

LITTLE COTTONWOOD CANYON

HIGH-T PILOT PROGRAM

In the past, the intersections in Little Cottonwood Canyon at Snowbird Entry 4 and Alta Wildcat have had high levels of congestion. Starting in January 2019, UDOT implemented a pilot program using temporary High-T intersections at these locations to determine whether a different intersection design would improve traffic flow. If so, UDOT would build permanent intersections with that, or a similar design.



Figure 1: High-T at Snowbird Entry 4

Figure 2: High-T at Alta Wildcat

TRAFFIC DATA RESULTS

Traffic data for the pilot program was collected through video monitors and Bluetooth sensor data. For the video camera data collection multiple cameras were set up at each intersection to observe traffic flow and congestion levels. The Bluetooth sensor data was used to calculate travel time from the intersections to a point about one mile below Entry 1.

UDOT began the pilot program by collecting baseline traffic data at the existing intersections:

Date	Weather
January 19 (Saturday)	Snow
January 20 (Sunday)	Cloudy
January 21 (Monday, a holiday)	Heavy snow/road closure

In early February 2019, UDOT installed the temporary High-T intersections at Snowbird Entry 4 (Figure 1) and Alta Wildcat (Figure 2). UDOT then collected additional traffic data to compare to the baseline data on:

Date	Weather
February 23 (Saturday)	Partly Cloudy
March 16 (Saturday)	Sunny
March 17 (Sunday)	Sunny

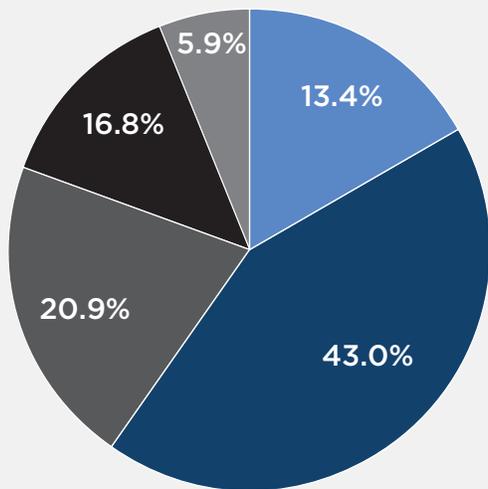
UDOT found through review of video monitoring that there was no substantial difference in traffic flow at the intersections between the current and temporary High-T intersection designs. However, part of the traffic analysis had been skewed because of snow on the roads, weather and road closures for avalanche mitigation while the data was being collected.

Review of Bluetooth sensor data revealed an improvement in travel time of up to 45 seconds from Snowbird Entry 4/Alta Bypass Road to about one mile below Entry 1. From the Wildcat parking area to one mile past Snowbird Entry 1, two of the monitored days showed improvements in travel times up to 15 seconds with the third day showing a 32-second increase in travel time.

PUBLIC SURVEY RESULTS

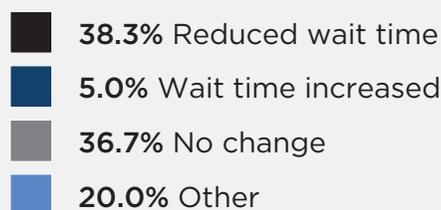
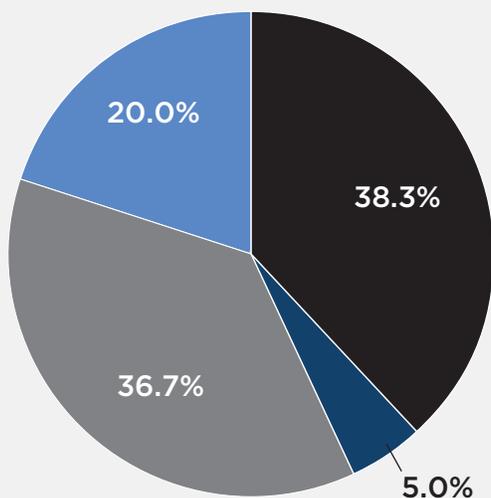
After the temporary High-T intersections were installed, UDOT conducted an online public survey to solicit feedback from the public about the temporary intersections. The public was notified of the survey through the UDOT Little Cottonwood Canyon EIS and Central Wasatch Commission email lists and social media. UDOT received 365 responses. As shown in the data below, the public felt that travel times down the canyon were reduced. Many respondents also said that the temporary nature of the intersections made it difficult to see the roadway striping and directional signs. These would be more visible if permanent intersections were installed.

How often do you drive down Little Cottonwood Canyon during times of high congestion in the winter?



