Hertfordshire County Council

(as Local Highway Authority)

Protocol for working with Districts & Boroughs during the Local Plan process

October 2014

Background

This protocol has been developed to enable districts to understand the role and expectations of the County Council (in its capacity as Local Highway Authority), throughout the Local Plan process. The intention of the protocol is to set out the level of information expected by the Local Highway Authority at each stage of the plan making process to ensure that a consistent approach is applied across the county.

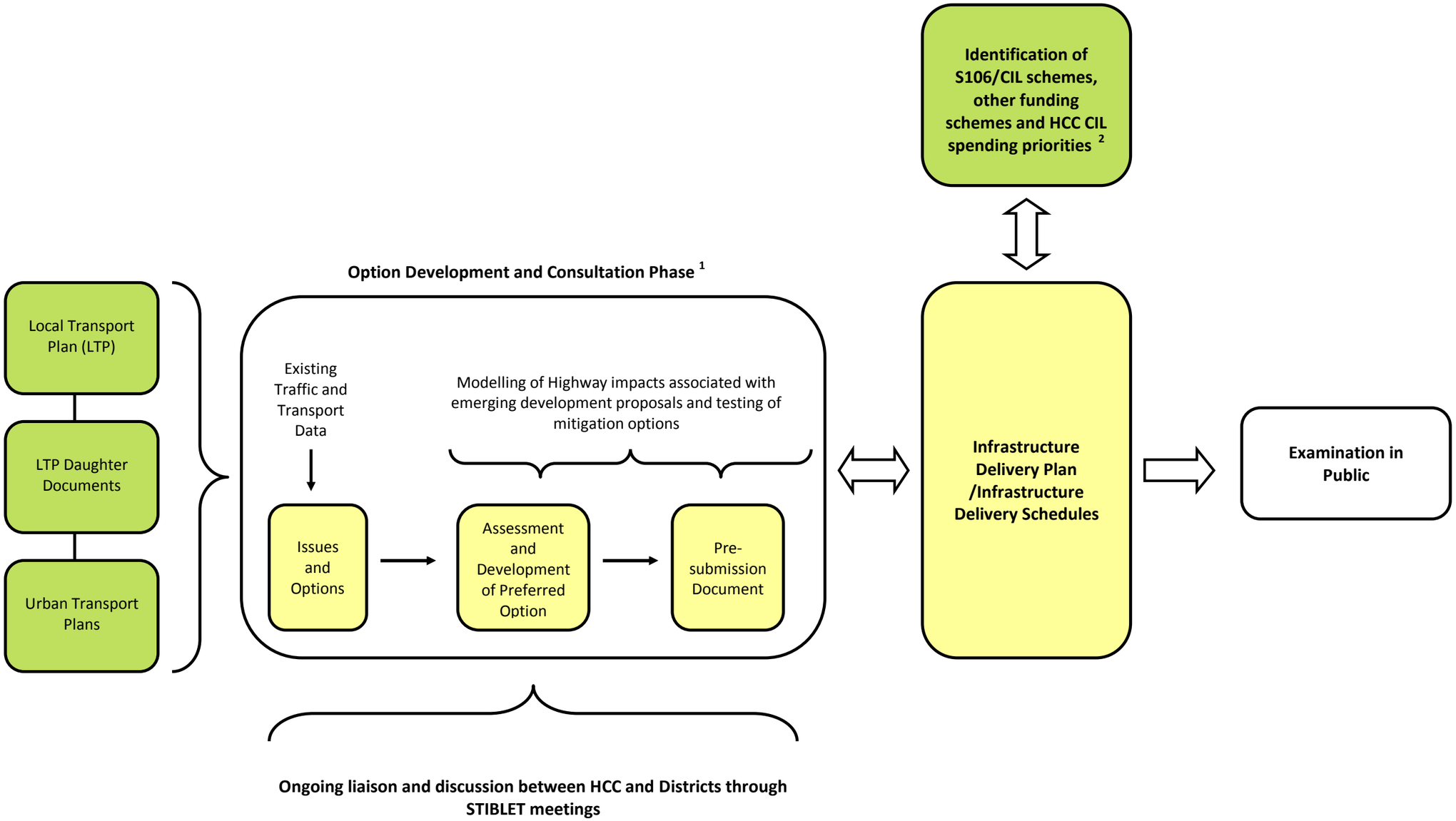
An LDF Transport Issues Protocol was developed by the LHA in January 2011. This was primarily concerned with the data and modelling support available to assist the LDF process. At this time it was recognised that the protocol would need to be reviewed and amended as experience was gained in using it,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

Since 2011, there have been significant changes to planning guidance (NPPF) and new challenges associated with the funding and delivery of infrastructure (i.e. the requirements of the 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 updated protocol reflects the experience gained to date. It also takes on board the recently published protocol from the Highways Agency[1].

