

AIR QUALITY MODELLING OF STRATEGIC TRAFFIC DEMAND MODELLING STRATEGIES**A. Namdeo, M.C. Bell***Institute for Transport Studies, University of Leeds, Leeds, UK*

This paper presents the results of the air quality modelling study carried out within the HEAVEN (Healthier Environment through Abatement of Vehicle Emission and Noise) EU: Fifth Framework Information Society Programme. The HEAVEN system in Leicester has identified potential scenarios for better air quality through improved control and management of traffic. These measures have been of two types short-term tactical and long-term strategic measures. In the HEAVEN project emphasis was placed on developing and quantifying the impact of the more strategic citywide traffic demand management strategies (TDMS). Four TDMS scenarios were identified to assess against the base case the sensitivity of the network to changes in speed and fleet composition. However, two of the TDMS, namely those to assess the effect of reducing speed of traffic by 20% on all links across the network and to remove the % HGV, were not realistic because they did not consider the changes in the capacity of the network for traffic that would result. When the capacity reducing effects of the road network were investigated it was found that if a speed reduction of 20% was imposed the capacity would be substantially reduced and if all HGV were banned the capacity would increase. This capacity effect was measured using the TRIPS model and the results inputted into air quality model Airviro. This paper presents the air quality impacts of the realistic scenarios and compares them to those for the sensitivity tests.