A320 Corridor Study

Introduction

This study focuses on the A320 between Woking (Brook House roundabout) and Chertsey (both the A320/B388/St Ann’s Rd roundabout and M25 J11 interchange). The study is to identify current and forecast traffic related problems and opportunities, and produce a strategy that achieves the objectives of this brief.

The principal aim of the study is to assess the cumulative quantum and distribution of vehicular trips resulting from major development proposals in Runnymede, Surrey Heath and Woking boroughs and the forecast impacts on the A320 corridor, and to recommend appropriate measures of mitigation that might be necessary to help address and/or minimise the impact to enable the delivery of the development.

A320 Corridor

This section of the A320 is a Principal A Road linking Woking with Chertsey. However, it also links both settlements with the M25 at Junction 11. Woking in particular is a sub-regional economic centre and, consequently, the road carries high volumes of commuter traffic in both directions in the morning and evening peak periods.

Adjacent to the A320 is St Peter’s Hospital, part of the Ashford & St Peter’s NHS Foundation Trust. It serves north-east Surrey, in particular the centres of Woking, Chertsey, Weybridge, Staines and Walton-on-Thames, and it includes a major Accident & Emergency unit.

This section of the A320 is also a strategic diversion route in the event of major incidents on the nearby section of the M25.

The majority of junctions are roundabouts, but there are also some side roads as well as properties with individual accesses. It passes through Ottershaw, and is a major cause of severance within the community.

The northern end is primarily urban in nature as it passes through Chertsey, serving amongst other facilities the Hanworth Trading Estate, Sir William Perkins’ independent day school, Chertsey railway station and the residential area of Chilsey Green Road.

Further south, congestion and related issues in particular are experienced at the A320/A245 Six Crossroads roundabout just to the north of Woking, through Ottershaw and in the vicinity of St Peter’s Hospital.

It should be noted that an A245 Corridor Study was undertaken in 2002, and this incorporated the section of the A320 between the Six Crossroads and Brook House roundabouts just to the north of Woking. The results of that study should be taken into account during this study.
Planning background

This section of the A320 serves Woking and Chertsey, St Peter’s hospital, and other smaller settlements such as Ottershaw and Rowtown. It also provides alternative access to places further away such as Staines, Thorpe (including Thorpe Theme Park), Egham and Pooley Green, and Virginia Water. The majority of these settlements are within Runnymede borough, and the Borough Council is currently developing its replacement Local Plan.

Much of the area is green belt, restricting where new development can take place. In order to meet future (up to 2035) housing needs, a significant proportion of Runnymede’s housing demand is likely to be focused in the south of the borough in the vicinity of the A320. Subject to a further round of consultation during May/June 2017, potential developments include:

- 1700 units at Longcross Garden Village;
- up to 210 units at the Veterinary Laboratory site at Rowtown;
- up to 250 units at Ottershaw East;
- 40 units at Brox End Nursery, Ottershaw;
- up to 680 units at the Chertsey Bittams sites;
- 430 units at St Peter’s Hospital;
- Pyrcroft Road housing site in Chertsey.

However, this section of the A320 is also close to the boundaries of Surrey Heath and Woking. Both boroughs have proposals for potential housing sites either close to or adjacent to the A320. These include:

- 2,000 units at Fairoaks airfield, although a planning application is unlikely to be submitted until towards the end of 2017;
- 1,200 units at Martyr’s Lane, just to the north of Woking. A decision is yet to be made by Woking Borough Council on whether this site should be safeguarded for development between 2027 and 2040.

Should all these potential developments be progressed, particularly the developments at Longcross, Fairoaks and Martyr’s Lane, considerably more pressure will be placed on the A320. This is particularly pertinent given the existing issues experienced by users (drivers, bus operators, pedestrians, etc.) on a daily basis.

Objectives

As indicated above, the principal aim of the study is to identify a strategy for this corridor to address existing and forecast vehicular traffic to ensure that future housing requirements within the three authorities does not create severe and unacceptable impacts, which will undermine planned economic growth. This strategy should include details of specific improvement schemes to meet the objectives.

These objectives are to:

- provide a balanced level of provision for all road users;
- improve the journey time reliability for buses and other vehicular traffic;
- ensure cumulative growth related movement results in either a nil detriment or at least impacts that are tolerable;
- reduce community severance;
- ensure road safety is enhanced;
- enhance emergency vehicle access to St Peter’s hospital and ensure cumulative growth related movement does not result in a “severe” residual impact (as stated in the NPPF);
- support the economic vitality of the area.

Only improvements associated with the existing route should be considered, but this does not mean that schemes need to be confined to within the highway boundary. Therefore while improvement schemes may require some additional land-take, alternative off-line solutions, such as a bypass, should not be contemplated. However, where additional land may be required, this should be taken into account when considering the feasibility and costs of schemes.

As noted above, a balanced provision is sought, including both soft and hard measure to encourage the use of sustainable modes of travel such as buses. It should be noted that current bus provision is affected by poor journey time reliability caused by congestion on the approaches to junctions. The current issue is severe enough to come to the attention of the Traffic Commissioner.

