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Dear Kay,

East Herts Local Plan Transportation Issues - A414 Hertford

Following your letter of July 6th we have reviewed the revised draft Local Plan trajectory against the information we currently have regarding the capacity of the network at this location.

Whilst the full Plan growth is undeliverable without a strategic intervention at Hertford, the assessment we have undertaken indicates that the traffic growth associated with the sites in your current first 5 year housing trajectory (up to 2021) is likely to be acceptable in terms of traffic impact on the A414. However, further detailed localised traffic assessments will need to be undertaken, and mitigation measures developed, as part of the planning process.

In detail:

- There is currently room for the traffic growth on the A414 corridor associated with committed development in Hertford.
- In terms of the proposed development in the next 5 years, the change in figures has led to a change in the conclusions; traffic from the sites west and north of Hertford (HERT3 & 4) are unlikely to have a significant impact on the critical sections of the A414 on Gascoyne Way and around the Pegs Lane / Bluecoats junctions.
- The additional development in the Mead Lane area (a further 200 or so dwellings) will require further detailed transport work to ensure additional vehicle trips are limited as far as possible. Whilst Mead Lane appears to be a more sustainable location, the amount of already committed development in this area, and the restricted access, will bring increased pressure on the Mill Road / Ware Road junction and Bluecoats roundabout, leading to a likely increase in queueing / delay on the approaches. In the development of these sites, further modelling work will be required to define the exact impacts and mitigations required to limit journeys from the site and improve the transport network. Whilst this is unlikely to lead to a complete breakdown in conditions there is likely to be a discernible impact on traffic conditions as a result, particularly if background traffic also rises, therefore it is

critical that a proper assessment of the impacts on the critical junctions as part of any Transport Assessment work associated with Mead Lane.

- The tipping point is likely to come with the completion of development in the Mead Lane area, along with the larger scale developments elsewhere on the corridor. Post 2021, the EHDC trajectory shows 850 dwellings east of WGC and 1000 North and East of Ware between 2021-2026, and we would suggest that this level of development could not be accommodated by the existing A414 corridor in Hertford. Further consideration will also need to be given to the current TFL proposals to bring Crossrail 2 to Hertford East within the plan period.

The indicators of the anticipated severe traffic congestion from our studies on the A414 beyond this level of growth include:

- Regular instances of traffic blocking key junctions and queuing back on the current free flowing lanes of the A10.
- Significant increases in delays were also predicted on the wider local road network that would result in
 - subsequent impacts on key public transport routes,
 - inappropriate routing of traffic through the town centre and residential roads (including villages)
 - The likely expansion of the existing traffic related air quality management area (AQMA).

As highlighted previously, Hertfordshire County Council is developing a 'Transport Vision' to identify packages of transport interventions to enable growth across the county to 2050. The accommodation of East West movements will be a key consideration in this work. As you are also aware, to provide an appropriate evidence base for this work a new Countywide Transportation Model (COMET) is being developed, and this will provide a platform for testing strategic mitigations to growth across the County. This technical work is already underway, and is considered to be the logical next step to progress the evidence base, and seek the necessary approvals to progress strategic transport improvements in Hertfordshire.

It is currently anticipated that the COMET will become available to test scenarios in early 2016 and the Transport Vision work will be presented to our members for approval in the summer of 2016, following a round of public and stakeholder consultations. Once adopted, this document will set out Hertfordshire's approach to dealing with strategic transport and will include a prioritised list of interventions. These will then subsequently be developed to Strategic Business Case level to enable funding bids to be put forward to the LTB, LEP and DFT. It will also be a key document in supporting the transport evidence base for Local Plans. Unfortunately we are unable to accelerate this work due to the technical process of building the transport model and subsequent consultation on the vision.

In the shorter term, tests could be undertaken with Essex County Council's VISSUM model, however, it is unlikely to provide a robust evidence base to move forward with, due to the limited extents of the model west of Hertford.

