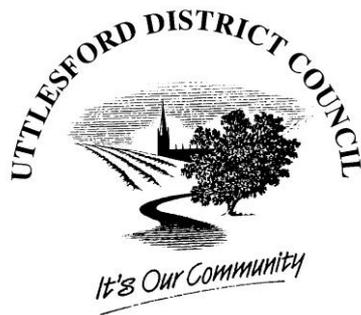


**UTTLESFORD LOCAL PLAN
APPROACH TO LOCAL PLAN TRANSPORT ASSESSMENT**

JULY 2015



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INTRODUCTION

1. Following receipt of the report of the Planning Inspector on the previously submitted Local Plan in December 2014, the Plan was withdrawn in January of this year. The District Council has now restarted the plan formulation process, an important part of which will be transport assessment.
2. This report explains the basic principles that the Council will need to follow in building up its plan-making transport evidence base. The report looks at:
 - i) national policy and guidance,
 - ii) transport assessment
 - iii) Local Plan Inspector's comments, and
 - iv) work programme.

NATIONAL POLICY AND GUIDANCE

3. In March 2012 the National Planning Policy Framework (NPPF) was published, and a set of Planning Practice Guidance (PPG) was issued a year later. This framework is underpinned by the Planning and Compulsory Purchase Act 2004. Plan-making is part of a "quasi-judicial" process and therefore local planning authorities are constrained by national policy and guidance in terms of what they must do in their local plans if those plans are to be found sound by the Planning Inspectorate and carry legal force.
4. HM Treasury has just published its productivity plan entitled "Fixing the foundations: Creating a more prosperous nation". In the plan, the Government has confirmed that it will set a deadline for local authorities to put local plans in place, with the deadline being set by the summer recess. Where plans are not in place, the Secretary of State will intervene to arrange for local plans to be written, in consultation with local people.

National Planning Policy Framework

5. Promoting sustainable transport is an important feature of the NPPF. Sustainable transport refers to public transport, walking and cycling. It can also refer to other measures designed to reduce car use such as personal, company and railway station travel planning, car sharing and travel information packs for new residents of new houses. Many of these other measures can be secured by planning conditions or obligations. Paragraph 29 states that (inter alia):

“the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas”

6. More is said of this issue later in this report, especially in relation to the relatively high levels of car ownership and car use within the district.
7. Paragraph 30 gives further advice which local authorities need to take into account when looking at development options:

“Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing local plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport”.

8. Similar advice to Paragraph 30 is given in Paragraphs 34 and 35, namely locating significant traffic generators where the need to travel can be minimised and the use of sustainable transport modes can be maximised. Again, the differing needs of rural areas are highlighted.
9. Paragraph 37 refers to planning policies aiming for a balance of land uses so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities.
10. Paragraph 38 is prescriptive about larger scale housing developments:

“For larger scale residential developments in particular, planning policies should promote a mix of uses in order to provide opportunities to undertake day-to-day activities including working on site. Where practical, particularly within larger-scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties”.

Planning Practice Guidance

11. The relevant guidance is entitled “Transport evidence bases in plan making and decision taking”. The opening paragraph (001) states that:

“The transport evidence base should identify the opportunities for encouraging a shift to more sustainable transport usage, where reasonable to do so; and highlight the infrastructure requirements for inclusion in infrastructure spending plans”.

12. The guidance gives advice on what type of baseline information should inform a local plan transport assessment and what detailed information is required for the assessment to take place. The guidance also advises on assessment methodology. In relation to how the assessment is produced, Paragraph 005 advises that:

“The transport assessment should be produced at a local plan level in partnership with all relevant transport and planning authorities, transport providers and key stakeholders, for example the Local Economic Partnership. It may be appropriate for the transport assessment to cover an area wider than the local plan at least initially given the size of some travel to work areas (this would be similar to the Strategic Housing Market Assessment). This process should help to identify any potential measures that may be required to mitigate negative impacts”.

