

Hertfordshire County Council

(Local Highway Authority)

Requirements for Local Plans

August 2016

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1.0 Background

With all the potential development being considered both in and around Hertfordshire, we feel that it is imperative that we continue to work cooperatively to establish and agree the level of growth being planned for and its cumulative impact to ensure that the right infrastructure and associated behavioural change policies and measures to facilitate modal shift are provided to in order to mitigate the impacts in the long term.

A Local Development Framework (LDF) Transport Issues Protocol was developed by the Local Highway Authority (LHA) in January 2011. This was primarily concerned with the data and modelling support available to assist the LDF process. At this time it was recognised that the Protocol would need to be reviewed and amended, as experience was gained in using it, and to reflect any changes to the transport or spatial planning processes.

Since 2011, there have been significant changes to planning guidance (the National Planning Policy Framework - NPPF) and new challenges associated with the funding and delivery of infrastructure (i.e. the requirements of the Community Infrastructure Levy (CIL) Guidance 2012 for Local Planning Authorities and the County Council, to identify specific infrastructure requirements upfront as part of the Plan making process). Furthermore, Districts have progressed at different rates through the Local Plan process and this document reflects the experience gained to date.

This document seeks to set out the LHAs evidence requirements for each of the various local plan stages. This evidence is critical to the LHA being able to understand the impacts of growth and the associated mitigations that have been developed as part of the local plan process led by the LPAs. The intention in this document is to set out the level of transport / highway information and evidence already available as well as providing a clear picture of what is required to enable a sound understanding and evidence base to be developed at each stage of the Plan making process which is consistently applied across the County.

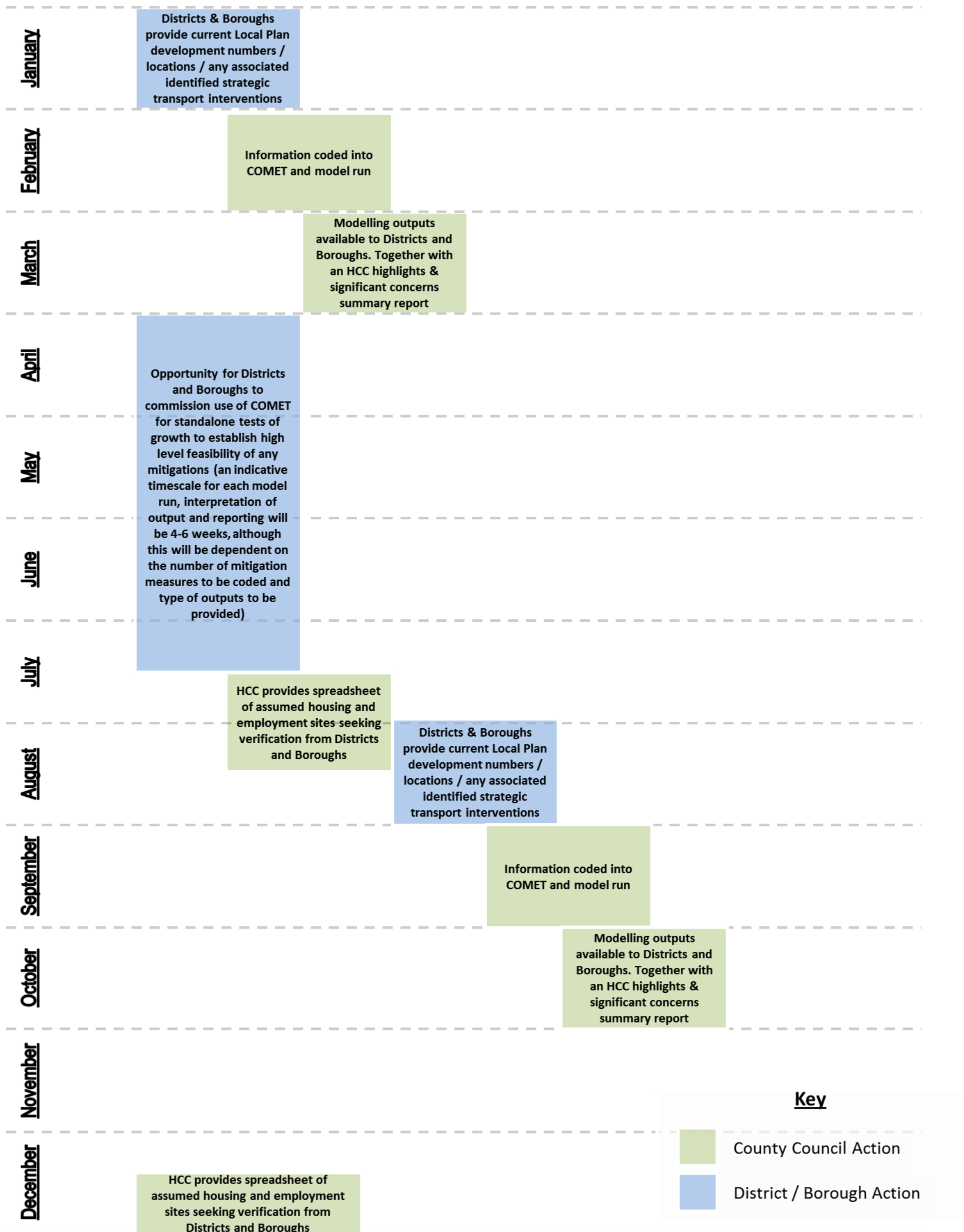
To inform the process of Local Plan development and review, we are planning on running the County Wide transport Model (COMET) twice a year and will seek the latest spatial planning proposals from the Local Planning Authorities (LPAs) to include and inform the process. The indicative annual timeline for this process is detailed in Figure 1

