

TECHNICAL NOTE

Job Name: Lower Thames Crossing, Thurrock
Job No: 43879
Note No: HE 004
Date: 7th October 2019
Prepared By: PBA, now part of Stantec
Subject: **Lower Thames Crossing Task Force – Traffic Modelling Update Meeting Summary**

1. Introduction

Thurrock Council (TC) has been engaged in the consultation process regarding the Lower Thames Crossing (LTC). The effects of the scheme on the local roads in Thurrock and on emerging Local Plan development growth areas were not available within the consultation documents. Model outputs were subsequently provided by Highways England's Lower Thames Crossing team (HE LTC).

HE LTC provided a cordoned model of the Thurrock borough to allow TC to investigate the effects of the LTC. TC has requested that PBA undertakes these investigations.

This note has been prepared to provide an update to the Task Force on:

- PBA's audit of the cordoned model provided by Highways England (Note: the cordoned model covers the area of Thurrock boundary and was extracted from the wider area Local Thames Area Model (LTAM) created for the Statutory Consultation); and
- Update at the meeting with HE on 26th September 2019; and
- Agreed actions / next steps.

**Lower Thames Area Model has been used by HE LTC to assess "the need for additional road capacity across the River Thames, east of London, and the impact that the new crossing would have by developing a simulation of the transport system in the Lower Thames Area. The model contains a detailed representation of the road network in the area and information on where people travelled to and from in an average month (March 2016). It uses an industry-recognised method of predicting future traffic flows and conditions, both with and without the new crossing. The transport model shows the number of people choosing to travel by road and rail and the route they use now, and the route they are forecast to use. This enables us to predict how many vehicles will be using each part of the road network in the future and how long it would take to complete a journey."*

2. Thurrock Borough Cordon Model Audit.

An audit of the cordoned model has been undertaken to understand the predicted impacts of the LTC on TC's road network.

It should be noted that the cordoned model only covers the Thurrock borough, and therefore does not extend south of the River Thames. This means that the model cannot meaningfully be used to test the effects of development or incidents in its current state, as traffic cannot switch between the two river crossings (Dartford and LTC).

TECHNICAL NOTE

The key findings of the audit of the cordoned model indicate that the Lower Thames Crossing (LTC) results in (as bulleted below and see section 3 for actions):

Neutral impacts

- Thurrock urban area demonstrate limited changes in traffic levels; and
- Only small increases and decreases in junction delay on local roads.

Adverse impacts

- Induced traffic (i.e. new traffic that wasn't travelling in that peak period or by car previously) on the strategic road network
- Considerable change in routing of trips to and from Thurrock on the strategic road network, with an increase in 'through' trips to and from areas outside of Thurrock Borough; and
- Impacts on the operation of the junctions at the A1014 east of the A13 junction, Orsett Cock and the Manor Way junctions.

Beneficial Impacts

- General speed improvements within Thurrock, due to traffic rerouting onto the LTC.
- A reduction in traffic in locations including: the Dartford Crossing, A13 west of the LTC/A13 junction and M25 Junction 30.

The overall and broad conclusion is that the LTC does not cause major beneficial or adverse change to the local (Thurrock) roads including the A1089 and with the exception of the A13 corridor east of the LTC, but sees significant relief to the strategic road network, specifically at the Dartford Crossing and M25. This is on the basis of the development assumptions reported in the previous taskforce summary note 8th January 2019 regarding the traffic modelling for forecast years 2026 and 2041.

This would appear to support HE's case for LTC in terms of relief on the Strategic Road Network, however further investigation is needed on:

- The impact on the A1014 east of the A13 junction, Orsett Cock and Manorway junctions.
- The effects of the emerging Local Plan development
- The effects of future Port expansion (beyond Tilbury 2)

The model audit findings could also be better corroborated by extending the audit to the full network not just the Thurrock area provided by HE.

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
TNHE004	-	02.10.19	SM	SC	SC	DS
TNHE 004	B	07.10.19	SM	SC	SC	DS

Peter Brett Associates LLP disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client and generally in accordance with the appropriate ACE Agreement and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

© Peter Brett Associates LLP 2018

Peter Brett Associates LLP Caversham Bridge House Waterman Place, Reading Berkshire RG1 8DN

T: +44 (0)118 950 0761 E: reading@peterbrett.com

TECHNICAL NOTE

3. Update from HE

The LTAM (which will be re-titled 'DCO model') is currently being updated to include:

- The design development changes, taking cognisance of feedback from consultation to date;
- New freight data provided from the latest Great Britain Freight Model and updated National Road Traffic Forecasts (version 15); and
- the final design for the A13 widening scheme.

The reports setting out these model updates will not be available until the next Supplementary Consultation period – expected 8th January to 4th March. The reports will include:

- Local Model Validation Report;
- Forecasting Report; and
- Non Technical Summary of the Forecasting Report.

An updated Thurrock borough cordoned model has been requested from the new DCO model, when it is complete.

HE noted that it has been unable to test any emerging development (i.e. not committed or aspirational plans) being considered by TC for the next Local Plan period or by the Port of Tilbury (PoT), because details of any emerging plans/options have yet to be shared with them.

4. Actions Agreed

The following actions have been agreed between TC and HE:

- TC to share the final A13 widening drawings (early October);
 - HE to reissue and provide traffic data collected in Thurrock (survey data by hour, journey times) via a data sharing portal (early October);
 - HE to provide TC with an updated Thurrock Borough cordoned model as a result of enhancements currently being undertaken to LTAM (December) Note: assuming its release is agreed
 - TC to consider (by early/mid November):
 - sharing development options for the next plan period (and beyond, if direction is known) and possible Tilbury Link Road options.
 - the location of any future junction(s) on the LTC, so that passive provision can be made
 - confirming the location(s) for re-use of arisings from LTC tunnel works to create development platforms
 - PoT to consider (by early/mid November):
 - sharing provisional/aspirational development plans
 - confirming the location(s) for re-any use of arisings from LTC tunnel works to create a development platform.
 - Workshops to be arranged on:
 - Local Plan Update to be confirmed for November 2019
 - ASDA roundabout/A1089 – early November
 - findings of the DCO modelling (including A13/Orsett Cock/Manorway) – early December
 - HE to undertake sensitivity testing considering any development options provided by TC and PoT (during December).
-