may be cumbersome for visitors that chose to drive to pay both a toll and a parking fee. A decision
27 would need to be made regarding that issue.

28
29 Chris Cushing wondered whether resorts would be asked to contribute parking revenue to
30 improvements in the canyon. Mr. Perez believed that would need to be worked out. He felt it could
31 be beneficial for revenue from ski resort parking to be tied to transit services or improvements.

32
33 **No Action:**

34
35 No clarifying questions were raised.

36
37 ○ **Reaction Round**

38
39 **Seasonal Express Buses to Resorts:**

40
41 Ms. Christie opened up the reaction round for discussions related to seasonal express buses to resorts.

42
43 Michael Maughan shared information related to capacity. Ski areas work closely with the Forest
44 Service to match capacity to infrastructure. He commented that the capacity of the ski resorts in Utah
45 were generally much less than in other parts of the country on public lands. Mr. Maughan expressed
46 concerns that setting limits would put ski resorts in the position where they would have to reduce
47 lesser yielding programs.

1 Chair Robinson noted that many of the questions, comments, and reactions in the Zoom chat box
2 seemed to relate to capacity.

3
4 **Bicycle and Pedestrian Improvements:**

5
6 Ms. Christie opened up the reaction round for discussions related to bicycle and pedestrian
7 improvements.

8
9 Mayor Harris Sondak noted that the addition of bicycle racks could lead to bicycle theft. Mr. Perez
10 commented that bicycle racks would create added security for those that bike. The racks being in a
11 good location would be an added incentive.

12
13 **Variable Tolling:**

14
15 Ms. Christie opened up the reaction round for discussions related to variable tolling.

16
17 Shawn Marquardt commented on the percentage split between resort users and dispersed recreation
18 users. He noted that a possible solution would be to toll resort users and not dispersed users. This
19 would incentivize the majority to use mass transit. Mr. Perez took note of the suggestion.

20
21 **Year-Round Local Bus:**

22
23 Ms. Christie opened up the reaction round for discussions related to year-round local bus.

24
25 Laura Hanson made a comment about small buses versus large buses. She noted that the majority of
26 the cost of bus service is driver labor. A smaller bus essentially costs the same amount of money but
27 can carry fewer people. If the goal was to reduce cost, smaller vehicles don't accomplish that goal
28 well. However, the benefit of a smaller bus is that it can navigate tighter roadway conditions and may
29 fit into the character of a residential neighborhood.

30
31 **Reduced On-Road Parking:**

32
33 Ms. Christie opened up the reaction round for discussions related to reduced on-road parking.

34
35 Kirk Nichols suggested a pro for the pros and cons list: reduced on-road parking would be beneficial
36 on high fog days for cyclists and runners.

37
38 **Paid Parking at Resorts:**

39
40 Ms. Christie opened up the reaction round for discussions related to paid parking at resorts. No
41 reactions were shared. However, she noted that comments in the Zoom chat box would be reviewed.

42
43 **No Action:**

44
45 Ms. Christie opened up the reaction round for discussions related to the no-action option. No
46 reactions were shared.

1 ○ **Polling (Capturing Support, Objections)**

2
3 Ms. Christie discussed the polling tool. She noted that decisions weren't being made during the MTS
4 Summit, but the polling tool would provide a better understanding of the general viewpoints of each
5 element. Those that wished to comment or explain their decision could enter it into the Zoom chat
6 box. Ms. Christie shared that the options for each polling question would be in favor, opposed, more
7 information needed, and no answer at this time.

8
9 Ms. Christie opened the poll for questions related to seasonal express bus to resorts, bicycle and
10 pedestrian improvements, variable tolling, year-round local bus, reduced on-road parking, paid
11 parking at resorts, and the no-action option.

12
13 ○ **Capture Results, and Any Framework for Further Evaluation**

14
15 Ms. Christie shared the poll results related to Big Cottonwood Canyon:

- 16
17 • Big Cottonwood Canyon:
 - 18
19 ○ Seasonal express buses to resorts (74% favor, 6% opposition, 14% need more
20 information, 6% no answer);
 - 21 ○ Bicycle and pedestrian improvements (78% favor, 8% opposition, 12% need more
22 information, 2% no answer);
 - 23 ○ Variable tolling (72% favor, 8% opposition, 18% need more information, 2% no
24 answer);
 - 25 ○ Year-round local bus (77% favor, 6% opposition, 6% need more information, 11% no
26 answer);
 - 27 ○ Reduced on-road parking (67% favor, 17% opposition, 13% need more information,
28 2% no answer);
 - 29 ○ Paid parking at resorts (67% favor, 13% opposition, 13% need more information, 7%
30 no answer); and
 - 31 ○ No action (4% favor, 76% oppose, 14% need more information, 6% no answer).