The County wide transport model COMET will be used to support this process and to provide an appropriate evidence base for this work. It enables an understanding of the cumulative impact of the forecast growth to be considered as well as helping to consider the most suitable mitigations.

The results will then be formally fed back through the various forums and meetings that take place with the LPAs to help ensure a common understanding of the issues identified from the modelling work and focus discussion, further investigation and development of the most appropriate mitigation measures.

The overall aim of this document is to ensure that sufficient evidence is available by the time of an Examination in Public (EiP) so that the County Council as LHA are able to support the Development Strategies and Infrastructure Development Plans being brought forward in Local Plans across Hertfordshire and around its borders.

Figure 1–
Indicative Annual Timeline detailing Key Milestones for COMET Modelling of Emerging/Preferred Spatial Distributions of Growth across the County



2.0 Evidence, Roles and Responsibilities

2.1 Local Plan Evidence Requirements

This document sets out the LHA approach to assisting the LPAs to develop appropriate evidence to support the Local Plan process. The aim is that sufficient technical assessment and evidence is available to provide the LHA with a reasonable level of confidence that development related transport and highways issues can be mitigated to an acceptable level, and also that there are no 'severe' impacts associated with the Plan or other major 'show stoppers' which would affect the delivery of the plan.

The LHA recognise that the level of evidence required at the various stages of Local Plan development needs to be proportionate and that the technical work and evidence required will vary according to the stage of the Local Plan process and the scale of development being promoted.

2.2 The role of the LPA in developing Highway Evidence

At the initial issues and options consultation stage, a desktop review of current network issues which identifies whether proposed development locations are likely to impact on already sensitive sections on the highway network (i.e. locations where capacity / congestion, air quality is already an issue) will be sufficient. However, as the plan develops to the preferred options stage (and prior to submission), transport modelling will be required to identify the potential scale of the impacts to the transport network (in relation to both large scale strategic sites and the cumulative impact of the overall plan and neighbouring plans) and to help inform the development of suitable mitigation measures.

The LHA are seeking to work with the LPAs to agree evidence requirements and identify opportunities for developing a suitable evidence base on the basis that:

- If there is an identified development / site promoter, the LPA will be asking the developer to provide appropriate highway evidence / assessment / justification as part of their submission to the LPA. This should include an expectation for the promoter to buy in to use of the LHA owned or recommended transport models (see below).
- Where the promoter makes a submission of transport / highways evidence, the LPA will consult the Highway Authority as soon as practicable. The LHA will respond with a general assessment of the submitted material and in relation to any other evidence they already have available. The emphasis of the response will be to utilise readily available information and to apply current policy to give an "in principle" view on the impact of the proposals (ref NPPF).
- If at this stage there is no objection in principle, or the LHA considers it is not necessary to respond to, or question, the promoter's submission, this will be taken as definitive at a strategic / development level. It will not however obviate the need for additional detailed work on implementation or mitigation at the stage of a planning application.
- If it is considered likely that there are wider strategic impacts of a development site or sites on the transport network and the LHA expresses a view that there are issues that require further investigation they will make the LPA aware. It is expected that the

LPA will lead with developers where applicable to undertake to investigate the issues further, and develop and assess the impact of possible mitigation proposals prior to inclusion in a Local Plan document and the associated Infrastructure Delivery Plan if appropriate.

Table 1 sets out the evidence requirements that may be sought for each stage of the Local Plan process. However, the list is not comprehensive and the type of information required at each stage will depend on the scale and location of the development being proposed and the potential level of impact on the network.