At the same time the strategy must ensure that the effects of future growth would be tolerable and would not result in the residual impacts being considered severe. Given the proximity of M25 J11, there will be concerns raised should any resulting increase in traffic flows as a result of potential development be deemed to have a negative effect on road safety that cannot be mitigated. Consequently, care will need to be taken to ensure that any schemes do not result in significantly increased traffic arriving to join the M25 earlier than occurs currently. Similarly, any increased demand in trips leaving the motorway will need to be accommodated; ensuring that any resulting increase in queuing on Junction 11 slips roads would not reduce safety.

It should also be noted that there are other elements that may restrict what can be done in terms of feasibility, timescales and cost. These include:
- heritage remains in the vicinity of Ottershaw roundabout;
- railway related infrastructure at Chertsey;
- a fuel pipeline serving Heathrow in the vicinity of the A320 section between St Peter’s and Chertsey.

**Methodology**

The study will be overseen by a Steering Group, consisting of representatives from Surrey County Council and the borough councils of Runnymede, Surrey Heath and Woking.

The Study should be broken down into the following stages:

**Stage 1: Understanding the current situation**

This should take into account:
- transport and other policies;
- opportunities & constraints;
- travel demands and level of service;
- transport related issues and problems.

Much data already exists or can be obtained. This includes a Roadside Interview Survey on the A320 just to the north of Martyr’s Lane (although this is somewhat dated) and other survey data, journey time and delay data, traffic model data, 2011 journey to work census data, road safety data, etc. Passenger Transport also holds data on bus delays.
**Stage 2: Understanding the future situation**
This should take into account:
- committed and proposed development;
- travel demands and level of service;
- transport related problems arising from growth.
- potential mitigation schemes identified by SCC
Forecast traffic flows and other outputs will be available from the parallel modelling work being undertaken to inform a Strategic Highway Assessment of Runnymede’s draft Local Plan.

**Stage 3: Options for Solutions**
At this stage a report and presentation to the Steering Group will be required. The report should also be circulated to other SCC services beyond the Steering Group (Highways, PTG etc.). The report should contain the findings of Stages 1 & 2 and initial thinking on improvement options. This is to ensure guidance is given on the potential solutions prior to commencing Stage 4.

**Stage 4: Option Testing & Appraisal – Study Outputs and Report**
Technical notes will need to be produced detailing options considered for each location. These notes will contain scheme drawing and the pros and cons of each option.

The options considered will need to be compared and distilled, and appraised against the study objectives. Aspects such as feasibility, costs and likely timescales for construction (including statutory processes) will need to be taken into account. At this stage it is not envisaged that detailed cost estimates should be provided, but indicative costs will need to be given and used as part of the distillation process.

A report should be produced to include reasons for rejecting certain options and for promoting preferred options. For the preferred options enough detail will need to be provided (including scheme drawings) so that, where appropriate, they can be included as mitigating schemes in the Strategic Highway Assessment modelling work being undertaken for Runnymede borough council. The report should include all the assumptions used in the project and the findings of the study, with the outcomes set out clearly against the study objectives. It should be concise and written in a style that is accessible albeit recognising that it will be technical document. Consequently, it should include a non-technical Executive Summary. It should be capable of reproduction as an A4 document.

It will be helpful to understand whether an individual scheme is sufficient to address existing issues and, in particular, to reduce the unacceptable effects of cumulative growth on the A320, or whether a combination of schemes would be required. However, it is recognised that this may not be able to be done without the scheme(s) being tested within the parallel Strategic Highway Assessment work to inform Runnymede’s Local Plan.

As part of submitting a costed proposal, a separate element should be detailed for undertaking junction assessments using appropriate tools (e.g. Arcady, LinSig, etc.). This element should specify where additional data collection might be required and indicate costs for data collection and junction modelling as well as how much time would be required to complete this element. It is uncertain whether this element is required now, and hence the request to show this as a separate item.
The work undertaken should be done to a level that it can be used as a basis for preparing business cases to secure funding either from the EM3 LEP or in response to funding opportunities issued by either the Department for Transport or the Department for Communities & Local Government (including the Homes & Communities Agency). It is recognised that should junction testing not be undertaken as part of this study, then such assessments would need to be carried out at this stage. Currently, completing a WebTAG compliant assessment for any scheme options forecast to cost in excess of £5m is outside the scope of the study.

Consequently, the preferred options do not have to be fully developed ready to meet statutory procedures. However, they do need to be developed to a sufficient level of detail to enable confident decisions to be taken about whether to progress potential schemes. In particular, the level of detail needs to be sufficient for inclusion in Strategic Highway Assessment modelling work and to inform the Local Plan related Infrastructure Needs Assessment and Infrastructure Delivery Plan.

As with Stage 3, it is envisaged that a presentation on the study outputs would need to be made to the Steering Group.

It is recognised that what can be undertaken is dependent upon the timeframe of the project. To meet Local Plan requirements, it is envisaged that this study should be completed within 4-6 months, depending upon when the Inception Meeting is held, when data is available from the Strategic Highway Assessment modelling work and whether any junction or corridor assessments are carried out, including related data collection. An indicative programme is shown in Figure 1, overleaf.

Should it be considered that micro simulation modelling be required, then this would need to be undertaken using S-Paramics.

All additional data and models would need to be provided upon completion of the study.

SCC do not have the resource given the short timescales to carry out the work but would need to be involved in each stage of the process to provide guidance and steer the study.
Figure 1: Indicative programme

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