The overall aim of the protocol is to ensure that sufficient evidence is available by the time of an Examination in Public (EiP) so that the County Council as Local Highway Authority are able to support the Development Strategies and Infrastructure Development Plans being brought forward in Hertfordshire. It will ensure that the expertise and resources of the authorities is used as effectively as possible to achieve the best outcome for the local community whilst reducing the work required by each authority.

The diagram below sets out an overview of the key interfaces between the county and district councils in the Local Plan process. It is recognised that the detail of this process will vary between the Districts.



Consultation Documents prepared by Local Planning Authorities

HCC Documents

[1] Local Highway Authority will maintain dialogue with LPA throughout Option Development and Consultation Phase and will provide formal response to consultations where required

[2] Hertfordshire County Council will identify the infrastructure schemes required to support growth outlined in the Local Plan. This will include the identification of potential funding sources and identification of CIL spending priorities where LPA develop a CIL Charging Schedule.

The Protocol

Local Plan Evidence Requirements

This protocol sets out the level of detail required by the Local Highway Authority (LHA) to support emerging development strategies and infrastructure planning processes within Hertfordshire. The aim of this is for the technical assessment work to ultimately give HCC as LHA, a reasonable level of confidence that development related highways issues can be overcome and that there are no severe impacts associated with the delivery of the plan or other major 'show stoppers' to the delivery of critical infrastructure items prior to the Examination in Public of emerging Local Plans.

HCC recognise that the level of evidence required needs to be proportionate and will vary according to the stage of the Local Plan process and the scale of development being promoted.

For example, 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 is already an issue) will be sufficient. However, as the plan develops to the preferred options stage (and prior to submission), some form of transport modelling is likely to be required to identify the potential scale of the highway impacts (in relation to both large scale strategic sites and cumulative impact) and to help identify suitable mitigation measures.

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

In some cases the level and / or location of the proposed development may be expected to have little impact on sensitive highway locations. Early discussions between HCC and the district will be necessary to establish the likely level and location of growth and subsequent evidence requirements. Any modelling work then needs to be proportionate and tailored to individual authorities based on the likely numbers of highway trips and expected onward distribution.

In some cases, the initial calculations/desk based assessments may form a suitable evidence base (i.e. there will not be a need for further modelling work). However, where development proposals are likely to result in a more significant impact on the road network, then more detailed modelling work and assessment of mitigation options will be required.

Should growth options be identified on or near to local authority boundaries or if they impact on key highway routes then it may be necessary to consider any cross boundary development and resultant impacts on the road network.

The Role of HCC

At the Options stage HCC will provide pre existing traffic and transport data free of charge. Current network constraints have already been identified in many areas from pre existing studies such as the urban transport plans (UTPs), Inter Urban Route Strategy (IURS) and congestion hotspot analysis and HCC will use these and other

relevant work to flag up areas of concern. HCC will also ensure that Local Transport Plan (LTP) objectives are also flagged up at this stage.

HCC own a number of transport models covering the key towns and will provide advice on these and access to them. Districts will be expected to commission their own modelling runs using HCC's transport planning consultants and will be expected to meet the cost price for this.

Where no pre existing transport model is available, HCC (and /or their transport planning consultants) will advise on the most appropriate form of assessment

Once potential mitigation measures are identified, the County Council will work with Districts and any other relevant stakeholders to assess the suitability, feasibility and deliverability of schemes (including identification of funding opportunities and potential delivery partners). This will form part of the integrated infrastructure planning process.

Where funding gaps are identified, HCC will work with the districts to identify potential alternative sources of funding and where appropriate develop bids.

Contacts and roles within HCC

The Spatial and Land Use and Planning Unit (SLUP) will co ordinate the County Council's Environment Department's overall response to Local Plan consultations, bringing together input from different service areas within the Environment Department (including Highways). SLUP also has a role in responding formally to any consultation from Local Planning Authorities, monitoring Local Plan timescales and liaising with Boroughs/Districts through the plan making process. In the first instance, SLUP should be the first point of contact for Local Plan work.

The Development Managers (within HCC's Highways Operations and Strategy Unit) will co-ordinate the Highways response and report 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 Transport Planning Data team.