13. The local SHMA area covers East Herts, Epping Forest, Harlow and Uttlesford districts. “Duty to co-operate” transport assessment meetings between these authorities, Essex and Herts County Councils and Highways England are ongoing, looking as cross-boundary strategic highway matters.
14. Paragraph 003 identifies seven key issues which need to be considered in developing a transport evidence base. These are worth highlighting in this report as some common emerging themes are clearly evident from what has been said earlier in this report. The issues are:
 - i) assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms,*
 - ii) assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport,*
 - iii) highlight and promote opportunities to reduce the need for travel where appropriate,*
 - iv) identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate,*
 - v) consider the cumulative impacts of existing and proposed development on transport networks,*
 - vi) assess the quality and capacity of transport infrastructure and its ability to meet forecast demands, and*
 - vii) identify the short, medium and long-term transport proposals across all modes.*
15. The guidance (in Paragraph 004) identifies three stages of transport assessment during the preparation of a local plan. More is said of these three stages later in this report. The three stages are:
 - i) issues and opportunities*
 - ii) options testing*
 - iii) preparation of the final submission.*

TRANSPORT ASSESSMENT

Strategic level assessment work

16. Transport assessment is an iterative process, becoming more refined and detailed as the process draws to a conclusion. In relation to the withdrawn plan, “duty to co-operate” transport assessment work looked at the effect on the strategic transport network taking into account the impacts of existing and committed development and proposed development within Uttlesford and its neighbouring authorities. This work is ongoing as the various authorities prepare and refine their new plans. The main strategic assessment relates to impacts upon M11 J7 and J8, the A120, A414 and A1184 and Bishop’s Stortford and Harlow town centres. Essex County Council is also proceeding with work on proposed M11 Junction 7A prior to a formal public consultation in 2016. Junction 7A is a proposed new junction between J7 and J8 to improve access into and out of the Harlow area, as Harlow is currently only served by J7 which is already very busy.
17. Initial assessment work for issues and opportunities and options testing is undertaken by assessing the effect of differing amounts and locations of development by loading relevant trip generation data for various proposed land uses into a transport model and carrying out a run or a number of runs of the model. Each run would therefore test a particular development scenario for comparison against each other and against a baseline. From these runs, stresses and strains on the network links and junctions can be identified from, for instance, increased queueing and / or congestion.
18. Paragraph 32 of the NPPF states that development should only be prevented or refused when transport impacts would be severe. However, “severe” is not defined. A judgement will need to be made on whether impacts are severe. Highways England has stated that it considers an impact to be severe if it compromises safety (e.g. queueing onto a motorway carriageway), although County Councils mostly have no defined position on this. The term “gridlock” is often colloquially used in describing adverse effects on the highway, but it has no meaning in planning policy. Evidence will always be required, probably in the form of results from transport modelling, to assess transport impacts against Paragraph 32.
19. Subsequent model runs can include building in proposed mitigation (such as junction improvements and / or new links) with the ideal aim of achieving a “nil detriment” position with regard to queueing and congestion etc. A “nil detriment” position is one where queueing and congestion would be no worse in a “post development” world compared to the baseline. In reality, assessors will probably be seeking to achieve an outcome where effects are not “severe”. More localised modelling may be required to assess effects in more detail on particular parts of the network.
20. Initial assessment work is harder to carry out when participating local authorities are at different stages of local plan preparation. This is

because it is difficult to assess what the actual effect on the network will be when development amounts and locations are not finally determined across the model area. There is a considerable risk of a plan being found unsound if authorities progress their plans at a different pace because modelling is likely to be incomplete. In an ideal world, co-operating local authorities would progress their plans at the same pace, but reality is not like that.

