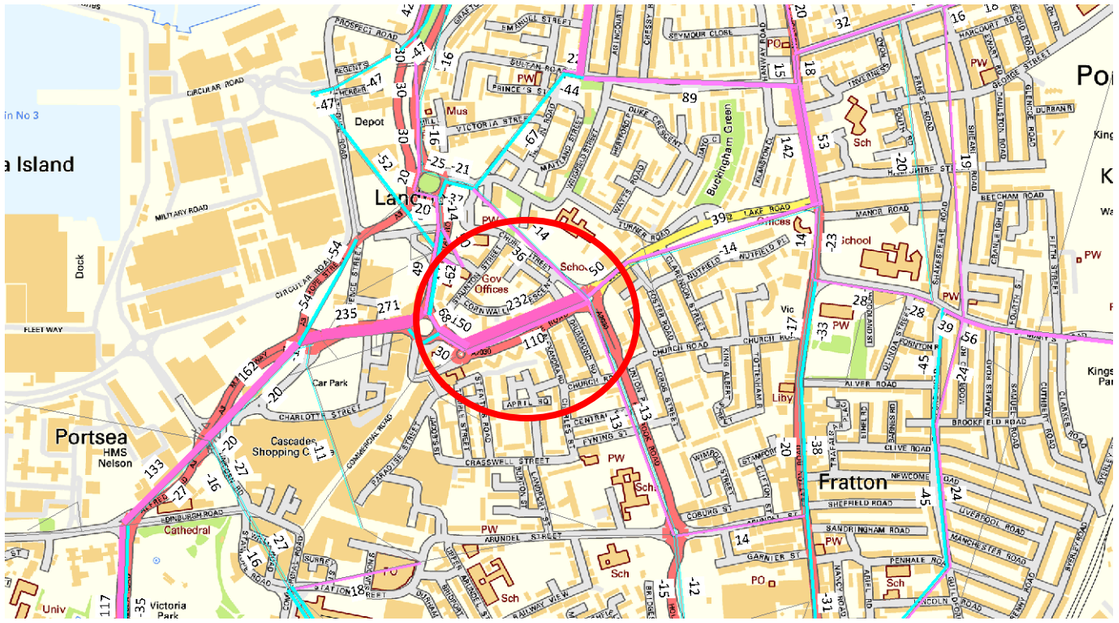
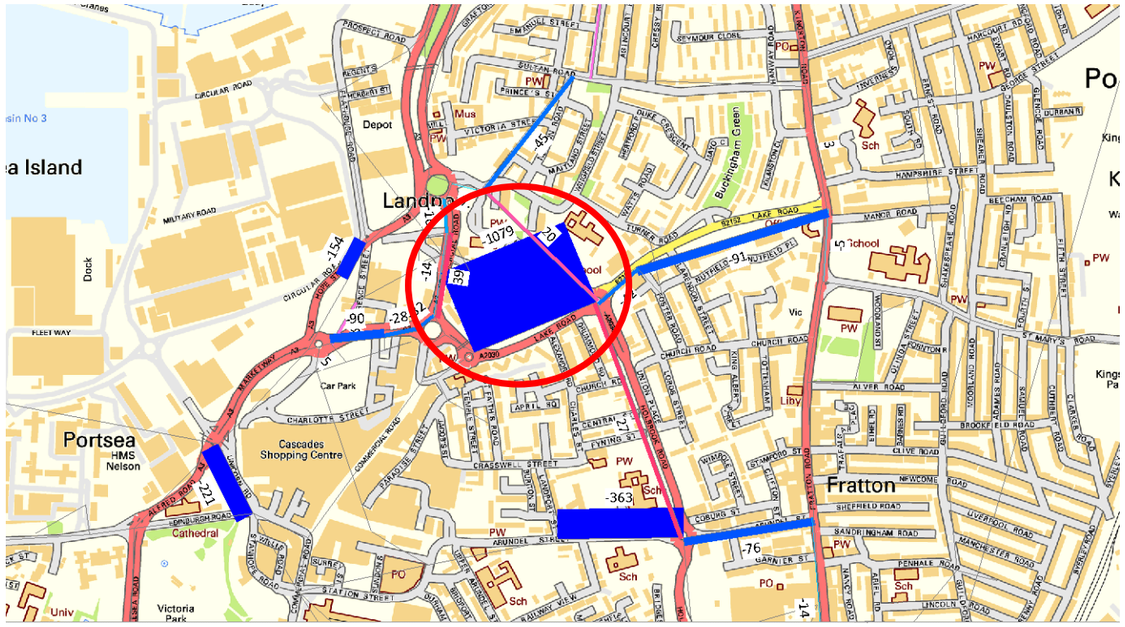
Number	Section	Page	Topic	WSP Comment	SYSTRA Response
1	2.3	4	Baseline land use	"It would be helpful if clarification could be provided as to the reasons behind these differences, particularly given that on a zone by zone basis, almost a quarter of the 69 zones with non-zero growth have significant differences in their land use assumptions, with zone 252 showing the biggest difference"	The land use totals were specified to us by Eastleigh Brough Council on 10/01/2018 and account for the evolution of the planning data since the earlier scenario.
