

Livewire Data Platform: Data Dictionary

WholeTraveler Transportation Behavior Study - WholeTraveler Anonymized Data Phase 2

Authors

Livewire Data Platform

Modified

2021-06-09

Generated

2021-06-17

Livewire Data Platform: Data Dictionary

WholeTraveler Transportation Behavior Study - WholeTraveler Anonymized Data Phase 2

Phase 2 of WholeTraveler consisted of a global positioning system (GPS) data collection. Phase 2 started immediately after the completion of the Phase 1 survey for any respondent who opted into Phase 2. The raw locational data collected have been processed into identified “trips” and some of those trips into identified “trip chains.” Data from Phase 1 and Phase 2 are linked by a unique respondent identifier. Anonymized versions of the Phase 1 and Phase 2 data are both accessible on Livewire.

Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	1.32 %	20,037 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

For information on how the Livewire Data Platform project characterizes dataset quality, see the Livewire Data Platform's Frequently Asked Questions (<https://livewire.energy.gov/faq>).

Table: WT_phase2_Activities_20200828

Description

The estimated activities of survey participants at locations specified by a link ID

Count

1,032,015 rows/instances

Table Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	0.00 %	0 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

Attributes

Name	Type	Units	Refers To	Description
link_id	integer	n/a		Reference for identifier specified in phase 1
locationTimestamp_ms	number	ms		Timestamp at location in milliseconds
activityTimestamp_ms	number	ms		Timestamp of activity at location in milliseconds
activityType	string	n/a		Type of activity at location

Data Quality Measures

Applies To	Name	Value	Units	Description																					
WT_phase2_Activities_20200828.link_id	Count	1,032,015	n/a	Number of rows with attribute/column specified																					
WT_phase2_Activities_20200828.locationTimestamp_ms	Count	1,032,015	n/a	Number of rows with attribute/column specified																					
WT_phase2_Activities_20200828.activityTimestamp_ms	Count	1,032,015	n/a	Number of rows with attribute/column specified																					
WT_phase2_Activities_20200828.activityType	Count	1,032,015	n/a	Number of rows with attribute/column specified																					
	Number of Categories	11	n/a	Number of distinct/unique values for attribute/column																					
	Distribution			<table border="1"> <thead> <tr> <th>Category</th> <th>n</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>UNKNOWN</td> <td>192,725</td> <td>18.68</td> </tr> <tr> <td>STILL</td> <td>186,277</td> <td>18.05</td> </tr> <tr> <td>IN_VEHICLE</td> <td>100,602</td> <td>9.75</td> </tr> <tr> <td>ON_FOOT</td> <td>94,393</td> <td>9.15</td> </tr> <tr> <td>WALKING</td> <td>93,577</td> <td>9.07</td> </tr> <tr> <td colspan="3">(6 additional categories not shown)</td> </tr> </tbody> </table>	Category	n	%	UNKNOWN	192,725	18.68	STILL	186,277	18.05	IN_VEHICLE	100,602	9.75	ON_FOOT	94,393	9.15	WALKING	93,577	9.07	(6 additional categories not shown)		
Category	n	%																							
UNKNOWN	192,725	18.68																							
STILL	186,277	18.05																							
IN_VEHICLE	100,602	9.75																							
ON_FOOT	94,393	9.15																							
WALKING	93,577	9.07																							
(6 additional categories not shown)																									

Table: WT_phase2_Commute_Chains_20200828

Description

Description of trip chains taken by survey participants

Count

514 rows/instances

Table Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	0.00 %	0 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

Attributes

Name	Type	Units	Refers To	Description
link_id	integer	n/a		Reference for identifier specified in phase 1
trip_type	string	n/a		Designation of trip type
chainID	integer	n/a		Reference to a commute chain
tripID	integer	n/a	WT_phase2_Trips_20200828.tripID	Reference to a trip event
startTS_ms	number	ms		Timestamp in milliseconds of the start of event
endTS_ms	number	ms		Timestamp in milliseconds of the end of event
startTime_PDT	date-time	n/a		Date and time of the start of event
endTime_PDT	date-time	n/a		Date and time of the end of event
chainLength_min	number	min		Duration of the chain in minutes
tripGap_min	number	min		Duration of the time between trips in minutes
numTripsInChain	integer	n/a		Number of trips in chain