The cumulative impact of proposed growth will be assessed as part of the twice yearly COMET runs and may highlight unforeseen impacts on the network as a result of a number of smaller scale developments that individually were not considered likely to cause problems. Any identified impacts will need to be considered as part of the relevant Local Plans development and are likely to require LPAs to work together to develop deliverable mitigations as part of the Local Plans development.

2.3 The Role of the Local Highway Authority

At the Options stage, the LHA will provide pre-existing traffic and transport data free of charge. Current network constraints have already been identified in many areas from COMET, pre-existing studies such as model development work, the Urban Transport Plans (UTPs), Inter Urban Route Strategy (IURS) and congestion hotspot analysis. The LHA will use these and other relevant work to flag up areas of concern.

HCC recently developed COMET and also own a number of more detailed highway models covering the key towns and will provide advice on these and access to them. Districts will be asked to fully fund the costs of any required modelling runs over and above the twice yearly cumulative growth scenario model runs as agreed in conjunction with the LHA using the transport planning consultants for such work.

Once potential mitigation measures are identified, the LHA will work with Districts, (and any other relevant stakeholders), to assess the suitability, feasibility and deliverability of schemes, including the consideration of likely funding sources. This will form part of the integrated infrastructure planning process.

Where potential funding gaps are identified, the LHA will work with the Districts to identify ways to support the delivery long term.

2.4 Contacts and roles within the LHA

The Spatial Planning & Economy unit (SPE) will co-ordinate the County Council's Environment Department's overall response in conjunction with other HCC departments to Local Plan consultations, bringing together input from different service areas within the Environment Department (including Highways, Transport Access and Road Safety Unit). SPE also has a role in responding formally to any consultation from Local Planning Authorities, monitoring Local Plan timescales and liaising with Boroughs/Districts throughout the plan making process. In the first instance, SPE should be the first point of contact for Local Plan work.

The HCC Highways Development Manager (within the Operations and Strategy Unit) will co-ordinate the Highways response and ensure that it has been reported up through the County Council's Transport Planning governance (Transport Planning Board, Strategic Issues Transport Board (STIB) etc).

The provision of data and advice on modelling work and assistance with the interpretation of modelling results will be provided by the HCC Highways - Transport Planning & Data team, there will not be a cost for this assistance.

The area Development Managers along with the Strategy and Programme Managers need to be made aware of potential development sites, and they will feed into the initial suitability reviews at the options sifting stage, and will then maintain ongoing dialogue during the preparation of the Local Plans and other DPD documents such as AAP or Site Allocations. Post EIP the Highways Development Managers will be responsible for assessing the applications and proposals for individual sites Table 2 at the end of this document lists the key HCC contacts by name.

2.5 *Role of Highways England*

Highways England (HE) is responsible for maintaining, operating and improving the Strategic Road Network (SRN) which includes motorways and trunk roads. Roads under the HE's authority are:

- M1;
- M25;
- A1(M);
- A1 (south of M25);
- M11;
- A5 (north of M1 junction 9); and
- A414 (old M10 section).

Highways England is a named consultee in the Local Plan process and has a duty to cooperate with Local Authorities to support the preparation and implementation of development plan documents. They have developed their own Protocol¹ to support this.

The Highways England Protocol states that they will find ways to ensure that the needs of the SRN are adequately addressed in the Local Plans, and that they will support the development of a consistent and robust evidence base relating to the SRN providing access to data and traffic models. Their expectation is that policies and plans should identify the following:

- The type of improvement (mitigation measure) necessary with an early range estimate of likely cost
- At what point the improvement becomes necessary (ie trigger point analysis)
- How the improvement is to be funded and delivered.

It is therefore essential that HE/ HCC and LPAs work together throughout the Local Plan process and that HE are fully involved in scheme identification (in relation to the SRN). HE are undertaking the development of Road investment Strategy that it is expected will set out the long term aspirations for the various routes within their network and where they currently have identified issues on the network and are intending to focus investment in the short medium and long term, they provide a key opportunity for the LHA and LPAs to feed in to the process and ensure that issues are identified for consideration .

2.6 *Role of Network Rail*

Network Rail strategic planning primarily informed by The Long Term Planning Process (LTPP) which is designed to facilitate the strategic planning of the rail network in a way which is flexible enough to take into account the views of the rail industry, funders, specifiers and customers on the requirements to develop the network to meet future demand through market studies, cross-boundary analysis and route studies.

The process takes the views of local stakeholders into account and incorporates their views on how the rail industry can drive and support economic growth, as well as giving passenger and freight operators the confidence they need to take their own strategic decisions in planning the future of their services.

HCC work closely with the rail industry in term of Network Rail and the Train Operating Companies who run the services. The HCC Rail Strategy sets out the Counties strategic aims for the rail in Hertfordshire along with shorter term improvements on the network that would provide benefits for users and in achieving an increase in rail usage.

