Southern California Association of Governments Augment to the California Statewide Travel Survey: Lookup Table

Transportation Secure Data Center

Revised: 2016-12-05

Summary Statistics

Travel Diary	Households	
	Persons	
Vehicle GPS	Households	332
	Vehicles	625
	Days of Travel	2,919
	GPS Frequency (Hz)	1
Vehicle OBD	Households	
	Vehicles	
	Days of Travel	
	GPS Frequency (Hz)	
Wearable GPS	Households	141
	Persons	244
	Days of Travel	2,015
	GPS Frequency (Hz)	1

Blank fields indicate data is not present for this study.

Vehicle Tables

v_households

The v_households table includes a list of identifiers (sampno) for the households who participated in the vehicle GPS part of the study (a subset of the total households who participated in the study).

Name	Data Type	Comment
sampno	numeric	Household identifier

v_vehicles

The v_vehicles table provides a list of matched household (sampno) and vehicle (vehno) identifiers for the vehicles outfitted with onboard GPS devices.

Name	Data Type	Comment
sampno	numeric	Household identifier
vehno	smallint	Vehicle identifier

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
longitude*	double precision	Longitude recorded by the GPS device
latitude*	double precision	Latitude recorded by the GPS device
gpsspeed	double precision	GPS speed (in KPH)
course	double precision	N/A
sat	double precision	Number of satellites
hdop	double precision	HDOP of computed position
altitude	double precision	Altitude at which GPS point was recorded
distance	double precision	Distance (in miles) from last point
geom*	geometry	Geometric point data
time_local	timestamp without time zone	Local timestamp that GPS point was recorded

v_gpstrips

The v_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	numeric	Household identifier
vehno	smallint	Vehicle identifier
gpstripid	integer	Trip number within file
distance_miles	double precision	Distance covered during trip in miles
duration_sec	integer	Duration of trip in seconds
avg_speed_mph	double precision	Average speed (mph)
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
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	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_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. 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	Unique person 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 MPH)
course	double precision	N/A
sat	double precision	Number of satellites
hdop	double precision	HDOP of computed position
altitude	double precision	Altitude at which GPS point was recorded
date	date	Date that GPS point was recorded
time	time without time zone	Time that GPS point was recorded
distance	double precision	Distance (in miles) from last point
geom*	geometry	Geometric point data
time_local	timestamp without time zone	

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 during the assigned travel day.

Name	Data Type	Comment
sampno	numeric	Household identifier

perno	smallint	Person identifier
gpstripid	integer	Trip number within file
distance_miles	double precision	Distance covered during trip (in miles)
duration_sec	integer	Duration of trip (in seconds)
avg_speed_mph	double precision	Average speed (mph)
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
origin_lon*	double precision	Longitude (dd WGS84) of trip origin
origin_lat*	double precision	Latitude (dd WGS84) of trip origin
destination_lon*	double precision	Longitude (dd WGS84) of trip destination
destination_lat*	double precision	Latitude (dd WGS84) Of trip destination
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_person

The w_person table contains one record for each person deployed with wearable GPS equipment during the study period.

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

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
gpsspeed	double precision	GPS speed (in KPH)
course	double precision	N/A
sat	double precision	Number of satellites
hdop	double precision	HDOP of computed position
altitude	double precision	Altitude at which GPS point was recorded

distance	double precision	Distance (in miles) from last point
time_local	timestamp without time zone	Local timestamp that GPS point was recorded

gps_households

The v_households table includes a list of identifiers (sampno) for the households who participated in the vehicle GPS part of the study (a subset of the total households who participated in the study).

Name	Data Type	Comment
sampno	numeric	Household identifier

gps_vehicles

The v_vehicles table provides a list of matched household (sampno) and vehicle (vehno) identifiers for the vehicles outfitted with onboard GPS devices.

Name	Data Type	Comment
sampno	numeric	Household identifier
vehno	smallint	Vehicle identifier

Sorted by Person Tables

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 person 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. 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.

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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 during the assigned travel day.

Name	Data Type	Comment
sampno	numeric	Household identifier
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gpstripid	integer	Trip number within file
distance_miles	double precision	Distance covered during trip (in miles)
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avg_speed_mph	double precision	Average speed (mph)
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

* 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.

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

<u>How to Cite the TSDC:</u>

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.