Data Quality Measures

Applies To	Name	Value	Units	Description									
WT_phase2_Commute_Chains_20200828.link_id	Count	514	n/a	Number of rows with attribute/column specified									
WT_phase2_Commute_Chains_20200828.trip_type	Count	514	n/a	Number of rows with attribute/column specified									
	Number of Categories	2	n/a	Number of distinct/unique values for attribute/column									
	Distribution			<table border="1"> <thead> <tr> <th>Category</th> <th>n</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>PDtoHome</td> <td>323</td> <td>62.84</td> </tr> <tr> <td>HomeToPD</td> <td>191</td> <td>37.16</td> </tr> </tbody> </table>	Category	n	%	PDtoHome	323	62.84	HomeToPD	191	37.16
Category	n	%											
PDtoHome	323	62.84											
HomeToPD	191	37.16											
WT_phase2_Commute_Chains_20200828.chainID	Count	514	n/a	Number of rows with attribute/column specified									
WT_phase2_Commute_Chains_20200828.tripID	Count	514	n/a	Number of rows with attribute/column specified									
WT_phase2_Commute_Chains_20200828.startTS_ms	Count	514	n/a	Number of rows with attribute/column specified									
WT_phase2_Commute_Chains_20200828.endTS_ms	Count	514	n/a	Number of rows with attribute/column specified									

Applies To	Name	Value	Units	Description
WT_phase2_Commute_Chains_20200828.startTime_PDT	Count	514	n/a	Number of rows with attribute/column specified
	Minimum Value	2018-03-23 16:21:00	n/a	Minimum value for attribute/column
	Maximum Value	2018-07-19 20:33:00	n/a	Maximum value for attribute/column
WT_phase2_Commute_Chains_20200828.endTime_PDT	Count	514	n/a	Number of rows with attribute/column specified
	Minimum Value	2018-03-23 16:32:00	n/a	Minimum value for attribute/column
	Maximum Value	2018-07-19 20:47:00	n/a	Maximum value for attribute/column
WT_phase2_Commute_Chains_20200828.chainLength_min	Count	196	n/a	Number of rows with attribute/column specified
	Minimum Value	22.667	n/a	Minimum value for attribute/column
	Maximum Value	2,591.070	n/a	Maximum value for attribute/column
	Mean	209.259	n/a	Statistical mean for values specified for attribute/column
	Median	118.575	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	357.003	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	5.105	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
WT_phase2_Commute_Chains_20200828.tripGap_min	Kurtosis	28.950	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
	Count	317	n/a	Number of rows with attribute/column specified
	Minimum Value	0.250	n/a	Minimum value for attribute/column
	Maximum Value	1,499.500	n/a	Maximum value for attribute/column
	Mean	84.724	n/a	Statistical mean for values specified for attribute/column
	Median	38.617	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	161.042	n/a	Statistical standard deviation for values specified for attribute/column
WT_phase2_Commute_Chains_20200828.numTripsInChain	Skewness	5.381	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	34.867	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
	Count	196	n/a	Number of rows with attribute/column specified
WT_phase2_Commute_Chains_20200828.numTripsInChain	Minimum Value	2	n/a	Minimum value for attribute/column
	Maximum Value	14	n/a	Maximum value for attribute/column
	Mean	2.612	n/a	Statistical mean for values specified for attribute/column
	Median	2	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	1.553	n/a	Statistical standard deviation for values specified for attribute/column

Applies To	Name	Value	Units	Description
	Skewness	4.922	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	28.465	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.

