

# **2012-2013 Delaware Valley Regional Planning Commission Household Travel Survey: Lookup Table**

Transportation Secure Data Center

Revised: 2016-12-05

## Summary Statistics

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<b>Travel Diary</b>	Households	9,235
	Persons	20,216
<b>Vehicle GPS</b>	Households	
	Vehicles	
	Days of Travel	
	GPS Frequency (Hz)	
<b>Vehicle OBD</b>	Households	
	Vehicles	
	Days of Travel	
	GPS Frequency (Hz)	
<b>Wearable GPS</b>	Households	480
	Persons	811
	Days of Travel	1,956
	GPS Frequency (Hz)	1

Blank fields indicate data is not present for this study.

## Survey Tables

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### survey\_households

The survey\_households table contains information from households who completed the travel diary survey. Of the households who completed the survey, a smaller subset also contain GPS travel data.

Name	Data Type	Comment
sampno	integer	Household identifier.
hh_weight	double precision	Household weight.
hh_geo_acc	integer	Accuracy of home location: 1- Match, 2- Cross street, 3- Street centroid, 4- City or zip code centroid, 5- State (out of region), 99- Not geocodeable.
home_state	integer	Household state based on geocoded location: 34- New Jersey, 42- Pennsylvania.
home_county	integer	Household county based on geocoded location: 42017- Bucks, 42029- Chester, 42045- Delaware, 42091- Montgomery, 42101- Philadelphia, 34005- Burlington, 34007- Camden, 34015- Gloucester, 34021- Mercer.
home_cpa	text	Household County Planning Area (CPA) based on geocoded location.
home_mcd	bigint	Household municipality based on geocoded location.

home_tract*	bigint	Household Census Tract based on geocoded location.
home_taz*	integer	Household Transportation Analysis Zone (TAZ) based on geocoded location.
area_type	integer	Area type of household: 1- CBD, 2- CBD fringe, 3- Urban, 4- Suburban, 5- Rural, 6- Open rural.
hh_trips	integer	Number of household trips.
hh_motor_trips	integer	Number of household motorized trips.
hh_nomotor_trips	integer	Number of non-motorized household trips.
gps_factor	double precision	Multiplier used to correct for trip under-reporting in the diary sample.
f_hh_tot_trips	double precision	Corrected total number of household trips.
f_hh_mo_trips	double precision	Corrected number of household motorized trips.
f_hh_nm_trips	double precision	Corrected total number of household non-motorized trips.
hh_size	integer	Household size: Range 1-15, 98- Dont know, 99- Refused.
hh_work	integer	Number of household workers: Range 0-15, 98- Dont know, 99- Refused.
tot_veh	integer	Total number of household vehicles: Range 0-15, 98- Dont know, 99- Refused.
op_veh	integer	Total number of operational vehicles: Range 0-15, 98- Dont know, 99- Refused.
veh_out	integer	Nearest outlet to where you typically park your vehicle(s): Range 1- 8999 ft, 9000- No outlet, 9998- Dont know, 9999- Refused.
tot_bike	integer	Number of bicycles in household: Range 0-15, 98- Dont know, 99- Refused.
toll_accnt	integer	Household maintains toll road/bridge account: 1- Yes, 2- No, 98- Dont know, 99- Refused.
car_share	integer	Household maintains a car sharing membership/rents cars: 1- Yes, 2- No, 98- Dont know, 99- Refused.
res_type	integer	Description of residence: 1- Single family house not attached to any other house, 2- Single family house attached to one or more house, 3- Building with 2-4 apartments/rooms/flats/condos, 4- Building with 5-19 apartments/rooms/flats/condos, 5 Building with 20 or more apartments/rooms/flats/condos, 6- Mobile home, 7- Boat/RV/Van, 8- Hotel/Motel, 9- Dormitory, 10- Military barracks, 11- Nursing home/Assisted Living, 97- Other, 98- Dont know, 99- Refused.
hh_income	integer	Household income: 1- \$0 to \$9,999, 2- \$10,000 to \$24,999, 3- \$25,000 to \$34,999, 4- \$35,000 to \$49,999, 5- \$50,000 to \$74,999, 6- \$75,000 to \$99,999, 7- \$100,000 to \$149,999, 8- \$150,000 to \$199,999, 9- \$200,000 to \$249,999, 10- \$250,000 or more, 98- Dont know, 99- Refused.
trav_date	text	Travel date assignment: MM/DD/YYYY.
trav_dow	integer	Travel day of the week: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday.
holiday	text	Name of holiday.
hol_type	integer	Type of holiday: 0- No holiday, 1- Major holiday, 2- Minor holiday, 3- Very minor holiday.
ov_sample	integer	Household in oversampled tract: 0- No oversample, 1- Oversample.
study	integer	Study type: 1- Pilot study, 2- Main study.
rec_mode	integer	Recruitment mode: 1- Phone, 2- Web.
ret_mode	integer	Retrieval mode: 1- Phone, 2- Web, 3- Mail back, 4- Multi-mode.

rec_lang	integer	Language of recruitment interview: 1- English, 2- Spanish.
surv_lang	integer	Language of survey materials: 1- English, 2- Spanish.