21. A new strategic computer based model is being commissioned by Essex County Council to replace the existing ones that are being used. The new model is designed to help with the assessment of M11 J7A, and separate runs can be made to consider the effects of development being proposed in the emerging local plans. The model is a VISUM type model, which is a German acronym for “Traffic in cities – simulation model”. The model uses mobile phone data to provide trip information together with traffic data collected on roads and junctions across the area to reflect actual flows. The model can identify transport modes being used and also interchanging. The model base year will be 2014. Highways England has been engaged with the model preparation process, but the model has not yet been signed off as being fit for purpose by either Highways England or the DfT.
22. A plan showing the full VISUM model area is attached at the end of this report. The full model area is shown in red, and the network links feeding into the model are shown in blue. The full model area includes the SW portion of Uttlesford, and does not include M11 J9 at Great Chesterford / Stump Cross or the A120 east of Little Canfield beyond the junction with the B1256 (old A120).
23. There are three other models which can be used for transport assessment within the district. These are summarised in Table 1 below (all information provided by Essex County Council):

Table 1: Transport models for use in transport assessment

Model name	Coverage	Type	Age	Status
Uttlesford Local Plan model (used for the Highway Impact Assessment)	Uttlesford	Spreadsheet model. Traffic distribution based on census information, including journey to work, but also includes data collected on the ground	3 yrs	Live and available

		to reflect actual flows and movements. Works well in rural areas.		
M11 J8	Junction and immediate approaches	“Linsig” model – computer based for modelling traffic signal operation, based on traffic data and journey to work data	Current	Being updated with date from M11 J7A model
A120 / B1383 (Bishop’s Stortford bypass)	Junction only	“Arcady” computer based model for modelling roundabouts from actual traffic data and journey to work data and information provided by developers.	Current	Available for use

24. As the preparation of the new Local Plan progresses, a decision will need to be made as to whether the coverage of the existing models is adequate or whether further coverage is needed. This will depend on the options for development that are taken forward.

25. The Council will need to work closely with neighbouring districts to understand the cumulative highway impacts of growth proposed in their Local Plans. This will include East Herts Council (and Herts County Council) in relation to M11 J8, South Cambridgeshire District Council (and Cambridgeshire County Council) in relation to M11 J9, and Braintree District Council in relation to the A120.

Local assessment work

26. At a more local level, Essex Highways were commissioned to prepare the Uttlesford Local Plan Highway Impact Assessment (HIA). The assessment was published in 2013 in time for the plan pre-submission consultation. This was a study

“to assess the existing situation in key locations, and then assess the implications of the ULP in highway terms at key junctions, and identify and evaluate mitigation measures, if required. Two future years, 2018 and 2026 have been assessed, with a base year of 2012. This is in order to more clearly understand the impact of already committed development, and then the cumulative effect of the ULP proposals” (Page 1). An updated HIA was published in March 2014, focussing on Saffron Walden, Great Dunmow and Elsenham.

27. A large part of the HIA is still likely to be useful, but it will need to be carefully reviewed to make sure that it is fit for purpose. Further HIA modelling work may be required depending upon which options are taken forward.
28. The “Call for Sites” identification process requires site promoters to submit a transport assessment. These assessments will be critically appraised by the Council through the Local Plan process.

Sustainable transport

29. Uttlesford is a large district with a relatively small and dispersed population. As a result, public transport connectivity within the district is often regarded as being poor with, for instance, much of the bus network being run under contract and with subsidy.
30. In spite of this perception, the district does have some more robust assets. In particular, these are:
- i) West Anglia Main Line rail services, including the recent enhancement to the Stansted Airport to Cambridge service which now runs half-hourly between peak hours on weekdays,*
 - ii) parts of the local bus network (mainly in the south of the district) where service frequencies are higher and hours of operation longer because of demand from the airport, and*
 - iii) sections of the National Cycle Network that run through the district, namely Route 11 from Stansted Mountfitchet to Cambridge (via Ickleton) and Route 16 which connects Stansted Airport with Braintree (via the Flitch Way) and which will continue to Witham.*
31. As both NPPF and PPG advice is strongly geared towards use of sustainable modes of transport, any transport assessment will need to consider in the issues and opportunities and options testing stages how the district’s existing assets can contribute to reduced car use.

