Atlanta Regional Commission - 2011 Regional Travel Survey: Lookup Table

Transportation Secure Data Center

Revised: 2016-12-05

Summary Statistics

Travel Diary	Households	10,278
	Persons	25,797
Vehicle GPS	Households	911
	Vehicles	1,653
	Days of Travel	8,625
	GPS Frequency (Hz)	1
Vehicle OBD	Households	
	Vehicles	
	Days of Travel	
	GPS Frequency (Hz)	
Wearable GPS	Households	661
	Persons	797
	Days of Travel	1,912
	GPS Frequency (Hz)	1

Blank fields indicate data is not present for this study.

Survey Tables

survey_place

The survey_place table contains records of each location visited during the sample period. The place identifier is unique to each person.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier
vehno	smallint	Vehicle number (RANGE: 1-96, 97 non-household vehicle)
plano	smallint	Place number (from diary)
place_name*	character varying	Name of place
tripno	smallint	Trip number
travel_date	date	Assigned household travel date
arr_time	time without time zone	Date time of arrival according to diary
dep_time	time without time zone	Departure time from place
parked_loc_type	smallint	Parking location (1- At this destination, 2- Offsite, 9- DK/RF)
taz*	smallint	Place travel analysis zone (7777 out of area)

lon*	double precision	Place longitude
lat*	double precision	Place latitude
act_dur	integer	Activity duration
trip_purpose	smallint	Primary trip purpose (lookup table)
trip_purpose_other	character varying	Other, trip purpose
trip_purpose_sec	smallint	Secondary trip purpose (lookup table)
trip_purpose_sec_other	character varying	Other, trip purpose
persons_count	smallint	Total number of people
hh_members	smallint	Number of household members on trip
trip_duration_min	double precision	Trip duration in minutes
trip_distance_miles	double precision	Trip distance
non_hh_members	smallint	Non-household members on trip
mode	smallint	Mode of transport (1- Walk, 2- Bike, 3- Auto/van/truck driver, 4- Auto/van/truck passenger, 5- Local bus (regular, standard, city), 6- Express bus (suburban, commuter, intercity), 7- MARTA Train, 8- Dial-a-Ride/paratransit, 9- Taxi/limo, 10- School bus, 11- Motorcycle/moped, 97- Other (specify), 98- DK, 99- RF)
mode_other	character varying	Other, mode of transport
transit_access_mode	smallint	Transit Access Mode (1- Walk, 2- Bike, 3- Auto/van/truck driver, 4- Auto/van/truck passenger, 5- Local bus (regular, standard, city), 6- Express bus (suburban, commuter, intercity), 7- MARTA Train, 8- Dial-a-Ride/paratransit, 9- Taxi/limo, 10- School bus, 11- Motorcycle/moped, 97- Other (specify), 98- DK, 99- RF)
transit_access_mode_other	character varying	Other, transit access mode
transit_egress	smallint	Transit egress mode (1- Walk, 2- Bike, 3- Auto/van/truck driver, 4- Auto/van/truck passenger, 5- Local bus (regular, standard, city), 6- Express bus (suburban, commuter, intercity), 7- MARTA Train, 8- Dial-a-Ride/paratransit, 9- Taxi/limo, 10- School bus, 11- Motorcycle/moped, 97- Other (specify), 98- DK, 99- RF)
transit_egress_other	character varying	Other, transit egress mode
hov_lane	smallint	Used HOV lane (1- Yes, 2- No, 3 DK/RF)
toll_use	smallint	Used toll lane (1- Yes, 2- No, 3 DK/RF)
parked_desc	smallint	Parking description (1- Parking lot, 2- Parking garage, 3- Street, 4- Driveway, 5- Residential garage, 7- Other (specify), 8- DK, 9- RF)
parked_desc_other	character varying	Other, parking description
parked_payed	smallint	Pay to park (1- Yes, 2- No, 3- DK/RF)
parked_amount_pay	smallint	Pay to park amount
parked_payment_unit	smallint	Pay unit (1- Per hour, 2- Per day, 3- Per week, 4- Per month, 5- Per semester, 6- Per year, 8- DK, 9- RF)
get_out_vehicle	smallint	Exit vehicle (1- Yes, 2- No)
route	character varying	Transit route
transit_service	smallint	Transit service (1- MARTA train, 2- MARTA Bus , 3- CAT, 4- CCT, 5- GCT, 6- Xpress GRTA, 7- HAT, 97- Other (specify), 98- DK, 99- RF)
transit_service_other	character varying	Other, transit service
fare_type	smallint	Transit fare type (1- Cash, 2- Used pass, 7- Other (specify), 8- DK, 9- RF)
fare_other	character varying	Other, transit fare type
fare_cash	smallint	Transit fare cash

destination_place_name*	character varying	Destination place name (arrived)
destination_taz*	smallint	Destination travel analysis zone (777 out of area) (arrived)
destination_lon*	double precision	Destination longitude (arrived)
destination_lat*	double precision	Destination latitude (arrived)
origin_place_name*	character varying	Origin place name (previous place departed)
origin_taz*	smallint	Origin travel analysis zone (7777 out of area) (previous place departed)
origin_lon*	double precision	Origin longitude (previous place departed)
origin_lat*	double precision	Origin latitude (previous place departed)
per1	smallint	Person number on trip
per2	smallint	Person number on trip
per3	smallint	Person number on trip
per4	smallint	Person number on trip
per5	smallint	Person number on trip
pwgt	double precision	Person weighted
expwgt	double precision	Expanded person weight
geom*	geometry	Point representation of the place. Generated from the place longitude/latitude coordinate value in the table. (WGS 4326). Origin/destination or arrival/departure Points are available but not represented as geometries in this table.

survey_households

The survey_households table includes data from the households who participated in the travel diary survey (a subset of the total households who participated in the study). Of these, one portion participated in the wearable GPS part of the survey and another in the vehicle GPS part of the study.