## survey\_trips

The survey\_trips table contains detailed information on the trips reported in the travel diary portion of the study.

Name	Data Type	Comment
sampno	integer	Household identifier.
perno	integer	Person identifier.
hh_weight	double precision	Weight of a household.
p_weight	double precision	Weight of person taking trip.
tour_num	integer	Tour number.
wksub_num	integer	Sub-tour from work number.
trip_num	integer	Trip number: Range 1-97, 0- No trips, 97- Final destination.
no_trips	integer	Confirmation of no trips: 1- Yes, 2- No, 8- Dont know, 9- Refused.
whyno_trips	integer	Reason why no trips were made on travel day: 1- Personally sick, 2- Vacation or personal day, 3- Caretaking sick kids, 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- No transportation available, 10- Out of Delaware Valley region, 11- Weather, 12- No reason to travel, 97- Other, 98- Dont know, 99- Refused.
tour_type	integer	Tour type: 1- Home based work, 2- Home based other, 3- Non home based, 4- No trips.
tour_stops	integer	Tour stops.
start_trav	integer	At location or traveling at 3 AM: 1- Traveling, 2- At a location.
origin_loctype	integer	Origin location type: 1- Home, 2- Work, 3- School, 4- Other.
origin_geo_acc	integer	Accuracy of origin location: 1- Match, 2- Cross Street, 3- Street Centroid, 4- City or Zip Code Centroid, 5- State (out of region), 99- Not Geocodable.
origin_state	integer	State of origin based on coordinates: 34- New Jersey, 42- Pennsylvania.
origin_region	integer	Region of origin location based on coordinates: 1- DVRPC Region (9 counties), 2- Extended Model Counties, 3- Beyond Extended Model Counties.
origin_county	integer	County of origin location based on coordinates: 42017- Bucks, 42029- Chester, 42045- Delaware, 42091- Montgomery, 42101- Philadelphia, 34005- Burlington, 34007- Camden, 34015- Gloucester, 34021- Mercer.
origin_cpa	text	County Planning Area (CPA) of origin location based on coordinates.
origin_mcd	bigint	Minor Civil Division (MCD) or origin location based on coordinates.
origin_tract*	bigint	Census tract of origin location based on coordinates.
origin_taz*	integer	Transportation Analysis Zone (TAZ) of origin location based on coordinates.
arrival_time	text	Arrival time (Military time): HH:MM, 9998- Dont know, 9999- Refused.

activ1	integer	Activity 1 at origin: 1- Home activities not related to work, school, or online, 2- Homework, class related assignments, or attended an online course, 3- Attended classes, 4- Attended other school activities (performances, meetings, clubs), 5- Work for pay, 6- Personal business (banking or ATM, salon, library), 7- Online personal business (banking, e-mail, etc.), 8- Everyday shopping (grocery, drug store, gas, etc.), 9- Major shopping (appliances, cars, home furnishings, clothes, etc.), 10- Online shopping for products, services or goods, 11- Eat out (restaurant, drive-thru, etc.), 12- Social (visit friends, relatives, etc.), 13- Social/community/religious (meetings, worship, wedding, funeral, etc.), 14- Recreation: active participation (sports, exercise, walk the dog, etc.), 15- Recreation: watch/observe (movies, concert, sports event, etc.), 16- Medical (medical appointment, medical procedure, etc.), 17- Pick up passenger, 18- Drop off passenger, 19- Change type of transportation/transfer, 20- Accompany household member, 96- Other activity.
activ2	integer	Activity 2 at origin: 1- Home activities not related to work, school, or online, 2- Homework, class related assignments, or attended an online course, 3- Attended classes, 4- Attended other school activities (performances, meetings, clubs), 5- Work for pay, 6- Personal business (banking or ATM, salon, library), 7- Online personal business (banking, e-mail, etc.), 8- Everyday shopping (grocery, drug store, gas, etc.), 9- Major shopping (appliances, cars, home furnishings, clothes, etc.), 10- Online shopping for products, services or goods, 11- Eat out (restaurant, drive-thru, etc.), 12- Social (visit friends, relatives, etc.), 13- Social/community/religious (meetings, worship, wedding, funeral, etc.), 14- Recreation: active participation (sports, exercise, walk the dog, etc.), 15- Recreation: watch/observe (movies, concert, sports event, etc.), 16- Medical (medical appointment, medical procedure, etc.), 17- Pick up passenger, 18- Drop off passenger, 19- Change type of transportation/transfer, 20- Accompany household member, 96- Other activity.
activ3	integer	Activity 3 at origin: 1- Home activities not related to work, school, or online, 2- Homework, class related assignments, or attended an online course, 3- Attended classes, 4- Attended other school activities (performances, meetings, clubs), 5- Work for pay, 6- Personal business (banking or ATM, salon, library), 7- Online personal business (banking, e-mail, etc.), 8- Everyday shopping (grocery, drug store, gas, etc.), 9- Major shopping (appliances, cars, home furnishings, clothes, etc.), 10- Online shopping for products, services or goods, 11- Eat out (restaurant, drive-thru, etc.), 12- Social (visit friends, relatives, etc.), 13- Social/community/religious (meetings, worship, wedding, funeral, etc.), 14- Recreation: active participation (sports, exercise, walk the dog, etc.), 15- Recreation: watch/observe (movies, concert, sports event, etc.), 16- Medical (medical appointment, medical procedure, etc.), 17- Pick up passenger, 18- Drop off passenger, 19- Change type of transportation/transfer, 20- Accompany household member, 96- Other activity.