Also, as mentioned in our previous correspondence, the County Council is also seeking to establish clear working arrangements between all authorities on the A414 in Hertfordshire to address the emerging challenges associated with growth in a managed way along the corridor. Whilst this will be a good forum to discuss potential solutions we will not be able to be definitive in terms of solutions until the model is in place thus enabling the cumulative impacts of all the development along the corridor to be fully assessed. Furthermore, without the model we would not have sufficient evidence to support any bids to government for investment along the corridor.

Our priority must be to work together to ensure that the County Council can support your emerging Plan most effectively over the next 12 months, and through to implementation and delivery. To this effect we have an officer meeting set up on August 5th to discuss these issues further. It is important for the two authorities to agree on an interim position for the next stage of consultation on the Plan.

I hope this is helpful in providing a way forward. We have appended a further technical response to provide comments on the specific questions you raised (see attached)

Yours sincerely

Roger Flowerday
Development Manager

Response to Specific Questions Raised.

- a) What the capacity of the A414 through Hertford will be in relation to accommodating the likely planned development in the district (confidential draft trajectory previously supplied to you, but attached to this email for clarity).

Traffic monitoring sites on the A414 on the approach to the Rush Green roundabout and on the A414 Cole Green bypass west of Hertford indicate that traffic flows peaked around 2006 before declining with the recession. The most recent data shows that traffic volumes are still below 2006 levels indicating there is further room for growth.

Table 1 shows the level of traffic flows recorded at HCC's traffic monitoring site at Rush Green. In the morning peak hour 2015 data indicates flows on an average weekday around 300 vehicles lower than those recorded in 2006 / 07 in each direction. In theory therefore additional vehicles could be accommodated in the morning peak before conditions deteriorate to what was previously experienced (frequent queueing back from the Bluecoats roundabout to the A10 junction at Rush Green).

In the evening peak hour in 2015 there were around 150 less vehicles in the westbound direction and around 130 in the eastbound direction compared to those measured in 2006/07.

Table 1 – Peak hour traffic flows at HCC monitoring site at A414 at Rush Green

Year	AM peak 0800-0900		PM peak 1700 - 1800	
	Eastbound	Westbound	Eastbound	Westbound
2006	1118	1915	1744	1315
2007	1119	1919	1711	1340
2008	1028	1825	1634	1322
2009	1056	1801	1572	1277
2010	1011	1801	1555	1249
2011	1003	1830	1579	1289
2012	939	1654	1543	1214
2013 /14*	N/A	N/A	N/A	N/A
2015	815	1629	1615	1161
2006-2015	-27% (-303)	-15% (-286)	-7% (-129)	-12% (-154)

Monitoring site was not operational during 2013 & 2014

The traffic data also indicates the strong tidality of flow. In the morning peak westbound flows are double the eastbound flows leading to issues with queueing back from the Bluecoats roundabout towards Rush Green. In the evening peak eastbound flows are greater leading to queues on the approach to Hertford from the west.

The latest East Herts Housing Trajectory indicates 467 residential commitments in Hertford by 2016 with a further 167 in the 5 year period from 2016-2021. There is also extant permission for 107 residential units south of Mead Lane by 2021. A number of these are conversions from existing uses and in theory will not generate any additional trips on the network compared with previous uses. Based on information supplied in available transport assessments / transport statements these could potentially generate up to around 220 two way vehicle trips on the road network in Hertford in the peak periods. However, only a proportion of this traffic would be expected to use the A414. Given the previously higher levels of traffic on the network even up to half this traffic ended up on the A414 this traffic should be capable of being accommodated). It should however be noted that a large

proportion of the committed development is located in the Hertford East / Railway Street / Ware Road area and traffic from these developments is likely to impact on the operation of the Ware Road / Mill Road traffic signals and the adjacent Bluecoats roundabout, potentially increasing queueing on the A414 corridor.

The A414 is a strategic east west route which carries vehicles across the county and therefore would be potentially used by traffic from developments elsewhere in East Herts and in neighbouring districts such as Welwyn Hatfield and Harlow in addition to development within Hertford itself. The data collection for the A414 wider study indicated around 40% of the traffic on the route was through traffic without an origin or destination in Hertford.

There are also a number of committed sites elsewhere in the district, a number of these are located in Bishops Stortford and Buntingford which given their distance from the A414 would be expected to have relatively little impact. There are however 181 committed dwellings in Ware which potentially would add further stress to the network.

