

# **Madison County Council of Governments - In The Moment Travel Study 2014-2015: Lookup Table**

Transportation Secure Data Center

Revised: 2017-02-23

## Summary Statistics

---

<b>Travel Diary</b>	Households	191
	Persons	505
<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	188
	Persons	276
	Days of Travel	533
	GPS Frequency (Hz)	1

Blank fields indicate data is not present for this study.

## Survey Tables

---

### survey\_vehicles

The survey\_vehicles table contains vehiclelevel variables for a total of 389 vehicles.

Name	Data Type	Comment
sampno	text	Unique household identifier
vehicleid	text	Unique vehicle identifier (sampno. + vehno)
vehno	bigint	Vehicle number (per household)
veh_year	text	Vehicle year (note: 1980 = 1980 or earlier)
veh_make	text	Vehicle make
veh_model*	text	Vehicle model
vehname*	text	Vehicle name
veh_disa	text	Vehicle has disability plates or tags?

## survey\_households

The survey\_households table contains details about a participants household. This table contains information from 191 unique households.

Name	Data Type	Comment
dataset	text	Data source
sampno	text	Unique household identifier
sampno_14	text	2014 HIM household identifier
traveldate_start	double precision	First assigned travel date
traveldate_end	double precision	Last assigned travel date
starttimehinfo_et	double precision	Recruit survey start time (ET)
endtimehinfo_et	double precision	Recruit survey end time (ET)
hhinfodur	bigint	HH info survey duration (minutes) (derived)
hhnumtrips	bigint	HH number of trips during travel week (includes passively collected, derived, and reported missed trips)
hhnumtrips_day1	bigint	HH number of trips for travel day 1 (includes passively collected, derived, and reported missed trips)
vehicle_count	text	Number of vehicles
hhsz	text	Household size
num16p	text	Number of HH members age 16+ (derived)
numadults	text	Number of adults in household age 18+ (derived)
numchildren	text	Number of children in household under 18 (derived)
numparticipants	bigint	Number of GPS participants in household who activated rMove
numinvited	bigint	Number of people in household initially invited to download rMove
homelat*	double precision	Latitude of home address
homelon*	double precision	Longitude of home address
homeaddress*	text	Home address, reported (Google Maps)
res_dur	text	How long lived in residence
res_type	text	Type of residence
rent_own	text	Residence tenure status
hhinc_detailed	text	Household income: Detailed categories
hhinc_followup	text	Prefer not to answer detailed household income categories: Broad categories
hhinc_broad	text	Household income: Combined categories (derived)
user_ism	text	Took recruit survey on mobile device
home_geom*	geometry	Point geometry indicating household location

## survey\_person

The survey\_persons table contains personlevel variables for a total of 505 persons, including adults and children, both GPS participating and nonparticipating.

Name	Data Type	Comment
sampno	text	Unique household identifier

personid	text	Unique person identifier (sampno. + perno)
perno	bigint	Person number
participant	text	GPS participant? 0 = No, 1 = Yes
person_status	text	Person completion status (derived)
resptype	text	Respondent type (derived)
relationship	text	Relationship to primary respondent
gender	text	Gender
age_bin	text	Age range
employment	text	Employment status (age 18+)
jobs_count	text	Employed or age is 16 to 17: Number of jobs
student	text	Student status (age 18+)
education	text	Educational attainment (age 18+)
license	text	Has valid drivers license (age 16+)?
typical_vehicle	text	Has drivers license and HH owns 1 or more vehicles: Typical vehicle used
numtrips	bigint	Number of trips for travel week (includes passively recorded, derived, and missed trips) (derived)
numtrips_day1	bigint	Number of trips taken on travel day 1 (includes passively recorded, derived, and missed trips) (derived)
num_dailies	double precision	Number of daily surveys completed (derived)
numtrips_missed	double precision	Number of trips reported missing from GPS record (derived)
smartphone_type_reported	text	Reported smartphone ownership and type (age 16+)
smartphone_dr_reported	text	Reported Android model (age 16+): Type
smartphone_ip_reported	text	Reported iPhone model (age 16+): Type
smartphone_type	text	GPS participant: Smartphone used for GPS study (metadata): more details
device_activated	double precision	Date and time rMove was activated on device (Unix timestamp)
incentiv	text	Incentive type preferred: Amazon or Walmart

### survey\_days

The survey\_days table contains 1,981 rows one for each GPS participant per day of the travel study. For days when no GPS data was collected and no daily survey submitted, no data is included in that row. For days when GPS data was collected but no daily survey submitted, there is a count of number of trips collected, but no other data for that row.