activ4	integer	Activity 4 at origin: 1- Home activities not related to work, school, or online, 2- Homework, class related assignments, or attended an online course, 3- Attended classes, 4- Attended other school activities (performances, meetings, clubs), 5- Work for pay, 6- Personal business (banking or ATM, salon, library), 7- Online personal business (banking, e-mail, etc.), 8- Everyday shopping (grocery, drug store, gas, etc.), 9- Major shopping (appliances, cars, home furnishings, clothes, etc.), 10- Online shopping for products, services or goods, 11- Eat out (restaurant, drive-thru, etc.), 12- Social (visit friends, relatives, etc.), 13- Social/community/religious (meetings, worship, wedding, funeral, etc.), 14- Recreation: active participation (sports, exercise, walk the dog, etc.), 15- Recreation: watch/observe (movies, concert, sports event, etc.), 16- Medical (medical appointment, medical procedure, etc.), 17- Pick up passenger, 18- Drop off passenger, 19- Change type of transportation/transfer, 20- Accompany household member, 96- Other activity.
activ1_dur	text	Duration of activity 1.
activ2_dur	text	Duration of activity 2.
activ3_dur	text	Duration of activity 3.
activ4_dur	text	Duration of activity 4.
depart_time	text	Departure time (Military time): HH:MM, 9997- Did not leave location, 9998- Dont know, 9999- Refused.
trans_mode	integer	Mode of transportation: 01- Walk, 02- Bike, 03- Wheelchair/Mobility Scooter, 04- Other non-motorized (Skateboard, etc.), 05- Auto/Van/Truck, 06- Carpool/Vanpool, 07- Motorcycle/Scooter/Moped, 08- Taxi/Hired Car/Limo, 09- Rental car/car share vehicle (ZipCar, etc.), 10- Private shuttle (RapidRover, employer, hotel, etc.), 11- Greyhound/Bolt/Mega Bus, 12- Airplane, 13- Other private transit, 14- SEPTA Bus/Trolleybus, 15- NJ TRANSIT Bus, 16- TMA Shuttle (includes Pottstown Area Rapid Transit, Coatesville Link, Beeline Burlink, Doylestown DART, Bieber Bus, Tiger Transit), 17- AMTRAK Bus, 18- School Bus, 19- Dial-a-Ride/ParaTransit (Access Services, etc.), 20- Other bus, 21- SEPTA Subway/the El (includes Market-Frankford Line, Broad Street Line, or Norristown High Speed Line), 22- SEPTA Regional Rail, 23- SEPTA Trolley/Light Rail, 24- NJ TRANSIT Commuter Rail (includes Northeast Corridor, Atlantic City Line, etc.), 25- NJ TRANSIT Light Rail (includes River LINE, Hudson-Bergen Light Rail, Newark Light Rail), 26- PATCO (Port Authority Transit Corporation) Speedline, 27- AMTRAK Train, 28- Other rail, 29- RIVERLINK FERRY, 30- Other Boat/Ferry.
trans_mode_agg	integer	Aggregate of transportation modes: 1- Walk, 2- Bike, 3- Private Vehicle, 4- Private Transit, 5- Public Transit, 6- School Bus, 7- Other.
trav_party	integer	(if mode=5,6,7,9) Number of persons traveling: Range 0-15, 97- 15+ people, 98- Dont know.
hh_mem	integer	Number of household members traveling: Range 1-15, 98- Dont know, 99- Refused.
hh_per_num1	integer	Household member traveling (person number): Range 1-15, 98- Dont know, 99- Refused.
hh_per_num2	integer	Household member traveling (person number): Range 1-15, 98- Dont know, 99- Refused.
hh_per_num3	integer	Household member traveling (person number): Range 1-15, 98- Dont know, 99- Refused.
hh_per_num4	integer	Household member traveling (person number): Range 1-15, 98- Dont know, 99- Refused.
hh_per_num5	integer	Household member traveling (person number): Range 1-15, 98- Dont know, 99- Refused.