Name	**Data Type**	**Comment**
sampno	numeric	Household identifier
recruite	integer	Recruit mode (1- CATI, 2- WEB)
retrieval	integer	Retrieval mode (1- CATI, 2- WEB, 3- Mail Back)
home_county_id	integer	County FIPS
home_loc_type	integer	Area type (1- CBD, 2- urban commercial, 3- urban residential, 4- suburban residential, 5- suburban commercial)
assn	integer	Assigned travel date
dow	integer	Day of week (1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday)
interview_language	integer	Code language of interview (1-English, 2-Spansish)
gps_sample	integer	GPS households (1- Yes, 2- No)
gps_type	character varying	GPS type (1- wearable random, 2- wearable target, 3- vehicle)
residence_type	integer	Residence type (1- single-family detached house, 2- single-family attached house, 3- building with 2+ apartments/condos, 4- mobile home or trailer, 5- boat, rv, van, etc., 6- dorm room, frat or sorority house, 7- other (specify), 8- DK, 9- RF)
residence_type_other	character varying	Other type of dwelling (If residence_type = other, Specify)
home_own	integer	Home ownership status (1- Rent, 2- Own/buying(paying off mortgage), 7- Other (specify), 8- DK, 9- RF)

home_own_other	character varying	Other ownership type if home_own = 7
persons_count	integer	Household size: RANGE: 1-15, 98- DK, 99- RF
non_relative_flag	character varying	Presence of non-household members (1- Yes, 2- No)
vehicle_count	integer	Number of household vehicles
vehicle_op_count	character varying	Number of household vehicles used regularly during the week
vehicle_power_count	character varying	Number of operation vehicles with working power outlet or cigarette lighter socket
phone_line	integer	Land-based telephone service (1- Yes, 2- No, 9- RF)
income	integer	Household income (1- Less than $10,000, 2- $10,000 to $19,999, 3- $20,000 to $29,999, 4 -$30,000 to $39,999, 5- $40,000 to $49,999, 6- $50,000 to $59,999, 7- $60,000 to $74,999, 8- $75,000 to $99,999, 9- $100,000 to $149,999, 10- $150,000 or more, 99- RF)
race	integer	Race/ethnicity (1- White, 2- African-American, 3- Asian, 4- Native American, Alaskan Native, 5- Pacific Islander, Native Hawaiian, 6- Multiracial, 7- Hispanic/Mexican, 97- other (specify), 98- DK, 99- RF)
race_other	character varying	Other, race/ethnicity if race = 97
hispanic_flag	integer	Hispanic origin (1- Yes, 2- No, 8- DK, 9- RF)
hispanic_flag_hh	character varying	Hispanic origin, household (1- Yes, 2- No, 8- DK, 9- RF)
incentive	integer	Incentive offered, households (1- Household was offered incentive)
student_count	integer	Number of household students
worker_count	integer	Number of household workers (computed)
license_count	integer	Number of household license holders (computed)
children_count	integer	Number of household children
lifecycle	integer	Household life cycle (computed) (1- One adult, no children, not retired, 2- 2+ Adults, no children, not retired, 3- One adult, youngest child 0-5, 4- 2+ Adults, youngest child 0-5, 5- One adult, youngest child 6-15, 6- 2+ Adults, youngest child 6-15, 7- One adult, youngest child 16-21, 8- 2+ Adults, youngest Child 16-21, 9- One adult, at least one retired, no children , 10- 2+ Adults, at least one retired, no children)
trip_count	smallint	Total number of trips (computed)
future	integer	Willingness to participate in future surveys (1- Yes, 2- No, 9- Refused)
home_taz_id*	integer	Home travel analysis zone (7777 out of area)
home_lon*	double precision	Home X coordinate
home_lat*	double precision	Home Y coordinate
partial_complete	integer	Partial completed households. 4 or more size household (n-1) completed the survey (0- No, 1- Yes)
hhwgt	double precision	Household weight
exphhwgt	double precision	Expanded household weight
geom*	geometry	Point grabbed from place table where place name = home

survey_vehicles

The survey_vehicles table contains detailed vehicle information about the vehicles described in the survey part of the study (a subset of the total vehicles in the study). Of these, a smaller portion also contain GPS travel data.

Name	Data Type	Comment
sampno	numeric	Household identifier
vehno	smallint	Vehicle number
model_year	integer	Year of Vehicle
make	integer	Make of vehicle (lookup table)
make_other	character varying	Other, make of vehicle
model*	character varying	Model of vehicle
body_type	integer	Body of vehicle (1- Auto sedan, 2- Auto: 2 seat, 3- Van, 4- Recreational vehicle, 5- Sport utility vehicle (SUV), 6- Station wagon, 7- Pickup truck, 8- Motorcycle, 9- Moped/scooter (e.g., Vespa), 97- Other (specify), 98- DK, 99- RF)
body_type_other	character varying	Other, body of vehicle
fuel	integer	Type of fuel (1- Gas, 2- Diesel, 3- Hybrid, 4- Flex fuel, 7- Other (specify), 8- DK, 9- RF)
fuel_other	character varying	Other, type of fuel
outlet	smallint	Working power outlet or cigarette lighter (1- Yes, 2- No, 8- DK, 9- RF)
veh_own	integer	Ownership status of vehicle (1- Household owned/leased, 2- Employer provided, 3- Rental car, 4- Borrowed from friend or relative, 7- Other (specify), 8- DK, 9- RF)
veh_own_other	character varying	Other, Ownership status of vehicle
ezpas	smallint	EXPass ((1- Yes, Vehicle has cruise card tag, 2- No, vehicle does not have Cruise Card, 8- DK, 9- RF)
veh_used	smallint	Vehicle used on travel day 1 (1- Yes, 2- No, 9- RF)
veh_used_no	character varying	Reason not used
hhwgt	double precision	Household weight
exphhwgt	double precision	Expanded household weight
geom*	geometry	Geometric linestring

survey_person

The survey_person table contains personal information from the persons who completed the travel diary survey (a subset of the total persons who participated in the study). Of these, a smaller portion also contain GPS travel data.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Unique person identifier
gender	integer	Gender (1- Male, 2- Female, 9- RF)
age*	integer	Age (RANGE: 1- 98, 99- 99 years or older, 998- DK, 999- RF)
nrel_agebin	smallint	NREL derived age bins for public distribution: 1= ¡16 YO, 2= 16-25 YO, 3= 26-35 YO, 4= 36-45 YO, 5= 46-55 YO, 6= 56-65 YO, 7= 66-79 YO, 8= 80+ YO, 999= DK/RF