The HCC Development Managers (Highways) need to be made aware of potential development sites and will feed into the initial suitability reviews at the options sifting stage and will maintain ongoing dialogue during the preparation of the Local Plans ad other DPD documents such as AAP or Site Allocations. Post EIP the Development Managers will be responsible to assessing the applications and proposals for individual sites.

Table 2 lists the key contacts.

Role of the HA

The Highways Agency are responsible for maintaining, operating and improving the Strategic Road Network (SRN) which includes motorways and trunk roads. Roads under the HA's jurisdiction are:

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

The HA are a named consultee in the Local plan process and they have a duty to co operate with local authorities to support the preparation and implementation of development plan documents and have developed their own protocol[1] to support this.

The HA protocol states that they will find ways to ensure that the needs of the strategic road network are adequately addressed in the local plans and that they will support the development of a consistent and robust evidence base relating to the strategic road network 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
- How the improvement is to be funded and delivered.

It is therefore essential the HA / HCC and LPAs work together throughout the Local Plan process and that the HA are fully involved in scheme identification (in relation to the SRN).

Data and Model Availability and Use

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.

The County owns a number of pre existing traffic models which can potentially be used to test the implications of development options. Figure 1 shows the coverage of models in the County.

If no pre existing transport model is available, HCC (and /or their transport planning consultants) will advise on the most appropriate form of assessment (Diamond Model / design feasibility study/ requirement to build a new model). The cost of any third party work will be borne by the district.

Where a model is already available covering the potential development areas, option tests can be commissioned via HCC's Transport Planning consultants, AECOM. Districts will pay the cost price of the option test and the HCC Transport Planning and Data Team can offer technical guidance on the specification of the option test and also interpretation of the results. At the current time HCC's technical support time is

offered free of charge, however HCC reserve the right to consider future charging for certain elements of work (or work beyond a certain level or pre determined time period).

This modelling work can be commissioned through HCC's transport planning contract with AECOM. In this case a task order will be developed in conjunction with HCC and will be sent to AECOM who will provide a costed specification with timescale in response. Once HCC have confirmation in writing that the district will pay the full cost of the option test, AECOM will then be commissioned on the district's behalf. AECOM will issue invoices to HCC who will in turn invoice the district for reimbursement of the costs.

An alternative approach is for the districts to commission AECOM directly (where this is within their procurement rules). They would need to agree to AECOM's Day 1 terms and conditions from HCC's transport planning contract. The district would set up the order directly with AECOM and pay for all invoices directly. Where this arrangement is followed it is strongly recommended that HCC remain involved throughout the modelling process.

In some cases (for example where a new model is required to be developed or where developers are already making use of a pre existing model) it may be appropriate for an alternative consultant to be used for the modelling work. Early discussions should be held with HCC to determine the best strategy.

The cost of modelling work will vary depending on the size and number of developments to be tested, whether any update to existing models is required and what level of mitigation measures are required. Table 3 gives some indicative modelling costs and timescales.

Outputs from modelling work

Outputs available from the modelling work will vary depending on the type of model used.

Diamond is a link based spreadsheet model developed by AECOM for use in the initial option sifting stages of the Local Plan process. Output includes plots and tables showing the expected change in two way vehicle flows on links expected with development. Given the spreadsheet nature of this model these are presented as ranges (typically rounded to the nearest 200 vehicles). Although coarse, this does highlight the links expected to have the largest flow changes. Diamond is also able to give an indication of changes in volume to capacity ratio and highlight those links which are already at capacity (or expected to become so with development).

Saturn and Paramics are traffic models which are able to take full account of vehicle re routeing 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 / 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).

Saturn and Paramics based traffic models are also able to explicitly tests the impact of potential mitigation schemes and measure their effectiveness (in terms of impact on volume / capacity ratios and changes in queues, delays and journey times).

Cross Boundary Impacts

Whilst each local plan is considered separately, the NPPF makes it clear that there is a duty to cooperate with neighbouring authorities and where possible proposed growth in surrounding districts needs to be taken account of in the Local plan development and any associated modelling work.

Districts are at varying stages of their Local Plan process. Allowance for other districts growth will depend on the certainty of their development numbers and locations. Where Local Plans have been adopted (or are at an advanced stage of preparation), specific growth at defined locations can be included for neighbouring districts in the modelling work. Where neighbouring districts are at an earlier stage of the process and growth / locations are still undefined, it may be appropriate to use general Tempro growth in the modelling work. It is recognised that modelling assumptions of growth are based on the best information available at the time and could be subject to future change.