General comment

32. It must be stressed that local plan transport assessment is not about looking in detail at individual sites and identifying what local mitigation measures may be required. This is the function of transport assessments and transport impact statements which are submitted with planning applications. However, the Local Plan should show that there is a reasonable prospect that necessary mitigation measures can be delivered. For development expected in the first five years of the plan period more detail is likely to be required. Local Plan policies will set out any significant mitigation measures that are required. Any more localised measures that may emerge from transport assessment of planning applications can be secured by either planning conditions or a planning obligation.

LOCAL PLAN INSPECTOR'S COMMENTS

33. This section of the report looks at some of the general issues that the Inspector dealt with in his conclusions, and which are likely to arise again with any fresh transport assessment.

Strategic Impact

34. The Local Plan Inspector's main conclusion on transport assessment referred to PPG Paragraph 005, which requires a robust transport evidence base to be in place at Local Plan submission. He did not consider that there was sufficient evidence that potential measures had been identified to mitigate the negative impacts, particularly those affecting a wider area than a single authority.
35. Looking at the wider effect on the strategic road network, he commented in his conclusions about concerns expressed by both Highways England (Highways Agency as it was at that time) and Essex County Council that there had been insufficient investigation of the cumulative impact of development on the strategic road network, in particular M11 J8. He referred to the Agency's concern that sites had been identified before it was clear that deliverable measures to manage any unacceptable impacts were available. This is a criticism that mainly arises from the differing stages of local plan preparation that had been reached.
36. He was also concerned that further modelling work being undertaken at that time could identify the need for more costly improvements which would need Local Enterprise Partnership funding. He also noted that reference had been made to improvements which may become necessary at some stage if Stansted Airport expands beyond its present cap, and which may bring in additional resources for J8 improvements. However,

the timing of that is uncertain and could be subject to wide variation from the Airport's present aspirations.

37. Stansted Airport is currently growing at a very fast rate, currently about 2.5 – 3mppa (million passengers per annum) each year. This is twice the average growth rate achieved from the opening of the terminal in 1990 to the start of the economic downturn. Table 2 below shows three possible growth scenarios to 25 and 35mppa (currently, throughput is about 21.5mppa). M.A.G refers to the Manchester Airports Group which purchased the airport in March 2013.

Table 2: Growth scenarios at Stansted Airport

Growth to:	25mppa	35mppa
Rate of growth		
Average since M.A.G ownership	June 2017	May 2023
Since start of 2015	July 2016	December 2019
"Split the difference"	January 2017	March 2021

38. Assuming a target date for adoption of the new plan in 2017, it is likely that any effects from any expansion of Stansted Airport beyond its existing planning caps that might be permitted could be felt early in the plan period if the airport is to retain "business as usual" growth. In view of the Inspector's comments, strategic network assessment will have to take into account headroom for any future growth at the airport. In the transport assessments submitted with the "Call for Sites", the Council asked for assessments to assume growth to 45mppa, the presumed maximum capacity of the single runway.
39. In Paragraph 2.26 of his conclusions, the Inspector repeated a question that he had asked earlier, "*is the present state of evidence sufficient to demonstrate that (when the models under development have been run) the Uttlesford allocations, taken together with those in nearby Districts, will be sound in the sense of being compatible with the capacity of the road network*"? His answer was that he could not conclude that the question had been answered sufficiently positively.

Elsenham / Henham

40. When assessing the localised impacts of Elsenham Policy 1, the Inspector took into account what the HIA said about travel patterns in Uttlesford as a rural district. There are five indicators, which are set out below:
- i) *higher than average household car ownership (only 10% of households do not have a car, compared with 26% nationally),*
 - ii) *higher than average cars per household (1.6 compared to 1.2 nationally),*
 - iii) *higher than average level of travel to work by car (41% compared with 38% nationally),*

iv) lower than average travel to work by train (0.5% compared with 2.6% nationally), and

v) journeys to work are longer than average (44% of journeys are longer than 10km, compared with 28% nationally).