driver_license	smallint	License (1- Yes, 2- No, 8- DK, 9- RF)
cell_phone	smallint	Cellular telephone (1- Yes, 2- No, 8- DK, 9- RF)
relation	smallint	Relationship (1- Self, 2- Spouse, 3- Son/daughter, 4- Father/mother, 5- Brother/sister, 6- Grandparent, 7- Grandchild, 8- Live-in help, 9- Roommate/other nonrelated, 10- Other related, 98- DK, 99- RF)
disabled	smallint	Disability (1- Yes, 2- No, 8- DK, 9- RF)
dis_type1	smallint	Disability type 1 (1- Visually impaired or blind, 2- Hearing impaired or deaf, 3- Cane or walker, 4- Wheelchair nontransferable, 5- Wheelchair transferable, 6- Mentally or emotionally disabled)
dis_type2	smallint	Disability type 1 (1- Visually impaired or blind, 2- Hearing impaired or deaf, 3- Cane or walker, 4- Wheelchair nontransferable, 5- Wheelchair transferable, 6- Mentally or emotionally disabled)
dis_type3	smallint	Disability type 1 (1- Visually impaired or blind, 2- Hearing impaired or deaf, 3- Cane or walker, 4- Wheelchair nontransferable, 5- Wheelchair transferable, 6- Mentally or emotionally disabled)
dis_type4	smallint	Disability type 1 (1- Visually impaired or blind, 2- Hearing impaired or deaf, 3- Cane or walker, 4- Wheelchair nontransferable, 5- Wheelchair transferable, 6- Mentally or emotionally disabled)
dis_type5	smallint	Disability type 1 (1- Visually impaired or blind, 2- Hearing impaired or deaf, 3- Cane or walker, 4- Wheelchair nontransferable, 5- Wheelchair transferable, 6- Mentally or emotionally disabled)
dis_type_other	character varying	Other, disability not listed
employment	smallint	Employed (1- Yes, 2- No, 8- DK, 9- RF)
volunteer	smallint	Volunteer (1- Yes, 2- No, 8- DK, 9- RF)
empl_status	smallint	Work status (1- Treated as worker, 2- Non-worker
empl_status_unempl	smallint	Unemployment status (1- Retired, 2- Homemaker, 3- Unemployed but looking for work, 4- Unemployed, not seeking employment, 5- Student (part-time or full-time), 7- Other (specify), 8- DK, 9- RF)
empl_status_other	character varying	Other, unemployment status if empl_status_unempl = 7
job_count	smallint	Number of jobs (RANGE: 1-98, 99- RF)
hours_per_week	smallint	Number of hours worked at primary job (RANGE: 1-998, 999- RF)
hours_per_week_sec	smallint	Number of hours worked at secondary job (RANGE: 1-998, 999- RF)
hours_per_week_third	smallint	Number of hours worked at third job (Range: 1-998, 999- RF)
empl_telecomm	smallint	Telecommuting offered at workplace (1- Yes, 2- No, 8- DK/RF)
empl_telecomm_hours	smallint	Telecommuting hours (RANGE: 1-997, 998- DK, 999- RF)
workday_start	smallint	Work start time (9998- DK, 9999- RF)
workday_end	smallint	Work end time (9998- DK, 9999- RF)
workday_schedule	smallint	Work schedule (1- Yes, 2- No, 8- DK, 9- RF)
workday_per_week	smallint	Work days per week (RANGE: 1-7, 8- DK, 9- RF)
workday_compres	smallint	Compressed work week (1- 4/40, 2- 9/80, 3- NO, 7- Other (specify), 8- DK, 9- RF)
workday_compres_other	character varying	Other, compressed work week
empl_industry	integer	Industry, North American Industry Classification System lookup table
empl_industry_other	character varying	Other, industry
empl_occupation	integer	Occupation, occupation lookup table
empl_occupation_other	character varying	Other occupation

employer	integer	Employer (1- Private company, 2- Government, 3- Nonprofit, 4- Self-employed, 7- Other (specify), 8- DK, 9- RF)
employer_other	character varying	Other employer if employer = 7
empl_park	smallint	Employer-provided parking (1- Yes, 2- No, 8- DK, 9- RF)
empl_park_sub	smallint	Employer-subsidized parking (1- Yes, 2- No, 8- DK, 9- RF)
empl_park_sub_use	smallint	Employer-subsidized parking use (1- Yes, 2- No, 8- DK, 9- RF)
empl_transit_sub	smallint	Employer-subsidized transit (1- Yes, 2- No, 8- DK, 9- RF)
empl_loc_type	smallint	Work location (1- Fixed, 2- Home, 3- Varies)
empl_name*	character varying	Name of employer
empl_taz*	integer	Work travel analysis zone
empl_lon*	double precision	Work X coordinate
empl_lat*	double precision	Work Y coordinate
commute_mode	smallint	Mode of transport to work (1- Walk, 2- Bike, 3- Auto/van/truck driver, 4- Auto/van/truck passenger, 5- Local bus (regular, standard, city), 6- Express bus (suburban, commuter, intercity), 7- MARTA Train, 8- Dial-a-Ride/paratransit, 9- Taxi/limo, 10- School bus, 11- Motorcycle/moped, 97- Other (specify), 98- DK, 99- RF)
commute_mode_other	character varying	Other mode of transport work if wmode = 97
education	integer	Educational attainment (1- Not a high school graduate, 12th grade or less (this includes very young children), 2- High school graduate (high school diploma or GED), 3- Some college credit but no degree, 4- Associate or technical school degree, 5- Bachelor or undergraduate degree, 6- Graduate degree (includes professional degree such as MD, DD, JD), 7- Other (specify), 8- DK)
education_other	character varying	Other, educational attainment if education = 7
student	smallint	Student status (1- Yes: full time, 2- Yes: part time, 3- No, 8- DK, 9- RF)
school_grade	smallint	Level of school (1- Daycare, 2- Nursery/Preschool, 3- Kindergarten to grade 8, 4- Grade 9 to 12, 5- Vocational/technical school, 6- 2-year college (community college), 7- 4-Year college or university, 8- Graduate school/professional, 97- Other (specify), 98- DK, 99- RF)
school_grade_other	character varying	Other, level of school
school_home	smallint	Home schooled (1- Yes, 2- No, 8- DK, 9- RF)
school_online	smallint	School online (1- Yes, 2- No, 8- DK, 9- RF)
school_name*	character varying	School name
school_taz*	integer	School travel analysis zone (7777 out of area)
school_lon*	double precision	School X coordinate
school_lat*	double precision	School Y coordinate
school_mode	smallint	Mode of Transport to School(1- Walk, 2- Bike, 3- Auto/van/truck driver, 4- Auto/van/truck passenger, 5- Local bus (regular, standard, city), 6- Express bus (suburban, commuter, intercity), 7- MARTA Train, 8- Dial-a-Ride/paratransit, 9- Taxi/limo, 10- School bus, 11- Motorcycle/moped, 97- Other (specify), 98- DK, 99- RF)
school_mode_other	character varying	Other mode if school_mode = 7
transit_use	smallint	Public transit use (1- Nearly every day, 2- Once or twice a week, 3- Once or twice a month, 4- Almost never, 8- DK, 9- RF
breeze_card	smallint	Breeze Card (1- Yes, 2- No, 8- DK, 9- RF)