It is also proposed that an annual run of the East of England Regional Model (EERM) will be undertaken to include the known Local Plan development across the county at that point in time. This will identify the cumulative impacts of the proposals which will provide evidence on long term effects for the Inter Urban Route Strategy and will also provide information on the requirement for strategic infrastructure. It is suggested that the first run is undertaken in August 2013. The cost of this work will be borne by HCC.

Infrastructure Delivery Plans

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

The County Council will work with Local Planning Authorities wherever possible to identify indicative costs and appropriate funding mechanisms (both from developer contributions and other funding sources where appropriate).

As a general approach, the County Council would seek for specific mitigation measures required to enable a particular development to be funded by that development with funding secured via S106 through the planning application process, subject to them meeting the relevant tests listed in the CIL Regs.

• necessary to make the development acceptable in planning terms
• directly related to the development

• 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 and may also be appropriate to secure other funding source.

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.

Post EIP Support/Planning Application Stage

Local Impact Assessments should be undertaken as part of ongoing Site Allocations and should be dealt with as part of the normal planning process.

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 pre existing HCC transport models where available or alternatively develop their own models 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 EERM 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 Infrastructure Delivery Plans. Future IDP updates will also be required on a regular basis to reflect UTP updates, IURS updates and also changes to potential funding streams. HCC will continue to work with the Districts on this through the existing STIBLET process.

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 Urban 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

Stage	Information required	Appropriate evidence	LHA role	HA Input
Issues and options consultation	Review of current network issues (infrastructure deficit) & schemes already identified	Urban Transport Plans, Congestion Hotspots, IURS HIIS, LTP	Highlight key highways issues on local road network related to proposed development locations & provide appropriate information from LTP and UTPs.	Highlight key issues wrt SRN
Preferred options	Indication of locations likely to experience increased traffic flow / stress as result of options	Diamond (or high level runs of transport model if available)	Technical client for any modelling work. Assistance with interpretation of results	Involvement in discussions of model results where SRN affected
Pre-submission consultation	Outline mitigation measures, broad cost estimates, indicative delivery timescales, identification of funding sources where known	Run of preferred option through highway model if required & if key issues identified. High level feasibility review of mitigation measures,.including assessment of broad costs & deliverability[1]	Technical client for modelling work. Provide advice guidance for feasibility review	Involvement in discussions in relation to any mitigation measures affecting SRN.
Submission	Confirmation that proposed measures mitigate against severe harm. Indicative cost estimates of measures, high level feasibility assessment and identification of funding sources	Refinement of designs & costs through modelling work. Indication of likely level of CIL/S106 sought & identification of funding gaps	Identification of potential funding opportunities	

[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.

