LONDON BOROUGH OF ENFIELD (LBE)

LOCAL PLAN STRATEGIC TRANSPORT ASSESSMENT – EXECUTIVE SUMMARY

DATE:	16 June 2021	**CONFIDENTIALITY:**	Internal
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INTRODUCTION

WSP has been appointed by the London Borough of Enfield (LBE) to support their new Local Plan (2019-2039). The review is to inform the Town and Country Planning (Local Planning) (England) Regulations 2012 - Regulation 18 and 19 Local Plan stages with inputs into the statements of common ground and the provision of the transport evidence supporting the new Local Plan.

OVERALL APPROACH TO THE ASSESSMENT

WSP is undertaking a **quantitative review** of the potential impacts and associated mitigation effectiveness on the highways and public transport networks through the use of the Transport for London (TfL) strategic modelling suite including:

- MoTioN, a Multi-modal strategic transport 'mode of travel' in London model
- LoHAM, a strategic London-wide highway assignment model
- Railplan, a public transport strategic model

MoTiON is the new multimodal demand model within TfL's strategic transport modelling suite. MoTiON uses numerous demand drivers including land use, socio-economic forecasts and transport supply to calculate future trip generation, trip distribution and mode choice. The trips that MoTiON calculates are then assigned to detailed strategic networks in Railplan (public transport) and LoHAM (highway) models to forecast detailed route choice and cost changes between transport and land use scenarios.

The transport model analysis will follow the industry standard approach where the impacts and mitigations required will be determined through the comparison of the future baseline and growth scenarios.

At the point of writing, the quantitative assessment is ongoing and is expected to be completed and inform the Regulation 19 Local Plan drafts and consultations.

Complementing the quantitative assessment, WSP is also undertaking a **qualitative review** of the transport networks with a focus on:

- Alignment with National, London and Local policy frameworks, their underpinning evidence and emerging best practice in sustainable transport planning.
- Review of the site allocation Strategic Housing Land Availability Assessment (SHLAA) and Employment Land Availability Assessment and growth scenarios on the basis of their Public Transport Accessibility Levels (PTAL) and amenities access.
- Review of the committed, planned and 'aspirational' mitigation measures which could support the planned growth.

The qualitative review is focused on compliance with the policy and best practice and is focusing more directly on active modes and opportunities to encourage 15-minutes' neighbourhoods and Active Travel Zones, thus complementing the quantitative, network capacity based, analysis.

This qualitative review is intended to provide LBE with an initial assessment of the likely potential impacts on the transport network as a result of the proposed growth options, thus assisting LBE in the understanding of the opportunities and constraints associated with the Baseline, Medium and High growth scenario.

The overall approach to the assessment study methodology is graphically shown in the flow chart in Figure 1 following on.

QUANTITATIVE REVIEW

The transport model analysis will include the industry standard approach steps to:

- Establish the 'fitness for purpose' of the models through review of the baseline scenario and discussion with TfL and the local highway authority
- Build the 'future year' baseline
- Assess potential new Local Plan cumulative growth scenario which includes options for a

  - Baseline growth scenario
  - Medium growth scenario
  - High growth scenario

The sequential process is graphically shown in Figure 1.

At the strategic level TfL's models have been developed and validated to a high standard. However, individual areas of a strategic model may perform better than others and therefore the model audit is undertaken for the study area. Stage 1 "'Fitness for Purpose' - Model Audit" has now been completed and resulted in the production of the following technical reports, which are published along this document:

- "Enfield Local Plan - Highway and Public Transport Model Study Areas", March 2021
- "LoHAM Base Model Audit", June 2021
- "Railplan Base Model Audit", June 2021

Both LoHAM and Railplan model audits have concluded that the existing 2016 base year models are deemed to be sufficiently detailed and validated for the 'Regulation 18' first stage of assessment. Any model deficiencies identified at Stage 1 will be addressed at Stage 2 ('Model refinement and validation').

Stage 2 is expected to be completed in advance of Regulation 19 stage to ensure a robust set of base year models is available to undertake an assessment of Enfield growth scenarios, which is dealt with in Stages 3 to 5.

The impacts and mitigation required will be determined through the comparison of the future growth scenarios with the future baseline scenario. Stage 3 deals with the development of the future baseline scenario and a technical note outlining the forecast assumptions associated with modelling of the Future Baseline scenario (i.e. without LBE local plan growth) using MoTiON has been produced and is published along other evidence base ("Technical Note 1 - Future Baseline Assumptions", June 2021).