hh_per_num6	integer	Household member traveling (person number): Range 1-15, 98- Dont know, 99- Refused.
driver	integer	Was the person making this trip the driver of the vehicle?: 1- Yes, 2- No, 98- Dont know, 99- Refused.
veh_num	integer	Household vehicle used for trip: Range 1-15, 97- Non-vehicle vehicle, 98- Dont know, 99- Refused.
use_toll	integer	Used toll road or toll bridge on trip?: 1- Yes: toll road, 2- Yes: toll bridge, 3- Yes: both toll road and toll bridge, 4- No, 8- Dont know, 9- Refused.
toll_rd1	integer	Used toll road: New Jersey turnpike (I-95): 0- Not used, 1- New Jersey Turnpike (I-95), 98- Dont know, 99- Refused.
toll_rd2	integer	Used toll road: Garden State Parkway: 0- Not used, 1- Garden State Parkway, 98- Dont know, 99- Refused.
toll_rd3	integer	Used toll road: Atlantic City Expressway: 0- Not used, 1- Atlantic City Expressway, 98- Dont know, 99- Refused.
toll_rd4	integer	Used toll road: Pennsylvania Turnpike: 0- Not used, 1- Pennsylvania Turnpike, 98- Dont know, 99- Refused.
toll_rd5	integer	Used toll road: New Jersey Turnpike- Pennsylvania Extension: 0- Not used, 1- New Jersey Turnpike- Pennsylvania Extension, 98- Dont know, 99- Refused.
toll_bridge1	integer	Used Toll Bridge: Benjamin Franklin Bridge: 0- Not used, 1- Benjamin Franklin Bridge, 98- Dont know, 99- Refused.
toll_bridge2	integer	Used Toll Bridge: Walt Whitman Bridge: 0- Not used, 1- Walt Whitman Bridge, 98- Dont know, 99- Refused.
toll_bridge3	integer	Used Toll Bridge: Betsy Ross Bridge: 0- Not used, 1- Betsy Ross Bridge, 98- Dont know, 99- Refused.
toll_bridge4	integer	Used Toll Bridge: Burlington-Bristol Bridge: 0- Not used, 1- Burlington-Bristol Bridge, 98- Dont know, 99- Refused.
toll_bridge5	integer	Used Toll Bridge: Delaware Memorial Bridge: 0- Not used, 1- Delaware Memorial Bridge, 98- Dont know, 99- Refused.
toll_bridge6	integer	Used Toll Bridge: Tacony-Palmyra Bridge: 0- Not used, 1- Tacony-Palmyra Bridge, 98- Dont know, 99- Refused.
toll_bridge7	integer	Used Toll Bridge: Commodore Barry Bridge: 0- Not used, 1- Commodore Barry Bridge, 98- Dont know, 99- Refused.
toll_bridge8	integer	Used Toll Bridge: Trenton-Morrisville Route 1: 0- Not used, 1- Trenton-Morrisville Route 1, 98- Dont know, 99- Refused.
toll_bridge9	integer	Used Toll Bridge: New Hope-Lambertville Route 202: 0- Not used, 1- New Hope-Lambertville Route 202, 98- Dont know, 99- Refused.
park_at_loc	integer	Parked at or near location: 1- Yes, 2- No, 8- Dont know, 9- Refused.
park_trav	integer	Number of minutes from parking location to destination: Range 0-97, 98- Dont know, 99- Refused.
park_pay	integer	Charged for parking?: 1- Yes, 2- No, 8- Dont know, 9- Refused.
park_cost	double precision	Cost of parking: -
..--.,999.99 – Dontknow.		
park_unit	integer	Parking cost unit: 1- Hour, 2- Day, 3- Week, 4- Month, 5- Quarter, 6- Semester, 7- Year, 97- Other, 98- Dont know, 99- Refused.
dest_loctype	integer	Destination location type: 1- Home, 2- Work, 3- School, 4- Other.
dest_geo_acc	integer	Accuracy of destination location: 1- Match, 2- Cross Street, 3- Street Centroid, 4- City or Zip code Centroid, 5- State (out of region), 99- Not Geocodable.

dest_state	integer	State of destination location based on coordinates: 34- New Jersey, 42- Pennsylvania.
dest_region	integer	Region of destination location based on coordinates: 1- DVRPC Region (9 counties), 2- Extended Model Counties, 3- Beyond Extended Model Counties.
dest_county	integer	County of destination location based on coordinates: 42017- Bucks, 42029- Chester, 42045- Delaware, 42091- Montgomery, 42101- Philadelphia, 34005- Burlington, 34007- Camden, 34015- Gloucester, 34021- Mercer.
dest_cpa	text	County Planning Area (CPA) of destination location based on coordinates.
dest_mcd	bigint	Minor Civil Division (MCD) of destination location based on coordinates.
dest_tract*	bigint	Census tract of destination location based on coordinates.
dest_taz*	integer	Transportation Analysis Zone (TAZ) of school destination based on coordinates.
tripfactor	double precision	Corrected count of trips based on persons GPS factor.
survey_travtime	integer	Travel time between diary-recorded departure and arrival.
model_travtime	double precision	Travel time between diary recorded departure TAZ and arrival TAZ; Determined using TIM 2.2 model based on mode choice.
model_travdist	double precision	Network travel distance between diary recorded departure TAZ and arrival TAZ; Determined using TIM 2.2 model based on mode choice.