breeze_card_type	smallint	Value added to Breeze Card (1- Purchase a 30-day pass, 2- Purchase a 7-day pass, 3- Purchase 20 trips, 4- Purchase 10 trips, 5- Purchase less than $20 in fares, 6- The card was purchased through a special fare program, 7- Other(specify), 8- DK, 9- RF)
breeze_card_type_other	character varying	Other, value added to Breeze Card
transit_pass_xpress	smallint	Xpress Bus Pass (1- Yes, 2- No, 8- DK, 9- RF)
transit_pass_grta	smallint	Type of GRTA Xpress Bus Pass (1- Purchase a 31-day pass, 2- Purchase a 40-ride pass, 3- Purchase a 20-ride pass, 4- Purchase a round-trip fare, 5- Purchase a one-way fare, 6- The Xpress Bus Pass was purchased through a special fare program, 8- DK, 9- RF)
transit_pass_cg	smallint	Cobb or Gwinnett County Transit Pass (1- Yes, for local service, 2- Yes, for express service, 3- Yes, for paratransit service, 4- No, 8- DK)
transit_pass_cg_type	smallint	Type of Cobb or Gwinnet Count Transit Pass (1- Purchase a 31-day pass, 2- Purchase a 40-ride pass, 3- Purchase a 20-ride pass, 4- Purchase a round-trip fare, 5- Purchase a one-way fare, 6- The Xpress Bus Pass was purchased through a special fare program, 8- DK, 9- RF)
transit_discount	smallint	Discounted fare program participation (1- No discounted fare, 2- Yes: through an employer, 3- Yes: through a university, 4- Yes: through a K-12 program, 5- Yes: discounted fare for disabled/elderly, 7- Other discount, 8- DK, 9- RF)
transit_discount_other	character varying	Other, discounted fare program participation
bike_freq	smallint	Frequency of bike travel (1- 0 times (never), 2- Once or twice, 3- 3 or 4 times, 4- 5 or more times, 8- DK, 9- RF)
interview	smallint	Person being interviewed (1- Yes, 2- No)
interview_proxy	smallint	Person serving as proxy
complete_log	smallint	Completed log (1- Yes, 2- No, 3- Did not travel on that day, 4- valid partial, 8- DK, 9- RF)
complete_diary	smallint	Completed diary (1- Yes, 2- No, 3- Did not travel on that day, 4- Valid partial, 9- RF)
trip_count	smallint	Number of trips
why_no_trips	smallint	Reason for no trips (1- Personally sick, 2- Vacation or personal day, 3- Caretaking sick children, 4- Caretaking sick other, 5- Homebound elderly or disabled, 6- Worked at home for pay, 7- Not scheduled to work, 8- Worked around home (not for pay), 9- Out of area, 10- No transportation available, 11- Weather, 97- Other (specify), 99- RF)
why_no_trips_other	character varying	Other reason for no trips
incomplete	smallint	Person belong to partial complete (0- Complete, 1- Incomplete valid partial)
county_id	character varying	County FIPS Code
perwgt	double precision	Person weighting
expperwgt	double precision	Expanded person weighting
geom*	geometry	Person home location point

Vehicle Tables

v_households

The v_households table includes data from the households who participated in the vehicle GPS part of the study (a subset of the total households who participated in the study). Of these, a smaller portion were also included in the survey part of the study. 362 households participated in the vehicle GPS part of the survey only, and are unique to the v_households table.

Name	Data Type	Comment
sampno	numeric	Household identifier
home_county_id	character varying	County ID provided by NuStats
vehicle_count	integer	Total number of vehicles reported for household
vehicle_count_gps	integer	Number of vehicles deployed with GPS devices
travel_day1	date	Assigned travel date for diary completion
gps_trips_td	integer	Number of GPS trips on assigned travel date
gps_trips_27	integer	Number of GPS trips on days 2 and 7
gps_tripcount	integer	Number of GPS vehicle trips collected by the household for all days
diary_trips_td	integer	Total of all diary trips on assigned travel date (null if diarycomplete = 0)
gps_complete	integer	GPS data exist for vehicles with GPS instrumentation or diary confirms no travel on assigned travel date (0- False, 1- True)
gps_partial	integer	GPS Data exist for some but not all vehicles with GPS instrumentation on assigned travel date (0- False, 1- True)
diary_complete	integer	Diary data were retrieved for this household (0- False, 1- True)
gps_diary_complete	integer	Both GPS and diary are complete (0- False, 1- True)
gps_complete_no_diary	integer	GPS complete but no diary (0- False, 1- True)
gps_obd_diary_complete	integer	Some GPS collected: diary retrieved (0- False, 1- True)
gps_partial_no_diary	integer	Some GPS collected: no diary retrieved (0 False, 1- True)
diary_complete_no_gps	integer	No GPS collected, diary retrieved (0- False, 1- True)
incomplete	integer	No GPS collected, no diary retrieved (0- False, 1- True)
incentive_pad	integer	Participation requirements met: household incentive was paid (0- False, 1- True)
traveldatediscrepancy	character varying	Suspect GPS and diary were used on different days (0- False, 1- True)
returned	integer	GPS equipment returned (0- False, 1- True)
control_code	integer	Final household status (See lookup_controlcodes table)
geom*	geometry	Point grabbed from place table where place name = home

v_missedtripanalysis

The v_missedtripanalysis table contains aggregate values (sorted by vehicle) indicating the accuracy of survey responses compared to GPS data.

Name	Data Type	Comment
sampno	numeric	Household identifier

vehno	smallint	Vehicle identifier
hhgpsdiarycomplete	smallint	Both GPS and diary are complete (0- False, 1- True)
nbgpstripdiaryday	smallint	Number of trips captured by GPS on the travel day
nbdiaryreportedtrips	smallint	Number of trips reported by diary for the vehicle on the travel day
rawmatchdifference	smallint	Difference between the nbgpstripdiarday and nbdiaryreportedtrips columns
nbmissinggpstrips	smallint	Number of trips reported by diary, not in GPS data
nbmissingdiarytrips	smallint	Number of trips captured by GPS, not in diary
totalgps27	smallint	Number of GPS trips on days 2 and 7
nbadjustedmissdiary	smallint	Number of Unique trips falling into an exception category
unmatchedonsitetrips	smallint	Number of unmatched trips contained within a single site
unmatchednontransportationtrips	smallint	Number of unmatched trips conducted for non-transportation activities
unmatchedworktrips	smallint	Number of unmatched work-related trips
unmatchedexternaltrips	smallint	Number of unmatched trips falling outside the study area
unmatchedlooptrips	smallint	Number of unmatched loop trips

v_gpslinks

Included in the GPS component of this study was link matching of the GPS points confirmed as valid trips to geographic information system (GIS) spatial layers. The routine compared GPS point sequences to linear spatial databases representing various elements from the study areatransportation infrastructure. The results of the link matching are included in this table. The reference layers were not provided, but the GPS data matched to a link is grouped to build a line representing the data collected within each link.

