Madison County Council of Governments - Heartland in Motion 2014: Lookup Table

Transportation Secure Data Center

Revised: 2017-02-23

Summary Statistics

Travel Diary	Households	1,926
	Persons	4,349
Vehicle GPS	Households	
	Vehicles	
	Days of Travel	
	GPS Frequency (Hz)	
Vehicle OBD	Households	
	Vehicles	
	Days of Travel	
	GPS Frequency (Hz)	
Wearable GPS	Households	
	Persons	
	Days of Travel	
	GPS Frequency (Hz)	

Blank fields indicate data is not present for this study.

Survey Tables

survey_households

Participants were asked for details regarding their specific household. The "survey_households" table contains data from 1,926 unique households.

Name	Data Type	Comment
dataset	text	Main/Pilot
sampno	text	Unique household identifier
segnum	bigint	Number corresponding to segname
segname	text	Assigned home segment based on the purchased sample. In some cases a household reported a geographic location that differed from that in the purchased sample (household has moved, mail forwarding, etc)
segname_reported	text	Reported home segment (derived from selfreported home location)
county_reported	text	Reported home county (derived from selfreported home location)
numdiarycompletes	bigint	Number of completed diaries

hhinfodur	bigint	Calculated as the difference between the timestamp recorded for the last survey page (participate) and the timestamp for the first survey page (intro). Use care when interpreting survey duration as it is possible the respondent left their web browser open for period(s) of time.
hhnumtrips	bigint	Number of trips on household travel day
vehicle_count	text	Number of vehicles in household
hhsize	text	Number of people in household
numadults	text	Number of people age 18+ in household
numchildren	text	Number of people less than 18 years old in household
res_dur	text	Amount of time participant has lived in current residence
res_type	text	Current residence type
rent_own	text	Residence tenure status
house_value*	text	If participant owns home, value of home (Exact)
house_value2*	text	If participant owns home & prefered not to give an exact value, value of home (Range)
house_value3	text	Value of home (Range) derived from house_value and house_value2
rent_amount*	text	If participant rents home, monthly cost for rent (Exact)
rent_amount2*	text	If participant rents home & prefered not to give an exact cost, monthly cost for rent (Range)
rent_amount3	text	Monthly cost for rent (Range) derived from rent_amount and rent_amount2
homelat*	double precision	Latitude of home location
homelon*	double precision	Longitude of home location
homeaddress*	text	Address of home location
prev_res_city	text	City of previous residence (if lived there < 10 years ago)
prev_res_st	text	State of previous residence (if lived there < 10 years ago)
prev_res_zip	text	ZIP code of previous residence (if lived there < 10 years ago)
prev_rent_own	text	Previous residence tenure status (if lived there < 10 years ago)
prev_res_type	text	Previous residence type (if lived there < 10 years ago)
prev_house_value*	text	If participant owned home previously, value of previous home (Exact)
prev_house_value2*	text	If participant owned home previously & prefered not to give an exact value, value of previous home (Range)
prev_house_value3	text	Value of previous home (Range) derived from prev_house_value and prev_house_value2
prev_rent_amount*	text	If participant rented home previously, monthly cost for previous rent (Exact)
prev_rent_amount2*	text	If participant rented home previously & prefered not to give an exact cost, monthly cost for previous rent (Range)
prev_rent_amount3	text	Monthly cost for previous rent (Range) derived from prev_rent_amount and prev_rent_amount2
hh_income	text	Household income (detailed categories)
hh_income2	text	Household income (broad categories)
hh_income3	text	Household income (combined broad categories)

hh_income_imputed	text	For households that did not provide a response to the eight-category income question, an estimated household income was derived using a multiple imputation process. It is important to note that the imputed income data are estimates with some degree of uncertainty, and as such, any analysis performed with the imputed data should be interpreted with caution.
hh_income_detailed	text	Household income (combined detailed & imputed detailed income categories)
contact_email	text	Particpant prefers email contact
contact_phonecall	text	Participant prefers phone contact
contact_text	text	Participant prefers text contact
incentive_type	text	Type of incentive preferred (WalMart or Amazon gift card)
participate	text	Willing to participate in future MCCOG & CIRTA studies?
call_center	text	Call center completed household info survey?
user_browser	text	Survey completed online. Browser used to complete survey?
hhsize_veh_cat	text	N/A
hhwgt	double precision	Household weight
unix_traveldate	bigint	Assigned travel date (One day out of the following: Dec 10 thru 12 2013, Feb 11 thru 13 2014, Feb 19 thru 20 2014, Feb 25 thru 27 2014, Mar 4 thru 6 2014, Mar 11 thru 13 2014)
unix_start_hhinfo	bigint	Start time for household info survey
unix_end_hhinfo	text	End time for household info survey
home_geom*	geometry	Point geometry indicating household location

survey_trips

The survey_trips table is derived from trips made by all participants on their assigned travel dates (travel data starts at 3 AM on assigned date and ends at 3 AM the following day). 15,820 unique trips are represented in this table.