41. When considered together, the conclusion to be drawn from these five indicators is that Uttlesford residents and workers have a higher propensity to travel by car than the national average, and for longer distances, especially commuting. Car commuters can be resilient to change of mode because of the very convenience of origin to destination or origin to interchange driving. In a rural area such as Uttlesford, meeting NPPF policy to maximise the use of sustainable transport can therefore be (and will continue to be) challenging.
42. Improvements to public transport can have counter-intuitive effects in locations where there is a higher propensity to travel by car. The Inspector saw a clear benefit from residents being able to use the West Anglia Main Line stopping services at Elsenham, but then commented that the 2014 HIA showed that there had been some reduction in passenger use at Elsenham since 2011/12 because of better services offered by the Stansted Express from Bishop's Stortford and Stansted Mountfitchet. This is an example of where improved rail services have likely increased local road trips from Elsenham to make use of the improved rail services available for the other stations contrary in this respect to the aim of NPPF Paragraph 34.
43. The Inspector commented that Elsenham's distance from the strategic road network *"in a location embedded within a network of rural roads acknowledged as currently unfit to serve expansion on the scale proposed"* (Paragraph 2.16) was a major disadvantage of Elsenham Policy 1. He noted that some public transport improvements would be possible (such as enhanced local bus services) and that the planned growth of local facilities could reduce the demand for travel. He went on to conclude in the same paragraph that:
- "Nonetheless, the development would place substantial increased pressures upon existing unsuitable rural routes. Various proposed mitigation measures and solutions have been proposed for overcoming this disadvantage but these have not been shown either to be clearly able to secure their objectives or to be deliverable. My overall conclusion on the evidence is that there are serious doubts that Elsenham could overcome the connectivity disadvantages of its location sufficiently to be regarded as consistent with national policy or effective in being able to secure sustainable development".*
44. One theme that has been referred to in this report is minimising the need to travel. The Inspector acknowledged that planned growth of local facilities would help to reduce transport demands at Elsenham. In the Development Strategy: Options Stage Methodology report to the PPWG on 13th July 2015, five basis conceptual options were explained, namely

urban intensification, urban extensions, village extensions, infilling and free-standing new settlements. In all of these, travel reduction can be encouraged by locating housing near to jobs, schools, shops, leisure and other facilities, but consumer choice and the propensity to travel by car can blunt travel reduction efforts. There is no overall one “right” solution to travel reduction.

45. Village extensions can be effective in reducing the need to travel if the extra use / trade / custom that new residents bring allow local facilities to stay open. A good example of this would be a primary school with a declining school roll – the option being closure and the need to travel to another school. Also, the retention of local facilities greatly assists people with reduced mobility.

Saffron Walden

46. Whilst the Inspector said that he thought Saffron Walden Policy 1 was a sound strategic allocation, he queried what the function was of the proposed link between Thaxted Road and Radwinter Road. He commented that it seemed to be regarded as an extension of the present cross-town route from London Road to Thaxted Road. He doubted whether Saffron Walden Policy 1 either had sufficient precision and effectiveness, or whether it provided the County and District Councils with a way of securing objectives where the policy would be implemented incrementally by developers with different focuses and timescales.
47. The Inspector who dismissed the Kier appeal against refusal of outline planning permission for up to 300 houses said that (Paragraph 66 of his decision letter):

“In terms of access to services and facilities by sustainable transport modes, my conclusion is that, taking account of the opportunities available in a market town in a largely rural District, the site would provide a suitable location for housing”.

This echoes the comments of the Local Plan Inspector about the site being a sound strategic allocation, but the Kier Inspector attached only limited weight to the provision of an interim and the full link road because of uncertainties about delivery. He said that it had not been satisfactorily demonstrated that the residual cumulative impacts on the local road network would not be severe.