Name	**Data Type**	**Comment**
sampno	numeric	Household identifier
vehno	smallint	Vehicle identifier
gpstripid	smallint	Trip number from file
gpstravdayid	smallint	Travel day within travel period (RANGE: 1-7, where: 1 = Sunday and 7 = Saturday)
gpstravdaytripid	smallint	Trip number within travel day (restarts at 1 each day)
matchedlayer	character varying	Name of matched GIS Layer (all values "arc_streets_topo")
matchedfield	character varying	Name of the match field in the match GIS Layer (all values gid)
featureorder	smallint	Order of the route segment
feautreid*	bigint	Value of the match field corresponding to the matched feature
seltype	smallint	Selection type of the match feature (1- GPS, 2- Shortest path)
direction	double precision	Direction along link with respect to topology (1- Same, -1- Opposed)
start_time	timestamp without time zone	Timestamp when vehicle entered link (interpolated)
end_time	timestamp without time zone	Timestamp when vehicle exiting link (interpolated)
lrs_start*	double precision	Start linear referencing system measure along the links topological direction
lrs_end*	double precision	End linear referencing system measure along the links topological direction
geom*	geometry	Geometric linestring created by matching the timestamps from the v_gps_links table to the timestamps from the v_points table

v_vehicles

The v_vehicles table provides trip summary data for the vehicles that logged at least one GPS trip during the study. 262 vehicles that were outfitted with GPS did not register a trip during the study, and are thus not included in this table.

Name	Data Type	Comment
sampno	numeric	Unique household identifier
vehno	smallint	Vehicle identifier
diarytripsday1	smallint	Number of all diary trips reported on day 1
gpstripsday1	smallint	Number of GPS trips collected on day 1 of deployment period
gpstripsday2	smallint	Number of GPS trips collected on day 2 of deployment period
gpstripsday3	smallint	Number of GPS trips collected on day 3 of deployment period
gpstripsday4	smallint	Number of GPS trips collected on day 4 of deployment period
gpstripsday5	smallint	Number of GPS trips collected on day 5 of deployment period
gpstripsday6	smallint	Number of GPS trips collected on day 6 of deployment period
gpstripsday7	smallint	Number of GPS trips collected on day 7 of deployment period
totalgpstrips	smallint	Number of GPS trips collected during 7-day deployment period
geom*	geometry	Geometric point data

v_place

The v_place table contains all diary reported trips by vehicle for all households. This table contains only vehicles whose diary data could be matched to GPS data, or whose diary data confirmed no travel on the travel day.

Name	Data Type	Comment
sampno	numeric	Household identifier
vehno	smallint	Vehicle identifier
gpsplaceid	integer	Place number (from GPS)
diaryvehplaceid	integer	Place number (from diary)
arr_match_type	smallint	Match type of incoming trips destination
dep_match_type	smallint	Match type of outgoing trips origin
name*	character varying	Name of place
address*	character varying	Address of place
city	character varying	City of place
lon*	double precision	Longitude of place
lat*	double precision	Latitude of place
arr_lon*	double precision	Longitude of last GPS point before arrival
arr_lat*	double precision	Latitude of last GPS point before arrival
dep_lon*	double precision	Longitude of first GPS point after departure
dep_lat*	double precision	Latitude of first GPS point after departure
distance	double precision	Distance between GPS trip end and diary trip end

arr_time	timestamp without time zone	Date-time of arrival according to diary
dep_time	timestamp without time zone	Date-time of departure according to diary
arr_gpstime	timestamp without time zone	Date-time of arrival according to GPS
dep_gpstime	timestamp without time zone	Date-time of departure according to GPS
loc_type	character varying	Home, work, school, other (origin location type captured from recruit interview or diary information)
arr_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
dep_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
geom*	geometry	Point representation of the place. Generated from the place latitude/longitude coordinate values in the table (WGS 4326). Origin/destination or arrival/departure points are available but not represented as geometries in this table.

v_points

The v_points table contains all valid GPS points (associated with GPS trips) collected by the sampled vehicle GPS households during the assigned travel day. All higher level tables (households, persons, trips, etc.) are derived from point tables. For public download, the v_points data is segregated by vehicle and available in the sorted_by_vehicle.zip file. Thus, the v_points table is not available in the full_survey.zip download. This decision was made to better organize the data and manage file sizes.

Name	Data Type	Comment
sampno	numeric	Unique household identifier
vehno	smallint	Original study vehicle identifier
gpstripid	integer	Trip identifier
localid	integer	Point identifier
time_local	timestamp without time zone	Local timestamp
longitude*	double precision	Longitude recorded by the GPS device
latitude*	double precision	Latitude recorded by the GPS device
gpsspeed	double precision	Speed (in mph)
geom*	geometry	Geometric point data

v_gpstrips

The v_gpstrips table contains trip results from the vehicle GPS subsample. The table also contains trip summary information derived from GPS data.

Name	Data Type	Comment
sampno	numeric	Household identifier
vehno	smallint	Vehicle identifier
gpstripid	integer	Trip number within file
gpstravdayid	smallint	Travel day within travel period (1- Sunday, 7- Saturday)
gpstravdaytripid	smallint	Trip number within travel day (restarts at 1 each day)

start_time	timestamp without time zone	Local date and time of trip start
end_time	timestamp without time zone	Local date and time of trip end
duration_min	double precision	Duration of trip in minutes
distance_miles	double precision	Distance covered during trip in miles
avg_speed_mph	double precision	Average speed (mph)
max_speed_mph	double precision	Maximum speed (mph)
origin_lon*	double precision	Starting longitude (dd WGS84) of trip
origin_lat*	double precision	Starting latitude (dd WGS84) of trip
destination_lon*	double precision	Ending longitude (dd WGS84) of trip
destination_lat*	double precision	Ending latitude (dd WGS84) of trip
destination_distfromlast	double precision	Distance between previous trip destination and current trip origin (meters)
region_type	smallint	Destination region defined by client area (1-Internal origin: internal destination, 2-Internal origin: external destination, 3- External origin: internal destination, 4- External origin: external destination)
workrelated	smallint	1- trip suspected to be work related, 0- Otherwise
nontransport	smallint	1- Trip suspected to be a non-transportation trip, 0- Otherwise
onsite	smallint	1- Trip appears to be within boundaries of a single location, 0- Otherwise
looptrip	smallint	1- Trip starts and ends at same location, 0- Otherwise
origin_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
destination_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
geom*	geometry	A line representation created by NREL to represent that path of travel for the trip. Points are grouped using the start and end GPS timestamps, and ordered to create a line (WGS84, 4326).

Wearable Tables

w_gpstripstages

The w_gpstripstages table divides wearable GPS trip data into mode of transportation and summarizes each division.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier
gpstripid	smallint	Trip number from file
gpstravdayid	smallint	Travel day within travel period (1- Sunday 7- Saturday)
gpstravdaytripid	smallint	Trip number within travel day (restarts at 1 each day)
stage_id	smallint	Stage number within trip
start_time	timestamp without time zone	Local timestamp of trip start
end_time	timestamp without time zone	Local timestamp of trip end

duration_min	double precision	Duration of trip (in minutes)
distance_max	double precision	Distance covered during trip (in miles)
avg_speed_mph	double precision	Average speed (mph)
avg_gpsspeed	double precision	Average speed of person (mph)
max_speed_mph	double precision	Maximum speed (mph)
travel_mode	integer	Imputed travel mode
origin_lon*	double precision	Starting longitude (dd WGS84) of trip
origin_lat*	double precision	Starting latitude (dd WGS84) of trip
destination_lon*	double precision	Ending longitude (dd WGS84) of trip
destination_lat*	double precision	Ending latitude (dd WGS84) of trip
geom*	geometry	Geometric linestring

w_gpslinks

Included in the GPS component of this study was link matching of the GPS points confirmed as valid trips to GIS spatial layers. The routine compared GPS point sequences with linear spatial databases representing various elements from the study areatransportation infrastructure. The results of the link matching are included in this table. The reference layers were not provided, but the GPS data matched to a link are grouped to build a line representing the data collected within each link.