32
33 • **After Presentation of Little Cottonwood Canyon: Integrative Decision-Making**
34 **Process.**

35
36 ○ **Clarifying Questions Related to Little Cottonwood Canyon**

37
38 **Snowsheds:**

39
40 Participants of the MTS Summit asked clarifying questions related to snowsheds. Ms. Christie and
41 Mr. Perez read questions from the Zoom chat box.

42
43 Mr. Vargyas wondered why the Design Your Transit tool results were being shared without the public
44 comments. Mr. Perez apologized for not including slides with public comments. He noted that all
45 public comments would be posted on the CWC website. Mr. Perez reported that a brief overview of
46 the public comments had been shared during day one of the MTS Summit.
47

1 Mr. Draper asked whether it was true that snowsheds would only have prevented approximately 40%
2 of the slides from last year from blocking the road. Kyle Maynard commented that according to the
3 UDOT Little Cottonwood Canyon EIS, snowsheds would change the road closure days from 11 to 6
4 per year.

5
6 Ned Hacker wondered if snowsheds would reduce the cost of current avalanche control measures.
7 Mr. Perez believed they would but asked that any MTS Summit participants with more information
8 share in the Zoom chat box.

9
10 **Bicycle and Pedestrian Improvements:**

11
12 Participants of the MTS Summit asked clarifying questions related to bicycle and pedestrian
13 improvements. Mr. Perez took note of the questions.

14
15 **Rail:**

16
17 Participants of the MTS Summit asked clarifying questions related to rail. Ms. Christie and Mr. Perez
18 read questions from the Zoom chat box.

19
20 Mr. Fields asked whether a whistle-stop was realistic and asked if users could get off anywhere they
21 wanted. Mr. Perez reported that it wouldn't be anywhere they wanted, but it could potentially include
22 locations that weren't designated stops. If no passengers needed to get on or off, the train would
23 continue past that stop. A whistle-stop could provide additional access if and when it was needed.

24
25 Ms. Anderson wondered how a rail system would impact wildlife. Mr. Perez noted that there was
26 already a road going through the area. One of the options for the rail alignment was within that
27 roadway. As a result, it wouldn't add another barrier to wildlife.

28
29 Ms. Christie and Mr. Perez noted that Martin Ritter and Mr. Allegra were both from Stadler Rail and
30 were answering questions in the Zoom chat box. Mr. Allegra stated that it was common practice in
31 Europe to have on-demand stops. He felt that in Little Cottonwood Canyon, those stops would likely
32 be present at common trailheads and access points. It would slow down the schedule, but the
33 frequency of service would allow for safe and efficient stops.

34
35 Chair Robinson asked about impacts to Little Cottonwood Canyon Creek and water quality if the old
36 railroad grade was chosen. He also wondered about the impact on water quality if additional buses
37 or vehicles were allowed instead. Ms. Christie made note of Chair Robinson's questions.

38
39 Chris McCandless asked about the cost of ridership per person. Mr. Perez wondered whether Mr.
40 McCandless was discussing the fare rates or the overall implementation and development costs. Mr.
41 McCandless stated that he felt it was important to analyze both. Both elements would play into the
42 pros and cons of a cog rail system. It should be possible to analyze the costs to the taxpayers as well
43 as the overall impacts. Mr. Perez thanked Mr. McCandless for his question and suggestion.

44
45 Autumn Hu wondered if the MTS Summit participants were being asked whether they preferred rail
46 over other transit options or simply if it should be considered. Ms. Christie clarified that she was
47 looking for responses and feedback about the two different rail options. Ms. Hu asked whether being
48 in favor of one rail option would preclude the implementation of other transit modes. Ms. Christie

1 stated that at the end of the Little Cottonwood Canyon round, participants would be asked their
2 preference between rail, aerial, enhanced bus, and no action. Participants could respond to each
3 polling question independently and answer comparative questions afterward.

4
5 Mr. Fisher asked whether building a rail system up Little Cottonwood Canyon without tunnels was
6 feasible or economical. Mr. Allegra felt it was important that a rail system work with the rest of the
7 UTA system. The priority would be a high-capacity east to west connection in the southeast part of
8 the Valley. Other canyons would be up for discussion.

9
10 John Knoblock wondered how passenger capacity was calculated, how many people would be seated
11 per car, and how many cars there would be per train. Martin Ritter responded that the capacity was
12 calculated at 4 cars per hour. Each trainset would have three cars with a 250-person capacity. Mr.
13 Ritter noted that the 250-person capacity would include standing and seating. Seating capacity is
14 typically 60%. There would be an option to add a fourth train to the trainset to increase the total
15 capacity.