Enfield Future Baseline scenario is being developed from TfL's off the shelf 2041 Reference Case scenario. TfL's Reference Case assumes a substantial level of housing and jobs is delivered between 2016 and 2041. This growth needs to be removed within the borough to create Enfield specific Future Baseline scenario. However, it has been agreed with LBE that an appropriate level of growth should be retained to account for development that has been completed since 2016. Enfield Future Baseline will also include planned and committed strategic highway and public transport schemes.
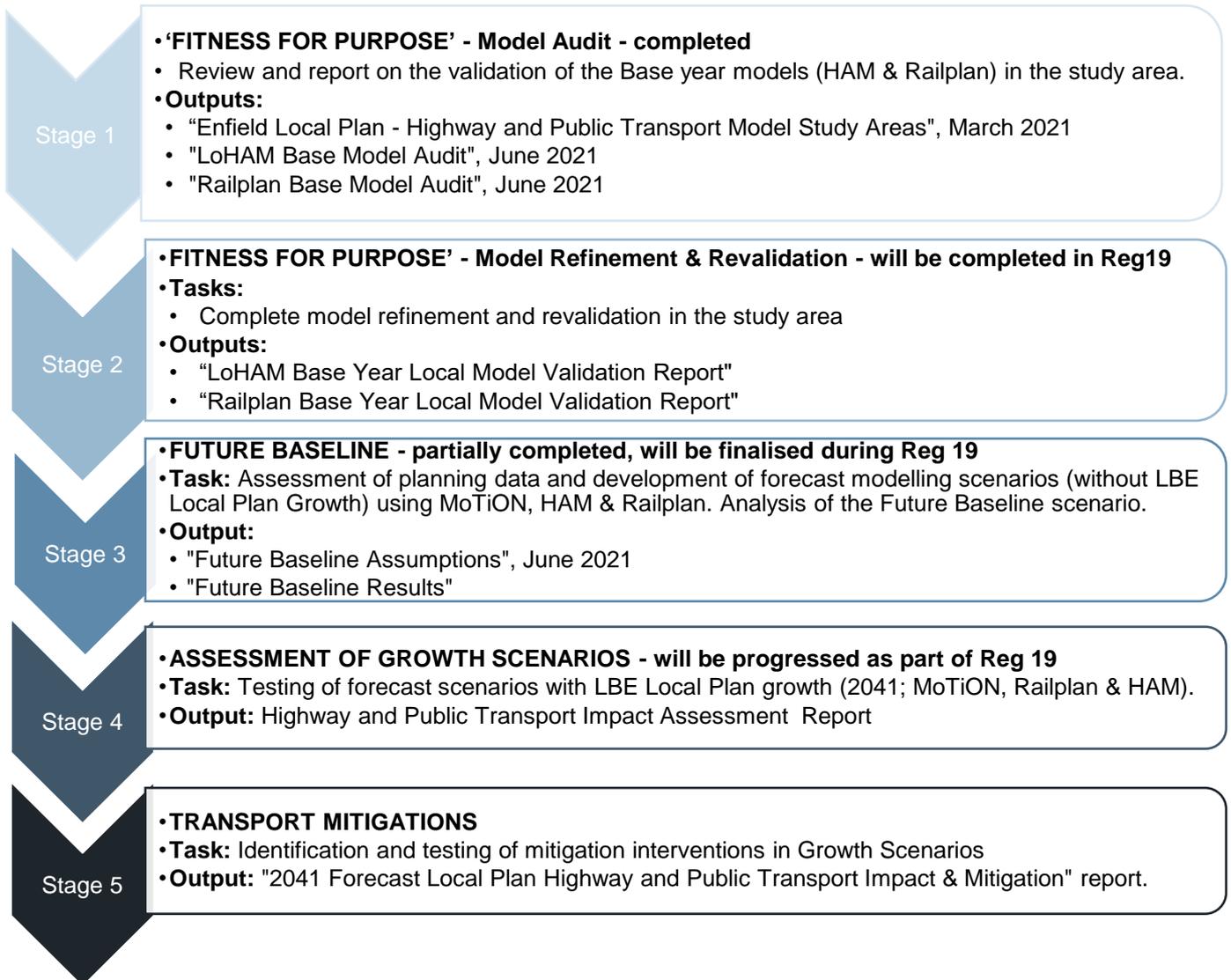
Stage 1

