Estimation of Origin-Destination Matrices with UTD19 Traffic Counts and Network Tomography
Corrigendum

Preparing counts data and road network model page 13:

The travel times in free-flow traffic for the edges of the road network are calculated by a function in OSMnX from the road speeds that are available as edge attributes in the OSM data.

Scaling page 18:

Scaling by mean subtraction and division by the standard deviation of the counts WAS attempted in a CVXPY solution of the Hazelton Model 1 but found to give very poor agreement with the published OD demand, after un-scaling.

Results – MCMC page 22:

The maximum value of the MCMC OD demand is 607 vehicles per 15 minute period, not 150. This is stated correctly later on page 24. The number 150 erroneously refers to the CVXPY result. The MCMC flow is concentrated onto fewer OD relations, not spread more evenly. (For a time during writing, the CVXPY and MCMC results had been inadvertently switched in a table).

Improvements to the Model Specification page 35

The explicit travel time model of Dey et al. takes a further step to modify the P matrix with updated travel times as a result of congestion on the edges. This use of dynamic travel time is not part of the P matrix that was implemented here.