## survey\_vehicle

The survey\_vehicle table contains detailed vehicle information for the vehicles described in the survey portion of the study.

Name	Data Type	Comment
sampno	integer	Household identifier.
hh_weight	double precision	Household weight.
tot_veh	integer	Total household vehicles.
op_veh	integer	Total household vehicles in working condition.
vehno	integer	Vehicle number.
veh_own	integer	Vehicle ownership status: 1- Owned by household member, 2- Leased by household member, 3- Owned or leased by employer/company, 4- Owned or leased by person not living in household (Borrowed), 97- Other, 98- Dont know, 99- Refused.
veh_year	integer	Year of vehicle: YYYY, 9998- Dont know, 9999- Refused.
veh_make	integer	Vehicle make (see lookup_vehiclemake table).
veh_model*	text	Vehicle model: Text response, 98- Dont know, 99- Refused.
veh_body	integer	Vehicle body type: 1- Sedan, 2- SUV, 3- Pick-up truck, 4- Coupe, 5- Convertible, 6- Hatchback, 7- Wagon, 8- Minivan, 9- Van, 10- Other kind of truck, 11- Recreational vehicle, 12- Motorcycle, 13- Scooter (e.g. Vespa), 14- Crossover, 97- Other, 98- Dont know, 99- Refused.
veh_type	integer	Vehicle type: 1- Hybrid vehicle, 2- Gasoline only vehicle, 3- Diesel only vehicle, 4- Plug in hybrid electric vehicle, 5- CNG (Compressed Natural Gas), 6- Electric only, 7- Other, 98- Dont know, 99- Refused.



## survey\_person

The survey\_person table contains personal information from the persons who completed the travel survey. Of those who completed the survey, a smaller subset records also contain GPS travel data.

Name	Data Type	Comment
sampno	integer	Household identifier.
perno	integer	Person identifier.
hh_weight	double precision	Household weight.
person_weight	double precision	Person weight.
p_trips	integer	Total person trips.
p_motor_trips	integer	Total motorized trips.
p_nm_trips	integer	Total non-motorized trips.
gps_factor	double precision	Multiplier used to correct for trip under-reporting in diary sample.
corrected_p_trips	double precision	Corrected total number of person trips.
corrected_p_motor_trips	double precision	Corrected number of person motorized trips.
corrected_p_nm_trips	double precision	Corrected number of person non-motorized trips.
gender	integer	Gender of person: 1- Male, 2- Female, 99- Refused.
age_bin	integer	Collapsed age categories: 1- 5 or younger, 2- 6 to 12, 3- 13 to 15, 4- 16 to 17, 5- 18 to 24, 6- 25 to 34, 7- 35 to 44, 8- 45 to 54, 9- 55 to 64, 10- 65 to 74, 11- 75 to 85, 12- 86 and over, 98- Dont know, 99- Refused.
race	integer	Race or ethnicity: 1- White/Caucasian, 2- Black/African American, 3- Hispanic or Latino, 4- American Indian or Alaska Native, 5- Asian, 6- Native Hawaiian or Pacific Islander (Guamanian, Samoan, Fijian), 97- Other, specify, 98- Dont Know, 99- Refused, 100- Multi-race, 988 Pilot record (non-Hispanic).
education	integer	Highest level of education completed: 1- Not a high school graduate, 12 grade or less, 2- High school graduate, 3- Some college credit but no degree, 4- Associate or technical school degree, 5- Bachelors or undergraduate degree, 6- Graduate degree, 97- Other, 98- Dont know, 99- Refused.
relationship	integer	Relationship to contact person: 0- Contact person, 1- Spouse/Partner, 2- Child/Daughter/Son/Adopted Child/Stepchild/Son-In-Law/Daughter-In-Law, 3- Parent/Parent-In-Law/Step-Parent, 4- Brother Or Sister (Step-brother/Stepsister), 5- Grandparent, 6- Grandchild, 7- Other relative, 8- No Relation/Housemate/Roommate/Foster Child, 99- Refused.
driver_license	integer	Drivers license status (age 16+): 1- Yes, 2- No, 98- Dont know, 99- Refused.
employment	integer	Employment status: 1- Yes, 2- No, 98- Dont know, 99- Refused.
empl_status	integer	Work status: 1- Retired, 2- Disabled, 3- Homemaker, 4- Unemployed but looking for work, 5 Unemployed and not looking for work, 6- Student, 7- Volunteer, 97- Other, 98- Dont know, 99- Refused.
self_employ	integer	Self-employment status: 1- Yes, 2- No, 98- Dont know, 99- Refused.
jobs	integer	Number of jobs: Range 1-97, 98- Dont know, 99- Refused.
work_loc	integer	Work location: 1- Fixed, 2- Home, 3- No fixed workplace, 8- Dont know, 9- Refused.

