

Library Ref: TP05

Land Use Assumptions in the Mainland Transport Assessment

(A topic paper supporting the examination)



Introduction

1. This Topic Paper is one of a series of notes and papers provided by the Council to support the examination of its Local Plan. It provides information requested by the Local Plan Inspectors in relation to MIQ6: Mainland Transport Assessment.
2. The Mainland Transport Assessment was published in January 2019. It took as its basis land use assumptions in the Local Plan at the time that the model runs that underpin the TA were being prepared (end 2017). The Local Plan has evolved through several drafts since that time, and the allocations within it have been adjusted to take into account information from site promoters, any planning applications and other relevant evidence.
3. Questions were raised in letter CR06 and in MIQ6 (question 6.2) regarding the difference in employment land assumptions between the Local Plan TA and the Submission Local Plan (CD01). The Council has already set out why it considers that the TA remains robust in letter CR08 and MIQ07, and the matter was discussed at the stage 1 hearing session on 16.7.2021.
4. At this session, it was suggested that any changes in the quantum and distribution of residential development were more likely to affect the robustness of a transport assessment than any made to employment land assumptions. The Inspectors have therefore asked for further information to help them and other interested parties, in particular Highways England (R314) and the Local Highway Authority (R215) to understand how the assumptions in the TA for residential development compare with those in the Submission Plan.
5. Some key points on employment land assumptions are also included. While these were discussed at the hearings, it is considered useful to set them out in writing, to allow interested parties to fully consider them more readily than may have been possible during verbal hearing sessions.
6. While the focus of the paper is on the land use assumptions, it also addresses some additional queries from the inspector about the TA, namely those relating to assumed trip rates and the land take of the mitigation measures presented in the TA.

Housing: Quantum & Distribution

7. The residential land use assumptions in the Transport Assessment are shown in Appendix B of SRTM Model report (part of EB05), in the form of a table, which assigns the numbers of dwellings from completions, permissions, and from the Local Plan (allocations and windfall assumptions) to the 'zones' defined in the Sub Regional Transport Model (SRTM). The Zones are shown in Figure 16 on p.45 of the TA.
8. The Council has reviewed the land use assumptions in the Submission Local Plan and compared them with those in the TA. This review does not include completions, since these already exist on the ground and are therefore given in any assessment, with the model being updated to the latest position. That is to say completions do not

serve to demonstrate the effect of the Local Plan proposals and rather would form part of the baseline against which the effect of the Local Plan is measured.

9. Table 1 below shows the distribution of residential development across the five sub-areas of the borough as presented in the Local Plan. It compares allocations and windfall assumptions in the TA with those put forward in the Submission Local Plan. The detail behind this, showing the individual sites that make up this supply and assigning each to an SRTM zone is shown at Appendix A.

Table 1: Residential Allocations & Windfall Assumptions			
Area	No. of homes assumed in TA	No. of homes assumed in HBLP	Difference between TA and HBLP
Emsworth	508	486	-22
Havant & Bedhampton	2,547	2,078	-469
Hayling Island	1,146	1,070	-76
Leigh Park	752	671	-81
Waterlooville	2,362	2,211	-151
Southleigh	2,100*	2,100*	0
TOTAL	9,415	8,616	-799
<i>*It should be noted that the full 2,100 assumed in KP5 has been considered, despite just 1,100 being expected in the plan period</i>			

10. This table demonstrates that across the whole borough, as well as within each sub-area considered separately, fewer dwellings are expected to come forward via the Submission Local Plan than were considered through the TA.
11. The overall and the area based reduction in assumed future development is also demonstrated in outstanding planning permissions (see table 2 below). The detail behind this, showing the individual sites that make up this supply and assigning each to an SRTM zone is shown at Appendix B.

Table 2: Outstanding Residential Permissions			
Area	No. of homes assumed in TA	No. of homes assumed in HBLP	Difference between TA and HBLP
	<i>as at 04/2016</i>	<i>as at 04/2021</i>	
Emsworth	205	131	-74
Havant & Bedhampton	410	272	-138
Hayling Island	228	80	-148
Leigh Park	128	91	-37
Waterlooville	893	494	-399
Southleigh	0	0	0
TOTAL	1,864	1,068	-796

12. Table 3 brings together Tables 1 and 2 to show all proposed development, arising from the Local Plan and outstanding permissions:

Table 3: Total Proposed Residential Development (Local Plan + Permissions)			
Area	No. of homes assumed in TA	No. of homes assumed in HBLP	Difference between TA and HBLP
Emsworth	713	617	-96
Havant & Bedhampton	2,957	2,350	-607
Hayling Island	1,374	1,150	-224
Leigh Park	880	762	-118
Waterlooville	3,255	2,705	-550
Southleigh	2,100	2,100	0
TOTAL	11,279	9,684	-1,595

13. Overall, the assumptions on proposed residential development used to assess the effects of the Local Plan in the TA far exceed those in the Submission Local Plan. Since the location, as well as total number of dwellings, will determine the transport impacts of development, table 1 to 3 above show how the assumptions play out at a more localised level in the sub-areas of the borough, which confirms, that in all sub-areas the quantum in the Local Plan is reduced compared to that in the TA.