Name	Data Type	Comment
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno. + perno)
perno	bigint	Person number
daynum	bigint	Travel day number (1 = first assigned travel day)
daily_survey_complete	text	Daily survey for day is complete
traveldate	double precision	Travel date
missed_trips	text	Number of missed trips reported for travel date
no_travel_reason	text	If no travel: Reason didnt travel

noneed_vacation	text	No need to travel: Did not work/took vacation
noneed_telecommute	text	No need to travel: Worked from home
noneed_workhomenopay	text	No need to travel: Worked around the home (not for pay)
noneed_kidvacation	text	No need to travel: Children on school break/vacation
noneed_other	text	No need to travel: Other reason
unable_notransport	text	Unable to travel: No available transport
unable_health	text	Unable to travel: Sick
unable_visitor	text	Unable to travel: Caring for household member or caring for/waiting for visitor
unable_other	text	Unable to travel: Other
numtrips	double precision	Total number of trips on travel date (missed trips plus recorded trips) (derived)
numtrips_recorded	bigint	Number of trips passively collected on travel date

## Wearable Tables

---

### w\_points

The w\_points table contains pointlevel data from GPS coordinates that were passively collected during the travel of 276 GPS participants via the rMove smartphone application.

Name	Data Type	Comment
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno. + perno)
locnum	bigint	Location number (per personid)
accuracy	integer	Meters of location accuracy
heading	bigint	Heading (in degrees)
speed_mph	double precision	Speed (in mph)
collected_at	double precision	Time collected
lat*	double precision	Point latitude
lon*	double precision	Point longitude
geom*	geometry	Point geometry
perno	text	
time_local	timestamp without time zone	

### w\_gpstrips

The w\_gpstrips table contains triplelevel variables from the 13,689 trips collected by the smartphone app during the travel period. This table includes trips collected directly from GPS participants devices (whether the trip survey was completed or not) as well as trips copied for nonparticipants who were identified in the travel party from participants trips. Trips that started on the last travel date (May 11, 2015) but ended on the day after the last travel date (May 12, 2015) are included in the dataset, but trips starting before the first travel date are not included.

Name	Data Type	Comment
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno. + perno)
perno	bigint	Person number (per household)
tripid	text	Unique trip identifier (sampno. + perno. + tripnum)
tripnum	bigint	Trip number
traveldate	double precision	Travel date (date that trip was taken)
olat*	double precision	Origin latitude
olon*	double precision	Origin longitude
dlat*	double precision	Destination latitude
dlon*	double precision	Destination longitude
time_start	double precision	Trip start time
time_end	double precision	Trip end time
survey_endtime	double precision	Time that survey was completed
survey_status	bigint	Survey was completed
trip_distance	double precision	Trip distance in miles (derived)
trip_duration	bigint	Trip duration in minutes (derived)
implied_speed_mph	double precision	Trip speed in miles per hour (derived)
o_purpose	double precision	Origin purpose (derived)
d_purpose	double precision	Destination purpose
travelers_hh	double precision	Number of household members on trip (including self) (derived)
travelers_nonhh	double precision	Number of nonhousehold members on trip
travelers_total	double precision	Total travelers on trip (derived)
mode	double precision	Travel mode used for trip
mode1	double precision	Used more than one travel mode: Travel mode 1
mode2	double precision	Used more than one travel mode: Travel mode 2
mode3	double precision	Used more than one travel mode: Travel mode 3
driver	double precision	Auto mode (household vehicle or other vehicle), travel party size >1: Driver or passenger
park	double precision	Auto mode (household vehicle or other vehicle): Parked vehicle
park_pay	double precision	Parked on street or in lot: Paid for parking
park_cost	double precision	Paid for parking: Cost of parking
transit_faretype	double precision	Transit, vanpool, airplane, or other mode: Fare payment method
transit_pay	double precision	Paid fare with cash/tickets: Paid for transit
transit_cost	double precision	Paid fare with cash/tickets: Cost of transit
taxi_paymethod	double precision	Taxi or rideshare mode: How taxi fare was paid
taxi_pay	double precision	Self or employer paid taxi/rideshare: Paid for taxi fare
taxi_cost	double precision	Self or employer paid taxi/rideshare: Cost of taxi fare
error	double precision	Error reported on trip
error_detail	text	Error reported on trip: Error detail
error_missed_stops	double precision	More than 1 stop made on trip: Number of missed stops
member1	text	Household size > 1: Household member 1 was in travel party (personID of member 1)

member2	text	Household size > 1: Household member 2 was in travel party (personID of member2)
member3	text	Household size > 1: Household member 3 was in travel party (personID of member 3)
member4	text	Household size > 1: Household member 4 was in travel party (personID of member 4)
member5	text	Household size > 1: Household member 5 was in travel party (personID of member 5)
member6	text	Household size > 1: Household member 6 was in travel party (personID of member 6)
member7	text	Household size > 1: Household member 7 was in travel party (personID of member 7)
member8	text	Household size > 1: Household member 8 was in travel party (personID of member 8)
revised_at	double precision	Survey was revised: Time last revised
revised_count	double precision	Number of times survey was revised
flag_split	bigint	Trip was part of split trip
flag_merge	bigint	Trip was merged from two or more trips
flag_teleport	bigint	Trip was derived due to >=250m gap in participant trip record
nonresp_trip	bigint	Trip was derived for nonGPS participant
nonresp_originaltripid	text	Trip was derived for nonGPS participant: Original trip ID
trip_per	text	Person ID of original trip (use to join to locations table)
o_geom*	geometry	Point geometry indicating location of trip origin
d_geom*	geometry	Point geometry indicating location of trip destination
ts_start	timestamp without time zone	
ts_end	timestamp without time zone	