<http://www.hertsdirect.org/services/transtreets/ltplive/supporting/rail/>

The main point of contact for rail related matters in the county should be the Team Leader, Rail Strategy and Liaison Spatial Planning and Economy.

3.0 *Data and Model Availability and Use*

3.1 *Data and Model options*

HCC holds a large amount of transport data which can be provided to the District Councils to develop their evidence base at no extra charge. Appendix 1 lists the information available. In addition the County are developing a set of Evidence Packs for the main towns in the County containing key facts and figures in relation to transport.

This currently includes Hemel Hempstead, Watford and Stevenage. Further packs are under development.

As discussed earlier in this document HCC has developed the Countywide Transport Model (COMET). This is a strategic model which enables HCC to develop a holistic view of the cumulative impact of growth on the transport network, including issues associated with neighbouring authorities. At this stage it is most suitable for assessing the impacts of development on the key interurban transport network.

There are also a series of pre-existing highway models such as the model covering the A1 corridor (WHaSH) and more localised models of key urban areas. It is recommended that these continue to be used where available for districts own Local Plan purposes as these models are more detailed in urban areas and provide a good basis for testing the implications of highway mitigation measures. Over the longer term (the next 2-5 years) it is then likely that in most cases these models will become superseded by enhancement of the COMET model. This will ensure that the models are up to date, based on the same underlying forecasts and are more compliant with Department for Transport requirements (WebTAG) that will help support funding bids as opportunities arise. HCC will fund the further enhancement of the model where required and in conjunction with the programme of Growth and Transport Plans.

HCC – Highways – Requirements for Local Plans

HCC officers can provide advice and support to this process and will recommend the most appropriate method of assessment.

Where districts have used pre existing transport models the results of the COMET model run will be checked to determine whether additional locations come under pressure when development across the county is taken into account.

HCC will undertake a twice yearly cumulative test of COMET (in September and February) to identify the overall impact of growth based on the most up to date development pattern and will therefore reflect the ongoing adoption of any Local Plans both within and beyond Hertfordshire. It will also provide a means to test agreed growth scenarios, proposed strategic transport improvement measures and provide the LPAs and LHA with information to help determine the most suitable infrastructure for inclusion the Local Plan.

The success of the tests will depend on the provision of good up to date planning data from the LPAs. Spreadsheets of assumed housing and employment sites and numbers will be provided to LPAs in August and December / January in advance of the model tests. LPAs will be asked to confirm whether any changes are required to reflect their latest Local Plan development. LPAs will also be asked to confirm the strategic transport mitigations they wish to have included in a do something scenario run. This is an opportunity to add schemes identified or likely to be identified in Infrastructure Delivery Plans (IDP) and test policy options (eg mode shift / different traffic growth assumptions). The LPA will be required to provide layout plans / proformas giving details of the scheme. The model is strategic in nature so only key schemes likely to have an influence on travel patterns should be included.)A summary list of all schemes/mitigations included in the run along with the growth assumptions will accompany the output of the model.

Information from the cumulative model runs will be shared with districts via HPG and this will provide information on likely cross boundary impacts, identify the impact of development growth on interurban travel and identify future congestion hotspots and areas of stress on the key transport network.

The COMET model would also be suitable at this stage for use by the LPAs for assisting in the identification of possible locations for growth and evaluating different development options and identifying locations where mitigation measures may be required where no previous modelling work has been undertaken.

It is recognised that prior to plan publication there is sensitivity around the planning data. The Transport Planning and Data team will act as custodians of this data. Where this needs to be shared with our internal HCC partners (such as School Planning, SPE and Property) for forward planning purposes and to help HCC inform our overall planning response to the Local Plans, the sharing of data will be strictly controlled. Each unit will sign up to a Memorandum of Understanding restricting the use of the data to named individuals, preventing its publication in a detailed format and preventing its supply to third parties without prior consent of the LPA(s) concerned.

Districts may also wish to test the impacts of their proposed Local Plan independently of the HCC led runs to help inform Local Plan development and demonstrate the effectiveness of any mitigation measures using either COMET or pre existing models (as appropriate and agreed with the LHA). The cost of this modelling work will vary depending on the number of model runs to be undertaken and the number and complexity of mitigation measures to be tested. Districts will be expected to cover the

cost price of undertaking this work. Typically this would be in the range of £4,000 - £7,000 per option test.

For the purposes of Local Plan submission a high level feasibility assessment of proposed mitigation measures is required from the modelling work. The detailed design of schemes is then expected to be picked up by developers who will be encouraged to make use of HCCs models. This work will be funded by developers and cost estimates will be provided by HCC to developers using criteria such as the number of runs to be undertaken, the complexity of the development and the number of new transport schemes to be coded in.

