

**PRELIMINARY FINDINGS INTO THE EFFECTS OF THE CONGESTION CHARGING
SCHEME ON AIR QUALITY MEASUREMENTS IN CENTRAL LONDON**

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Congestion charging commenced within Central London on 17th February 2003. While the primary aim of this traffic management scheme was to reduce congestion, there is much interest in its effects on London's air quality. Analysis of traffic data for the first 12 months of operation shows a marked change in vehicle numbers, speed and class. These changes in emissions profiles are not translated directly into pollutant measurements due to the small area of the charging zone within the greater urban area and statistically unusual weather patterns prevalent throughout 2003. The repeatability of pollutant measurements across Greater London prior to and following introduction of the scheme are tested using wind-biased Bland-Altman plots. These identify outlying results from sites above or below the regional mean and therefore independent of meteorological effects. These plots, coupled with trend analyses, indicate that mean roadside NO_x and NO₂ concentrations have fallen at the selected indicator site within the zone, against stable or increasing concentrations elsewhere in London. At this stage, there is no clear deviation from the regional mean in particulate concentrations. The analysis also highlights increasing NO₂ concentrations at some roadside sites against stable or decreasing NO_x. This may be evidence of directly emitted NO₂ from vehicle exhausts. This is a preliminary analysis, which will become more robust as the post-scheme dataset increases.