Table: WT_phase2_Locations_20200828

Description

Locations visited by survey participants during their trips

Count

471,646 rows/instances

Table Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	4.12 %	19,413 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

Attributes

Name	Type	Units	Refers To	Description
link_id	integer	n/a		Reference for identifier specified in phase 1
timestampMs	number	ms		Timestamp in milliseconds of this event
time_PDT	date-time	n/a		Date and time of event
tripID	integer	n/a	WT_phase2_Trips_20200828.tripID	Reference to a trip event
tripLocOrder	integer	n/a		Designation of the order of the trip event
locType	string	n/a		Designation of location type
distFromHome_mtr	number	m		Distance from home
distFromPrimeDest_mtr	number	m		Distance from a primary location
distFromLastPt_mtr	number	m		Distance from last event in the series
blockGrpID	integer	n/a		Reference to a block group
accuracy	number	n/a		Horizontal GPS accuracy
velocity	number	n/a		Vehicle velocity
altitude	number	n/a		Vehicle altitude
verticalAccuracy	number	n/a		Vertical GPS accuracy

Data Quality Measures

Applies To	Name	Value	Units	Description
WT_phase2_Locations_20200828.link_id	Count	471,646	n/a	Number of rows with attribute/column specified
WT_phase2_Locations_20200828.timestampMs	Count	471,646	n/a	Number of rows with attribute/column specified
WT_phase2_Locations_20200828.time_PDT	Count	471,646	n/a	Number of rows with attribute/column specified
	Minimum Value	2013-06-18 00:12:09	n/a	Minimum value for attribute/column
	Maximum Value	2018-07-25 18:02:37	n/a	Maximum value for attribute/column
WT_phase2_Locations_20200828.tripID	Count	105,639	n/a	Number of rows with attribute/column specified
WT_phase2_Locations_20200828.tripLocOrder	Count	105,639	n/a	Number of rows with attribute/column specified
	Minimum Value	1	n/a	Minimum value for attribute/column
	Maximum Value	23,236	n/a	Maximum value for attribute/column

Applies To	Name	Value	Units	Description																					
	Mean	3,397.382	n/a	Statistical mean for values specified for attribute/column																					
	Median	1,523	n/a	Statistical median for values specified for attribute/column																					
	Standard Deviation	4,893.001	n/a	Statistical standard deviation for values specified for attribute/column																					
	Skewness	2.163	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.																					
	Kurtosis	4.013	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.																					
WT_phase2_Locations_20200828.locType	Count	471,603	n/a	Number of rows with attribute/column specified																					
	Number of Categories	502	n/a	Number of distinct/unique values for attribute/column																					
	Distribution			<table border="1"> <thead> <tr> <th>Category</th> <th>n</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>street_address</td> <td>269,224</td> <td>57.08</td> </tr> <tr> <td>establishment point_of_interest</td> <td>57,236</td> <td>12.14</td> </tr> <tr> <td>route</td> <td>27,802</td> <td>5.90</td> </tr> <tr> <td>bus_station establishment point_of_interest transit_station</td> <td>13,197</td> <td>2.80</td> </tr> <tr> <td>establishment point_of_interest school</td> <td>6,398</td> <td>1.36</td> </tr> <tr> <td colspan="3">(496 additional categories not shown)</td> </tr> </tbody> </table>	Category	n	%	street_address	269,224	57.08	establishment point_of_interest	57,236	12.14	route	27,802	5.90	bus_station establishment point_of_interest transit_station	13,197	2.80	establishment point_of_interest school	6,398	1.36	(496 additional categories not shown)		
Category	n	%																							
street_address	269,224	57.08																							
establishment point_of_interest	57,236	12.14																							
route	27,802	5.90																							
bus_station establishment point_of_interest transit_station	13,197	2.80																							
establishment point_of_interest school	6,398	1.36																							
(496 additional categories not shown)																									
WT_phase2_Locations_20200828.distFromHome_mtr	Count	471,646	n/a	Number of rows with attribute/column specified																					
	Minimum Value	0	n/a	Minimum value for attribute/column																					
	Maximum Value	5,061,900	n/a	Maximum value for attribute/column																					
	Mean	111,498.296	n/a	Statistical mean for values specified for attribute/column																					
	Median	2,422.300	n/a	Statistical median for values specified for attribute/column																					
	Standard Deviation	518,623.653	n/a	Statistical standard deviation for values specified for attribute/column																					
	Skewness	6.447	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.																					
	Kurtosis	43.087	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.																					
WT_phase2_Locations_20200828.distFromPrimeDest_mtr	Count	471,646	n/a	Number of rows with attribute/column specified																					
	Minimum Value	0	n/a	Minimum value for attribute/column																					
	Maximum Value	5,071,180	n/a	Maximum value for attribute/column																					
	Mean	116,445.266	n/a	Statistical mean for values specified for attribute/column																					
	Median	8,069.615	n/a	Statistical median for values specified for attribute/column																					
	Standard Deviation	518,472.739	n/a	Statistical standard deviation for values specified for attribute/column																					