16
17 Mayor Knopp asked about Pikes Peak and the impacts on the watershed. Mr. Allegra commented
18 that Stadler Rail had been paying close attention to the construction at Pikes Peak. He believed there
19 were little to no impacts on the watershed during the construction. Newer techniques of construction
20 allowed there to be fewer impacts on the environment, especially as it relates to water quality.
21 However, Mr. Allegra noted that the watershed was a serious concern. Laura Briefer commented that
22 it was difficult to compare one watershed to another because of the variability in hydrology and soils.
23 She noted that the rail system was a high-level concept. There would be a better understanding of
24 potential impacts to the watershed as more details become available. Ms. Briefer stressed the
25 importance of understanding potential watershed and environmental impacts.

26
27 Chair Robinson wondered about the difference in rail cost estimates between the UDOT Little
28 Cottonwood Canyon EIS and the Stadler Rail proposal. Mr. Perez noted that the UDOT Little
29 Cottonwood Canyon EIS had a double track, had larger maintenance facilities and there were
30 additional trains. Mr. Allegra noted that the cross-section was different as well. Newel Jensen stated
31 that the UDOT Little Cottonwood Canyon EIS also had a significant number of snowsheds.

32
33 Questions were raised regarding the rail alignments. Mr. Allegra confirmed that one alignment was
34 along the stream path and one was along the road. It was noted that one option connected to the UTA
35 system and one option did not. Mr. Allegra stated that the rail line would likely go from Little
36 Cottonwood Canyon up to Snowbird and o Alta. It could connect with the rest of the UTA system
37 but that cost estimate had not yet been added to the analysis.

38
39 Patrick Nelson wondered whether there were potential wildfire risks linked to railway lines. Mr.
40 Allegra noted that this was a possibility but was extremely rare.

41
42 Mr. Fisher asked about managing visitation and capacity. He wondered if the rail option was for a
43 train mixed with continued vehicle usage or if it was for a train without continued vehicle usage.
44 Chair Robinson added that the answer to that question would also address whether or not snowsheds
45 would need to be added to accommodate cars. Mr. Perez didn't feel that it was an either/or situation.
46 Ms. Christie suggested adding a question to the polling tool to determine how MTS Summit
47 participants felt about a "cars removed" option.

1 **Aerial:**

2
3 The Summit participants asked clarifying questions related to aerial. Ms. Christie and Mr. Perez read
4 questions from the Zoom chat box.

5
6 Patrick Shea asked whether passengers would be standing in the aerial gondola the entire time. Mr.
7 Perez noted that it would depend on how many people were in the gondola. Mr. Marquardt noted
8 that each cabin could hold approximately 32 passengers and there were up to 24 seats per cabin. He
9 added that the cabins could be flexed or scaled depending on the need each day.

10
11 Mayor Sondak asked about the weather resilience of the gondola system. Mr. Cushing noted that the
12 3S cable system was able to withstand wind speeds of up to 80 miles per hour. It would be unlikely
13 to close due to weather conditions. Mr. Marquardt mentioned a study that UDOT had participated in.
14 It looked at avalanches and the associated powder blast above those avalanches. An aerial gondola
15 system would be built so that the towers and cable spans were outside of those powder blast zones.
16 The aerial system would then be able to run in any weather conditions.

17
18 Mr. Nichols wondered whether the La Caille Base Station was a private for-profit option. Mr.
19 McCandless clarified that La Caille owned the land and was making it available. He believed there
20 would likely be a public/private relationship as it would make sense financially based upon the
21 parameters that had been discussed.

22
23 David Carroll wanted to know if there would be risk implications to the watershed during the
24 construction and ongoing maintenance of this element. Mr. Perez asked Mr. Marquardt for additional
25 information and wondered whether there would be new maintenance roads required for towers or
26 angle stations. Mr. Marquardt noted that the benefit of an aerial system is that it has a low ground
27 disturbance and only needs foundations at the tower sites and stations. Access would be needed for
28 those areas in order to bring in equipment and install the concrete, but it would drastically eliminate
29 the cuts and fills associated with other transportation elements.

30
31 Ms. Anderson asked whether maintenance costs for a gondola system would skyrocket over time.
32 Mr. Fields noted that lifespan was an important factor to consider. He reported that the Snowbird
33 tram was 50 years old and was still functioning well. A gondola system would not operate like a tram
34 but had a similar lifespan. Mr. Marquardt stated that operating expenses were based on the lifespan
35 of the system. It would also depend on the maintenance of the components over time. The better a
36 gondola system was maintained, the longer it would last.

37
38 Mark Thurber asked for more information about the viewshed. Mr. Perez reported that based on
39 public comments, viewshed was essentially anything that would alter the view of the environment.
40 For instance, towers at the bottom of the canyon may reduce the visual quality and natural setting.
41 He encouraged MTS Summit participants to share their definitions of viewshed in the Zoom chat box.

