Central Wasatch Commission
January 21, 2021 Bus Mode Education Meeting
Question and Answer Sheet

On Thursday, January 21, 2021, the Central Wasatch Commission met with experts from the Utah Transit Authority (UTA) to discuss the expanded bus mode laid out in both UDOT's Little Cottonwood Canyon EIS, and the CWC's Mountain Transportation System Draft Alternatives report. In discussing the capacity, reliability, frequency, accessibility, and impact of the expanded bus alternative with Laura Hanson, Lorin Simpson, Kerry Doane, and Autumn Hu (operations and NEPA experts from Utah Transit Authority), the following statements were made:

Background on the current ski bus service

Laura Hansen : "Three different bus routes that operate at 15 minute intervals on the schedule. Often not able to deliver the 15-minute interval level of service due to congestion. Right now the ski bus has 26 seats, standing room for 20 more, so capacity for 46 people. Average ridership per month distills down to 1000 people per hour during peak ridership times."

Lorin Simpson: "In LCC there are 16 buses in service at any time, with three spare, totaling 19 available."

On the challenge of canyon congestion

Lorin Simpson: "Our number one challenge to effectively move people up and down the canyon is congestion, and while additional transit can help solve the problem other congestion mitigation efforts are required to make that system work. It only takes one car that's stuck in the canyon to hold everybody back. If the busses aren't moving, then we're not meeting that 15-minute frequency, or that 2.5 minute frequency. On the busy powder day, during peak hours it's not uncommon that it will take 40 minutes or more to get through one resort parking. We've got to solve the congestion problem should this be the chosen alternative."

Lorin Simpson: "Not only does congestion slow us down, when you get to 2.5 minute frequency in the canyon, operationally it's a challenge to not start bunching up and slowing things down. So we'd need a clear road with priority and no congestion, so if we had that, with the incentive to ride, yes, we could exceed that if we had the funds."

Kerry Doane: "Somehow limiting cars would have to happen."

On the challenge of available parking spaces

Lorin Simpson: "The other challenge we've got to be thinking about is parking. One big limitation is parking – not enough parking at the bottom of the canyon, or in the canyon."

Lorin Simpson: "The current parking capacity we've had in the past is at overload, or near-overload. So if we're going to double or triple the number of people that we're carrying and

there's an incentive not to drive, we have to find additional park and ride lots outside of the canyon in order to facilitate that."

On the challenge of seasonal service and driver attrition
Laura Hansen: "If we need to hire 50-75 people for the seasonal service who are qualified, that's a challenge. Public transit really works best when it's an ongoing, year-round service just because of the labor and training implications. It would require additional busses and employees, but also additional facilities to maintain these busses."

On the challenge of transporting 1,000 people/hour
Lorin Simpson: "14 years with the mid-year engine replacement per bus is the duration of these busses. In terms of whether we could do more than 1,000 people per hour, operationally yes, but the congestion needs to be solved, so no we couldn't do more than the 1,000, in fact, we'd struggle even meeting the 1,000. There's gotta be incentive to take it."

Maintenance and service facilities
Commissioner Christensen: "Can you give me a sense about what kind of maintenance facility you would need to service a bus fleet of this nature and how far away it can be before you start adding a lot to the cost?"

Autumn Hu: "For the enhanced bus with peak period shoulder lane alternative, we would need a four-acre maintenance and storage facility. The enhanced bus alternative would require a 6-acre bus maintenance facility. The cost of the maintenance facility is included in the cost estimate. The EIS only assumes direct service to the ski resorts to solve the winter congestion issue. If we do need to stop at more locations, it slows the cycle down. You need a larger bus fleet in order to allow for more stops. It would be a larger bus fleet than what the EIS proposes."

Lorin Simpson: "The farther the facilities are from the resorts, the higher the dead head cost. The closer you can get the better."

On the challenge of servicing both Little Cottonwood Canyon and Big Cottonwood Canyon
Commissioner question: "Hopefully the solution for LCC is transferrable to BCC to some degree. Are your demands any different going up BCC and if so, would that make any difference in logistics and the number of busses?"

Lorin Simpson: "Operationally, the congestion is still there, but not to the same extent as LCC, but the concern about servicing parking lots of each resort, and yet in those busy times at Solitude, we could be sitting in traffic in the parking lot for forty minutes and the entire trip is only meant to last an hour and ten minutes."

On servicing whistle-stops in the canyons and the agility of busses
Kerry Doane: "A bus service associated with the gondola and train options in the EIS, the bus service is only servicing the base of that particular mode like busses from the gravel pit and

9400 south park and ride lots to La Caille or in the case in the base of the LCC gondola option, busses to that base. I don't think they're talking about whistle stops in those alternatives."

Autumn Hu: "One other thing I'd like to add, we kind of skip over the assumption that once we build transit that 1,00 people would ride the bus. There needs to be some kind of incentive for the user to switch mode from their car to say the bus. So if the bus stops at more locations, it's going to take longer for the travel time, so it would be less attractive to a user, so there needs to be a balance to make it competitive if our goal is to move a lot of people to the transit mode. We talked about having tolling as one of the tools that can help push people towards transit. With the two-bus options in the EIS, the one with a dedicated transit lane, and the one without. For the option without the dedicated lane, you're going to have to have a strong incentive program to get people to ride the bus, otherwise you'll just look at the cost. Without the dedicated lane, yes it will be a lot cheaper, but realistically will people really use it if it takes longer."

Commissioner Wilson: "Investment in a system that forces an operational piece to it is different than a bus system that we have a vision for improving and investing in and then the operational piece can never meet what we envision. imagine a gondola or train system is funded and built, there is an operational piece in that that would get funded, whereas with bus, we would have to build in that guarantee to keep it funding at a level that would have an impact. A bussing system is more subject to yearly funding."

Chair Robinson: "You're saying, Jenny, that when you start being nimble with busses, you start increasing the cost."

Dave Fields question: "How nimble can we be with busses?"

Lorin Simpson: "We're limited to the busses we have, and the people we have. Say there's some crazy congestion and we have to completely rearrange where the busses are, send them to one location instead of what the schedule says. So that's the nimbleness."

On the importance of providing incentives to take the bus

Autumn Hu: "The dedicated lane option would make the operations much easier and be able to meet the schedule while being more competitive with somebody driving a car. Out of the five UDOT alternatives, all of them basically have a dedicated corridor for their transit option except for the bus travelling in mixed flow. In order for the bus travelling in mixed flow to work, there has to be some sort of incentive for people to switch mode because it does take a little bit longer to get to the resort, so it would be less competitive."

Chair Robinson question: What are the pros and cons of busses

Dave Fields: "Snowsheds address the biggest offenders, but the avalanche problem is much bigger than three primary areas. The reliability of transportation up and down the canyons regardless of weather is a big issue."

Commissioner Houseman: "For Sandy City, the congestion at the mouth of the canyon continues to be something that causes the experience in the canyons to not be a pleasant one for our residents. So we need to consider what it looks like to disperse the transportation across the entire city, not have it continue to be just at the mouth of the canyon. We'd really like to protect the watershed and think of solutions that get people out of their vehicles and off the roads."

Commissioner Silvestrini: "I am very much concerned with the bus system to be successful in terms of moving busses through the canyon with all the congestion. Widening the road and snow sheds creates the impacts that I'd prefer not to see."

Commissioner Sondak: "The susceptibility to the volatility of funding is actually the flipside of the flexibility of the mode."