Name	**Data Type**	**Comment**
sampno	numeric	Household identifier
perno	smallint	Person identifier
gpstripid	smallint	Trip number from file
gpstravdayid	smallint	Travel day within travel period (1- Sunday, 7- Saturday)
gpstravdaytripid	smallint	Trip number within travel day (restarts at 1 each day)
matched_layer	character varying	Name of matched GIS layer (all values "arc_streets_topo")
matched_field	character varying	Name of the match field in the match GIS layer (all values GID)
feature_order	smallint	Order of the route segment
feature_id*	bigint	Value of matchfield corresponding to the matched feature
sel_type	smallint	Selection type of the match feature (1- GPS, 2- Shortest path)
direction	double precision	Direction along link with respect to topology (1- Same, -1- Opposed)
start_time	timestamp without time zone	Timestamp when vehicle entering link (interpolated)
end_time	timestamp without time zone	Timestamp when vehicle exiting link (interpolated)
lrs_start*	double precision	Start LRS measure along the links topological direction
lrs_end*	double precision	End LRS measure along the links topological direction
geom*	geometry	Geometric linestring

w_place

The w_place table contains all diary reported trips by person for all households. This table contains only persons whose diary data could be matched to GPS data or that confirmed no travel on the travel day.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier
gpsplaceid	integer	Place number (from GPS)
diaryvehplaceid	integer	Place number (from diary)
arr_match_type	smallint	Match type of incoming trips destination
dep_match_type	smallint	Match type of outgoing trips origin
name*	character varying	Name of place
address*	character varying	Address of place
city	character varying	City of place
lon*	double precision	Longitude of place
lat*	double precision	Latitude of place
arr_gpslon*	double precision	Longitude of last GPS point before arrival
arr_gpslat*	double precision	Latitude of last GPS point before arrival
dep_gpslon*	double precision	Longitude of first GPS point after departure
dep_gpslat*	double precision	Latitude of first GPS point after departure
distance	double precision	Distance between GPS trip end and diary trip end
arr_time	timestamp without time zone	Date-time of arrival according to diary
dep_time	timestamp without time zone	Date-time of departure according to diary
arr_gpstime	timestamp without time zone	Date-time of arrival according to GPS
dep_gpstime	timestamp without time zone	Date-time of departure according to GPS
loc_type	character varying	Home, work, school, other (origin location type captured from recruit interview or diary information)
arr_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
dep_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
geom*	geometry	Point representation of the place generated from the places latitude/longitude coordinate value in the table (WGS 4326). Origin/Destination or arrival/departure points are available but are not represented as geometries in this table.

w_person

The w_person table provides trip summary data for the persons who logged at least one GPS trip during the study. A total of 1,597 persons who were outfitted with GPS did not register a trip during the study, and are thus not included in this table.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier
diarytripsday1	smallint	Number of all diary trips reported on day 1
gpstripsday1	smallint	Number of GPS trips collected on day 1 of deployment period
gpstripsday2	smallint	Number of GPS trips collected on day 2 of deployment period
gpstripsday3	smallint	Number of GPS Trips collected on day 3 of deployment period

totalgpstrips	smallint	Number of GPS trips collected during 7-day deployment period
transit	smallint	Person reported transit as typical mode (0- False, 1- True)
walkbike	smallint	Person reported walk or bike for school or work Trip (0- False, 1- True)
geom*	geometry	Geometric linestring

w_missedtripanalysis

The w_missedtripanalysis table contains aggregate values (sorted by person), indicating the accuracy of survey responses compared to wearable GPS data.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier
hhgpsdiarycomplete	smallint	Both GPS and diary are complete (0- False, 1- True)
nbgpstripdiaryday	smallint	Number of trips captured by GPS on the travel day
nbdiaryreportedtrips	smallint	Number of trips reported by diary for the person on the travel day
rawmatchdifference	smallint	Difference between nbgpstripdiarday and nbdiaryreportedtrips
nbmissinggpstrips	smallint	Number of trips reported by diary not in GPS data
nbmissingdiarytrips	smallint	Number of trips captured by GPS, not in diary
totalgps27	smallint	Number of GPS trips on days 2 and 7
nbadjustedmissdiary	smallint	Number of unique trips falling into an exception category
unmatchedonsitetrips	smallint	Number of unmatched trips contained within a single site
unmatchednontra-nsportationtrips	smallint	Number of unmatched trips conducted for non-transportation activities
unmatchedworktrips	smallint	Number of unmatched work-related trips
unmatchedexternaltrips	smallint	Number of unmatched trips falling outside the study area
unmatchedlooptrips	smallint	Number of unmatched loop trips

w_gpstrips

The w_gpstrips table contains trip results from the wearable GPS subsample. The table also contains trip summary information derived from GPS data.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier
gpstripid	integer	Trip number within file
gpstravdayid	smallint	Travel day within travel period (1- Sunday, 7- Saturday)
gpstravdaytripid	smallint	Trip number within travel day (restarts at 1 each day)
start_time	timestamp without time zone	Local date and time of trip start
end_time	timestamp without time zone	Local date and time of trip end

duration_min	double precision	Duration of trip (in minutes)
distance_miles	double precision	Distance covered during trip (in miles)
avg_speed_mph	double precision	Average speed (mph)
max_speed_mph	double precision	Maximum speed (mph)
travel_mode	smallint	Imputed travel mode (if single mode or stage, then mode code, if multiple, then longest distance traveled mode)
trip_stages	smallint	Number of trip stages (each stage is change in travel mode)
travmodelist	character varying	Comma delimited sequence of travel modes
uni_trav_mode_count	smallint	Number of trip stages (each stage is change in travel mode)
uni_trav_mode	character varying	Count of unique modes
origin_lon*	double precision	Starting longitude (dd WGS84) of trip
origin_lat*	double precision	Starting latitude (dd WGS84) of trip
destination_lon*	double precision	Ending longitude (dd WGS84) of trip
destination_lat*	double precision	Ending latitude (dd WGS84) of trip
distancefromlastdest	double precision	Distance between previous trip destination and current trip origin (in meters)
region_type	smallint	Destination region defined by client Area (1- Internal origin: internal destination, 2- Internal origin: external destination, 3- External origin: internal destination, 4- External origin: external destination)
workrelated	smallint	1- Trip suspected to be work-related, 0- Otherwise
no_transport	smallint	1- Trip suspected to be a non-transportation trip, 0- Otherwise
onsite	smallint	1- Trip appears to be within boundaries of a single location, 0- Otherwise
looptrip	smallint	1- Trip starts and ends at same location, 0- Otherwise
origin_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
destination_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
geom*	geometry	A line representation created by NREL to represent the path of travel for the trip. Points are grouped using the start and end GPS timestamps, and ordered to create a line (WGS84, 4326).