42
43 Mr. Thurber also wondered whether there would be buses available to come back down the canyon.
44 Mr. Perez noted that the gondola could be taken back down. Mr. Fisher believed Mr. Thurber was
45 asking about reaching destinations other than Snowbird and Alta. Mr. Perez noted that the aerial
46 options would not eliminate the use of vehicles. In the UDOT Little Cottonwood Canyon EIS
47 alternatives, there were no transit options for dispersed recreation. However, the CWC MTS Draft
48 Alternatives called for a year-round local bus to serve dispersed recreation. He noted that the aerial

1 station could also potentially serve the backcountry community as well. Mr. McCandless stated that
2 one of the comments from the UDOT study suggested a bus scenario, where a bus could leave from
3 the La Caille Base Station and drop passengers off at dispersed recreation sites.

4
5 Chair Robinson asked if it would be possible to heat or cool the gondola cars or have Wi-Fi. Mr.
6 Perez noted that Wi-Fi and heated seats were available for gondola cars.

7
8 Ms. Christie reported that there were still a lot of questions in the Zoom chat box. She and Chair
9 Robinson discussed the possibility of extending the MTS Summit by an hour to fully discuss all of
10 the transportation options. Communications Director, Lindsey Nielsen created a poll to determine
11 how many MTS Summit participants were in support of extending the summit. The majority voted
12 to extend the MTS Summit by one hour.

13 **Variable Tolling:**

14
15
16 Participants of the MTS Summit asked clarifying questions related to variable tolling. Ms. Christie
17 and Mr. Perez read questions from the Zoom chat box.

18
19 Mr. Thurber wondered if there would be exceptions made for people who owned property in Little
20 Cottonwood Canyon. Mr. Perez noted that the issue of tolling exceptions had been discussed during
21 the Big Cottonwood Canyon elements. He believed it was something that would need to be addressed.

22
23 Mr. Doyle wondered why the cost of variable tolling was estimated to be 5 times more in Little
24 Cottonwood Canyon than in Big Cottonwood Canyon. Mr. Perez clarified that the numbers presented
25 were those from various studies. The cost for Big Cottonwood Canyon was estimated to be \$1 million
26 for the gantry based on a 2017 study. UDOT had presented a \$5 million tolling gantry for Little
27 Cottonwood Canyon.

28
29 Mr. Maughan wondered whether paid parking could have the same result as tolling on traffic levels.
30 Mr. Perez commented that paid parking was geared towards increasing carpooling but noted that there
31 were advantages to both strategies.

32
33 Chair Robinson believed there was very little distinction between the pros and cons for variable tolling
34 in Big Cottonwood Canyon and Little Cottonwood Canyon. He wondered whether Ms. Christie
35 should move forward unless there was new information to hear. Ms. Christie agreed and suggested
36 bypassing a poll related to variable tolling and other elements that were similar between Big
37 Cottonwood Canyon and Little Cottonwood Canyon.

38 **Enhanced Bus:**

39
40
41 Participants of the MTS Summit asked clarifying questions related to enhanced bus. Ms. Christie and
42 Mr. Perez read questions from the Zoom chat box.

43
44 Mr. Simpson wondered how many buses were assumed in the proposal. Ms. Hu clarified that
45 according to the UDOT Little Cottonwood Canyon EIS alternatives, there were 33 buses for the
46 enhanced bus with shoulder improvement and 53 buses for the enhanced bus with no road
47 improvements. Mr. Simpson noted that the combined Big Cottonwood Canyon and Little
48 Cottonwood Canyon enhanced bus proposals would exceed the available capacity of the UTA Depot

1 District Phase 1 and a large percentage of Depot District Phase 2. Additional facilities would need to
2 be considered in the cost assumptions for vehicle storage and maintenance.

3
4 Mr. Maughan asked how the element would incentivize out of state visitors to use the bus instead of
5 rental cars. Mr. Perez made note of the question.

6
7 Chair Robinson wondered why the enhanced bus was seasonal instead of year-round. Mr. Perez
8 clarified that this was what had been presented in the UDOT Little Cottonwood Canyon EIS
9 alternative. It was seasonal with express service to the ski resorts because the majority of visitors in
10 the winter went directly to the ski resorts.

11 12 **Reduced On-Road Parking:**

13
14 Participants of the MTS Summit asked clarifying questions related to reduced on-road parking. Ms.
15 Christie and Mr. Perez read questions from the Zoom chat box.

