TO:	WFRC
FROM:	RSG
DATE:	June 10, 2024
SUBJECT:	2023 Utah HTS: Weighting Addendum

OVERVIEW

This document is an addendum to the previously delivered weighting memo, which describes the household travel survey (HTS) weighting process. The section below highlights key methodological differences in weighting the weekend and supplemental samples compared to the HTS weighting methodology.

METHODOLOGY

Weekend samples

RSG generated household-, person-, day-, and trip-level weights for each weekend day (Friday, Saturday, Sunday) individually. The process to create the initial expansion factors, reweight for non-response bias, and account for multi-day responses in the day-level weights aligned with the process described in the Weighting Methodology memo delivered in March 2024. Given that the weekend samples in this round of calculations consisted of only rMove households, RSG did not perform day-pattern or trip rate adjustments on this set. RSG carried over imputed values for missing variable responses (such as household income) from the HTS to ensure consistency and leverage the larger sample size. To account for the smaller sample sizes on each weekend day, RSG combined the East and South PUMA groups to improve the fit to the target census data. RSG did not reweight the on-campus students in the University sample.

Supplemental long-distance sample

The process to create the initial expansion factors, reweight for non-response bias, and account for multi-day responses in the day-level weights aligned with the process described in the Weighting Methodology memo delivered in March 2024 with the exception of day-pattern and trip rate adjustments, which were omitted. In contrast to the weekend sample weighting, RSG used the original PUMA groupings and reweighted the University sample. As no day weights were provided for this set, RSG calculated the trip weights as $trip\_weight = (number\ of\ trips\ /\ 28\ days) * person\ weight$. This created weights that represent the number of trips per person per day for similar persons statewide. The number of trips were divided by 28 based on the long-distance travel period of 28 days.