2	2.3	5	Do Something land use	"This figure exceeds the Eastleigh Local Plan target of 14,580 dwellings between 2016 and 2036 by 2,850 dwellings, not by 2,392 dwellings as stated in Paragraph 11.2.3 of Transport Assessment Part 1. Therefore, clarification is requested to ascertain which figure is correct"	The stated figure of 2,392 dwellings is correct as the Baseline which consists of 8,897 dwellings includes 458 completions. This point was clarified and TA Part 1 reissued. As above, all land use totals were specified to SYSTRA by EBC and provided to SYSTRA on 10/10/2018.
3	2.3	7	Public Transport	"It should be noted that the proposed new bus service included in DS2 and DS3 will have to be a single deck service due to the low railway bridge on the B3335. This service will consist of 2 buses an hour in each direction and single deck buses in the current Bluestar fleet range from 35 to 43 seats per bus. Therefore, the current maximum seated capacity this new service could carry would be 86, if the biggest buses available were used. Fig ures 54 and 56 show that the modelled AM peak hour usage of these services is in excess of 90 passengers in both the DS2 and DS3 scenarios, suggesting either standing passengers are assumed or that double deck buses may have been assumed incorrectly, potentially impacting modal split assumptions."	The Public Transport Model within the SRTM does not take into account crowding levels, neither on buses nor on rail services. Therefore, passenger numbers exceeding the capacity of a particular service are merely an indicator of high demand and the potential to provide additional services to meet this demand.
4	2.3	7	Highway Network	"In addition, can it be confirmed what restrictions have been applied, if any, on HGV's at this key low railway bridge location as, even taking into consideration the proposed measures to increase clearance levels at the bridge, many HGV's will be unable to pass under the bridge and so will likely divert to using Junction 11 to access the M3."	The SRTM has a single user class for HGV's that accounts for both OGV1 and OGV2. Despite the low railway bridge, the B3335 between Allbrook and Highbridge does not currently have a HGV restriction in the SRTM. Having a height limit of 3.7 metres, the bridge would not be banned for all HGV types currently modelled in the SRTM. Based on the AADT data provided by SYSTRA, the average HGV share on this link is 2.36% eastbound and 2.21% westbound. The average absolute HGVs (24hr AADT) throughout all Do Something scenarios is 174 HGVs eastbound and 168 westbound. Therefore, looking at the relatively small numbers of HGVs, it is unlikely that a HGV ban on this link would have resulted in significantly different model results.
5	2.4	8	M3 J12 Modelling Work	"Detailed scheme designs of the proposed 'off-site' infrastructure schemes were provided in the Appendices for the major non-motorway junctions. However, for the plans at M3 Junction 12 only maps showing revised saturation flows were provided for the schemes proposed as part of DS2 and DS3. Therefore, it is requested that more detailed plans are provided at M3 Junction 12 for these two scenarios."	At the time of commission, Atkins was working on building a micro-sim model for M3 J12. As such, detailed plans were not available in time for the SRTM modelling and resulting TA.