16
17 Mr. Thurber wondered whether there would be exclusions for low-income users or if low-income
18 users would be given priority for on-road parking. Caroline Rodriguez commented that implementing
19 an income-based program for tolling or parking would be difficult. Having a special permit for
20 reduced fares or priority parking would create an administrative burden for the user and would create
21 a lot of additional work for the agency that was trying to implement or enforce the program. Ms.
22 Rodriguez noted that UTA was an exception because they are the existing public transit provider and
23 already have a robust program to address equity issues. It would make sense to lean on UTA rather
24 than attempt to develop a new program to address parking or tolling concerns.

25
26 Mr. Maughan asked whether the elimination of roadside parking would impact dispersed recreation
27 users the most. Mr. Perez believed it would but noted that the goal was to have transit options
28 available to that community as well.

29
30 Abi Holt asked Mr. Perez to speak to the element and how it would protect water quality. Mr. Perez
31 stated that reduced parking along the shoulders would reduce the amount of debris that impacts runoff
32 and vegetation.

33 34 **Year-Round Local Bus:**

35
36 Participants of the MTS Summit asked clarifying questions related to year-round local bus. Ms.
37 Christie and Mr. Perez read questions from the Zoom chat box.

38
39 Ms. Doane wanted to know if this element assumed that there would be no express buses to the resorts.
40 Mr. Perez noted that it would work year-round with whatever high capacity mode was decided upon
41 for Little Cottonwood Canyon.

42
43 Chair Robinson wondered what assumptions and math went into the estimated life cycle costs. He
44 felt \$244 million on a local bus in Little Cottonwood Canyon seemed high. Mr. Perez noted that it
45 was expensive to buy new buses every 12 to 15 years. Mr. Fisher wondered whether the costs
46 assumed that there might be electric buses in the future. Mr. Perez noted that the costs did not account
47 for electric buses. He believed the first round of buses would likely not be electric but the second

1 round likely would be electric. Mr. Fisher noted that there was a significant benefit if you considered
2 electric bus life cycle costs.

3
4 Mr. McCandless wondered how a year-round local bus service would happen without a revenue
5 stream. If a gondola system was constructed and tolls were incorporated, the revenue from those
6 sources could fund the year-round dispersed bus option. Mr. Perez took note of the suggestion.

7
8 **Paid Parking at Resorts:**

9
10 Participants of the MTS Summit asked clarifying questions related to paid parking at resorts. Ms.
11 Christie and Mr. Perez read questions from the Zoom chat box.

12
13 Chair Robinson wondered what the General Managers from the ski resorts thought about paid parking.
14 Mr. Maughan stated that Alta was continuing to evaluate paid parking. He felt it could be possible in
15 the future but details would need to be worked out with the Town of Alta. Mr. Fields commented
16 that Snowbird was open to the idea of paid parking. He didn't feel that vehicles were compatible
17 with Little Cottonwood Canyon and wanted to reduce the number of cars on the road. Mr. Fields
18 believed that paid parking had proven to be effective at increasing vehicle occupancy, based on the
19 findings from Solitude. However, he noted that Snowbird would not have paid parking this year.

20
21 **Enhanced Bus with Roadway Widening:**

22
23 Participants of the MTS Summit asked clarifying questions related to the enhanced bus with roadway
24 widening. Ms. Christie and Mr. Perez read questions from the Zoom chat box.

25
26 Mr. Cushing wondered if a barrier separating the bus lane from the vehicle lane would be
27 implemented to prevent vehicle wrecks from impacting bus movement. Mr. Perez didn't believe there
28 would be barriers included in the shoulder concept.

29
30 Mark Walton wondered how the negative impacts of the enhanced bus with road widening compared
31 to the cons tied to other transportation options. Mr. Perez noted that a roadway widening would have
32 significant impacts on the watershed compared to only the enhanced bus service.

33
34 **No Action:**

35
36 No clarifying questions were asked.

37
38 ○ **Reaction Round**

39
40 **Snowsheds:**

41
42 Ms. Christie opened up the reaction round for discussions related to snowsheds.

43
44 Mr. Maughan commented that snowsheds would reduce road closures for avalanche mitigation.
45 However, they would not address congestion issues related to slippery road surfaces in the rest of the
46 canyon. He noted that weather was the main issue that impacted traffic congestion.

1 **Bicycle and Pedestrian Improvements:**

2
3 Ms. Christie opened up the reaction round for discussions related to bicycle and pedestrian
4 improvements. She asked that comments made on this element be specific to Little Cottonwood
5 Canyon.

6
7 Mayor Sondak commented that access to water and restrooms would be a helpful way to improve the
8 overall experience for bicyclists.

9
10 **Rail:**

11
12 Ms. Christie opened up the reaction round for discussions related to rail.

13
14 Ms. Anderson stated that according to the engineers she had spoken with, whistle stops were not
15 feasible for keeping with the desired speed. Mr. Perez made note of the comment.

