Abstract: With the adoption of increasingly stringent environmental regulations, there has come greater pressure to quantify any potential effects on air quality associated with national strategies, local plans and individual development projects.

Although there are differences in the appropriate level of resource and modelling effort applied to the assessment of effects on local air quality, depending on the end use of the assessment, the reported values are generally regarded as being definitive by planning officials.

This may affect the weight (importance) placed by decision making officials, on the conclusions of assessments that are based on air quality modelling, in the following ways.

- Decision makers may place more reliance on the predicted values than are scientifically justifiable;
- Decision makers may place too little reliance on predicted values, if they do not understand the implications of the associated model uncertainty;
- Decision makers may find it difficult to have confidence in predicted values when there is an absence of statutory guidance on required methods or when apparently conflicting guidance is borrowed from other sectors.

This paper presents experiences, methodology and examples of communicating detailed information from urban air quality modelling, to a non-technical audience in support of the planning decision making process.