

# Statement of Common Ground between Woking Borough Council and Surrey County Council

## **Transport Modelling Assessment**

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**Produced by the Planning Policy Team** 

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#### **Background**

- Surrey County Council's (SCC's) Transport Studies team were commissioned by Woking Borough Council (WBC) in April 2009 to evaluate the transport impacts from proposed future development identified within the emerging Local Development Framework (LDF) Core Strategy. The study followed the methodology developed by SCC and consistent with that used for other boroughs and districts within the County and has been approved by the Highways Agency.
- 2 The purpose of this joint partnership study was to prepare a transport evaluation to:
  - assist in the provision of an evidence base to support the planning authorities preferred options;
  - evaluate whether the resulting impacts of the proposed quantum of development could be accommodated by the transport network; or to
  - identify any locations which would require further study to manage and promote growth;
  - adhere to SCC's transport policies and objectives; and
  - satisfy the Highways Agency and Surrey County Council as designated highway authorities, that the strategic and local highway networks can accommodate the planned growth.
- The results of the full evaluation are documented in the final report 'Transport Evaluation for Woking Borough Council's Core Strategy: 2026 Transport Assessment Report', December 2010 Revision 3.

#### **Modelling Capability**

- The transport assessment was based on SCC's then current Surrey Integrated Transport Model (SINTRAM) model [Version 3.3 /100610Wok]. This is an 'inhouse' strategic model that encapsulates the highway network of Surrey including all Motorway, Trunk, A and B Roads and some local roads and surrounding local authorities. The model was produced to Department of Transport (DfT) guidelines for a strategic transport model suitable for this type of appraisal and was the only readily available model to undertake such an evaluation. The SINTRAM base model was validated to 2005 traffic counts for the AM peak hour (08:00-09:00) for three vehicle types, cars, light goods vehicles (LGVs) and heavy goods vehicles (HGVs). Public Transport is not currently modelled.
- Strategic modelling uses aggregate descriptions of traffic such as flow, density and speed, and the relationship between them and does not include every local residential road or junction adjoining the highway network. As a result the model is unable to accurately reflect traffic interactions such as queuing or driver behaviour but can provide answers to the effects of re-distribution due to changes or intensification of land-uses, hence provides a robust tool for assessing the impacts of additional traffic due to the proposed development.

### Methodology

The transport evaluation was based on data reflecting WBC's estimates of committed and planned commercial and residential development in Woking between 2005 and 2026. As agreed the transport assessment considered the

likely impacts that the following proposed development scenarios could have on the strategic and local road network as a direct result of additional development in Woking by comparing these against a 2005 base and 2026 Do-Minimum reference case, these were:

- Scenario A All Committed development between (2005-2026)
- Scenario B Scenario A plus all estimated planned development between (2005-2026)
- Scenario C Scenario B plus additional 350 dwellings on greenbelt land between (2005-2026)
- Scenario D Scenario C plus additional 150 dwellings on greenbelt land (2005-2026)
- 7 Growth factors were derived from the DfT's TEMPRO database to create the 2026 Do-Minimum forecast year of 2026. Additional trips due to the committed and planned development were derived by using the nationally recognised TRICS database.

### **Agreed Outcomes**

- The outcomes of the transport evaluation have been based on aggregations of modelled outputs such as network summary statistics including vehicle kilometres travelled, travel times and average speeds, changes in traffic flows and comparing volume of traffic to highway capacity ratios to establish the sensitivity of the Strategic Route Network (SRN) and Local Road Network (LRN), at a strategic level. The Transport evaluation also assumed that all development would come forward (in affect simultaneously), and made no allowance for mitigation, demand management or infrastructure improvements. It effectively therefore represents a 'worst case' scenario which identifies that local roads and junctions will not be able to accommodate all future unconstrained traffic levels. The Highway's Agency is satisfied with the transport evidence.
- The evaluation concluded that overall it was unlikely that traffic impacts as a result of the proposed level of growth proposed within the Core Strategy will be significant enough to cause additional major disruption or require significant highway capacity infrastructure improvement measures on either the SRN or LRN. However, it did identify some key locations within the borough that may experience additional congestion, which in the absence of any appropriate mitigation measures might be exacerbated over the Core Strategy, these locations are:
  - Central Woking
  - Brookwood, Knaphill & St Johns
  - Westfield

- Maybury & Sheerwater
- West Byfleet and A245 corridor
- A320 corridor -Woking to the borough boundary
- 10 Subsequently, and in addition to SCC's Transport Evaluation for Woking's Core Strategy, a further study the 'Cumulative Assessment of Future Development Impacts on the Highway Network Report' September 2011 was undertaken by SCC's Transport Studies team to consider the cumulative impacts of all known future development within Surrey, as well as large developments located externally to the County, to consider cross boundary impacts.
- 11 The report concluded that although major additional highway capacity infrastructure investment such as motorway widening or local bypasses were

not necessary, other types of highway capital schemes in some urban locations, at key junctions would be required to promote and manage additional traffic demand due to development traffic in some parts of Woking such as A245 / B382 in West Byfleet.

- A joint-officer workshop was held to address the transport implications of the borough and cross border issues along routes such as the A245 and A320 and specific locations in order to identify solutions or packages of solutions that seek to manage the existing highway network and provide more sustainable transport choices. This is contained in the supporting 'Transport measures to support growth identified in the Woking Borough Core Strategy' Technical Note Revision B1, which contains evidence to support the Woking Borough Core Strategy Publication Draft (Woking Borough Council, July 2011). The information presented on existing and future highway problems is based on both transport evaluations above and includes other sources of transport contributions including schemes promoted as part of the Local Sustainable Transport Fund (LSTF) Large and Key Component bids.
- The technical note has been used to inform Woking's Infrastructure Delivery Plan (IDP) which sets out the infrastructure to support the growth set out in its Core Strategy. It is also basis for preparing a more detailed Local Transport Strategy for Woking which in turn will enable:
  - The infrastructure requirements to support growth to be identified and costed to support the need for a CIL charge; and,
  - The development of a more detailed list of schemes with costs. These will be capable of being implemented and forming part of the CIL 'Section 123' List.

#### **Summary**

In summary, the evidence base has led to the preparation of a policy framework that will ensure that any TA associated with development proposals in the Borough will consider in detail the impact of that proposal on transport infrastructure, and propose and facilitate suitable options to mitigate that impact by developing a Transport Strategy to manage and promote growth, fully supported by both the borough and county councils.

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