16
17 Some potential cons were shared by Mr. Knoblock and Mr. Fisher. Mr. Knoblock believed a con
18 would be the large footprint. Mr. Perez noted that one of the proposed rail options was within the
19 existing roadway and may not expand the footprint. Mr. Fisher believed a con was that a rail system
20 would significantly displace dispersed recreation.

21
22 Mr. Knoblock shared an additional con related to noise. Mr. Allegra stated that the noise would likely
23 be very minimal, considering the frequency of service. He noted that a rail system would be less
24 intrusive than vehicles and buses in terms of noise pollution.

25
26 Mr. Nichols brought up climate change. He believed a rail system would be a huge investment,
27 especially if much of the snow would be gone in 30 years due to climate change. Mr. Perez noted
28 that there would be increased visitation to the mountains regardless of the snow levels. He reported
29 that visitation in Big Cottonwood Canyon from last year to this year had risen 200%. Both Big
30 Cottonwood Canyon and Little Cottonwood Canyon are year-round recreation regions. Mr. Perez
31 also noted that Snowbird offers year-round activities for visitors and that hiking is a year-round
32 activity as well. Mr. Fisher noted that during the winter season, far more people were visiting the
33 canyons at one time, and causal use was more spread out. Mr. Becker added that climate change was
34 a huge issue and was something that the CWC would continue to look into.

35
36 Ms. Briefer commented on the cons list. She noted that in addition to possible impacts to stream
37 water sources during construction, there were also concerns post-construction. She stated that there
38 could be ongoing erosion impacts.

39
40 Mayor Sondak wasn't sure whether or not the residents of the Town of Alta would support a rail
41 system. He felt it would depend on the exact alignment. Detailed discussions related to noise and
42 access would also depend on the alignment of the rail system. Mr. Allegra agreed that specific rail
43 alignments and their impacts on adjacent properties would need to be thoroughly discussed.
44 However, he noted that rail discussions were currently at a conceptual stage.

45
46 Mr. Shea felt there needed to be a better estimate of what a rail system would cost in total. Mr.
47 Allegra referred back to the cost estimates shared by Mr. Perez during the element presentation. He
48 reported that the proposed rail system would cost approximately \$15 million per mile. For

1 comparison, when the FrontRunner was built, it cost approximately \$15 million to \$20 million per
2 mile. The price shared by Mr. Perez included the track, rail vehicles, maintenance facilities, and so
3 on. Chair Robinson asked if the cost estimate included snowsheds. Mr. Allegra confirmed this.

4
5 **Aerial:**

6
7 Ms. Christie opened up the reaction round for discussions related to aerial. No reactions were shared.
8 Comments in the Zoom chat box would be reviewed.

9
10 **Variable Tolling:**

11
12 Ms. Christie opened up the reaction round for discussions related to variable tolling.

13
14 Mr. Fisher mentioned a comment related to tolling. It was suggested that part of the canyon be tolled
15 instead of the entire canyon. Mr. Perez made note of the suggestion. Mr. Becker added that there
16 were many advantages to variable tolling. Considerations could be made about where to start the toll,
17 seasonal tolling, and whether or not to have an equity-based tolling system. The details could be
18 worked into the current technology during the implementation process.

19
20 **Enhanced Bus:**

21
22 Ms. Christie opened up the reaction round for discussions related to enhanced bus.

23
24 Norm Henderson commented that enhanced bus service was also a no action possibility. It didn't
25 need an EIS and could be immediately implemented by the county through the Wasatch Canyons
26 General Plan.

27
28 **Reduced On-Road Parking:**

29
30 Ms. Christie opened up the reaction round for discussions related to reduced on-road parking. No
31 reactions were shared. However, it was noted that comments in the Zoom chat box would be
32 reviewed.

33
34 **Year-Round Local Bus:**

35
36 Ms. Christie opened up the reaction round for discussions related to year-round local bus.

37
38 Mr. Fisher believed there should be an option for a year-round local bus in conjunction with express
39 bus service. Mr. Perez noted that this suggestion was included as part of Alternative #1 in the MTS
40 Draft Alternatives.

41
42 Ellen Birrell commented that labor costs weren't necessarily a con. She would rather have tax dollars
43 provide jobs to drivers and administrators than to disrupt nature and pave over natural resources.

44
45 Mr. McCarvill felt that the number of visitors per hour was not high enough and that additional buses
46 and frequency would be needed. Mr. Perez pointed out that more buses would equal more costs. It
47 would be difficult to achieve less than 5-minute headways.

1 **Paid Parking at Resorts:**

2
3 Ms. Christie opened up the reaction round for discussions related to paid parking at resorts. No
4 reactions were shared. Comments in the Zoom chat box would be reviewed.

5
6 **Enhanced Bus with Roadway Widening:**

7
8 Ms. Christie opened up the reaction round for discussions related to enhanced bus with roadway
9 widening.