Applies To	Name	Value	Units	Description
	Skewness	6.445	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	43.099	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Locations_20200828.distFromLastPt_mtr	Count	471,358	n/a	Number of rows with attribute/column specified
	Minimum Value	0	n/a	Minimum value for attribute/column
	Maximum Value	4,383,350	n/a	Maximum value for attribute/column
	Mean	1,468.015	n/a	Statistical mean for values specified for attribute/column
	Median	3.597	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	44,252.984	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	50.038	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	2,903.340	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Locations_20200828.blockGrpID	Count	470,761	n/a	Number of rows with attribute/column specified
WT_phase2_Locations_20200828.accuracy	Count	471,632	n/a	Number of rows with attribute/column specified
	Minimum Value	1	n/a	Minimum value for attribute/column
	Maximum Value	149,000	n/a	Maximum value for attribute/column
	Mean	112.548	n/a	Statistical mean for values specified for attribute/column
	Median	15	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	493.798	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	126.368	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	35,772.242	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Locations_20200828.velocity	Count	97,856	n/a	Number of rows with attribute/column specified
	Minimum Value	-1	n/a	Minimum value for attribute/column
	Maximum Value	276	n/a	Maximum value for attribute/column
	Mean	13.956	n/a	Statistical mean for values specified for attribute/column
	Median	13	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	11.898	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	6.675	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	129.164	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.

Applies To	Name	Value	Units	Description
WT_phase2_Locations_20200828.altitude	Count	332,825	n/a	Number of rows with attribute/column specified
	Minimum Value	-882	n/a	Minimum value for attribute/column
	Maximum Value	11,915	n/a	Maximum value for attribute/column
	Mean	111.378	n/a	Statistical mean for values specified for attribute/column
	Median	8	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	391.665	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	8.007	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	153.831	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Locations_20200828.verticalAccuracy	Count	330,447	n/a	Number of rows with attribute/column specified
	Minimum Value	1	n/a	Minimum value for attribute/column
	Maximum Value	18,905	n/a	Maximum value for attribute/column
	Mean	16.290	n/a	Statistical mean for values specified for attribute/column
	Median	4	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	199.436	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	56.103	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	3,627.604	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.

Table: WT_phase2_Participants_20200828

Description

Information regarding survey participant comments and general data about their trip behaviour

Count

288 rows/instances

Table Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	0.00 %	0 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

Attributes

Name	Type	Units	Refers To	Description
link_id	integer	n/a		Reference for identifier specified in phase 1
surveyComments	string	n/a		Comment of the event
aveTripsPerDay	number	n/a		Average number of trips per day
numOfDaysWithData	integer	n/a		Number of days with data included

Data Quality Measures

Applies To	Name	Value	Units	Description
WT_phase2_Participants_20200828.link_id	Count	288	n/a	Number of rows with attribute/column specified
WT_phase2_Participants_20200828.surveyComments	Count	84	n/a	Number of rows with attribute/column specified
WT_phase2_Participants_20200828.aveTripsPerDay	Count	260	n/a	Number of rows with attribute/column specified
	Minimum Value	1	n/a	Minimum value for attribute/column
	Maximum Value	10	n/a	Maximum value for attribute/column
	Mean	3.919	n/a	Statistical mean for values specified for attribute/column
	Median	3.750	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	1.498	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	0.833	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	0.771	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Participants_20200828.numOfDaysWithData	Count	288	n/a	Number of rows with attribute/column specified
	Minimum Value	3	n/a	Minimum value for attribute/column
	Maximum Value	8	n/a	Maximum value for attribute/column
	Mean	5.510	n/a	Statistical mean for values specified for attribute/column
	Median	6	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	0.613	n/a	Statistical standard deviation for values specified for attribute/column

Applies To	Name	Value	Units	Description
	Skewness	-0.222	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	2.714	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.