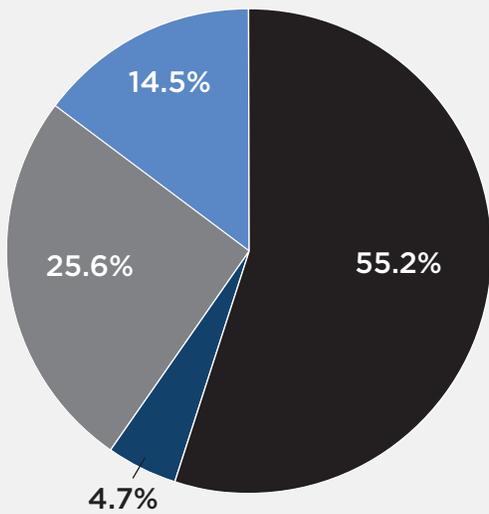
80.7% of respondents said that they drove through Little Cottonwood Canyon one or more times per week.

Has your wait time decreased when exiting these locations since the reconfiguration? [Alta Wildcat]



“Definitely makes exiting Wildcat parking area easier. Might need more signs telling people how to merge when the barriers end, some people seem confused if one lane has priority over the other and don't want to zipper merge.”

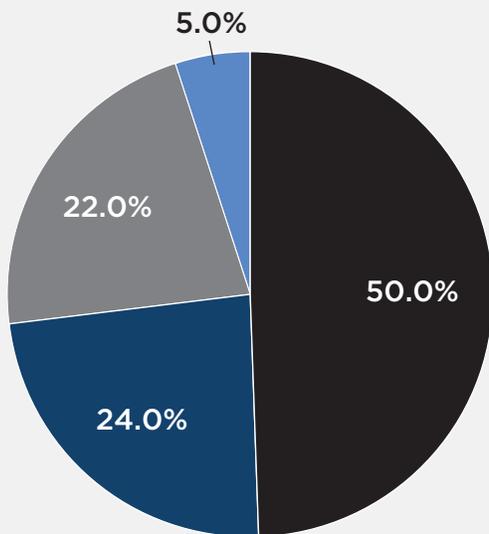
Has your wait time decreased when exiting these locations since the reconfiguration? [Snowbird Entry 4]



- 55.2% Reduced wait time
- 4.7% Wait time increased
- 25.6% No change
- 14.5% Other

“The Bird entry 4 and Alta Wildcat appear to work well because relatively even distribution of autos. Metering might improve equity of access to highway.”

Overall Reported Travel Time Impacts at Both Pilot High-T Intersections

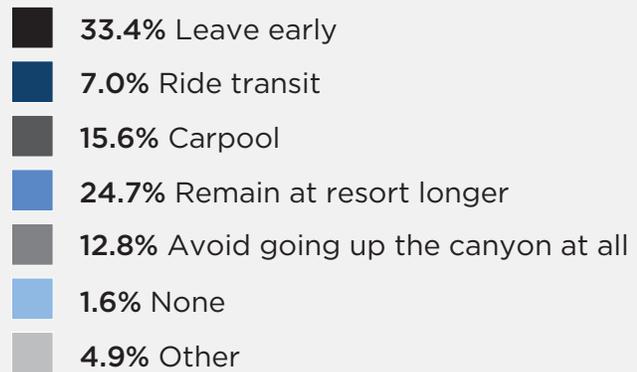
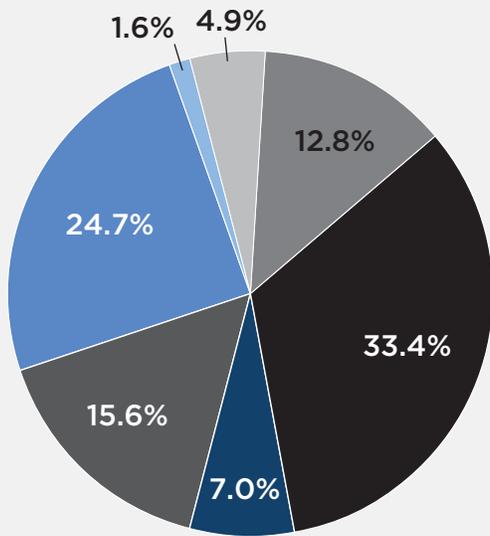


- 50.0% Reduced travel time
- 24.0% Travel time increased
- 22.0% No change
- 5.0% Other

“I think it is really helpful to only focus on one direction of traffic in order to exit the parking areas.”

“I’m a big fan of the pilot intersections. People don’t always merge properly and this configuration encourages more efficient traffic flow.”

To avoid down canyon congestion, which of the following do you do?



“Leave early, go home late.”

“Stay in Alta the night before a predicted busy morning.”

NEXT STEPS

Based on the results of the pilot program, UDOT has determined that High-T intersections at Snowbird Entry 4 and Alta Wildcat would improve traffic flow and safety.

UDOT will construct permanent High-T intersections during the summer of 2019.

LEARN MORE

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