Name	Data Type	Comment
dataset	text	Pilot/Main
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno + unique number for each household member)
tripid	text	Unique trip identifier (personID + unique number for each trip taken by person)
prepop	text	Trip was copied from other household member
place_start*	text	Description of trip origin
place_end*	text	Description of trip destination
oaddress*	text	Address of trip origin
daddress*	text	Address of trip destination
olat*	double precision	Latitude of trip origin
olon*	double precision	Longitude of trip origin
dlat*	double precision	Latitude of trip destination
dlon*	double precision	Longitude of trip destination
time_start	bigint	Trip start time (sec)

time_start_hhmm	text	Trip start time (HH:MM)
time_end	bigint	Trip end time (sec)
time_end_hhmm	text	Trip end time (HH:MM)
gdist	double precision	
gtime	bigint	
trip_duration	bigint	
o_purpose	text	Origin trip purpose
d_purpose	text	Destination trip purpose
travelers_total	bigint	Total count of travelers on trip (including self)
travelers_hh	bigint	Count of household members on trip (including self)
travelers_nonhh	bigint	Count of nonhousehold members on trip (including self)
spreftrip	text	Trip is reference trip for stated preferences (SP) section - survey_preferences table
mode	text	Trip mode
pool_start	text	Trip party size >1: Carpool start location same as trip origin?
park	text	Parked at destination?
park_cost	text	Person pays for parking > once per week: Cost of parking
transit_fare	text	Bus (CATS) trip: Transit fare
paratransit	text	Mode was paratransit: Which paratransit system used?
mode_acc	text	Transit access mode
bus1	text	Bus (CATS) trip: 1st bus route
xfer1	text	Bus (CATS) trip: Transferred once?
bus2	text	Bus (CATS) trip: 2nd bus route
xfer2	text	Bus (CATS) trip: Transferred twice?
bus3	text	Bus (CATS) trip: 3rd bus route
mode_egr	text	Transit egress mode
member1	text	Household member 1 on trip?
member2	text	Household member 2 on trip?
member3	text	Household member 3 on trip?
member4	text	Household member 4 on trip?
member5	text	Household member 5 on trip?
member6	text	Household member 6 on trip?
member7	text	Household member 7 on trip?
member8	text	Household member 8 on trip?
member9	text	Household member 9 on trip?
member10	text	Household member 10 on trip?
member11	text	Household member 11 on trip?
member12	text	Household member 12 on trip?
unix_traveldate	bigint	Unix travel date
o_geom*	geometry	Point geometry indicating location of trip destination
d_geom*	geometry	

survey_vehicles

The survey_vehicles table is derived from all vehicles reported by participants in the study. 3,627 unique vehicles representing the 1,861 households (of 1,926 total) that owned at least one vehicle are represented in this table.

Name	Data Type	Comment
dataset	text	Pilot/Main
sampno	text	Unique household identifier
vehicleid	text	Unique vehicle identifier (sampno + unique number for each household vehicle)
veh_year	text	Vehicle year
veh_make	text	Vehicle make
veh_model*	text	Vehicle model
veh_disa	text	Vehicle has disability plates or tags?

survey_preferences

The Heartland in Motion Transportation Study included five stated preference (SP) experiments about transit options between the MCCOG area and Indianapolis. In each experiment, respondents saw three mode options rive, commuter rail and express bus for a real or hypothetical trip. The mode options showed varying levels of the following attributes: travel time, cost of driving, cost of parking, transit fare and transit frequency. The resulting dataset, along with demographic variables from the person and householdlevel datasets, was used to estimate multinomial logit choice models to report respondent sensitivities to mode attributes, as well as Willingness to Pay (WTP) to travel by each of the three modes. To ensure relavance to respondents and quality of data, respondents only saw the SP questions if they had reported a qualifying trip to or from Indianapolis in their diary, or made at least one trip to downtown Indianapolis or Castleton Square Mall in the past 30 days. NOTE: Some stated preferencerelated variables are included at the person-level (repeated five times for each person) to show details about the reference trips the experiments were based on.