- **'FITNESS FOR PURPOSE'** - Model Audit - completed
- Review and report on the validation of the Base year models (HAM & Railplan) in the study area.
- **Outputs:**
  - "Enfield Local Plan - Highway and Public Transport Model Study Areas", March 2021
  - "LoHAM Base Model Audit", June 2021
  - "Railplan Base Model Audit", June 2021

Stage 2

- **FITNESS FOR PURPOSE'** - Model Refinement & Revalidation - will be completed in Reg19
- **Tasks:**
  - Complete model refinement and revalidation in the study area
- **Outputs:**
  - "LoHAM Base Year Local Model Validation Report"
  - "Railplan Base Year Local Model Validation Report"

Stage 3

- **FUTURE BASELINE** - partially completed, will be finalised during Reg 19
- **Task:** Assessment of planning data and development of forecast modelling scenarios (without LBE Local Plan Growth) using MoTiON, HAM & Railplan. Analysis of the Future Baseline scenario.
- **Output:**
  - "Future Baseline Assumptions", June 2021
  - "Future Baseline Results"

Stage 4

- **ASSESSMENT OF GROWTH SCENARIOS** - will be progressed as part of Reg 19
- **Task:** Testing of forecast scenarios with LBE Local Plan growth (2041; MoTiON, Railplan & HAM).
- **Output:** Highway and Public Transport Impact Assessment Report

Stage 5

- **TRANSPORT MITIGATIONS**
- **Task:** Identification and testing of mitigation interventions in Growth Scenarios
- **Output:** "2041 Forecast Local Plan Highway and Public Transport Impact & Mitigation" report.

Figure 1: Stages, Tasks and Outputs from the Study

QUALITATIVE REVIEW

This section of the analysis is presented in the Baseline and Future Baseline transport review reports. The aim of the qualitative review is to complement the quantitative assessment with a focus on the alignment with National, London and Local policy frameworks, their underpinning evidence and emerging best practice in sustainable transport planning such as TfL's Healthy Streets initiative.

The qualitative review includes the following:

- Policy and sustainability principles review
- Policy framework review
- Best practice and emerging trend review
- Baseline network opportunities and constraints review
- Committed, planned and aspirational mitigation measures presented
- Growth typologies options reviewed

The Baseline report acknowledges the existing transport networks in Enfield to establish which infrastructure is available in the immediate/ short term and whether constraints exist in the form of missing links/ severance, etc. And initial assessment to determine whether the existing highway and public transport networks are subject to delays, congestion and overcrowding was also carried out. The assessment was undertaken using the baseline outputs from the available TfL Highway and Public Transport model. In conjunction with these outputs previous studies that were undertaken in the borough were reviewed and these include:

- Mayor's Transport Strategy (MTS) supporting evidence
- London Plan Evidence Base
- Updated Upper Lee Valley Opportunity Area Planning Framework transport study
- Meridian Water planning applications
- Northern Gateway Access Package (NGAP)
- North London Sub regional Plan
- Anglia Route Study
- LBE Infrastructure Delivery Plan
- LBE Transport Plan (Local Implementation Plan)

Following from the Policy framework and topic studies review a closer review was undertaken of the proposed growth typologies. This review is based on the likely requirements of the proposed growth typologies in terms of access and travel patterns and the potential to accommodate sustainable travel to/from the growth locations in line with Policy and best practice. Sustainable travel opportunities are identified at this stage as access to public transport (PTAL scores as per TfL methodology) and proximity to essential services and amenities such as education, healthcare and leisure destination within walking/cycling distance.

The future baseline review reports the likely impact of the proposed growth scenarios with a focus on the following growth typologies:

- Urban infill
- Densification of local hubs
- Strategic Industrial Land

- Green Belt

In addition to a review of the existing PTAL and amenities proximity, a review of the committed, planned and 'aspirational' mitigation measures, that cover sustainable modes, highway and public transport are reported to give an indication of the potential timescales for unlocking growth in strategic areas.

The short-medium mitigation measure improvements include:

- Highway England's plans for the M25 junction 25
- Network Rail plans for the West Anglia Mainline upgrades to provide 4 trains per hour minimum service and rolling stock upgrades
- TfL and GLA plans for the Underground, Overground, bus network and strategic cycle networks (outer London orbital routes)
- Other improvements in the pipeline resulting from government programmes such as Housing Infrastructure Fund, LIP3 and S106 contributions