

AADT documentation

***This folder contains data and code for joining traffic counter data (AADT) to OSM network. For small links with missing data, a Random Forest model was used to infer likely AADT values.

1. Raw traffic count data is based on "homogenous_traffic_flow.csv" (source: <https://cloudstor.aarnet.edu.au/plus/s/qcDmkUvj4lpfooX>) in the data folder. This csv file is plotted as a point ESRI shapefile layer: cal_AADT_source.shp for further processing.

2. R script "03_Join_SpeedToOSMLink.R" spatially join counter data to OSM network "OSM_BaseNetwork_WGS84.shp" (Source: this is the original OSM data, but converted to WGS84 for processing). Currently I used a 25-meter cut-off distance for joining AADT counter data with the nearest road segment. (there should probably be a way to join AADT to road segment down the track, this should further improve accuracy)

3. Many road segments are missing AADT data. A Random Forest model is calibrated using existing assigned AADT and road attribute data, and was used to infer AADT for missing AADT values. The Random Forest model was able to explain 63.9 % of variations in AADT.