10
11 Ms. Doane commented that reduced travel time indicated that fewer buses would be required.

12
13 **No Action:**

14
15 Ms. Christie opened up the reaction round for discussions related to the no action option.

16
17 Mr. Henderson believed that no action was a viable alternative. That option could include bicycle
18 and pedestrian improvements, variable tolling, enhanced bus, reduced on-road parking, year-round
19 bus, and paid parking at resorts.

20
21 ○ **Polling (Capturing Support, Objections)**

22
23 Mr. Shea wondered how the polling data would be used. He felt it made sense for it to be used as
24 internal guidance for the Executive Committee but didn't feel it would be appropriate to be used to
25 lobby for the legislature. Chair Robinson clarified that the polling tool was a way to assess the general
26 views of those present. Mr. Becker commented that the polling tool was one piece of information for
27 the Commission and others to consider. However, it wasn't intended to be an official survey.

28
29 Ms. Christie opened the poll for questions related to snowsheds, bicycle and pedestrian
30 improvements, rail, aerial, year-round local bus, and enhanced bus with roadway widening. Polling
31 was not conducted for variable tolling, enhanced bus, reduced on-road parking, paid parking at
32 resorts, and the no-action option.

33
34 ○ **Capture Results, and Any Framework for Further Evaluation**

35
36 Ms. Christie shared the poll results related to Little Cottonwood Canyon:

- 37
38 • Little Cottonwood Canyon:
- 39 ○ Snowsheds (35% favor, 44% opposition, 17% need more information, 4% no answer);
 - 40 ○ Bicycle and pedestrian improvements (82% favor, 9% opposition, 7% need more
 - 41 information, 2% no answer);
 - 42 ○ Rail: on-road, at grade UDOT (22% favor, 41% opposition, 33% need more
 - 43 information, 3% no answer);
 - 44 ○ Rail: existing rail right of way (27% favor, 40% opposition, 29% need more
 - 45 information, 4% no answer);
 - 46 ○ Rail: opinion of further research (62% favor, 31% opposition, 5% need more
 - 47 information, 2% no answer);
 - 48

- Aerial: UDOT alternative (18% favor, 53% opposition, 25% need more information, 4% no answer);
 - Aerial: La Caille station option (30% favor, 46% opposition, 21% need more information, 4% no answer);
 - Aerial: opinion of further research (50% favor, 41% opposition, 6% need more information, 4% no answer);
 - Year-round local bus (80% favor, 6% opposition, 12% need more information, 2% no answer); and
 - Enhanced bus with or without road widening:
 - 56% prefer enhanced bus without road widening;
 - 21% prefer enhanced bus with road widening;
 - 16% need more information; and
 - 7% prefer no action.
- Overall Preferences:
 - 18% prefer rail;
 - 25% prefer aerial;
 - 47% prefer enhanced bus; and
 - 10% prefer no action.
 - **After Presentation of Cottonwood Canyon Connections: Integrative Decision-Making Process.**
 - **Clarifying Questions Related to Cottonwood Canyon Connections**

Aerial:

Participants of the MTS Summit asked clarifying questions related to aerial. Ms. Christie and Mr. Perez read questions from the Zoom chat box.

Mr. McCarvill asked whether a gondola system would be affected by forest fires and lightning. Mr. Marquardt stated that if there was an active fire, the system would need to be closed and the cabins may need to be removed from the line. However, some measures would allow the system to operate during a lightning storm.

Mr. Fisher wanted clarification about the top terminal. Mr. Perez commented that there would be a terminal point at the base of Alta and it would end at the base of Brighton. The gondola system could go in both directions and there would be no intermediate stops.

Ms. Christie believed that the remaining questions were intended for CWC Staff to review on a more thorough level after the MTS Summit.

No Action:

No clarifying questions were asked.

1 **Transit Tunnels:**

2
3 Participants of the MTS Summit asked clarifying questions related to transit tunnels. Ms. Christie
4 and Mr. Perez read questions from the Zoom chat box.

5
6 Mr. McCandless wondered whether tunneling would provide new water sources. Mr. Perez stated
7 that it would not.

8
9 ○ **Reaction Round**

10
11 **Aerial:**

12
13 Ms. Christie opened up the reaction round for discussions related to aerial.

14
15 Mr. Nichols believed an additional con to add to the pros and cons list was that an aerial system would
16 impact hikers who visited the area to get away from technology.

17
18 Mr. Maughan noted that wetland areas could be avoided with a base-to-base gondola system.

19
20 Mr. Marquardt clarified the point about egress on the pros and cons list. He noted that it would
21 depend specifically on where the issue was. For instance, if there was a wildfire directly below the
22 ropeway, the aerial system would need to be closed. However, depending on the location of the fire,
23 a gondola system could provide a second means of egress.