Table: WT_phase2_Routes_20200828

Description

Trip-route pairs describing the points visited by survey participants during a trip

Count

3,763 rows/instances

Table Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	4.92 %	185 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

Attributes

Name	Type	Units	Refers To	Description
link_id	integer	n/a		Reference for identifier specified in phase 1
tripID	integer	n/a	WT_phase2_Trips_20200828.tripID	Reference to a trip event
numPoints	integer	n/a		Number of points in a route
route	string	n/a		Designation of the route
type	string	n/a		Designation of the route type

Data Quality Measures

Applies To	Name	Value	Units	Description
WT_phase2_Routes_20200828.link_id	Count	3,763	n/a	Number of rows with attribute/column specified
WT_phase2_Routes_20200828.tripID	Count	3,763	n/a	Number of rows with attribute/column specified
WT_phase2_Routes_20200828.numPoints	Count	3,763	n/a	Number of rows with attribute/column specified
	Minimum Value	2	n/a	Minimum value for attribute/column
	Maximum Value	400	n/a	Maximum value for attribute/column
	Mean	14.404	n/a	Statistical mean for values specified for attribute/column
	Median	8	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	22.903	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	6.858	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	73.627	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Routes_20200828.route	Count	3,748	n/a	Number of rows with attribute/column specified
WT_phase2_Routes_20200828.type	Count	3,762	n/a	Number of rows with attribute/column specified
	Number of Categories	181	n/a	Number of distinct/unique values for attribute/column
	Distribution			Category n %
				street_address 2,017 53.60
				establishment point_of_interest 449 11.93
				bus_station establishment point_of_interest 145 3.85
				transit_station
				route 89 2.37

Applies To	Name	Value	Units	Description
				establishment food point_of_interest restaurant
				(175 additional categories not shown)

Table: WT_phase2_SurveyData_20200828

Description

Survey data regarding participants mode of travel, motive for vehicle-type selection, and primary reasons for traveling

Count

808 rows/instances

Table Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	0.00 %	0 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

Attributes

Name	Type	Units	Refers To	Description
link_id	integer	n/a		Reference for identifier specified in phase 1
mode	string	n/a		Type of transportation
primaryReason	string	n/a		Primary reason for choosing transportation type
secondaryReason	string	n/a		Secondary reason for choosing transportation type
purpose	string	n/a		Primary reason for traveling
primaryOtherReason	string	n/a		Primary other reason for traveling
secondaryOtherReason	string	n/a		Secondary other reason for traveling
purposeOther	string	n/a		Other designated purpose(s) for traveling

