# Sefton Local Plan - Transport Topic Paper

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## 1.0 Introduction

- 1.1 This topic paper sets out the approach that has been taken to assessing the transport impacts of the Sefton Local Plan. The approach adopted was intended to provide a robust transport evidence base so that the transport implications of the Local Plan can be understood. This would enable opportunities for encouraging sustainable transport options and the requirements for new or improved transport infrastructure to be identified. Information from the transport assessment has also been used in the site appraisal process to ensure that site allocations in the Local Plan will support development that is sustainable, safe and accessible.
- 1.2 The assessment has taken a phased and iterative process, based on the stages of Plan preparation and the geographical distribution of allocations within the Plan.
- 1.3 Information about existing transport conditions and issues formed part of the preparation of the spatial profiles prepared for all parts of the Borough at the early stages of Plan preparation. The main transport assessment work took place at the options testing phase, modelling the impacts of the Plan options and particularly in providing input to the site appraisal process. The assessment of the overall impacts of the preferred option for the Plan was revisited as part of the preparation of the final submission.
- 1.4 The transport assessment work has been aimed at addressing the following key questions, which inform whether the Plan is justifiable, effective and deliverable.
  - What are the impacts of the Plan as a whole on the transport network of the Borough as a whole, particularly the highway network?
  - What are the impacts of the 'clusters' of development allocations on the highway network in those parts of the Borough?
  - What are the impacts of individual site allocations on the local transport network, how accessible are those potential developments and what is required for those developments to satisfy the existing requirements for accessible development?

## 2.0 Policy and evidence base

- 2.1 The approach to transport assessment of the Local Plan and the development of policies within the Plan has taken account of NPPF and associated PPG. At a local level, the Plan reflects the policies and priorities of the Merseyside Local Transport Plan and the Liverpool City Region Combined Authority Transport Plan for Growth. The need to support sustainable travel, to provide people with a choice of travel option and to make development accessible by a range of travel options has already been clearly established in the Ensuring Choice of Travel SPD, the principles of which have been applied to the Plan.
- 2.2 The impacts of the whole Plan on the Borough's highway network have been assessed using the Liverpool City Region Transport Model (LCRTM), a multi-modal model comprising a link-based highway model, a public transport model and a variable demand model. It has been developed on behalf of the Liverpool City Region as the primary assessment tool for testing transport intervention measures in the City Region. The model was used to test the wider impacts of the Plan options and of the final published option, identifying those areas where there may be pressures on the existing capacity of the network.
- 2.3 The Borough wide modelling has been supplemented by local area based traffic modelling using a SATURN model to assess the performance of links and junctions within specifically defined networks. The SATURN modelling provides a more detailed assessment than the LCRTM, identifying particular locations where the cumulative impact of development allocations will affect the capacity of the existing highway network.
- 2.4 The accessibility of each individual development site considered for inclusion in the Plan was also assessed, with reference to the Ensuring Choice of Travel SPD. Potential issues associated with site access and the impacts of trips on the surrounding highway network were identified and this information formed part of the site appraisal process. Where potential developers submitted information on transport issues for specific sites, the submissions were independently and separately reviewed.

## 3.0 Borough wide transport modelling

- 3.1 The LCRTM was used to assess the impact of the Local Plan proposals as a whole on the highway network of the Borough as a whole. LCRTM was developed by consultants Mott McDonald on behalf of the Liverpool City Region for testing transport intervention measures in the City Region. LCRTM is a strategic model and does not include junction representation; rather it provides a representation of flow relative to theoretical capacity and an indication of where delays are likely to occur. The model cannot be used to determine junction performance. For the Local Plan assessment, LCRTM was used to predict where delays and congestion might occur over the period of the Plan.
- 3.2 LCRTM was designed to address the following objectives:

- to produce a long term forecast of growth in demand for travel in the City Region, which will reflect changes to land use, demographics, employment and the economy;
- to forecast the **impacts of growth** and changes in demand for travel on the existing highways and public transport networks;
- to forecast the **impacts of specific major regeneration projects and major land use developments** on the transport system in the Liverpool City Region;
- to forecast the **impacts of increased congestion** on the local economy and quality of life; and
- to examine an **array of measures and interventions** that could be deployed to **mitigate impacts**.
- 3.3 The operation of the model is explained in the report by Mott McDonald 'Sefton Local Plan Transport Modelling Option Testing' April 2013 (TR1).
- 3.4 The impact of the Local Plan proposals have been modelled twice using the LCRTM during the Local Plan development process. During the Option Testing phase in 2013, the impacts of the three options under consideration were assessed. LCRTM was then used a second time in 2015 to assess the impact of the published Local Plan. The model forecasts were provided for a base year of 2012 and a forecast year of 2030.
- 3.5 The findings of the modelling were used to inform the individual site appraisal process, the development of the transport policy in the Local Plan and the identification of infrastructure requirements in the IDP. The modelling reports are provided in the Evidence Library (TR1 and TR2).