Where issues and the likely mitigations are strategic in nature and/or can't be assigned to the impact of one particular development or Local Plan, further assessment work will be required to help identify the most appropriate course of action in collaboration with other relevant organisations such as Highways England or Network Rail and the LPAs. In co-operation with the relevant authorities HCC will lead discussions to help inform the process. These are likely to take the form of corridor or area working groups and will need to operate at both officer and elected member level. It is likely that in order to enable the group to develop and consider proposals and options there will need to be a subscription to the group.

If mitigation measures are identified HCC will lead where appropriate or co-ordinate with the relevant lead organisation. The solutions to these issues may be complex and as such time consuming and costly to move forward. During the process HCC will ensure that all parties are updated in respect to progress and potential Local Plan implications.

3.2 Outputs from modelling work

The highway element of the COMET model has been developed using Saturn model software. A number of the pre-existing urban area models (such as WHaSH) are also based on Saturn and there are also more detailed Paramics models in Hemel Hempstead, Stevenage and other town centres.

Saturn and Paramics are traffic models which are able to take full account of vehicle re routing due to congestion and also can properly model the impact of increased traffic flows at junctions. Outputs which can be produced include the following:

- Flow difference plots – absolute changes in traffic flow (including turning movements at junctions) with development;
- Changes in queues / delays / journey times;
- Volume to capacity ratios at junctions (and on links);
- Indication of likely onward routes of traffic from a particular development (select link analysis); and
- Overall network statistics (average journey times and delays – allowing different options to be quickly compared).
- Changes in journey time along key corridors / routes

Saturn and Paramics based traffic models are also able to explicitly test the impact of potential mitigation schemes and measure their effectiveness

3.3 *Cross Boundary Impacts*

Whilst each Local Plan is considered for adoption separately, the NPPF makes it clear that there is a duty to cooperate with neighbouring authorities and where possible, proposed growth in adjacent areas in other districts needs to be taken account of in the Local Plan and IDP development and any associated modelling work.

A key benefit of the COMET model is that it allows a consideration of cross boundary impacts and the cumulative impact of development growth across the network. The model also allows for development in neighbouring areas such as Luton, north London, Essex and Cambridgeshire.

HCC will also continue to engage with other authorities and provide inputs to any other wider modelling work being undertaken (eg the Essex M11 corridor model tests of growth in East Hertfordshire and West Essex).

4.0 *Infrastructure Delivery Plans and Policies*

The process outlined above (alongside existing Transport Strategies) will identify a series of mitigation measures required to support the level of growth set out in the Local Plans. These mitigation measures should be integrated into the Local Plans infrastructure planning processes that are undertaken alongside the Plan preparation and ultimately the LPA Local Plan, IDP. This work would also feed into discussions with Local Planning Authorities around the development and implementation of CIL charging schedules. Early engagement and consideration of highways mitigation measures in the Local Plan process is essential.

The County Council will support and advise the Local Planning Authorities and their appointed consultants wherever possible in their development of indicative costs and appropriate funding mechanisms for highway mitigations (both from developer contributions and other funding sources where appropriate)

As a general approach, the County Council would look to secure specific mitigation measures deemed necessary to facilitate the development to be funded by that development and secured via S106 through the planning application process, subject to them meeting the relevant tests listed in CIL Regulation 122. This requires that planning obligations should only be sought where they meet all of the following tests:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

Mitigation measures required to address the cumulative impacts of a number of smaller development sites, or upon key inter urban routes that are affected by development occurring in more than one authority area, would be identified as candidates for CIL funding, and listed in the charging authority's Regulation 123 list. Wherever possible these schemes will be identified as strategic or local level schemes. It may also be appropriate to seek to secure other funding sources to assist in their development and delivery.

Where an existing highway capacity / congestion issue is exacerbated by growth coming forward (or existing conditions act as a barrier to development) the potential for CIL or S106 monies will also be considered along with other funding opportunities.

Mitigating some of the consequences of growth is likely to be challenging and cannot solely be solved through capacity driven highway infrastructure improvements. Alongside the relevant sustainable transport infrastructure, the introduction of policies in the Local Plan which promote sustainable modes to facilitate a change in travel behaviour will be a necessity. To achieve these aims there needs to be collective agreement between the Local Planning Authority's and the Highway Authority and other transport bodies such as Highways England or Network Rail, where applicable, on mitigations and potential funding sources.

For clarity the HA response to a Local Plan will be based on our view of the cumulative impact of growth. It is unlikely that the HA will be able to support at EiP any Plans which fail to identify and address these impacts.

