

Lower Thames Crossing formal consultation response to Highways England

Urgent update

Kent County Council (KCC) appointed Peter Brett Associates (PBA) to provide a review of the Lower Thames Area Model (LTAM) (as referred to in paragraph 1.13 of the main SPS&T report). The LTAM was developed on behalf of highways England for assessment of the Lower Thames Crossing (LTC). The LTC is a strategic priority for KCC in KCC's Local Transport Plan 4 (LTP4).

The purpose of the report is to provide KCC with a technical and factual summary of the potential effect of the LTC on their highway network as predicted by the LTAM.

KCC have shared the draft report with Maidstone Borough Council (MBC) to aide in shaping our formal response to Highways England's current pre-application consultation on the LTC.

Key findings to note are as follows:

Modelled peak times: The LTAM uses the AM peak hour 0700-0800 and PM peak hour of 1700-1800. This is based upon analysis of DARTCharge data showing these to be the peak hours at the Dartford Crossing. However, what is not clear is whether or not the same peak hours are experienced across the entirety of the modelled area. If the same AM peak is assumed across the whole of the modelled area, it might result in lower traffic generation from modelled development sites compared to a peak time of, say, 0800-0900 (the local 'school run' time).

Data validation: The data has been collated for input to a calibration and validation exercise. The two data sets are completely separate. No validation data is included for the A229 corridor between Maidstone and Medway, nor the A249 between the M2 and M20. Aside from the PBA report highlighting this, it is unclear what the implications are without access to specialist technical transport advice.

Flow differences as a result of the LTC: The PBA report provides a summary and tables comparing the traffic flows along key roads, based upon the Shape files data provided by KCC. They summarise the total traffic flows (in vehicles) for the LTC model for the "with" and "without" LTC implemented on the M20, M2, A20, A229, and A249; for the years 2026 and 2041. They also show the HGV flows under the same scenarios, for the same roads, and for the same years. Relevant extracts from the PBA report are included within this urgent update.

The general points to note are:

2026 and 2041 AM and PM peak

- The M20 is predicted to experience a significant reduction in traffic flows between the M25 and the A229. East of this point there is little change in the M20 flows.
- The M2 is predicted to experience a significant increase in traffic flow east of the scheme. This increase continues east and is predominantly transferred to the A228 and A229 corridors. The A249 flows remain relatively unchanged.

Specifically in relation to the A229, and perhaps of greatest concern:

- In 2026, there is an anticipated increase in HGV flows during both peak hours, particularly Bluebell Hill, where there is a 76.6% increase during the AM peak and 116% increase during the PM peak.
- By 2041, this HGV flow increases to 154.2% in the AM peak and to 105.5% in the PM peak.

Also included in the extracts are tables summarising the 2026 and 2041 V/C (ratio of flow to capacity) statistic output from the Lower Thames Crossing Model for the “with” and “without” Lower Thames Crossing implemented.

In general, the effect of the LTC is a combination of increasing and decreasing the V/C ratio. The section of the A229 connecting the M20 with Maidstone increases in pressure across both AM and PM peak hours in both 2026 and 2041.

To conclude, the PBA report produced on behalf of KCC presents information that supports and further validates our proposed formal response to Highway’s England’s pre-application consultation on the proposed Lower Thames Crossing.