## Sorted by Person Tables

---

### gps\_points

The w\_points table contains pointlevel data from GPS coordinates that were passively collected during the travel of 276 GPS participants via the rMove smartphone application.

Name	Data Type	Comment
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno. + perno)
locnum	bigint	Location number (per personid)
accuracy	integer	Meters of location accuracy
heading	bigint	Heading (in degrees)
speed_mph	double precision	Speed (in mph)
collected_at	double precision	Time collected
perno	text	
time_local	timestamp without time zone	

## gps\_trips

The w\_gpstrips table contains triplelevel variables from the 13,689 trips collected by the smartphone app during the travel period. This table includes trips collected directly from GPS participants devices (whether the trip survey was completed or not) as well as trips copied for nonparticipants who were identified in the travel party from participants trips. Trips that started on the last travel data (May 11, 2015) but ended on the day after the last travel date (May 12, 2015) are included in the dataset, but trips starting before the first travel date are not included.

Name	Data Type	Comment
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno. + perno)
perno	bigint	Person number (per household)
tripid	text	Unique trip identifier (sampno. + perno. + tripnum)
tripnum	bigint	Trip number
traveldate	double precision	Travel date (date that trip was taken)
time_start	double precision	Trip start time
time_end	double precision	Trip end time
survey_endtime	double precision	Time that survey was completed
survey_status	bigint	Survey was completed
trip_distance	double precision	Trip distance in miles (derived)
trip_duration	bigint	Trip duration in minutes (derived)
implied_speed_mph	double precision	Trip speed in miles per hour (derived)
o_purpose	double precision	Origin purpose (derived)
d_purpose	double precision	Destination purpose
travelers_hh	double precision	Number of household members on trip (including self) (derived)
travelers_nonhh	double precision	Number of nonhousehold members on trip
travelers_total	double precision	Total travelers on trip (derived)
mode	double precision	Travel mode used for trip
mode1	double precision	Used more than one travel mode: Travel mode 1
mode2	double precision	Used more than one travel mode: Travel mode 2
mode3	double precision	Used more than one travel mode: Travel mode 3
driver	double precision	Auto mode (household vehicle or other vehicle), travel party size >1: Driver or passenger
park	double precision	Auto mode (household vehicle or other vehicle): Parked vehicle
park_pay	double precision	Parked on street or in lot: Paid for parking
park_cost	double precision	Paid for parking: Cost of parking
transit_faretype	double precision	Transit, vanpool, airplane, or other mode: Fare payment method
transit_pay	double precision	Paid fare with cash/tickets: Paid for transit
transit_cost	double precision	Paid fare with cash/tickets: Cost of transit
taxi_paymethod	double precision	Taxi or rideshare mode: How taxi fare was paid
taxi_pay	double precision	Self or employer paid taxi/rideshare: Paid for taxi fare
taxi_cost	double precision	Self or employer paid taxi/rideshare: Cost of taxi fare
error	double precision	Error reported on trip
error_detail	text	Error reported on trip: Error detail



error_missed_stops	double precision	More than 1 stop made on trip: Number of missed stops
member1	text	Household size > 1: Household member 1 was in travel party (personID of member 1)
member2	text	Household size > 1: Household member 2 was in travel party (personID of member2)
member3	text	Household size > 1: Household member 3 was in travel party (personID of member 3)
member4	text	Household size > 1: Household member 4 was in travel party (personID of member 4)
member5	text	Household size > 1: Household member 5 was in travel party (personID of member 5)
member6	text	Household size > 1: Household member 6 was in travel party (personID of member 6)
member7	text	Household size > 1: Household member 7 was in travel party (personID of member 7)
member8	text	Household size > 1: Household member 8 was in travel party (personID of member 8)
revised_at	double precision	Survey was revised: Time last revised
revised_count	double precision	Number of times survey was revised
flag_split	bigint	Trip was part of split trip
flag_merge	bigint	Trip was merged from two or more trips
flag_teleport	bigint	Trip was derived due to >=250m gap in participant trip record
nonresp_trip	bigint	Trip was derived for nonGPS participant
nonresp_originaltripid	text	Trip was derived for nonGPS participant: Original trip ID
trip_per	text	Person ID of original trip (use to join to locations table)
ts_start	timestamp without time zone	
ts_end	timestamp without time zone	

\* 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](mailto: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).