

# WCC Modelling Protocol

## Advice Note 013 – Data Extraction from Models

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Protocol Category	Model Licensing	Version	001
Prepared by	Warwickshire County Council	File reference	WCC_MP_AN013
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### Introduction

1. This Advice Note (AN) has been produced to explain Warwickshire County Council's (WCC) current position with regards the extraction of traffic flow information from the existing suite of microsimulation models and any limitations or restrictions which should be noted when the data is being requested.
2. This advice note relates specifically to the provision of traffic data from WCCs microsimulation models rather than instances of data being extracted from WCCs models which have already been run for the purpose of supporting an assessment of development impacts.

### Model Data Requests

3. Traffic data may be requested from WCC microsimulation models to support the assessment of development impacts at key locations, particularly those developments which are not expected to undertake a full assessment within WCCs microsimulation models.
4. The traffic flows are typically extracted from the microsimulation models to aid in the determination of forecast year conditions which are, in turn, affected by a variety of factors including traffic growth associated with future developments and any associated schemes, all of which is accounted for to some extent within WCCs models.
5. Ideally junction models will be calibrated to existing baseline conditions through the collection of survey data at the key locations. However, as it is not possible to survey future years and so outputs from the microsimulation models may provide suitable inputs for this purpose.

### Data Checking

6. WCC requires that checks are undertaken when data is requested from the microsimulation models and that these checks should include:
  - A review of the calibration of the Base microsimulation model to determine if survey data was used for calibration or if the junction is included based on modelling assumptions.
  - A review of the validation of the base microsimulation model to determine if journey times travelling through the junction have been checked as part of the model development exercise.

- Confirmation that the future year model assumptions remain current as well as a summary of the assumptions contained within any future year model scenarios for which traffic flows have been extracted.
7. WCC requires that this information is requested at the same time as the data for completeness.
  8. Completing the checks will enable WCC to comment on the suitability of the extracted data. Caution should be exercised when traffic flows are being extracted from junctions which have not been calibrated against observed data, especially in instances where the junction includes links which serve to load traffic into the model rather than connecting through to other junctions. This is because there is even more uncertainty around junctions which include loading points due to the reliance upon assumptions applied to the zones and associated demand estimation process.

#### **Data Limitations**

9. WCC considers that, subject to the appropriate checks having been completed, the data provided is fit for purpose at the time of extraction from the models.
10. Data which has been extracted from the models may no longer be considered valid if the model has been updated since the time of extraction. This is because any update will mean traffic flows have been refined based on more up to date assumptions and may materially impact upon any assessment derived therefrom.
11. WCC requires that the validity of model data is checked prior to any submission based on the data, particularly if more than 6 months has passed since the data was provided.
12. Where data is no longer considered valid, the magnitude of change should be checked to determine how different the new data is compared to that which was provided during the original data extraction.
13. Significant changes in traffic flows will result in WCC requesting the assessment be redone based on new flows. Where changes are less significant then WCC may not require the assessment be updated or may request that a sensitivity test is sufficient to ensure that the development assessment conclusions remain valid.
14. WCC requires consulting and reviewing in detail the validity the data when requested. Once the data has been issued, there will be not further changes and it must be paid in full regardless if any changes have occurred. WCC is not responsible if the data is not valid anymore at the point of submitting a full planning application. The developer is responsible for paying any further data requests.