w_points

The w_points table contains all valid GPS points (associated with GPS trips) collected by the sampled wearable households during the assigned travel day. All higher level tables (households, persons, trips, etc.) are derived from point tables. For public download, the w_points data is segregated by person and available in the sorted_by_person.zip file. Thus, the w_points table is not available in the full_survey.zip download. This decision was made to better organize the data and manage file sizes.

Name	**Data Type**	**Comment**
sampno	numeric	Unique household identifier
perno	smallint	Original study person identifier
gpstripid	integer	Trip identifier
localid	integer	Point identifier
time_local	timestamp without time zone	Local timestamp

longitude*	double precision	Longitude recorded by the GPS device
latitude*	double precision	Latitude recorded by the GPS device
gpsspeed	double precision	Speed (in mph)
geom*	geometry	GPS point data

w_households

The w_households table includes data from the households who participated in the wearable GPS part of the study (a subset of the total households who participated in the study). Of these, a smaller portion were also included in the survey part of the study.224 households participated in the wearable GPS part of the survey only, and are unique to the w_households table.

Name	Data Type	Comment
sampno	numeric	Household identifier
home_county_id	character varying	County ID provided by NuStats
persons_count	integer	Household size (RANGE: 1-15, 98- DK, 99- RF)
persons_count_gps	integer	Number of persons deployed with GPS devices
travel_day1	date	Assigned travel date for diary completion
gps_trips_td	integer	Number of GPS wearable trips on assigned travel date
gps_trips_23	integer	Number of GPS wearable trips on days 2 and 3
gps_trip_count	integer	Number of GPS wearable trips collected by the household for all days
diary_trips_td	integer	Total of all diary trips on assigned travel date (null if diarycomplete = 0)
gps_complete	integer	GPS data exist for wearable instruments or diary confirms no travel on assigned travel date (0- False, 1- True)
gps_partial	integer	GPS data exist for some but not all instrumented vehicles on assigned travel date (0- False, 1- True)
diary_complete	integer	Diary data were retrieved for this household (0- False, 1- True)
gps_diary_complete	integer	Both GPS and diary are complete (0- False, 1- True)
gps_complete_no_diary	integer	GPs complete but no diary (0- False, 1- True)
gps_obd_diary_complete	integer	Some GPS collected: diary retrieved (0- False, 1- True)
gps_partial_no_diary	integer	Some GPS collected: no diary retrieved (0- False, 1- True)
diary_complete_no_gps	integer	No GPS collected: diary retrieved (0- False, 1- True)
incomplete	integer	No GPS collected, no diary retrieved (0- False, 1- True)
incentive_qual	integer	Participation requirements met, household qualifies for incentive (0- False, 1- True)
incentive_paid	integer	Participation requirements met, household incentive was paid (0- False, 1- True)
traveldatediscrepancy	character varying	Suspect GPS and diary were used on different days (0- False, 1- True)
returned	integer	GPS equipment returned (0- False, 1- True)
control_code	integer	Final household status (See lookup_controlcodes table)
geom*	geometry	Point grabbed from place table where place name = home

Sorted by Vehicle Tables

gps_points

The v_points table contains all valid GPS points (associated with GPS trips) collected by the sampled vehicle GPS households during the assigned travel day. All higher level tables (households, persons, trips, etc.) are derived from point tables. For public download, the v_points data is segregated by vehicle and available in the sorted_by_vehicle.zip file. Thus, the v_points table is not available in the full_survey.zip download. This decision was made to better organize the data and manage file sizes.

Name	Data Type	Comment
sampno	numeric	Unique household identifier
vehno	smallint	Original study vehicle identifier
gpstripid	integer	Trip identifier
localid	integer	Point identifier
time_local	timestamp without time zone	Local timestamp
gpsspeed	double precision	Speed (in mph)

gps_households

The v_households table includes data from the households who participated in the vehicle GPS part of the study (a subset of the total households who participated in the study). Of these, a smaller portion were also included in the survey part of the study. 362 households participated in the vehicle GPS part of the survey only, and are unique to the v_households table.

Name	Data Type	Comment
sampno	numeric	Household identifier
home_county_id	character varying	County ID provided by NuStats
vehicle_count	integer	Total number of vehicles reported for household
vehicle_count_gps	integer	Number of vehicles deployed with GPS devices
travel_day1	date	Assigned travel date for diary completion
gps_trips_td	integer	Number of GPS trips on assigned travel date
gps_trips_27	integer	Number of GPS trips on days 2 and 7
gps_tripcount	integer	Number of GPS vehicle trips collected by the household for all days
diary_trips_td	integer	Total of all diary trips on assigned travel date (null if diarycomplete = 0)
gps_complete	integer	GPS data exist for vehicles with GPS instrumentation or diary confirms no travel on assigned travel date (0- False, 1- True)
gps_partial	integer	GPS Data exist for some but not all vehicles with GPS instrumentation on assigned travel date (0- False, 1- True)
diary_complete	integer	Diary data were retrieved for this household (0- False, 1- True)
gps_diary_complete	integer	Both GPS and diary are complete (0- False, 1- True)
gps_complete_no_diary	integer	GPS complete but no diary (0- False, 1- True)
gps_obd_diary_complete	integer	Some GPS collected: diary retrieved (0- False, 1- True)
gps_partial_no_diary	integer	Some GPS collected: no diary retrieved (0 False, 1- True)
diary_complete_no_gps	integer	No GPS collected, diary retrieved (0- False, 1- True)

incomplete	integer	No GPS collected, no diary retrieved (0- False, 1- True)
incentive_pad	integer	Participation requirements met: household incentive was paid (0- False, 1- True)
traveldatediscrepancy	character varying	Suspect GPS and diary were used on different days (0- False, 1- True)
returned	integer	GPS equipment returned (0- False, 1- True)
control_code	integer	Final household status (See lookup_controlcodes table)

gps_vehicles

The v_vehicles table provides trip summary data for the vehicles that logged at least one GPS trip during the study. 262 vehicles that were outfitted with GPS did not register a trip during the study, and are thus not included in this table.

