

LEVEL 3 TRANSPORT PLANNING PORTFOLIO

SUBMISSION EXAMPLE:

Topic 1: Transport Planning Modelling

Evidence for this area should demonstrate competence in the following KSBs:

K4: Transport models and forecasting techniques, using computer-based software system/packages, and their use in the sector for assessment and appraisal

S5: Use models to forecast demand using appropriate software packages for data gathering and analysis

EVIDENCE PIECE 1 – K4 & S5

Date and duration: May 2023 – 4 weeks

Key objectives and deliverables: Choosing how to forecast the impact of a cycle lane on traffic flow for the London Road Improvement Project

What you did: I obtained cycle data from roadside counts and for journey to work from the Census. I used the propensity to cycle tool (PCT) and looked at other areas where cycle priority had been introduced. This produced a range of increases and any impact on car use.

For this local scheme we (the project team) discussed what model would be best and considered that a large scale model would not be justified. We used a local VISSIM model run by the local authority.

I helped prepare the cycle and car forecasts for the model using Excel so that the space needed for the cycle lane could be balanced against the reduction in traffic demand. I sat in on the model runs which we did several times to give a range of results. We also did runs for peak and off peak flows. Because we used a small scale model we were able to do quite a few runs at low cost. This wouldn't have been possible with a large scale model like SATURN.

The results showed that some levels of cycling and mode switch would cause minimal traffic delays but some would cause peak hour disbenefits. This shows the uncertainty involved in all schemes aiming to change behaviour. The results of the forecasting and modelling were then used for an appraisal of the scheme.

223 words

Any help or contributions from others (including use of AI): I used an existing cycle forecast template spreadsheet as the basis for my forecasting calculations.