work_geo_acc	integer	Accuracy of work location: 1- Match, 2- Cross street, 3- Street centroid, 4- City or Zip code centroid, 5- State (out of region), 99- Not Geocodable.
work_state	integer	State of work location based on coordinates: 34- New Jersey, 42- Pennsylvania.
work_region	integer	Region of work location based on coordinates: 1- DVRPC Region, 2- Extended Region, 3- Out of Region.
work_county	integer	County of work location based on coordinates: 42017- Bucks, 42029- Chester, 42045- Delaware, 42091- Montgomery, 42101- Philadelphia, 34005- Burlington, 34007- Camden, 34015- Gloucester, 34021- Mercer.
work_cpa	text	County Planning Area (CPA) of work location.
work_mcd	bigint	Minor Civil Division of work location.
work_tract*	bigint	Census tract of work location.
work_taz*	integer	Transportation Analysis Zone (TAZ) of work location.
work_hours	integer	Number of hours worked per week: Range 1-99, 998- Dont know, 999- Refused.
occup_code	integer	Occupational code: 11- Management Occupations, 13- Business And Financial Operations Occupations, 15- Computer And Mathematical Occupations, 17- Architecture And Engineering Occupations, 19 - Life, Physical And Social Science Occupations, 21- Community and Social Service Occupations, 23- Legal Occupations, 25- Education, Training And Library Occupations, 27- Arts, Design, Entertainment, Sports and Media occupations, 29- Healthcare Practitioners And Technical Occupations, 31- Healthcare Support Occupations, 33- Protective Service Occupations, 35- Food Preparation And Serving Related Occupations, 37- Building And Grounds Cleaning And Maintenance Occupations, 39- Personal Care And Service Occupations, 41- Sales And Related Occupations, 43- Office And Administrative Support Occupations, 45- Farming, Fishing, and Forestry occupations, 47- Construction And Extraction Occupations, 49- Installation, Maintenance, And Repair Occupations, 51- Production Occupations, 53- Transportation And Material Moving Occupations, 55- Military specific occupations, 97- Other, 98- Dont know, 99- Refused.
work_mode	integer	Mode of transportation to work: 1- Car: driving alone, 2- Car: sharing a ride with others, 3- Transit using park and ride, 4- Transit NOT using park and ride, 5- Bicycle, 6- Walking the entire way, 7- Other, 8- Worked from Home, 9- Refused.
work_mode_tms	integer	Frequency of using work mode of transportation (last 10 times): Range 1-97, 98- Dont know, 99- Refused.
work_arrive	integer	Usual arrival time at work: 1- Before 6 am, 2- Between 6 and 6:30 am, 3- Between 6:30 and 7 am, 4- Between 7 and 7:30 am, 5- Between 7:30 and 8 am, 6- Between 8 and 8:30 am, 7- Between 8:30 and 9 am, 8- After 9 am, 9- Different times on different days.
arrive_freq	integer	Frequency of arrival time at work (last 10 times): Range 1-97, 98- Dont know, 99- Refused.
work_leave	integer	Usual departure time from work: 1- Before 3:30 pm, 2- Between 3:30 and 4 pm, 3- Between 4 and 4:30 pm, 4- Between 4:30 and 5 pm, 5- Between 5 and 5:30 pm, 6- Between 5:30 and 6 pm, 7- Between 6 and 6:30 pm, 8- After 6:30 pm, 9- Different times on different days.
leave_freq	integer	Frequency of departure time from work (last 10 times): Range 1-97, 98- Dont know, 99- Refused.
tcomm_freq	double precision	Frequency of telecommuting (in last 10 days worked): Range 1-97, 98- Dont know, 99- Refused.