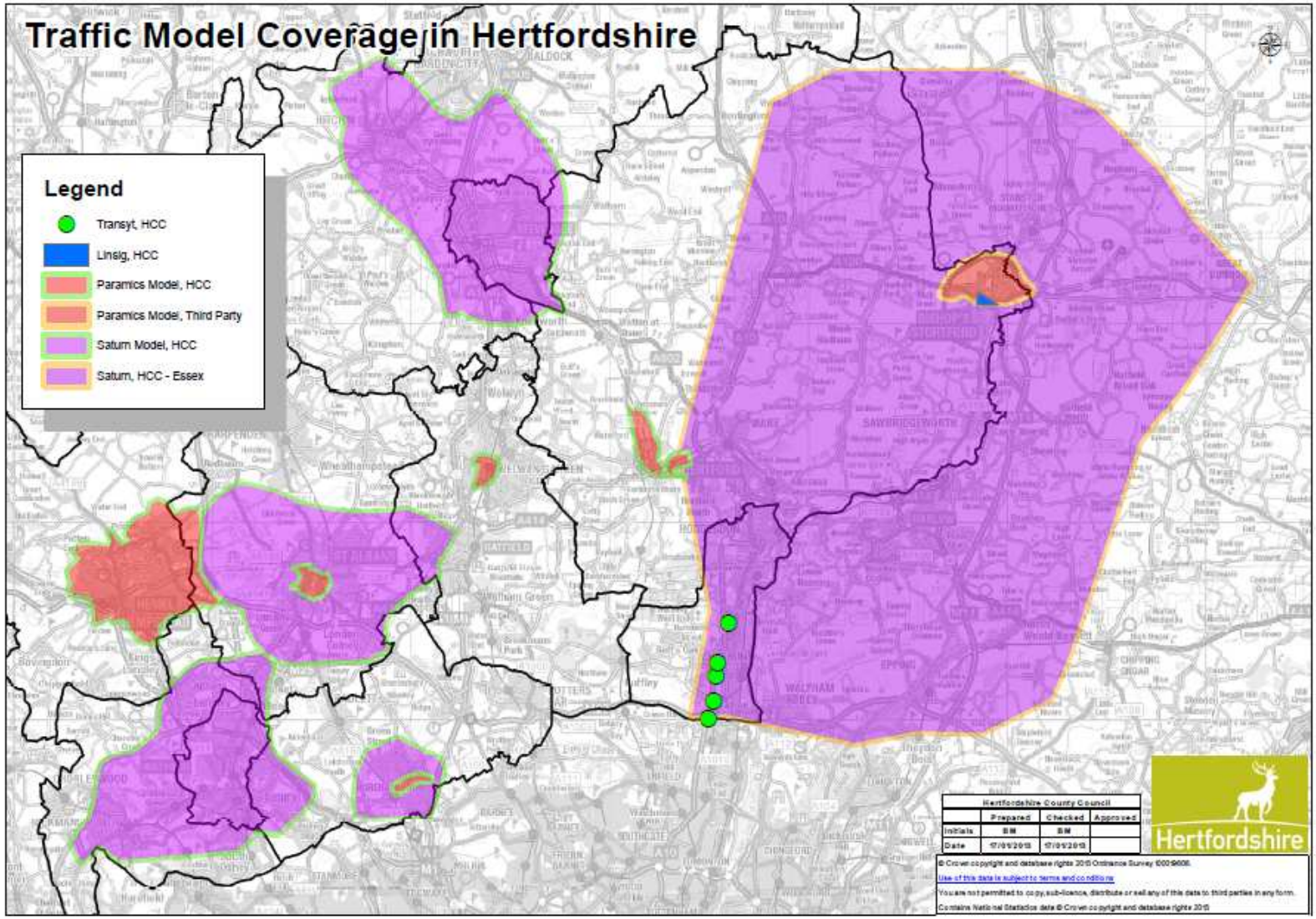

Traffic Model Coverage in Hertfordshire
Legend
Transyt, HCC
Linsig, HCC
Paramics Model, HCC
Paramics Model, Third Party
Saturn Model, HCC
Saturn, HCC - Essex
Hertfordshire County Council
Prepared
Checked
Approved
Initials
Date
Hertfordshire

Table 2 Key Contacts within HCC

District	Development management contact and co-ordinator for Highways response	Strategy and Programme Manager	Modelling & Data support	Coordinator for HCC response & queries on Timescale / Process
Broxbourne	Paul Chappell	David Burt	Sue Jackson	Paul Donovan
Dacorum	Nick Gough	Andrew Freeman		
East Herts	Paul Chappell	David Burt		
Hertsmere	James Dale	Lindsey Lucas		
North Herts	Manjinder Sehmi	Daniel Tancock		
St Albans	James Dale	Lindsey Lucas		
Stevenage	Manjinder Sehmi	Daniel Tancock		
Three Rivers	Nick Gough	Ian Thompson		
Watford	Nick Gough	Ian Thompson		
Welwyn Hatfield	James Dale	Rob Surridge		

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 Strategic Land Use Planning (SLUP) team who will then issue the final consultation response.