5.0 Links with Transport Vision LTP4 and Growth and Transport Plans

As part of the Transport Vision Process and the development of LTP4 a list of priority strategic major transport projects will be identified that are likely to be required in the long term to help facilitate the projected housing and employment growth in the county.

Growth and Transport Plans will provide a more focused assessment of the transport network and will be informed by the comet model to help shape the areas covered by an individual plan.

A Growth and Transport Plan is a County Council spatial transport plan developed in partnership with key stakeholders for the purpose of applying Local Transport Plan policies and objectives to a growth-focused area; assembling robust evidence to identify and justify packages of schemes and actions; and aligning these packages/actions to growth objectives and quality of life priorities to maximise funding opportunities and deliver positive change.

6.0 Post EIP Support/Pre & Planning Application Stages

Developers should be encouraged to engage in pre application discussions with HCC and the LPA. Developers will be required to fund all the technical aspects of the pre application discussion such as road safety audits and any modelling work. LPA's will also be charged for technical work where there are a large number of sites to assess. This will be provided at cost to the LPA's.

As part of the planning application process for large sites, developers will be expected to produce Transport Assessments which will include estimates of the number of vehicle trips and their onward destinations. Developers will be expected to test their proposals in COMET or in existing HCC transport models where available to determine the full highway impacts both at the immediate access junctions and, where necessary, at critical locations over the wider network. The modelling requirements will vary according to the scale and location of the development, and will be agreed at the initial scoping discussions as part of the planning application process. This technical work will feed into the design of appropriate mitigation measures.

Through the COMET runs, HCC will continue to look at the implications of the cumulative impact of development growth and, where additional mitigation is identified, feed outputs into future updates of IDP. Further updates will also be required on a regular basis to reflect the Transport Vision work, emerging Growth and Transport Plans, UTP updates, IURS updates, and also changes to potential funding streams. HCC will continue to work with the LPAs on this through the existing Strategic Transport Issues Board LET (STIBlet) process.

7.0 Neighbourhood Planning

Where necessary, the Local Highway Authority will provide a proportionate response to requests for assistance in the preparation of Neighbourhood Plans. As a minimum, it is expected that the outputs of modelling work and infrastructure requirements identified as part of the Local Plan process are incorporated into Neighbourhood Plans.

It will also be necessary for Neighbourhood Plans to incorporate the objectives of the Local Transport Plan (including Daughter Documents) and the outputs of any existing Urban Transport Plans and future Growth and Transport Plans or other transport strategies relevant to the area. Further information and access to the documents is available here:

<http://www.hertsdirect.org/services/envplan/plan/hccdevplan/neighbourhoodplanning/>

TABLE 1 LOCAL PLAN EVIDENCE REQUIREMENTS TO LHA

Stage		Information required of LPA by the LHA	Appropriate evidence	LHA role	HE Input
Plan Preparation	Issues and options consultation	Review of current network issues (infrastructure deficit) & schemes already identified together with details of locations, type of growth and numbers	COMET travel pattern analysis work COMET base model output Transport Vision, Growth and Transport Plans / Urban Transport Plans, Congestion Hotspots, Inter Urban Route Strategy, Local Transport Plan	Use existing evidence sources to highlight key highways issues on local road network related to proposed development locations & provide appropriate information from existing policy documents.	Highlight key issues for the Strategic Route Network
	Preferred Options	Indication of locations likely to experience increased traffic flow / stress as result of options. To facilitate the above commission the necessary modelling to establish the highway impacts of potential growth. Provide LHA with up to date details of preferred spatial distribution together with any identified mitigations.	High level run of COMET (medium term)) or pre existing highway models COMET cumulative impact tests (February and September)	Technical advice in relation to modelling work. Assistance with interpretation of results Check of COMET cumulative outputs against more localised modelling & identification of additional locations. Confirmation of whether proposed larger scale mitigation measures cause any adverse impacts elsewhere	Involvement in discussions of model results where Strategic Route Network affected

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<p>Publication</p>	<p>Outline mitigation measures (including sustainable transport options as well as highway capacity improvements), broad cost estimates, indicative delivery timescales, identification of funding sources where known</p>	<p>Run of preferred option through highway model if required & if key issues identified.</p> <p>High level feasibility review of mitigation measures including assessment of broad costs & deliverability¹</p>	<p>Technical guidance for modelling work.</p> <p>Provide advice guidance for feasibility review</p>	<p>Involvement in discussions in relation to any mitigation measures affecting SRN.</p>
<p>Submission</p>	<p>Prior to submission it would need to be established that proposed measures mitigate against severe harm and are deliverable in line with Local Plan timescales.</p> <p>Indicative cost estimates of measures, high level feasibility assessment and identification of funding sources</p> <p>Draft Infrastructure Delivery Plan agreed with stakeholders</p>	<p>Refinement of designs & costs through modelling work.</p> <p>Indication of likely level of CIL/S106 sought & identification of funding gaps</p>	<p>Identification of potential funding opportunities</p> <p>Support in developing Draft Infrastructure Delivery Plan</p>	<p>Identification of potential funding opportunities</p> <p>Support in developing Draft Infrastructure Delivery Plan</p>

¹ High level feasibility review consists of desk based exercise of proposed scheme to identify any critical showstoppers to the delivery of the scheme (e.g. environmental or physical constraints) and to establish reasonableness of identifying appropriate funding sources.