In addition to the committed sites there are also a number of large proposed sites in the Hertford area which could potentially come forward over the next 5 years which would also be expected to have a direct impact on the A414 (HERT2,HERT3,HERT4 and HERT5). In total these would add an extra 873 dwellings to the town on sites to the West, North and south of Hertford as well as additional development in the Mead Lane area (beyond the 107 units already committed). Using information from available transport assessments on trip generation and trip distribution it is estimated that these developments would add around 120 vehicle trips to the A414 at Rush Green in the critical AM peak hour and almost 200 vehicle trips on the A414 to the west of the town.

A test has been undertaken in the base Paramics model of the impact of uplifting traffic flow on the A414 corridor and throughout Hertford by 10%. This is roughly equivalent to allowing for the impact of the committed and proposed development in the 5 year housing trajectory plus an allowance of 0.5% background growth per annum (to allow for the impact of development elsewhere in East Herts plus neighbouring authorities in addition to factors such as changes car ownership and general economic growth). This indicates the following impacts:

- Queuing of westbound traffic on the A414 back to Rush Green roundabout for large portions of the AM peak period (from around 8:15 to after 0900). This will add to large increases in journey time for vehicles travelling westbound through Hertford.
- This means that traffic unable to exit A10 off slips onto Rush Green leading to queueing back onto the A10 mainline (both northbound and southbound) leading to safety issues.
- This is likely to lead to increased traffic diversion along the B1197 through Hertford Heath and along the A119 Ware Road as traffic from the east seeks to avoid the queues.
- Lengthening queues on Gascoyne Way leading to a further reduction in air quality.

- In the evening peak, increased incidence of queueing in the eastbound direction back to the Hertingfordbury roundabout leading to traffic diversion through Hertingfordbury village and the alternative parallel routes (B1000 Welwyn Road and B158 Lower Hatfield Road).
- subsequent impacts on key public transport routes
- inappropriate routing of traffic through the town centre and residential roads (including villages)
- The likely expansion of the existing traffic related air quality management area (AQMA).

- b) If the likely planned level of development cannot be accommodated, then we need to know what level of development would be acceptable before safety implications for queueing on the A10 (and possibly the safe operation of other roads/junctions) would prove severe and thus preclude further development.

The assessment undertaken indicates that there is some room for traffic growth on the A414 and the already committed sites in the 5 year housing trajectory (up to 2021) should be acceptable in terms of their traffic impact on the A414, although there is expected to be a worsening of queueing around the Bluecoats roundabout / Ware Road area.

There is however a number of additional potential development sites which could come forward before 2021. Based on information supplied by developers, in traffic terms the sites to the west and north of Hertford would have the least impact on the critical sections of the A414 along Gascoyne Way and on the section between Bluecoats roundabout and Rush Green. These sites add up to 600 residential units.

Traffic from the other proposed sites at Mead Lane and to the South of Hertford would access the A414 at the more sensitive locations and therefore would be expected to have a greater potential impact on the operation of both the Pegs Lane and Bluecoats roundabouts leading to a likely increase in queueing and delay on the junction approaches including the A414 back towards Rush Green.

If b) were to apply then, in respect of the proposed delivery trajectory, we need to know the point in time in the Plan period when it is considered likely that the critical point when no further development could be accommodated would be reached.

This is partly dependent on the level of background growth on the A414 corridor over the next 5 years. It is however likely that the proposed level of post 2021 development on key sites such as East of WGC and North of Ware will lead to a breakdown in traffic conditions on the A414 corridor based upon the current evidence.

- c) If b) were to apply, then, as online mitigations appear limited, we also need to know what work will be undertaken by your department* to ascertain a viable offline solution (or alternative strategies more generally) to enable planned development both in East Herts and neighbouring authority areas to progress and what timescale will this be achieved in.

**Although the Hertford stretch lies within East Herts, the A414 is a key element of the strategic route network with wider implications for the whole county and beyond (i.e. designated M25 alternative diversion route), and therefore it is considered that the issue should be viewed in this route-corridor context.*

See main response