Main conclusions

48. Four main conclusions can be drawn from what the Local Plan (and the Kier) Inspectors said. These are matters which will need to be borne in mind as the new Local Plan is prepared.

Conclusion 1

49. Unresolved modelling and mitigation of the strategic road network is an effective “show stopper” for the local plan process.

Conclusion 2

50. High levels of car ownership and a high propensity to travel by car in a district like Uttlesford can (and probably will) make it difficult to increase use of sustainable transport modes and reduce the need (or desire) to travel.

Conclusion 3

51. New links that are proposed need to have a clear purpose backed up by evidence, a means of delivery and a clear timescale for implementation.

Conclusion 4

52. There needs to be clear, robust evidence to justify why cumulative impacts on links and / or junctions would or would not be “severe” as the case may be.

WORK PROGRAMME

53. The Council has started a procurement process to appoint an independent transport consultant to assist it in the preparation of the Local Plan. There are a number of issues that the consultant should be able to help with. These are (not in any order of importance):

- i) helping to put together a transport assessment work programme identifying key milestones to ensure national policy requirements are met,*
- ii) commenting in more detail and in more depth than planning officers can on transport issues that have been raised at Local Plan Examinations and relevant local appeals, and what lessons can be learned,*
- iii) advising on the scope of transport modelling required and specifying modelling runs,*
- iv) interpreting modelling requirements,*
- v) assisting with the design of mitigation measures for testing, if necessary,*
- vi) providing support at the Examination in Public,*
- vii) providing a “Critical Friend” review of the HIA and other work carried out to date,*
- viii) providing high-level assessment of the ‘areas of search’.*

54. Whilst an independent transport consultant can greatly assist the Council, it will still be for Highways England and Essex County Council as the statutory consultees to take a view on the emerging Local Plan.
55. The Work Plan and Risk Assessment report to the PPWG on 13th July 2013 set out an indicative work plan in Table 1 on Page 21 of the agenda. Based on that table, Table 3 below gives more detail on the transport