Name	Data Type	Comment
dataset	text	Main/Pilot
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno + unique number for each household member)
spreftriptype	text	Reference trip type
spreftriptype_txt	text	N/A
spreftripid	text	Reference trip ID
sequence	bigint	Sequence ID (15) of experiment
choice	text	Travel mode chosen in each experiment drive, commuter rail, or express bus
choice_txt	text	N/A
sp_invariant	text	Did the respondent chose the same mode in all 5 experiments?
v1drivetime	bigint	Drive time attribute (in min)
v2drivecost	double precision	Drive cost attribute ($USD)
v3parkcost	double precision	Park cost (for driver) attribute ($USD/hr)
v4bustime	bigint	Express bus time attribute (min)
v5buscost	double precision	Express bus cost attribute ($USD)

v6busfreq	bigint	Express bus frequency attribute (minutes headway)
v7railtime	bigint	Commuter rail time attribute (min)
v8railcost	double precision	Commuter rail cost attribute ($USD, one way)
v9railfreq	bigint	Commuter rail frequency attribute (minutes headway)
spdestisdowntown	text	Is reference trip destination in immediate downtown area?
ocatch	text	Catchment area reference trip origin falls within...
dcatch	text	Catchment area reference trip destination falls within...
indydowntown_freq	text	Times visited downtown Indianapolis in past 30 days
castleton_freq	text	Times visited Castleton Square Mall in past 30 days
spref_olat*	double precision	Reference trip: latitude of origin
spref_olong*	double precision	Reference trip: longitude of origin
spref_dlat*	double precision	Reference trip: latitude of destination
spref_dlong*	double precision	Reference trip: longitude of destination
spref_ttime	bigint	Reference trip: travel time
spref_tdist	double precision	Reference trip: travel distance
spref_reported_dur	double precision	Reference trip reported duration (in min)
sprefopurp	text	Reference trip origin purpose
sprefdpurp	text	Reference trip destination purpose
sprefmode	text	Reference trip mode (diary trip only, from trip data)
spdurati	bigint	Stated Preference (SP) survey duration (in min)
spref_o_geom*	geometry	Point geometry indicating location of reference trip origin
spref_d_geom*	geometry	Point geometry indicating location of reference trip destination

survey_person

Participants were asked for details regarding themselves. The "survey_persons" table contains data from 4,349 unique persons, including adults and children.

Name	Data Type	Comment
dataset	text	Main/Pilot
sampno	text	Unique household identifier
personid	text	Unique person identifier (sampno + unique number for each household member)
personshouldtakediary	text	Travel diary required?
diaryduration_minutes	double precision	Duration of diary (in minutes)
resptype	text	Respondent type: Primary household member (person completing HH info survey), Other household adult member, Household child member (under 18)
relationship	text	Relationship to primary respondent
gender	text	Male/Female
age_bin	text	Age: Under 5 years old, 5 to 11, 12 to 15, 16 to 17, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, 75 to 84, 85 or older
employment	text	Employment status (age 18 & above)
jobs_count	text	If employed or age is 16 to 17, number of jobs: 0 to 5 where 0 = age 16 to 17 & 5 = 5 or more jobs