Name	Data Type	Comment
sampno	numeric	Unique household identifier
vehno	smallint	Vehicle identifier
diarytripsday1	smallint	Number of all diary trips reported on day 1
gpstripsday1	smallint	Number of GPS trips collected on day 1 of deployment period
gpstripsday2	smallint	Number of GPS trips collected on day 2 of deployment period
gpstripsday3	smallint	Number of GPS trips collected on day 3 of deployment period
gpstripsday4	smallint	Number of GPS trips collected on day 4 of deployment period
gpstripsday5	smallint	Number of GPS trips collected on day 5 of deployment period
gpstripsday6	smallint	Number of GPS trips collected on day 6 of deployment period
gpstripsday7	smallint	Number of GPS trips collected on day 7 of deployment period
totalgpstrips	smallint	Number of GPS trips collected during 7-day deployment period

Sorted by Person Tables

gps_households

The w_households table includes data from the households who participated in the wearable GPS part of the study (a subset of the total households who participated in the study). Of these, a smaller portion were also included in the survey part of the study.224 households participated in the wearable GPS part of the survey only, and are unique to the w_households table.

Name	Data Type	Comment
sampno	numeric	Household identifier
home_county_id	character varying	County ID provided by NuStats
persons_count	integer	Household size (RANGE: 1-15, 98- DK, 99- RF)
persons_count_gps	integer	Number of persons deployed with GPS devices
travel_day1	date	Assigned travel date for diary completion

gps_trips_td	integer	Number of GPS wearable trips on assigned travel date
gps_trips_23	integer	Number of GPS wearable trips on days 2 and 3
gps_trip_count	integer	Number of GPS wearable trips collected by the household for all days
diary_trips_td	integer	Total of all diary trips on assigned travel date (null if diarycomplete = 0)
gps_complete	integer	GPS data exist for wearable instruments or diary confirms no travel on assigned travel date (0- False, 1- True)
gps_partial	integer	GPS data exist for some but not all instrumented vehicles on assigned travel date (0- False, 1- True)
diary_complete	integer	Diary data were retrieved for this household (0- False, 1- True)
gps_diary_complete	integer	Both GPS and diary are complete (0- False, 1- True)
gps_complete_no_diary	integer	GPs complete but no diary (0- False, 1- True)
gps_obd_diary_complete	integer	Some GPS collected: diary retrieved (0- False, 1- True)
gps_partial_no_diary	integer	Some GPS collected: no diary retrieved (0- False, 1- True)
diary_complete_no_gps	integer	No GPS collected: diary retrieved (0- False, 1- True)
incomplete	integer	No GPS collected, no diary retrieved (0- False, 1- True)
incentive_qual	integer	Participation requirements met, household qualifies for incentive (0- False, 1- True)
incentive_paid	integer	Participation requirements met, household incentive was paid (0- False, 1- True)
traveldatediscrepancy	character varying	Suspect GPS and diary were used on different days (0- False, 1- True)
returned	integer	GPS equipment returned (0- False, 1- True)
control_code	integer	Final household status (See lookup_controlcodes table)

person

The w_person table provides trip summary data for the persons who logged at least one GPS trip during the study. A total of 1,597 persons who were outfitted with GPS did not register a trip during the study, and are thus not included in this table.

Name	**Data Type**	**Comment**
sampno	numeric	Household identifier
perno	smallint	Person identifier
diarytripsday1	smallint	Number of all diary trips reported on day 1
gpstripsday1	smallint	Number of GPS trips collected on day 1 of deployment period
gpstripsday2	smallint	Number of GPS trips collected on day 2 of deployment period
gpstripsday3	smallint	Number of GPS Trips collected on day 3 of deployment period
totalgpstrips	smallint	Number of GPS trips collected during 7-day deployment period
transit	smallint	Person reported transit as typical mode (0- False, 1- True)
walkbike	smallint	Person reported walk or bike for school or work Trip (0- False, 1- True)

gps_points

The w_points table contains all valid GPS points (associated with GPS trips) collected by the sampled wearable households during the assigned travel day. All higher level tables (households, persons, trips, etc.) are derived from point tables. For public download, the w_points data is segregated by person and available in the sorted_by_person.zip file. Thus, the w_points table is not available in the full_survey.zip download. This decision was made to better organize the data and manage file sizes.

Name	Data Type	Comment
sampno	numeric	Unique household identifier
perno	smallint	Original study person identifier
gpstripid	integer	Trip identifier
localid	integer	Point identifier
time_local	timestamp without time zone	Local timestamp
gpsspeed	double precision	Speed (in mph)

gps_trips

The w_gpstrips table contains trip results from the wearable GPS subsample. The table also contains trip summary information derived from GPS data.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier
gpstripid	integer	Trip number within file
gpstravdayid	smallint	Travel day within travel period (1- Sunday, 7- Saturday)
gpstravdaytripid	smallint	Trip number within travel day (restarts at 1 each day)
start_time	timestamp without time zone	Local date and time of trip start
end_time	timestamp without time zone	Local date and time of trip end
duration_min	double precision	Duration of trip (in minutes)
distance_miles	double precision	Distance covered during trip (in miles)
avg_speed_mph	double precision	Average speed (mph)
max_speed_mph	double precision	Maximum speed (mph)
travel_mode	smallint	Imputed travel mode (if single mode or stage, then mode code, if multiple, then longest distance traveled mode)
trip_stages	smallint	Number of trip stages (each stage is change in travel mode)
travmodelist	character varying	Comma delimited sequence of travel modes
uni_trav_mode_count	smallint	Number of trip stages (each stage is change in travel mode)
uni_trav_mode	character varying	Count of unique modes
distancefromlastdest	double precision	Distance between previous trip destination and current trip origin (in meters)
region_type	smallint	Destination region defined by client Area (1- Internal origin: internal destination, 2- Internal origin: external destination, 3- External origin: internal destination, 4- External origin: external destination)
workrelated	smallint	1- Trip suspected to be work-related, 0- Otherwise
no_transport	smallint	1- Trip suspected to be a non-transportation trip, 0- Otherwise

onsite	smallint	1- Trip appears to be within boundaries of a single location, 0- Otherwise
looptrip	smallint	1- Trip starts and ends at same location, 0- Otherwise
origin_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)
destination_loc_type	character varying	Home, work, school, other (based on proximity to geocoded home, work, or school location)

* Indicates that the column has been redacted from cleansed data sets available at www.nrel.gov/tsdc. It has been determined that the column contains sensitive data that must be viewed within the TSDC's secure portal environment.

Note: When necessary, a series of lookup tables was provided in the database to identify the meanings of certain integer-represented responses to survey questions.

How to Cite the TSDC:

If you use TSDC data in a publication, please send a notification to **tsdc@nrel.gov** and include a citation that is consistent with the following format in your publication:

"Transportation Secure Data Center" (2016). National Renewable Energy Laboratory. |*Date TSDC data was accessed*|. www.nrel.gov/tsdc.