This folder contains Metrics about the Origin-Destination travel between the Zones of the named Project.

TERMS

=====

Origin Zone: For this Project, travel was analyzed that started in any of the Origin Zones.

Middle Filter Zone: For the Project, trips were analyzed that went through any of the Middle Filter Zones after starting in or passing through an Origin Zone and before ending in or passing through a Destination Zone.

Destination Zone: For the Project, travel was analyzed that ended in any of the Destination Zones after starting in an Origin Zone.

Pass-Through: A value set on a Zone indicating how to analyze the travel touching that Zone. Analysis done on a Zone that is marked as pass-through uses travel that passes through the Zone but does not start or stop in it. This is used mostly for road segments. Analysis on a Zone that is not marked as pass-through uses travel that starts or stops in the Zone. This Zone is often referred to as an "area zone".

Zone Direction: A pass-through Zone may optionally have a direction which limits the travel analyzed for the Zone: only travel that passes through the zone within -20/+20 degrees of the Direction will be analyzed for the Zone. Values are provided in degrees from 0 to 359, where 0 is due north, 90 is east, 180 is due south, etc. A value of "Null" refers to no direction filter and therefore all travel that passes through the Zone will be used.

FILES

=====

Project\_OD.txt

==============

This file lists information about the Project as a whole, including the organization and user that created the Project, and the Data Source Type and the Data Period for the Project.

zones.csv

=========

This file contains information about the Zones used in this Project.

The fields are:

- Zone Type: Indicates if the Zone is an Origin or Destination Zone for this Project.

- Zone ID: Numeric ID for the Zone as provided by the user.

- Zone Name: Name for the Zone as provided by the user.

- Zone is Pass-Through: Indicates if the Zone is pass-through or not as described above in the Terms. Values are "Yes" or "No".

- Zone Direction (degrees): This refers to the direction in which travel passes through the Zone as described above in the Terms.

- Zone is Bi-Direction: Indicates if the Zones are bi-directional. Values are "Yes" or "No".

- Fingerprint1: A 64-bit signed integer assigned by StreetLight based on key spatial characteristics of the zone. Combination of Fingerprint1 and Fingerprint2 make up the fingerprint of the zone and indicate if two zones are the same or unique.

- Fingerprint2: A 64-bit signed integer assigned by StreetLight based on key spatial characteristics of the zone. Combination of Fingerprint1 and Fingerprint2 make up the fingerprint of the zone and indicate if two zones are the same or unique.

sample\_size.csv

===============

This file contains information about the size of the data sample that was analyzed for this Project and its Data Period. If the Data Source is "Location-Based Services", then it reports the number of unique devices that were analyzed. If the Data Source is "Location-Based Services with Pass-through", then it reports the number of unique device trips that were analyzed. This is an estimated value only, and thus, the sum of the relevant rows in the "Count" file may not add up exactly to it, as well as, some devices or trips may be counted in multiple Project results, depending on the Project configuration.

The fields are:

- Sample Type: Type of Travel analyzed. Values are "Personal" or "Commercial".

- Approximate Value: An estimated value (calculated during processing) of the number of unique devices (for data source "Location-Based Services") OR unique device trips (for data source "Location-Based Services with Pass-through") in the StreetLight Data database that were analyzed for this Project and its Data Period.

mf\_counts\_all.csv

=================

This files contains the OD Metrics.

The fields are:

- Type of Travel: Type of Travel analyzed. Values are "Personal" or "Commercial".

- Origin Zone ID: Numeric ID for the Origin Zone as provided by the user.

- Origin Zone Name: Name for the Origin Zone as provided by the user.

- Origin Zone Is Pass-Through: Indicates if the Origin Zone is pass-through or not as described above in the Terms. Values are "Yes" or "No".

- Origin Zone Direction (degrees): This refers to the direction in which travel passes through the Origin Zone as described above in the Terms.

- Origin Zone is Bi-Direction: Indicates if the Zones are bi-directional. Values are "Yes" or "No".

- Middle Filter Zone ID: Numeric ID for the Middle Filter Zone as provided by the user.

- Middle Filter Zone Name: Name for the Middle Filter Zone as provided by the user.

- Middle Filter Zone Direction (degrees): This refers to the direction in which trips pass through the Middle Filter Zone as described above in the Terms. Note, Middle Filter Zones are always pass-through Zones.