TABLE 2 KEY CONTACTS WITHIN HCC

District	Development Management contact	Strategy and Programme Manager contact	Network Management contacts	Modelling & Data support	Coordinator for HCC response & queries on Timescale / Process
Countywide	Roger Flowerday	Rupert Thacker		Sue Jackson	Paul Donovan
Broxbourne	Juliet Cromack		Muthiah G / Chris Davies		
Dacorum	Nick Gough	Andrew Freeman	Geoff Bailey		
East Herts	Juliet Cromack		Muthiah G / Chris Davies		
Hertsmere	James Dale	Lindsey Lucas	Sarah Atkinson		
North Herts	Manjinder Sehmi	Daniel Tancock	Ross Bevan		
St Albans	James Dale	Lindsey Lucas	Sarah Atkinson		
Stevenage	Manjinder Sehmi	Daniel Tancock	Ross Bevan		
Three Rivers	Nick Gough	Odette Carter	Geoff Bailey		
Watford	Nick Gough	Odette Carter	Geoff Bailey		
Welwyn Hatfield	James Dale	Anusha Vettivelu	Sarah Atkinson		

FIGURE 2 HCC HIGHWAYS LOCAL PLAN PROCESS FLOW CHART

The flow chart below illustrates how the various individuals (as noted above) as part of their respective teams should feed their responses to the district Local Plan consultations to the appropriate Development Manager (DM). The DM should coordinate the responses received and then feed through to the Spatial Planning & Economy (SPE) team who will then issue the final consultation response.