Data Quality Measures

Applies To	Name	Value	Units	Description																					
WT_phase2_SurveyData_20200828.link_id	Count	808	n/a	Number of rows with attribute/column specified																					
WT_phase2_SurveyData_20200828.mode	Count	808	n/a	Number of rows with attribute/column specified																					
	Number of Categories	12	n/a	Number of distinct/unique values for attribute/column																					
	Distribution			<table border="1"> <thead> <tr> <th>Category</th> <th>n</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>car</td> <td>229</td> <td>28.34</td> </tr> <tr> <td>bikePed</td> <td>151</td> <td>18.69</td> </tr> <tr> <td>carpool</td> <td>101</td> <td>12.50</td> </tr> <tr> <td>massTransit</td> <td>97</td> <td>12.01</td> </tr> <tr> <td>bus</td> <td>62</td> <td>7.67</td> </tr> <tr> <td colspan="3">(7 additional categories not shown)</td> </tr> </tbody> </table>	Category	n	%	car	229	28.34	bikePed	151	18.69	carpool	101	12.50	massTransit	97	12.01	bus	62	7.67	(7 additional categories not shown)		
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massTransit	97	12.01																							
bus	62	7.67																							
(7 additional categories not shown)																									
WT_phase2_SurveyData_20200828.primaryReason	Count	802	n/a	Number of rows with attribute/column specified																					
	Number of Categories	14	n/a	Number of distinct/unique values for attribute/column																					
	Distribution			<table border="1"> <thead> <tr> <th>Category</th> <th>n</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>lowHassle</td> <td>289</td> <td>35.77</td> </tr> <tr> <td>travelTime</td> <td>120</td> <td>14.85</td> </tr> <tr> <td>costLow</td> <td>81</td> <td>10.03</td> </tr> <tr> <td>other</td> <td>64</td> <td>7.92</td> </tr> <tr> <td>env</td> <td>57</td> <td>7.05</td> </tr> </tbody> </table>	Category	n	%	lowHassle	289	35.77	travelTime	120	14.85	costLow	81	10.03	other	64	7.92	env	57	7.05			
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Applies To	Name	Value	Units	Description																		
				(8 additional categories not shown)																		
WT_phase2_SurveyData_20200828.secondaryReason	Count	779	n/a	Number of rows with attribute/column specified																		
	Number of Categories	14	n/a	Number of distinct/unique values for attribute/column																		
	Distribution			<table border="1"> <thead> <tr> <th>Category</th> <th>n</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>travelTime</td> <td>125</td> <td>15.47</td> </tr> <tr> <td>lowHassle</td> <td>115</td> <td>14.23</td> </tr> <tr> <td>arrivalTime</td> <td>99</td> <td>12.25</td> </tr> <tr> <td>env</td> <td>88</td> <td>10.89</td> </tr> <tr> <td>costLow</td> <td>85</td> <td>10.52</td> </tr> </tbody> </table>	Category	n	%	travelTime	125	15.47	lowHassle	115	14.23	arrivalTime	99	12.25	env	88	10.89	costLow	85	10.52
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WT_phase2_SurveyData_20200828.purpose	Count	805	n/a	Number of rows with attribute/column specified																		
WT_phase2_SurveyData_20200828.primaryOtherReason	Count	63	n/a	Number of rows with attribute/column specified																		
WT_phase2_SurveyData_20200828.secondaryOtherReason	Count	68	n/a	Number of rows with attribute/column specified																		
WT_phase2_SurveyData_20200828.purposeOther	Count	42	n/a	Number of rows with attribute/column specified																		

Table: WT_phase2_Trips_20200828

Description

Description of the trips taken by survey participants

Count

5,025 rows/instances

Table Data Quality Summary

Quality Measure	Value	Notes
Error Affected Records/Rows	8.74 %	439 records/rows
Erroneous Records/Rows	0.00 %	0 records/rows
Missing Records/Rows	0.00 %	0 records/rows
Completeness Metric	100.00 %	
Accuracy Metric	100.00 %	
Overall Quality Metric	100.00 %	

Attributes

Name	Type	Units	Refers To	Description
link_id	integer	n/a		Reference for identifier specified in phase 1
tripID	integer	n/a		Unique trip identifier
originTS_ms	integer	ms		Timestamp in milliseconds of the origin of the trip
originTime_PDT	date-time	n/a		Date and time of the origin of the trip
originDow	integer	n/a		Numeric day of the week for trip origin
originBlockGrpID	integer	n/a		Reference to trip origin block group ID
origin_place_type	string	n/a		Location type of the origin of the trip
startTS_ms	integer	ms		Timestamp in milliseconds of the start of the trip
startTime_PDT	date-time	n/a		Date and time of the start of the trip
startDow	integer	n/a		Numeric day of the week for trip start
startBlockGrpID	integer	n/a		Reference to trip start block group ID
endTS_ms	integer	ms		Timestamp in milliseconds of the end of the trip
endTime_PDT	date-time	n/a		Date and time of the end of the trip
endDow	integer	n/a		Numeric day of the week for trip end
endBlockGrpID	integer	n/a		Reference to trip end block group ID
endPlaceType	string	n/a		Location type of the end of the trip
numPoints	integer	n/a		Number of points in the trip
sumDist_mtr	number	m		Summed distance in meters
dist_mtr	number	m		Distance in meters
dist_pctDiff	number	percent		Percent difference of the distance
dwel_min	number	min		Dwell time in minutes
duration_min	number	min		Duration time in minutes
aveSpeed_mph	number	mph		Average speed in miles per hour
homeToOrigin_mtr	number	m		Distance from home to origin in meters
primaryDestToOrigin_mtr	number	m		Distance from primary destination to origin in meters
homeToTripEnd_mtr	number	m		Distance from home to trip end in meters
primaryDestToTripEnd_mtr	number	m		Distance from primary destination to trip end in meters