- Middle Zone is Bi-Direction: Indicates if the Zones are bi-directional. Values are "Yes" or "No".

- Destination Zone ID: Numeric ID for the Destination Zone as provided by the user.

- Destination Zone Name: Name for the Destination Zone as provided by the user.

- Destination Zone Is Pass-Through: Indicates if the Destination Zone is pass-through or not as described above in the Terms. Values are "Yes" or "No".

- Destination Zone Direction (degrees): This refers to the direction in which travel passes through the Destination Zone as described above in the Terms.

- Destination Zone is Bi-Direction: Indicates if the Zones are bi-directional. Values are "Yes" or "No".

- Day Type: Average Day (average of traffic Monday through Sunday), Average Weekday (average of weekday traffic as defined by user), or Average Weekend Day (average of weekend traffic as defined by user).

- Day Part: Segments of the day defined by the user in intervals of hours to analyze travel (All Day is always included as entire 24 hours). The Day Parts reflect the local time at the Origin Zone.

- O-M-D Traffic (Trip Counts): The number of trips used from the StreetLight sample from the Origin Zone, through the Middle Filter Zone, to the Destination Zone. This is a measurement of Sample Size for the O-M-D triple for this particular Project configuration.

- O-M-D Traffic (StL Index): StreetLight Trip Index value representing the volume of trips from the Origin Zone, through the Middle Filter Zone, to the Destination Zone.

- O-M-D Traffic (Calibrated Index): Calibrated Index value represents the estimated trip count derived from StreetLight Index calibrated with StreetLight AADT or user-input counts. This is a measurement of all travel from the Origin Zone to the Destination Zone.

- Origin Zone Traffic (Trip Counts): The number of trips used from the StreetLight sample from the Origin Zone with no limitation on where they went. This a measurement of the sample size for the Origin Zone for this particular project configuration.

- Origin Zone Traffic (StL Index): StreetLight Trip Index value representing all travel from the Origin Zone with no limitation on where it went.

- Origin Zone Traffic (Calibrated Index): Calibrated Index value represents all estimated trip count derived from StreetLight Index calibrated with StreetLight AADT or user-input counts. This is the measurement of all travel from the Origin Zone with no limitation on where it went.

- Middle Filter Zone Traffic (Trip Counts): The number of trips used from the StreetLight sample through the Middle Filter Zone with no limitation on where they came from or where they went. This is a measurement of Sample Size for the Middle Filter Zone for this particular Project configuration.

- Middle Filter Zone Traffic (StL Index): StreetLight Trip Index value representing the volume of trips through the Middle Filter Zone with no limitation on where they came from or where they went.

- Middle Filter Zone Traffic (Calibrated Index): Calibrated Index value represents all estimated trip count derived from StreetLight Index calibrated with StreetLight AADT or user-input counts. This is a measurement of the volume of trips through the Middle Filter Zone with no limitation on where they came from or where they went.

- Destination Zone Traffic (Trip Counts): The number of trips used from the StreetLight sample to the Destination Zone with no limitation on where they came from. This a measurement of the sample size for the Destination Zone for this particular project configuration.

- Destination Zone Traffic (StL Index): StreetLight Trip Index value representing all travel to the Destination Zone with no limitation on where it came from.

- Destination Zone Traffic (Calibrated Index): Calibrated Index value represents all estimated trip count derived from StreetLight Index calibrated with StreetLight AADT or user-input counts. This is a measurement of all travel to the Destination Zone with no limitation on where it came from.

zone\_traffic\_mf\_counts\_all.csv

==============================

This file contains information about each Zone used in the Project. The StreetLight Trip Index represents all travel appropriate to each Zone with no limitations on where they came or where they went.

The fields are:

- Type of Travel: Type of Travel analyzed. Values are "Personal" or "Commercial".

- Zone Type: Indicates if the Zone is an Origin or Destination Zone for this Project.

- Zone ID: Numeric ID for the Zone as provided by the user.

- Zone Name: Name for the Zone as provided by the user.

- Zone Is Pass-Through: Indicates if the Zone is pass-through or not as described above in the Terms. Values are "Yes" or "No".

- Zone Direction (degrees): This refers to the direction in which trips pass through the Zone as described above in the Terms.