park_sub	integer	Employer parking subsidy: 1- Employer offers to subsidize/Pay for part of workplace parking, 2- Employee must pay for workplace parking out-of-pocket, 3- Free parking available for employees, 8- Dont know, 9- Refused.
park_sub_amt	integer	Percentage of employer parking subsidy: 1- 1% to 24%, 2- 25% to 49%, 3- 50% to 74%, 4- 75% to 99%, 5- 100%, 7- Employer does not provide subsidy, 8- Dont know, 9- Refused.
tran_sub	integer	Employer transit subsidy: 1- Employer offers to subsidize/Pay for part of transit fare, 2- Employee must pay for transit fare out-of-pocket, 8- Dont know, 9- Refused.
tran_sub_amt	integer	Percentage of employer transit subsidy: 1- 1% to 24%, 2- 25% to 49%, 3- 50% to 74%, 4- 75% to 99%, 5- 100%, 7- Employer does not provide subsidy, 8- Dont know, 9- Refused.
wday_1	integer	Typical days worked: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday, 6- Saturday, 7- Sunday, 98- Dont know, 99- Refused.
wday_2	integer	Typical days worked: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday, 6- Saturday, 7- Sunday, 98- Dont know, 99- Refused.
wday_3	integer	Typical days worked: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday, 6- Saturday, 7- Sunday, 98- Dont know, 99- Refused.
wday_4	integer	Typical days worked: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday, 6- Saturday, 7- Sunday, 98- Dont know, 99- Refused.
wday_5	integer	Typical days worked: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday, 6- Saturday, 7- Sunday, 98- Dont know, 99- Refused.
wday_6	integer	Typical days worked: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday, 6- Saturday, 7- Sunday, 98- Dont know, 99- Refused.
wday_7	integer	Typical days worked: 1- Monday, 2- Tuesday, 3- Wednesday, 4- Thursday, 5- Friday, 6- Saturday, 7- Sunday, 98- Dont know, 99- Refused.
student	integer	Student status: 1- Yes: Full time, 2- Yes: Part time, 3- No, 98- Dont know, 99- Refused.
school	integer	Current level of school enrollment: 1- Daycare, 2- Nursery School: Preschool, 3- Kindergarten To Grade 8, 4- Grade 9 To 12, 5- Technical/Vocational School, 6- 2 Year College (Community College), 7- 4 Year College Or University, 8- Graduate School/Professional, 97- Other, 98- Dont Know, 99- Refused.
school_home	integer	Home schooled status: 1- Yes, 2- No, 98- Dont know, 99- Refused.
school_online	text	Online college course attendance status: 1- On campus only, 2- Online only, 3- Both campus and online, 8- Dont know, 9- Refused.
school_geo_acc	integer	Accuracy of school location: 1- Match, 2- Cross Street, 3- Street centroid, 4- City or Zip code centroid, 5- State (out of region), 99- Not Geocodable.
school_state	integer	State of school location based on coordinates: 34- New Jersey, 42- Pennsylvania.
school_region	integer	Region of school location based on coordinates: 1- DVRPC Region (9 counties), 2- Extended model counties, 3- Beyond extended model counties.
school_county	integer	County of school location based on coordinates: 42017- Bucks, 42029- Chester, 42045- Delaware, 42091- Montgomery, 42101- Philadelphia, 34005- Burlington, 34007- Camden, 34015- Gloucester, 34021- Mercer.

school_cpa	text	County Planning Area (CPA) of school location.
school_mcd	bigint	Minor Civil Division (MCD) of school location.
school_tract*	bigint	Census tract of school location.
school_taz*	integer	Transportation Analysis Zone (TAZ) of school location.
presch_1	integer	Preschool type: 1- Relative/Family member in your home, 2- Relative/Family member outside your home, 3- Non-relative/Friend in your home, 4- Non-relative/Friend outside your home, 5- Private daycare center/Preschool, 6- Public daycare center/Preschool, 97- Other, 98- Dont know, 99- Refused.
presch_2	integer	Preschool type: 1- Relative/Family member in your home, 2- Relative/Family member outside your home, 3- Non-relative/Friend in your home, 4- Non-relative/Friend outside your home, 5- Private daycare center/Preschool, 6- Public daycare center/Preschool, 97- Other, 98- Dont know, 99- Refused.
presch_3	integer	Preschool type: 1- Relative/Family member in your home, 2- Relative/Family member outside your home, 3- Non-relative/Friend in your home, 4- Non-relative/Friend outside your home, 5- Private daycare center/Preschool, 6- Public daycare center/Preschool, 97- Other, 98- Dont know, 99- Refused.
trans_trips	integer	Number of one-way public transportation trips (last week): Range 0-50, 997- 50+ trips, 998- Dont know, 999- Refused.
pay_type1	integer	Method of transit fare payment (last week): 01- Tokens/Cash/Paper Ticket/ Exact Change, 02- SEPTA One Day Pass, 03- SEPTA Weekly pass, 04- SEPTA Monthly Pass, 05- TAP <sub>2</sub> RIDE Pass or Contactless Card, 06- NJ TRANSIT One-Way Patron Pass, 07- NJ TRANSIT Weekly pass, 08- NJ TRANSIT Monthly pass, 09- PATCO FREEDOM Smart Card, 10- Other Rail/Train/Subway pass/payment, 11- Other Bus/Trolleybus pass/payment, 12- Other Ferry/Boat pass/payment, 13- Senior Citizen Pass, 14- Student Pass, 15- Disabled Pass, 16- SEPTA Ten Trip, 17- School Bus, 98- Dont know, 99- Refused.
pay_type2	integer	Method of transit fare payment (last week): 01- Tokens/Cash/Paper Ticket/ Exact Change, 02- SEPTA One Day Pass, 03- SEPTA Weekly pass, 04- SEPTA Monthly Pass, 05- TAP <sub>2</sub> RIDE Pass or Contactless Card, 06- NJ TRANSIT One-Way Patron Pass, 07- NJ TRANSIT Weekly pass, 08- NJ TRANSIT Monthly pass, 09- PATCO FREEDOM Smart Card, 10- Other Rail/Train/Subway pass/payment, 11- Other Bus/Trolleybus pass/payment, 12- Other Ferry/Boat pass/payment, 13- Senior Citizen Pass, 14- Student Pass, 15- Disabled Pass, 16- SEPTA Ten Trip, 17- School Bus, 98- Dont know, 99- Refused.
pay_type3	integer	Method of transit fare payment (last week): 01- Tokens/Cash/Paper Ticket/ Exact Change, 02- SEPTA One Day Pass, 03- SEPTA Weekly pass, 04- SEPTA Monthly Pass, 05- TAP <sub>2</sub> RIDE Pass or Contactless Card, 06- NJ TRANSIT One-Way Patron Pass, 07- NJ TRANSIT Weekly pass, 08- NJ TRANSIT Monthly pass, 09- PATCO FREEDOM Smart Card, 10- Other Rail/Train/Subway pass/payment, 11- Other Bus/Trolleybus pass/payment, 12- Other Ferry/Boat pass/payment, 13- Senior Citizen Pass, 14- Student Pass, 15- Disabled Pass, 16- SEPTA Ten Trip, 17- School Bus, 98- Dont know, 99- Refused.
tap	integer	TAP card or EZ transit pass type: 1- Pay-As-You-Go, 2- Ten-Trip, 3- Monthly, 4- Other TAP <sub>2</sub> RIDE or Contactless Card, 98- Dont Know, 99- Refused.