Data Quality Measures

Applies To	Name	Value	Units	Description
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Applies To	Name	Value	Units	Description
WT_phase2_Trips_20200828.link_id	Count	5,025	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.tripID	Count	5,025	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.originTS_ms	Count	5,025	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.originTime_PDT	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	2013-06-18 00:14:51	n/a	Minimum value for attribute/column
	Maximum Value	2018-07-24 20:58:51	n/a	Maximum value for attribute/column
WT_phase2_Trips_20200828.originDow	Count	5,025	n/a	Number of rows with attribute/column specified
	Number of Categories	7	n/a	Number of distinct/unique values for attribute/column
	Distribution			Category n %
				5 861 17.13
				4 849 16.90
				3 775 15.42
				2 667 13.27
				6 664 13.21
				(2 additional categories not shown)
WT_phase2_Trips_20200828.originBlockGrpID	Count	5,013	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.origin_place_type	Count	5,024	n/a	Number of rows with attribute/column specified
	Number of Categories	197	n/a	Number of distinct/unique values for attribute/column
	Distribution			Category n %
				street_address 2,661 52.96
				establishment 576 11.46
				point_of_interest
				bus_station 205 4.08
				establishment
				point_of_interest
				transit_station
				route 147 2.93
				establishment food 100 1.99
				point_of_interest
				restaurant
				(191 additional categories not shown)
WT_phase2_Trips_20200828.startTS_ms	Count	5,025	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.startTime_PDT	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	2013-06-18 00:14:51	n/a	Minimum value for attribute/column
	Maximum Value	2018-07-25 17:20:49	n/a	Maximum value for attribute/column
WT_phase2_Trips_20200828.startDow	Count	5,025	n/a	Number of rows with attribute/column specified
	Number of Categories	7	n/a	Number of distinct/unique values for attribute/column
	Distribution			Category n %
				5 867 17.25
				4 840 16.72

Applies To	Name	Value	Units	Description
				3 753 14.99
				6 670 13.33
				2 659 13.11
				(2 additional categories not shown)
WT_phase2_Trips_20200828.startBlockGrpID	Count	5,013	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.endTS_ms	Count	5,025	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.endTime_PDT	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	2013-06-18 00:20:39	n/a	Minimum value for attribute/column
	Maximum Value	2018-07-25 17:33:39	n/a	Maximum value for attribute/column
WT_phase2_Trips_20200828.endDow	Count	5,025	n/a	Number of rows with attribute/column specified
	Number of Categories	7	n/a	Number of distinct/unique values for attribute/column
	Distribution			Category n %
				5 870 17.31
				4 844 16.80
				3 749 14.91
				6 666 13.25
				2 661 13.15
				(2 additional categories not shown)
WT_phase2_Trips_20200828.endBlockGrpID	Count	5,012	n/a	Number of rows with attribute/column specified
WT_phase2_Trips_20200828.endPlaceType	Count	5,024	n/a	Number of rows with attribute/column specified
	Number of Categories	196	n/a	Number of distinct/unique values for attribute/column
	Distribution			Category n %
				street_address 2,644 52.62
				establishment point_of_interest 572 11.38
				bus_station establishment point_of_interest transit_station 225 4.48
				route 150 2.99
				establishment food point_of_interest restaurant 106 2.11
				(190 additional categories not shown)
WT_phase2_Trips_20200828.numPoints	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	1	n/a	Minimum value for attribute/column
	Maximum Value	5,250	n/a	Maximum value for attribute/column
	Mean	18.213	n/a	Statistical mean for values specified for attribute/column
	Median	4	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	132.805	n/a	Statistical standard deviation for values specified for attribute/column