HCC Local Plan Process Flow Chart

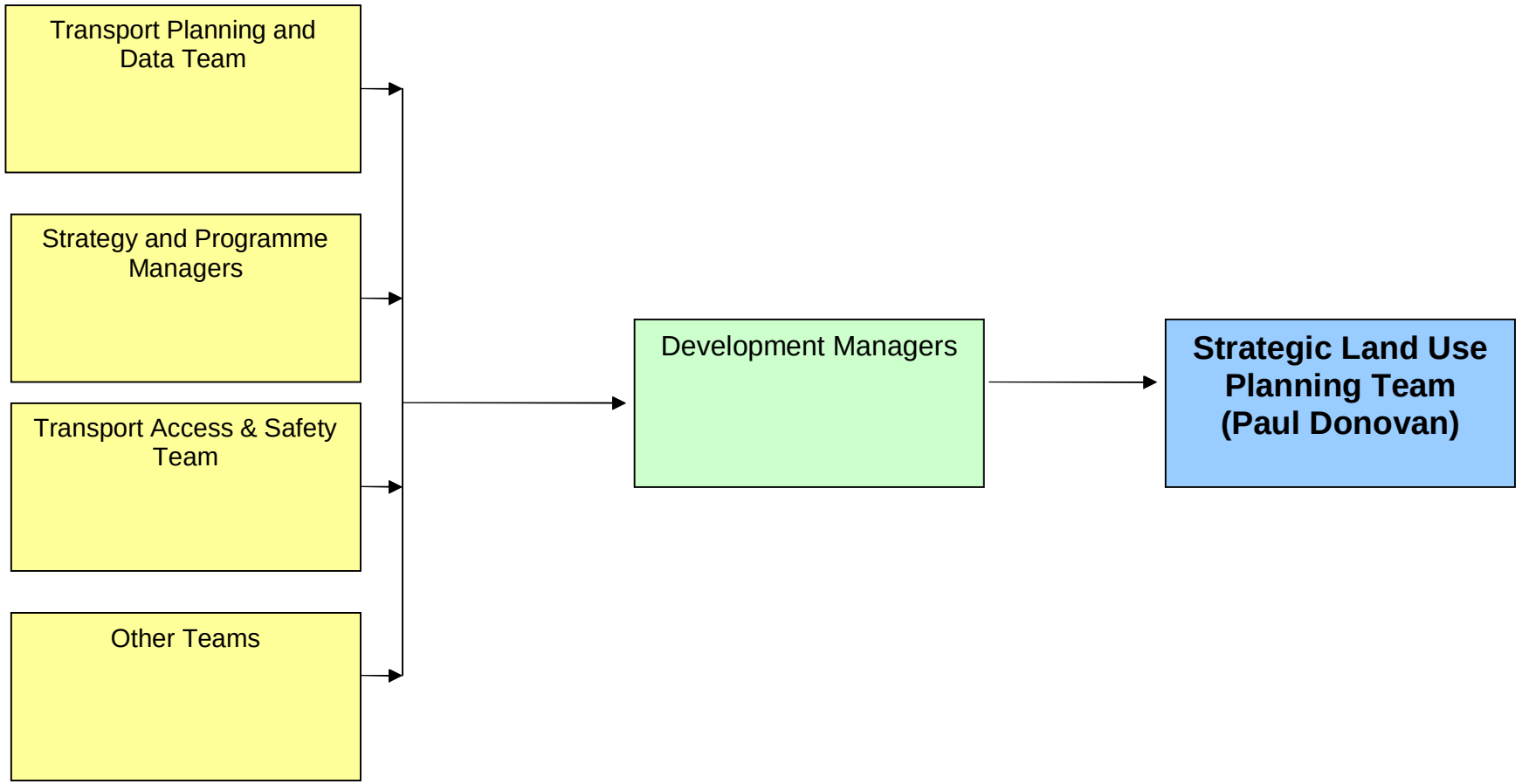


Table 3 Indicative Modelling Costs

Work required	Typical cost range	Notes	Estimated timescale
Diamond Model Set up costs	£6- £7k.	Assumes refinement & update of model to better reflect local area. This work is required prior to any scenario testing.	4 weeks
Diamond Model subsequent option tests	£1-£2k per option	Assumes test in one future year in both time periods (including reporting)	2 – 3 weeks
Saturn / Paramics model set up.	£5-10k	Assumes existing model with some limited local model validation and update of planning data / network to future year.	6 weeks
Saturn / Paramics model subsequent option tests (no mitigation measures)	£2.5-£4k per option test	Includes reporting.	3-4 weeks
Saturn / Paramics model subsequent option tests (with mitigation measures)	Up to £6k per test	Dependent on number of mitigation measures to be coded & outputs to be provided.	4-6 weeks
New model development (based on cordoning of HAM or EERM)	£40 - £50k		3 – 5 months

Appendix 1 Transport Information to be provided by Hertfordshire County Council at no cost to District

- National 2001 Census data
  Key statistic 1 – Usual resident population (district, settlement, ward or parish level)
  Key statistic 15 – Usual mode of travel to work (district, settlement, ward or parish level)
  Key statistic 17 – Car ownership (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 "Accession" software) identification of areas within 10, 15, 30, and 60 minutes 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 district giving a summary on the levels of access to transport of 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 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.

- Accident data – plots of accident locations by severity over the previous 3 calendar years and identification of locations where clusters of accidents have occurred.

- DCSF schools census data - % of pupils travelling to school by different types of transport.

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