24
25 **No Action:**

26
27 Ms. Christie opened up the reaction round for discussions related to the no-action option. No
28 reactions were shared. Comments in the Zoom chat box would be reviewed.

29
30 **Transit Tunnels:**

31
32 Ms. Christie opened up the reaction round for discussions related to transit tunnels.

33
34 Mr. Shea commented that litigation could be considered a con. He stated that it would be a challenge
35 to disrupt the complex hydrology of the mountain between Brighton and Alta.

36
37 Mr. Henderson stated that tunnel and aerial connection options should be fully analyzed in the UDOT
38 Little Cottonwood Canyon EIS. Both options could pull cars away from the base of Big Cottonwood
39 Canyon and Little Cottonwood Canyon, reduce congestion, and increase mobility. Mr. Becker
40 clarified that the UDOT Little Cottonwood Canyon EIS would not include an analysis of connections
41 to Big Cottonwood Canyon.

42
43 ○ **Polling (Capturing Support, Objections)**

44
45 Ms. Christie opened the poll for questions related to aerial and the no-action option. Polling was not
46 conducted for rail tunnel or bus tunnel.

1 ○ **Capture Results, and Any Framework for Further Evaluation**

2
3 Ms. Christie shared the poll results related to the Cottonwood Canyon Connections:

4
5 • Cottonwood Canyon Connections:

- 6 ○
7 ○ Aerial (41% favor, 37% opposition, 15% need more information, 7% no answer); and
8 ○ No action (40% favor, 37% opposition, 19% need more information, 5% no answer).

9
10 • Overall Preferences:

- 11 ○ 23% prefer aerial;
12 ○ 14% prefer tunnel;
13 ○ 50% prefer no action; and
14 ○ 14% need more information.

15
16
17 • **After Presentation of Big Cottonwood Canyon to Park City Corridor: Integrative
18 Decision-Making Process.**

- 19 ○ **Clarifying Questions Related to Big Cottonwood Canyon to Park City
20 Corridor**

21
22
23 **Aerial:**

24
25 No clarifying questions were asked.

26
27 **No Action:**

28
29 No clarifying questions were asked.

- 30 ○ **Reaction Round**

31
32
33 **Aerial:**

34
35 Ms. Christie opened up the reaction round for discussions related to aerial.

36
37 Mr. Maughan noted that Ski Utah does an annual survey on the people coming into the canyons. For
38 the last 6 years, the number of people staying in Park City and driving to Alta has been between 12
39 to 15%. Alta conducted a survey in 2019 and found that 30% of the cars in the Albion lot came from
40 Park City. In 2020, Alta was in the middle of conducting another survey when COVID-19 hit. That
41 incomplete survey showed that 28% of cars in the Albion lot and 12% of cars in the Wildcat lot were
42 coming from Park City on a daily basis. This equaled out to approximately 17%. Mr. Maughan stated
43 that he was supportive of any option that would reduce vehicle traffic and keep the air cleaner.

44
45 **No Action:**

46
47 Ms. Christie opened up the reaction round for discussions related to the no-action option. No
48 reactions were shared. Comments in the Zoom chat box would be reviewed.

1
2 ○ **Polling (Capturing Support, Objections)**
3

4 Ms. Christie opened the poll for questions related to aerial and the no-action option.
5

6 ○ **Capture Results, and Any Framework for Further Evaluation**
7

- 8 • **Big Cottonwood Canyon to Park City Corridor:**
9 ○ 36% prefer aerial;
10 ○ 47% prefer no action;
11 ○ 16% need more information;
12 ○ 2% no action.
13

14 **5. Wrap Up (Julianna).**
15

- 16 • **Review Accomplishments/Agreements Reached.**
17

18 Ms. Nielsen noted that the MTS Summit participants could submit comments and questions to
19 members of CWC Staff following the summit. She shared the appropriate email addresses.
20

- 21 • **Next Steps.**
22

23 Ms. Christie reviewed and discussed the findings from the MTS Summit polling tool.
24

25 **6. Closing Remarks.**
26

- 27 • **CWC Chair: Chris Robinson.**
28 • **Thank you.**
29

30 Chair Robinson thanked everyone that had planned, organized, and participated in day two of the
31 MTS Summit.
32

33 **ADJOURNMENT**
34

35 The Central Wasatch Commission Mountain Transportation System Summit adjourned at
36 approximately 1:07 p.m.

1 *I hereby certify that the foregoing represents a true, accurate, and complete record of the Central*
2 *Wasatch Commission Mountain Transportation System Summit held Saturday, November 14, 2020.*

3

4 Teri Forbes

5 Teri Forbes

6 T Forbes Group

7 Minutes Secretary

8

9 Minutes Approved: _____