Applies To	Name	Value	Units	Description
	Skewness	28.397	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	967.813	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.sumDist_mtr	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	0	n/a	Minimum value for attribute/column
	Maximum Value	370,477	n/a	Maximum value for attribute/column
	Mean	11,174.435	n/a	Statistical mean for values specified for attribute/column
	Median	4,171.900	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	21,455.268	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	6.062	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	61.447	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.dist_mtr	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	0	n/a	Minimum value for attribute/column
	Maximum Value	339,856	n/a	Maximum value for attribute/column
	Mean	8,536.415	n/a	Statistical mean for values specified for attribute/column
	Median	3,000.660	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	17,266.881	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	6.958	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	83.025	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.dist_pctDiff	Count	5,016	n/a	Number of rows with attribute/column specified
	Minimum Value	0	n/a	Minimum value for attribute/column
	Maximum Value	200	n/a	Maximum value for attribute/column
	Mean	30.184	n/a	Statistical mean for values specified for attribute/column
	Median	15.843	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	41.793	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	2.382	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	5.503	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.dwell_min	Count	5,025	n/a	Number of rows with attribute/column specified

Applies To	Name	Value	Units	Description
	Minimum Value	0	n/a	Minimum value for attribute/column
	Maximum Value	12,998.900	n/a	Maximum value for attribute/column
	Mean	283.695	n/a	Statistical mean for values specified for attribute/column
	Median	85.216	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	537.538	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	9.215	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	164.249	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.duration_min	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	4.000	n/a	Minimum value for attribute/column
	Maximum Value	1,114.820	n/a	Maximum value for attribute/column
	Mean	28.492	n/a	Statistical mean for values specified for attribute/column
	Median	14.884	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	63.925	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	9.501	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	110.250	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.aveSpeed_mph	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	0	n/a	Minimum value for attribute/column
	Maximum Value	163.120	n/a	Maximum value for attribute/column
	Mean	14.814	n/a	Statistical mean for values specified for attribute/column
	Median	11.550	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	13.240	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	1.477	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	4.365	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.homeToOrigin_mtr	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	1.273	n/a	Minimum value for attribute/column
	Maximum Value	4,320,599	n/a	Maximum value for attribute/column
	Mean	135,135.567	n/a	Statistical mean for values specified for attribute/column
	Median	3,373.545	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	595,870.083	n/a	Statistical standard deviation for values specified for attribute/column

Applies To	Name	Value	Units	Description
	Skewness	5.715	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	32.712	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.primaryDestToOrigin_mtr	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	0.670	n/a	Minimum value for attribute/column
	Maximum Value	4,338,935	n/a	Maximum value for attribute/column
	Mean	137,541.501	n/a	Statistical mean for values specified for attribute/column
	Median	7,077.713	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	595,798.757	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	5.719	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	32.737	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.homeToTripEnd_mtr	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	1.587	n/a	Minimum value for attribute/column
	Maximum Value	4,312,105	n/a	Maximum value for attribute/column
	Mean	135,692.180	n/a	Statistical mean for values specified for attribute/column
	Median	3,579.324	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	596,391.324	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	5.702	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	32.577	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.
WT_phase2_Trips_20200828.primaryDestToTripEnd_mtr	Count	5,025	n/a	Number of rows with attribute/column specified
	Minimum Value	0.670	n/a	Minimum value for attribute/column
	Maximum Value	4,330,440	n/a	Maximum value for attribute/column
	Mean	137,991.809	n/a	Statistical mean for values specified for attribute/column
	Median	6,955.832	n/a	Statistical median for values specified for attribute/column
	Standard Deviation	596,341.176	n/a	Statistical standard deviation for values specified for attribute/column
	Skewness	5.706	n/a	Statistical measure of the asymmetry of the distribution of the values for this attribute/column relative to its mean.
	Kurtosis	32.601	n/a	Statistical measure of the shape (peakedness) of the distribution of the values for this attribute/column.