## 4.0 Local area traffic modelling

- 4.1 In addition to the strategic and borough-wide assessment carried out using the LCRTM, additional traffic modelling has been undertaken using the SATURN suite of programmes to assess the impact on junction capacities of the proposed developments in Southport, Maghull and Formby. There are clusters of development allocations in these areas that, cumulatively, could exert pressure on the existing highway network. The local area modelling was carried out to assess the potential scale and extent of this pressure and identify any specific locations where improvements may be required if development takes place.
- 4.2 Southport : Additional modelling has been undertaken to assess the cumulative impact of development proposed for Southport in the Local Plan, particularly in relation to proposed housing sites along the eastern edge of the town. This assessment was carried out using the SATURN traffic model for the town, which has been developed to test options for a possible major scheme to improve highway access to Southport from the east.
- 4.3 Maghull : An upgraded and updated SATURN model was recently completed for the Business Case for the proposed M58 Junction 1 Improvements Major Scheme. The model has been used to analyse the impacts of the proposed new housing and

business park development on land to the east of the Maghull together with the other proposed housing sites within Maghull and Tower Hill, Kirkby and has been used to assess the impact of the development in the area and to quantify the economic benefits of the proposed additional slip roads at M58 J1 as part of the business case being developed for the scheme.

- 4.4 Three design horizon years have been modelled, 2019, 2024 and 2034 to reflect the opening year for the proposed M58 J1 Improvement, an interim assessment to assess the impact of the development, with and without the proposed spine road across the site and a design year of 2034.
- 4.5 Formby : Additional modelling has also been undertaken of the Formby area, principally to assess the cumulative impact on the existing and proposed junctions along the Formby Bypass of the principal housing development allocations to the west of the Formby Bypass together with the proposed employment development sites to the east of the Bypass.
- 4.6 The findings of the local area modelling will be used in discussions with potential developers to identify required improvements to the existing highway network. The results of these further modelling assessments can be found within the Evidence Library (TR3-5).

## 5.0 Individual site assessments

- 5.1 An individual assessment of transport and accessibility of each of the possible housing and employment sites was carried out. The site assessments were completed using a workshop style approach involving experienced Council officers from Strategic Transport Planning, Highways Development Control, Traffic Management & Road Safety, Highway Design, Urban Traffic Control and Public Rights of Way.
- 5.2 The assessment took account of the indicative development proposals (e.g. number of houses and size of site), the responses from public consultation and the results of any traffic modelling relevant to the location. The officers also used their extensive local knowledge of the Borough and the location of proposed sites in making their assessment.
- 5.3 The assessment identified which of the requirements of the Ensuring Choice of Travel SPD would apply to the site and any issues with highway capacity in the vicinity of the site shown by the traffic modelling. The vehicular access to the site and the accessibility for walking, cycling and public transport was assessed and those sites where accessibility improvements were considered necessary were identified. Any other factors and associated risks that should be considered in relation to the sites were also identified. The assessment, however, did not prescribe specific improvements because individual developers will be expected to bring forward accessibility improvement proposals as part of their detailed proposals for each site.
- 5.4 The findings of the site assessment process were incorporated into the overall site appraisal process, informing the 'Site access', 'Network capacity' and 'Accessibility

improvements' sections of the site appraisal. The site appraisal process and the site appraisal forms have been provided in the Evidence Library (LP5).

## 6.0 Review of transport submissions

6.1 For some of the sites being considered for the Local Plan, the Council received submissions containing information about transport issues. These varied in nature from full transport assessments to very short statements. To assist the Local Plan process and to provide an independent review of the submissions, consultants were appointed to undertake reviews of the transport submissions. A standard method was developed for the review process and the reports provided by the consultants on each submission have been provided in the Evidence Library (TR7 & TR8).

The Council recognises that transport connections and accessibility are major elements in the deliverability of the Local Plan. People need to be able to travel to and from proposed development sites safely, efficiently and by a range of travel options. The assessment that has been undertaken has assessed the impacts of the Local Plan at a borough-wide level, for key local areas and at an individual site level. This has identified routes and locations where the Council will need to focus strategic transport investment and individual sites where there are specific accessibility constraints that will need to be addressed as part of development proposals. These constraints were considered as part of the site appraisal process. The Council considers that the work that has been done provides an appropriately robust transport assessment of the Local Plan.