Employment: Quantum & Distribution

14. Interested parties have asked to understand more fully the make-up of the employment floorspace assumptions found in Table 3 of the Submission Plan.
15. Table 9.3 and 9.4 of the Employment Land Review 2020 (ELR) (EB54) set out the source of employment land supply from allocations and opportunities within existing areas, which are reflected in Table 3 of the Submission Plan. Table 4 below shows the sites making up the assumed Local Plan employment supply and compares the floorspace with that in the TA.

Table 4: Employment Floorspace Assumptions			
Site	Zone (SRTM 2015)	Floorspace (sqm) in TA <i>Based on 2017 ELR</i>	Floorspace (sqm) in Local Plan <i>Based on 2020 ELR</i>
Proposed Allocations			
Brockhampton West (C10)	598	7,800	20,000
Land at Hulbert Road (C11)	600	2,000	6,250
BAE Systems (C12)	636	17,900 (leisure)	29,820
Dunsbury Park (KP7)	623, 881, 882	57,418	57,700*
Total		85,118	113,770
<i>* Policy KP7 shows 76,779sqm; figure presented here is remaining floorspace once completions have been taken into account</i>			

Opportunities within Established Employment Areas			
Langstone Technology Park (KP6)	605	0	12,575
Leigh Park Gas Holder (C1)	617	1,250	1,250
Northney Marina (KP3)	593	-1,000	-865
Total		250	12,960
Total employment development identified:		85,368	126,730
Difference:		41,362	
<i>NB this table does not show all the floorspace assumed in the TA but is limited to comparing those sites that make up the supply in the Submission Local Plan. Details of the full non-residential floorspace assumptions in the TA are set out in Appendix B of SRTM Model report (part of EB05).</i>			

16. It should be noted that many of the sites that make up the supply are already subject to planning permission, as shown in Table 5.

Table 5: Employment Floorspace with Planning Permission		
Site	Application Reference	Permitted Employment Floorspace (sqm)
BAE Systems (C12)	Resolution to Grant Permissions APP/13/00893	29,820
Dunsbury Park (KP7)	Permission (APP/12/00338)	61,779
Langstone Technology Park (KP6)	Permission (APP/19/00703)	12,575
Total Floorspace with Planning Permission (or a resolution to grant):		104,174

17. Of the 126,730sqm of employment floorspace proposed in the Local Plan through allocations and opportunity sites, the vast majority (104,174sqm) already has planning permission or a resolution to grant planning permission leaving just 22,556sqm not yet committed. Notably the sites with permission and resolutions to grant are the more significant sites in terms of floorspace. This is with the exception of Brockhampton West (C10), although this site is also currently the subject of an outline application for 29,000sqm (APP/21/00189) with a site specific detailed TA.
18. Any sites with permission could come forward with or without the support of an allocation in the Local Plan.

Trip Rates

19. The Council has sought clarification from SRTM developers Systra regarding the trip rates associated with different types of land use in the Sub-Regional Transport Model.
20. This has confirmed that in the model the floorspace figures are converted into population or employment numbers (i.e. people), the reason being that it is people

that drive cars, or are passengers on buses etc. The model then applies person trip rates that vary by:

- Time period (AM Peak, Inter Peak, PM peak, Off peak)
- Mode (Car, Public Transport, Active (walking or cycling)),
- Journey purpose (Work commute, Employers business, Education, Other)
- Person category (Child, Working Adult, Non-working Adult, Retired)
- Car availability (no car available, competition for car (more adults than car per household), no competition for car (equal number or more cars than adults per household)).

21. The person trips rates used in the SRTM are derived from National Trip End Model (NTEM). The NTEM is a database maintained by the Department for Transport, which forecasts the growth in trip origin-destinations (or productions-attractions) up to 2051 for use in transport modelling. The forecasts take into account national projections of population, employment, housing, car ownership and trip rates.
22. For the SRTM they have been adjusted to match the observed trip volumes on the validated base year highway and public transport models and the base year population and employment statistics (i.e. adapted to local conditions). As the trip generation is based on demographic and employment information associated with each zone, trip generation for a particular land use will vary by zone (e.g. car availability split or person category split will vary by zone).
23. The person trips rates are set out in the SRTM model development report, which can be found at www.solent-transport.com/srtm as 'Report 2 - Main Demand Model Development'. Appendix A of that report tabulates the person trip rates used in the SRTM. For ease, it is copied as Appendix C to this Topic Paper.

Land Take of Mitigation Schemes

24. The Inspector asked for clarification whether the mitigation schemes put forward through the TA are on highway land or require any third party land.
25. The Council has contacted the consultants that prepared the TA, Hampshire Services, and their engineers confirm that none of the conceptual designs for the highways mitigation schemes presented and tested through the TA require third party land.

Concluding Remarks

26. This Topic Paper has provided information in response to questions raised by the Inspector during the examination of the Local Plan in relation to the Mainland TA.
27. The Council considers that the information provided confirms its view that the Mainland TA remains a robust and proportionate piece of evidence and provides the necessary information in order to reach conclusions regarding the soundness of the plan in transport terms.

Appendices

Appendix A:

Transport Assessment & Local Plan Land Use Assumptions (Residential)

Appendix B:

Location of Outstanding Permissions as at April 2021 (Residential)

Appendix C:

Person Trip Rates in Sub-Regional Transport Model