## Wearable Tables

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### w\_households

The w\_households table contains a list of identifiers (sampno) for the households who participated in the wearable GPS part of the study (a subset of the total households who participated in the study).

Name	Data Type	Comment
sampno	numeric	Household identifier

### 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. Higher level tables (e.g. gpstrips) 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
perno	smallint	Person identifier.
sampno	numeric	Unique household identifier.
longitude*	double precision	Longitude recorded by the GPS device.
latitude*	double precision	Latitude recorded by the GPS device.
gpsspeed	double precision	GPS speed (in meters per hour).
date	text	Date that GPS point was recorded.
time	text	Time that GPS point was recorded.
distance	double precision	Distance traveled from last point (in meters).
od	character	Origin Destination.
trip	smallint	Trip segment number in file.
tripid	numeric	Unique trip identifier.
geom*	geometry	Geometric point data.
time_local	timestamp without time zone	

### w\_gpstrips

The w\_gpstrips table contains trip-level information for each valid GPS trip detected in the GPS point data collected by the sampled households during the assigned travel day.

Name	Data Type	Comment
sampno	integer	Household identifier.
perno	smallint	Person identifier.
gpstripid	integer	Trip number.
origin_ts	timestamp without time zone	Timestamp of origin.
destination_ts	timestamp without time zone	Timestamp of destination.

dayofweek	character	Day of week of travel.
dayoftravel	character	Number of assigned travel day.
tripofday	character	Trip number of assigned travel day.
distance_miles	double precision	Trip distance (in miles).
duration_min	double precision	Trip duration (in min).
origin_lon*	double precision	Longitude of origin location.
origin_lat*	double precision	Latitude of origin location.
destination_lon*	double precision	Longitude of destination location.
destination_lat*	double precision	Latitude of destination location.
geom*	geometry	Geometric LineString.

### w\_person

The w\_person table contains one record for each of the persons deployed with wearable GPS equipment during the study period.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier

## Sorted by Person Tables

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### gps.households

The w\_households table contains a list of identifiers (sampno) for the households who participated in the wearable GPS part of the study (a subset of the total households who participated in the study).

Name	Data Type	Comment
sampno	numeric	Household identifier

### person

The w\_person table contains one record for each of the persons deployed with wearable GPS equipment during the study period.

Name	Data Type	Comment
sampno	numeric	Household identifier
perno	smallint	Person identifier

## 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. Higher level tables (e.g. gpstrips) 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
perno	smallint	Person identifier.
sampno	numeric	Unique household identifier.
gpsspeed	double precision	GPS speed (in meters per hour).
date	text	Date that GPS point was recorded.
time	text	Time that GPS point was recorded.
distance	double precision	Distance traveled from last point (in meters).
od	character	Origin Destination.
trip	smallint	Trip segment number in file.
tripid	numeric	Unique trip identifier.
time_local	timestamp without time zone	

## gps\_trips

The w\_gpstrips table contains trip-level information for each valid GPS trip detected in the GPS point data collected by the sampled households during the assigned travel day.

Name	Data Type	Comment
sampno	integer	Household identifier.
perno	smallint	Person identifier.
gpstripid	integer	Trip number.
origin_ts	timestamp without time zone	Timestamp of origin.
destination_ts	timestamp without time zone	Timestamp of destination.
dayofweek	character	Day of week of travel.
dayoftravel	character	Number of assigned travel day.
tripofday	character	Trip number of assigned travel day.
distance_miles	double precision	Trip distance (in miles).
duration_min	double precision	Trip duration (in min).

\* Indicates that the column has been redacted from cleansed data sets available at [www.nrel.gov/tsdc](http://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](http://www.nrel.gov/tsdc).