

Speaker Profiles

Dr Nicola Masey

Dispersion Modelling Consultant

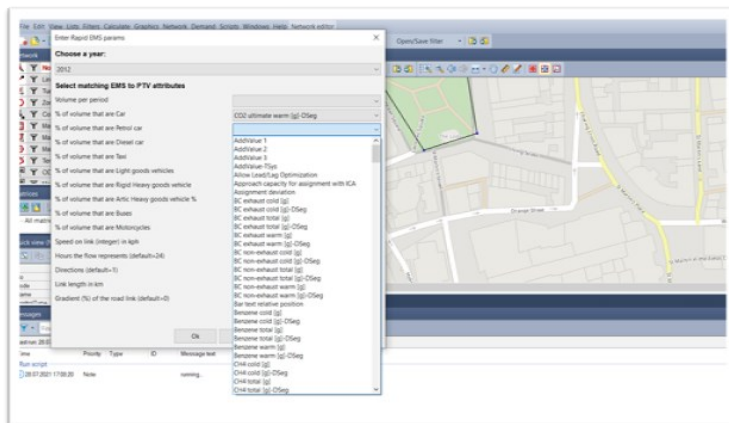


Nicola is a senior consultant in Ricardo's Air Quality modelling team. Nicola supports cities to carry out Clean Air Zones / Targeted Feasibility studies, including project management, technical advisor and air quality modeller. She has worked with cities across the UK to develop their Clean Air Zone plans. Nicola is also experienced in carrying out local and city-scale dispersion modelling, and consequent analysis and production of Local Plans and Detailed Assessments. She has a strong data science background and is experienced at handling large data sets including manipulation of traffic data, analysis and incorporation of local data (e.g. ANPR) in emissions calculations and development and evaluation of traffic mitigation scenarios.

Dr Stuart Sneddon

Air Quality Modelling Technical Director

Stuart is a Chartered Scientist with over 15 years of experience within the environmental sector with expertise encompassing air quality management, climate change mitigation and human health / environment risk assessments. Stuart has supported cities around the world with emissions inventories, air quality action planning, dispersion modelling, environmental impact assessments, stakeholder consultation and environmental training.



A module has been developed for Visum to allow road traffic emissions to be calculated – the emissions calculations use COPERT 5 emissions factors. These are emissions factors developed by the European Environment Agency for common air pollutants including CO₂, NO_x, and particulate matter. The COPERT 5 emissions factors are currently used in UK Government air quality national compliance modelling, and are also accepted for use in other UK air quality modelling studies. This talk will provide an overview of the user inputs required for the Rapid EMS emissions module and the outputs generated by the module. Example use cases for the module will also be discussed.

What to expect...

In the UK, road transport is recognised as the principal source of local air quality issues and Air Quality Management Areas. The evaluation of the impact of road traffic schemes and proposed mitigation scenarios is an important consideration, requiring the transparent calculation of emissions of key air quality pollutants (e.g. NO_x and CO₂).

Ricardo are leading practitioners in this area and recognise the need to enable the ready translation of strategic transport model outputs to support strategic planning and associated environmental assessments.