industry	text	Employed Employment industry (NAICS)
student	text	Student status (age 18 & above)
education	text	Educational attainment (age 18 & above)
license	text	Valid drivers license (age 16 & above)
typical_vehicle	text	N/A
parkfreq	text	How often pays for parking
trips_yesno	text	Made trips on travel day (age 5 or older)
numtrips	double precision	Number of trips reported
loc_startr	text	Location at 3am when travel date began: Home, Work, Other
loc_start_other	text	if loc_startR = other, specify
loc_endr	text	Location at 3am when travel date ended: Home, Work, Other
loc_end_other	text	if loc_endR = other, specify
no_travel	text	If no trips were made on travel day, why?: "I did not need to go anywhere all day", "I wanted to travel, but was unable to for personal reasons"
noneed_vacation	text	Reason no need to travel: Vacation or not scheduled to work
noneed_telecommute	text	Reason no need to travel: Worked from home for pay
noneed_workhomenopay	text	Reason no need to travel: Worked from home for no pay
noneed_other	text	Reason no need to travel: other
unable_notransport	text	Reason unable to travel: No available transportation
unable_sick	text	Reason unable to travel: Sick or caring for other sick person at home
unable_visitor	text	Reason unable to travel: Waiting for delivery or visitor
unable_other	text	Reason unable to travel: other
typical	text	Was travel date a typical day for the respondent?
not_typical_reason	text	Reason travel date was not typical
delivery	text	Received deliveries on travel date?
school_mode	text	Student (age 18+) typical mode to school
school_mode_other	text	if school_mode=Other, specify
work_mode	text	Employed typical mode to work
work_mode_other	text	if work_mode=Other, specify
commute_freq	text	Employed How often do you commute to work?
drive_living	text	Employed Do you drive for a living or drive a lot for work?
work_park	text	Employed Do you receive free or subsidized parking as a work benefit?
employment_length	text	Employed Years employed at current primary job
prev_job_city	text	Employment length < 10 years or not employed City of previous job
prev_job_st	text	Employment length < 10 years or not employed State of previous job
prev_job_zip	text	Employment length < 10 years or not employed ZIP code of previous job
prev_emp	text	Employment length < 10 years or not employed Previous employment status
prev_industry	text	Employment length < 10 years or not employed Previous job industry

walk_freq	text	How often went for a walk (15 minutes or longer) in past week?
transit_freq	text	How often rode transit in past 30 days?
bike_freq	text	How often went for bike ride in past 30 days?
indydowntown_freq	text	How many trips to downtown Indianapolis in the past 30 days?
indyairport_freq	text	How many trips to Indianapolis airport in the past 30 days?
castleton_freq	text	How many trips to Castleton Square Mall in the past 30 days?
keystone_freq	text	How many trips to Keystone at the Crossings in the past 30 days?
hamilton_freq	text	How many trips to Hamilton Town Center in the past 30 days?
proxy	text	Participant is taking own survey or represented by proxy?
call_center	text	Call center used for travel diary survey?
sprespondent	text	Respondent took Transit Stated Preference Survey?
safety_priority	double precision	Priority of transportation safety: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
system_pres_priority	double precision	Priority of transportation system preservation: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
efficient_priority	double precision	Priority of efficient transportation system operation: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
connectivity_priority	double precision	Priority of transportation integration and connectivity: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
mobility_priority	double precision	Priority of transportation accessibility and mobility options: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
environment_priority	double precision	Priority of environment and air quality: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
economic_priority	double precision	Priority of economic vitality: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
multimodal_priority	double precision	Priority of multimodal transportation options: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
plannedgrowth_priority	double precision	Priority of consistency with planned growth areas: 1 = Highest priority, 2 = Medium priority, 3 = Lowest priority
travel_ease	text	Traveling around downtown Anderson is easy: 1 = Strongly Disagree to 5 = Strongly Agree
travel_eastwest	text	Travel downtown would improve if EastWest oneways changed to twoways: 1 = Strongly Disagree to 5 = Strongly Agree
travel_northsouth	text	Travel downtown would improve if NorthSouth oneways changed to twoways: 1 = Strongly Disagree to 5 = Strongly Agree
downtown_live	text	Would live downtown if there were housing options: 1 = Strongly Disagree to 5 = Strongly Agree
downtown_park_options	text	Would visit downtown more if knew more about parking options: 1 = Strongly Disagree to 5 = Strongly Agree
downtown_park_ease	text	Would visit downtown more if easier to find parking: 1 = Strongly Disagree to 5 = Strongly Agree
downtown_park_hours	text	Would visit downtown more if two hour instead of one hour parking: 1 = Strongly Disagree to 5 = Strongly Agree
downtown_shop	text	Would visit downtown more if more shopping options: 1 = Strongly Disagree to 5 = Strongly Agree
downtown_rec	text	Would visit downtown more if more recreational activities: 1 = Strongly Disagree to 5 = Strongly Agree
downtown_eat	text	Would visit downtown more if more eating establishments: 1 = Strongly Disagree to 5 = Strongly Agree

downtown_bus	text	Would visit downtown more if express bus stop for traveling to Indianapolis: 1 = Strongly Disagree to 5 = Strongly Agree
age_cat	text	Age category
perwgt	double precision	Person weight
unix_start_diary	text	Start time for travel diary
unix_end_diary	text	End time for travel diary

* 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.