- Zone is Bi-Direction: Indicates if the Zones are bi-directional. Values are "Yes" or "No".

- Day Type: Average Day (average of traffic Monday through Sunday), Average Weekday (average of weekday traffic as defined by user), or Average Weekend Day (average of weekend traffic as defined by user).

- Day Part: Segments of the day defined by the user in intervals of hours to analyze travel (All Day is always included as entire 24 hours). The Day Parts reflect the local time at the Zone.

- Zone Traffic (Trip Counts): The number of trips used from the StreetLight sample representing all travel starting in or ending in the Zone, depending on the Zone Type. This is a measurement of the sample size for the Zone for this particular project configuration.

- Zone Traffic (StL Index): StreetLight Trip Index value representing all travel starting in or ending in the Zone, depending on the Zone Type.

- Zone Traffic (Calibrated Index): Calibrated Index value represents estimated trip counts (derived from StreetLight Index Calibrated with StreetLight AADT/user-input counts) starting in, passing through, or ending in the Zone based on the Zone Type and the Zone Is Pass Through values.

\*\_zone\_set.(dbf|prj|shp|shx)

============================

These files comprise the shapefiles for the Project's Zone Sets.

A shapefile consists of the following several files:

.shp file contains the feature geometries and can be viewed in a geographic information systems application such as QGIS.

.dbf file contains the attributes in dBase format and can be opened in Microsoft Excel.

.shx file contains the data index.

.prj file contains the projection information.

These shapefiles have the following attributes/columns:

- id: Numeric ID for the Zone as provided by the user. This may be null as the field is optional.

- name: Name for the Zone as provided by the user.

- direction (degrees): This refers to the direction in which travel passes through the Zone as described above in the Terms.

- is\_pass: Indicates if the Zone is pass-through or not as described above in the Terms. 1 = "Yes" and 0 = "No".

- geom: Polygon of the Zone.

- is\_bidi: 1 value indicates traffic is in two opposite directions in a single set of Metric values. 0 value indicates traffic is in single direction specified by users.

NOTES

=====

OD Pairs with No Values

=======================

If the StreetLight Trip Index values for an OD pair for a specific time period (e.g. Average Weekday, Early AM) are below StreetLight's significance threshold, no results will be shown in the CSV files.

Day Part Calculations

=====================

The Day Part calculations are done in relation to the Zones used in the analysis. The O-M-D Trip Count values Day Parts are calculated in relation to the Middle Filter Zone. The Day Part is determined by when Trips pass by the centroid of the Middle Filter Zone.

The Origin Zone Trip Count values Day Parts are calculated in relation to the Origin Zone. The Day Part is determined by when Trips either Start in the Origin Zone or pass by the centroid of the Origin Zone, if the Origin Zone is designated as pass-through.

The Middle Filter Zone Trip Count values Day Parts are calculated in relation to the Middle Filter Zone. The Day Part is determined by when Trips pass by the centroid of the Middle Filter Zone.

The Destination Zone Trip Count values Day Parts are calculated in relation to the Destination Zone. The Day Part is determined by when Trips either end in the Destination Zone or pass by the centroid of the Destination Zone, if the Destination Zone is designated as pass-through.

StreetLight Trip Indices

========================

The StreetLight Trip Index represents trip activity but does not indicate actual number of trips or vehicles. The values are provided on an index. Personal and Commercial values use different indices. Projects in the US and Projects in Canada also use different indices.

For US Projects, the value is normalized by adjusting the number of trips in our data sample to the actual number of trips on a region around Sacramento CA, as derived from the measurements published by the California Department of Transportation. This allows us to capture monthly and seasonal variation more accurately, even as our sample grows.

For Canadian Projects, a value of 500,000 on each index corresponds to average daily traffic on a stretch of Highway 401 east of Toronto.

Comparing StreetLight Trip Indices

==================================

Trip Indices are not comparable between different Data Sources, since they are calculated differently from each other. This includes Trip Indices from the "Location-Based Services" and "Location-Based Services with Pass-through" data sources.

Calibrated Index

================

Calibrated Index value represents the estimated number of trips or vehicles derived from StreetLight Index calibrated with StreetLight AADT or user-input counts.

Copyright © 2011 - 2019, StreetLight Data, Inc. All rights reserved.