SACOG 2018 Household Travel Survey
SACOG 2018 HTS Results (1)

- Household: all major household attributes
  - 3,956 households within SACOG planning boundary (Tahoe Basin in El Dorado and Placer Counties are not included.)
  - Weighted to 2016 ACS PUMS totals

- Person: all major person attributes
  - 8,321 persons
  - Weighted to 2016 ACS PUMS totals
• Unlinked trips: raw trips by origin and destination
  ➢ 196,744 unlinked trips
  ➢ Weighted based on household weight
  ➢ New micro-mobility IS NOT included in the survey.

• Linked trips: reclassified trips by incorporating access, transfers, and egress for transit trips
  ➢ 146,000 linked trips
  ➢ Weighted based on household weight
SACOG 2018 HTS Results (3)

• Vehicles: attributes of own vehicles
  ➢ 6636 vehicles
  ➢ Weighted based on household weight

• Person-Days: daily summary
  ➢ 34,000 person-days
  ➢ Weighted based on household weight

• Locations: trajectory of unlinked trips
  ➢ 4,080,712
  ➢ No weight
Tour-Based Tables

• Reclassified for the purpose of estimation and calibration of SACSIM19
• Households are weighted to equal to 2016 PUMS.
• Full tours for all travelers
Survey Data Release

- Released time: June, 2019
- Released tables: household, person, vehicle, place (linked trips)
- Released documents: data user guide, code book, final survey report, sample plan, weighting methodology
- Other released: TAZ shapefile, 2016 skims (bike, single occupancy vehicle, walk, and walk to transit)
Data Request

• Request a summary
  ➢ Send a request to SACOG data center (https://www.sacog.org/info-center-transportation) or Shengyi Gao (sgao@sacog.org)

• Request the survey tables
  ➢ Send a request to SACOG data center (https://www.sacog.org/info-center-transportation) or Shengyi Gao (sgao@sacog.org)
  ➢ Sign a non-disclosure agreement
What Can We Do With the Survey Data? (1)

• Travel behavior study
  ➢ Travel behavior (mode, purpose, departure time, distance, destination, carpooling, etc.) by age, gender, income, residence type, work status, and student status
  ➢ Daily travel pattern
  ➢ Temporal variations of travel from Sunday to Monday
  ➢ Spatial variations of travel across the region
  ➢ Parking study
  ➢ Vehicle fleet (auto ownership, vehicle fuel type) and use
  ➢ Online purchase and delivery
  ➢ Route choice
  ➢ TNC use
What Can We Do With the Survey Data? (2)

• Environmental justice analysis
  ➢ Accessibility of disadvantage groups
  ➢ Auto ownership and use of disadvantage groups

• Policy analysis
  ➢ Impacts of pricing (Cordon fee, VMT fee, etc.)
  ➢ Transit oriented development
  ➢ Impacts of transit fare policy
  ➢ Impacts of parking policy
Tips (1)

1. Weights
   hh_weight: expansion factor for total households. The persons within the same household have the same weight. The sum is the total households in household table, total persons in person table, and total vehicles in vehicle table.
   trip_weight: hh_weight/complete days for an average weekday. The complete days include only Monday to Thursday. The sum is the total trips.
   trip_weight_7day: hh_weight/complete days for an average day of a week. The complete days include days from Monday to Sunday. The sum is the total trips.
   multiday_factor: inverse of complete days.

2. Multiday_factor
   Normalize trips of multiple days to one day equivalent. In unweighted summaries, multiday_factor must be used.

3. Geography smaller than PUMA
   The samples were weighted at the PUMA level. The margin of error may become bigger if the geography (TAZ, RAD, etc) is smaller than PUMA.
Tips (2)

• Cross tab: hhid, personid
• Household summary: household table
• Person summary: person table
• Vehicle summary: vehicle table
• Trip summary: place table
• Trips on Weekday vs weekend
Examples

1. Transit use by residence type
   Variables: mode, res_type, res_duration, res_month

2. Transit use by pass
   Variables: transit_card, transit_discount, transit_freq, transit_pass_*

3. Private vehicle use
   Variables: vehicle, driver, fuel, mpg_avg_comb

4. Carpooling
   Variables: relationship, driver, travelers_nonhh

5. VMT
   Variables: driver(=1), mode, trip_path_distance_linked