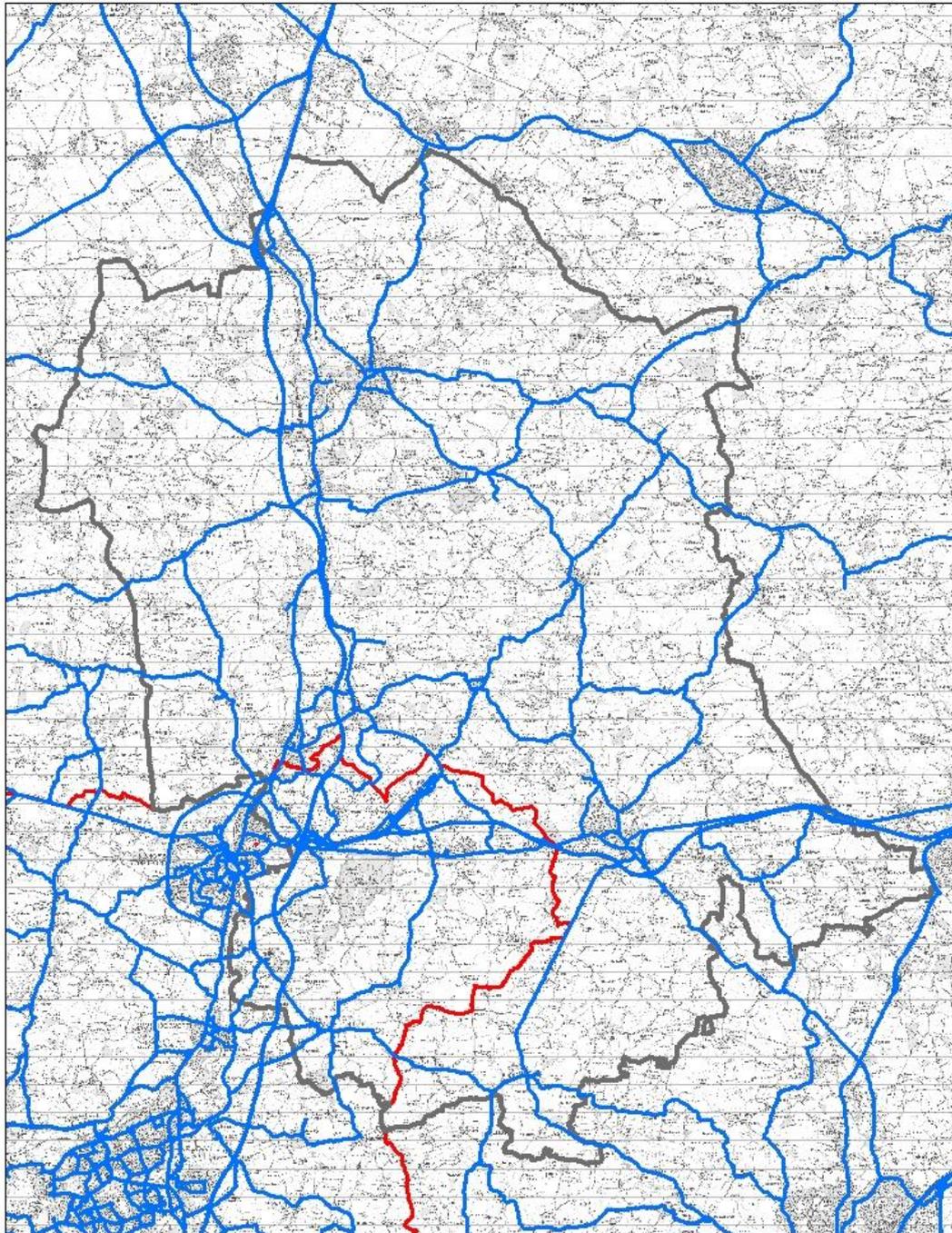
assessment programme (Task 6 in Table 1). No times are included in the work programme, but the overall work plan will be used to update the Local Development Scheme.

Table 3: Initial transport assessment programme

<p><u>Step 1</u> Initial preparation</p>	<p><i>Continue work on the development of the strategic modelling, especially assessing effects on M11 J8. Work with Highways England, Essex CC, Herts CC, East Herts and Harlow Councils and M.A.G.</i></p> <p><i>Consider whether the current suite of models will remain fit for purpose for use within Uttlesford. Assess need for model refinement or whether new models are required.</i></p> <p><i>Appoint an independent transport consultant.</i></p>
<p><u>Step 2</u> Options</p>	<p><i>Continue strategic modelling work, looking for deliverable solutions to any severe effects that have been identified.</i></p> <p><i>Commission model refinement / new models if required. Begin model runs on emerging options.</i></p> <p><i>Engage with public transport providers over opportunities for increasing use of public transport. Look at opportunities to integrate walking and cycling within the emerging options.</i></p> <p><i>Engage with site promoters on issues and further clarification required on their transport assessments</i></p>
<p><u>Step 3</u> Plan formulation</p>	<p><i>Continue work on strategic modelling.</i></p> <p><i>Analyse emerging options model runs, and design any mitigation that is required. Carry out further model runs to assess the effectiveness of the mitigation.</i></p>
<p><u>Step 4</u> Draft plan</p>	<p><i>Continue mitigation testing as an iterative process on the draft plan option.</i></p>
<p><u>Step 5</u> Refinement</p>	<p><i>Commission any further more local modelling / study work that may be necessary</i></p>
<p><u>Step 6</u> Pre-submission</p>	<p><i>Carry out the further modelling and study work to refine the pre-submission plan.</i></p>

APPENDIX 1

M11 J7A VISUM MODEL – AREA COVERAGE



-  District Boundary
-  2014 Network Link
-  Full Model Area

1:170,000 

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