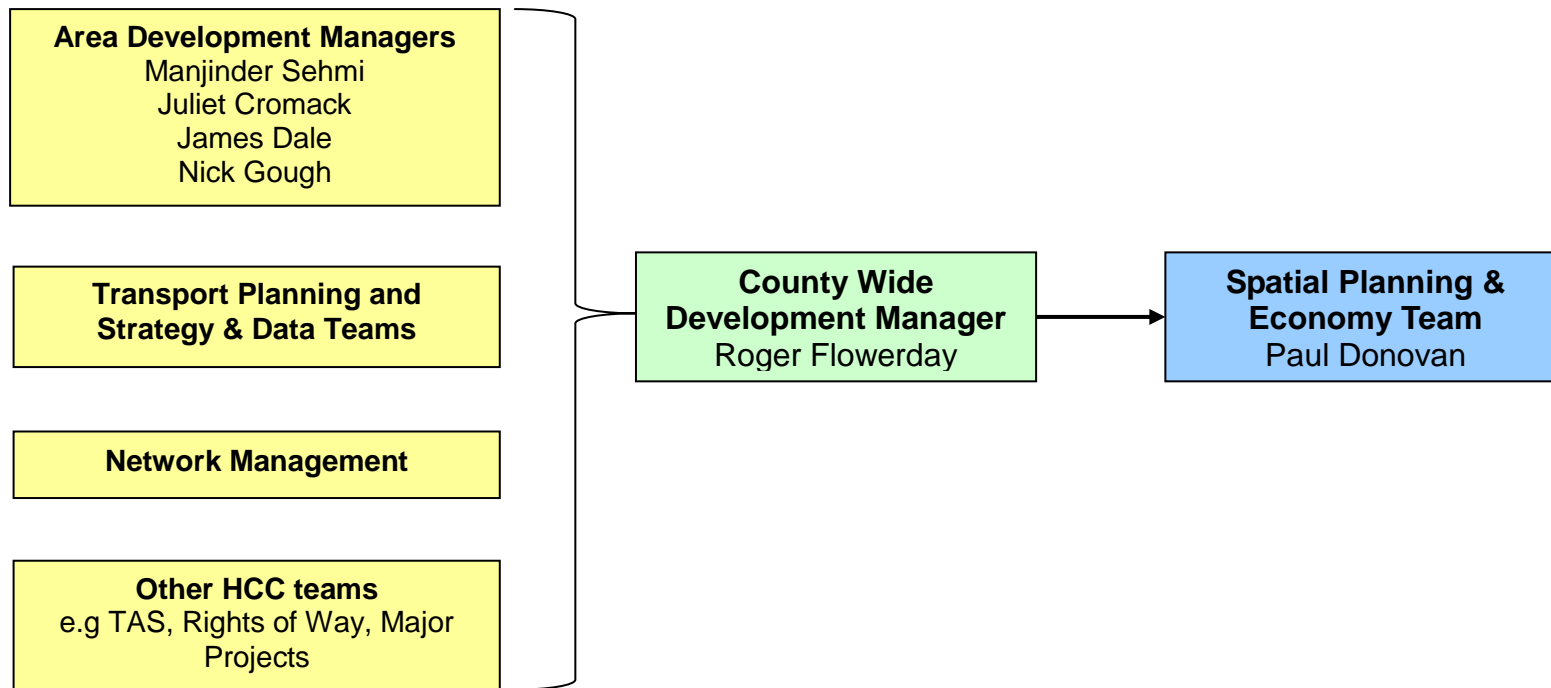


TABLE 3 INDICATIVE MODELLING COSTS

Work required	Typical cost range	Notes	Estimated timescale
High Level Run of Developments in COMET (Plan preparation stage)	£4,000 - £7,000.	Assumes development plugged into model but few other changes	4 weeks
COMET cumulative development test (twice yearly test)	Included in upfront contribution of £4,000	Based on agreed planning data and transport measures at time of tests	Results available in late September/ Late February
Enhancement / cordoning of COMET model to enable detailed testing of schemes / developments in an urban area	HCC to fund	Assumes cordoning of COMET model, further network development and recalibration (excludes data collection costs).	3 months
Pre existing Saturn / Paramics model subsequent option tests (no mitigation measures)	£4,000 - £7,000 per option test	Includes reporting.	3-4 weeks
Saturn / Paramics model subsequent option tests (with mitigation measures)	Up to £7,000 per test	Dependent on number of mitigation measures to be coded and outputs to be provided.	4-6 weeks

Appendix 1

Transport Information to be provided by Hertfordshire County Council at no cost to LPA

- Findings on transport movements in key corridors from Travel Pattern Analysis work undertaken as part of COMET model development.
- Output from COMET base model showing locations already under stress.
- National 2011 Census data
 - Key statistic 1 – Usual resident population (borough/ district, settlement, ward or parish level)
 - Key statistic 15 – Usual mode of travel to work (borough/ district, settlement, ward or parish level)
 - Key statistic 17 – Car ownership (borough/ district, settlement, ward or parish)
 - Journey to work origins and destination data
- Existing Traffic data Annual Average Weekday flows (AAWD - 16 hour two way traffic counts,) am and pm peak hour flows from HCC's monitoring sites plus any additional ad hoc counts (as appropriate)
- TravelWise mode share counts for main urban areas - inbound and outbound head counts of people travelling to / from the town centres by car, bus, cycle and on foot during the am peak (0700 – 1000 hours). Data is available for all the key settlements on a 3 yearly basis.
- Land use survey – map showing existing land use from latest HCC survey.
- Assessment of access to key services (using TRAC software or GIS Network Analyst) identification of areas within 10, 15, 30, and 60 minute travel times of stations, town centres and key destinations by bus / walk.
- Information on bus and rail services (from Intalink)
- County Travel Survey data – a profile has been produced for each borough/ district giving a summary on the levels of access to transport of borough/ district residents plus information on the mode, frequency and destinations of usual travel for work, shopping and education trips. Information on transport priorities within the borough/ district is also included.
- Average speeds and vehicle journey times on key routes within the main urban areas (analysed from Trafficmaster data). Maps are also available of key congestion hotspots.
- Collision data – plots of collision locations by severity over the previous 3 calendar years and identification of locations where clusters of collisions have occurred.
- Department for Education - schools census data - % of pupils travelling to school by different types of transport.

- TEMPRO forecasts – Department for Transport estimates of future year traffic growth.

Appendix 2

District and Borough use of the Transport Planning Contract

Under the terms of the new Transport Planning Contract, districts can directly commission Local Plan modelling support work from HCC's Transport Planning consultants. This will be done by developing a task order in conjunction with HCC. The Transport Planning consultant will then provide a costed specification with timescale (normally within 2 weeks).

Once the work is agreed the District would set up the order directly with HCC's consultant and pay for all invoices directly. It is however strongly recommended that HCC remain involved throughout the modelling process and HCC's Transport Planning and Data Team can offer technical guidance on the specification of the option test and also interpretation of the results. HCC's technical support time is offered free of charge, however HCC reserves the right to consider future charging for certain elements of work (or work beyond a certain level or pre-determined time period).