6	2.5	8	Land Use	"The population and employment changes, presented in Tables 9 and 10 of Transport Assessment Part 1, appear broadly consistent with the model inputs. The only exception is DS6 which had the same additional Eastleigh Borough land use assumptions as DS7 in all categories, except retail where it had 3,083 sqm less space assumed, and yet it generated 452 more jobs than DS7. This apparent discrepancy should be clarified."	This observation is correct. However, the Local Economic Impact Model takes employment density into account which varies significantly by model zones. Even though the total number of jobs is indeed lower in the DS7 compared to the DS6 scenario, in this particular example retail floorspace has partially been allocated to different zones. Zones 211 and 923 contain retail floorspace in the DS7 but not in the DS6 scenario and zone 922 has retail floorspace allocated in the DS6 but not in the DS7 scenario. Where the same retail floorspace was allocated to both scenarios, it has created the same number of jobs.
7	2.5	8	RTM / Model Noise	"However, given that traffic to and from the Isle of Wight can choose to access the island via Portsmouth, Southampton or Lymington, if there were additional delays on the M3 due to the changes in Eastleigh Borough, potentially traffic could reroute away from the M3 and the ports of Southampton and Lymington and instead use the A3 and the port of Portsmouth. Such a switch on the mainland would also lead to the use of a different port on the Isle of Wight which in turn would alter routeings and associated traffic levels on the Island. Therefore, can clear evidence be provided to support the claim that the additional delays in Portsmouth and on the Isle of Wight are indeed unrelated to the changes in Eastleigh Borough. In particular, can evidence be provided to show the scale of any potential rerouting to and from the Isle of Wight, given that if any such rerouting is arising it could impact other parts of the Strategic Road Network, not just the M3 and/or M27."	The model noise was due to flipping between minor roads, not strategic routes. SYSTRA can provide further detail if required. For example, comparing the DS2 with the Baseline, the eastbound approach arm to the A2030/Church St/Lake Rd/Holbrook Rd roundabout in Portsmouth is forecast to an increase of 232 PCUs/hr during the AM peak but at the same time to a decrease in delays of 1,079 seconds. This is likely due to a convergence issue on this heavily congested link. However, as this link is very remote from Eastleigh, it is unlikely that this change in delay is a result of the Eastleigh Local Plan. Screenshots showing this location are shown on page 4.

8	2.5	8	RTM	"It is recommended that the model coding in the vicinity of the Whiteley Way extension is checked in the eastbound direction given the counter-intuitive eastbound flow changes in this area."	SYSTRA have checked the coding within the Whiteley Way vicinity, and are satisfied this has been coded as per the SRTM standardised coding.
9	3.2	9	Scenarios	"It is assumed that all transport improvements and interventions included in each scenario remain the same as described in Transport Assessment Part 1. However, this does require clarification, as the description of the highway improvements and interventions appears to differ between Transport Assessment Part 1 and Part 2. Also, in Transport Assessment Part 1, no walking and cycling measures were listed whereas, in Transport Assessment Part 2, a number of strategic footpath, cycleway and bridleway improvements across the borough are proposed."	Transport improvements and interventions are identical and only grouped slightly different in TA Part 2. Section 1.4.5 of TA Part 2 slightly amended. TA Part 1 is focussed on a comparison of the development options and therefore doesn't describe walking and cycling measures.
10	3.3	10	Table 6	"It is also of note **that Table 6 contains no entries for the M27 Westbound or the M3 Northbound main carriageways**. Given that data for these sections is also not included in Appendix B of Transport Assessment Part 2, can it be confirmed that these motorway sections were actually included within any analysis undertaken within Transport Assessment Part 2 and, if so, can it be confirmed that the V/C values on these two sections are all below the 80% threshold in all time periods and scenarios?"	These links have been included in the analysis but were not shown in the table. The table has been updated for completeness and TA Part 2 will be reissued.
11	3.3	10	Table 5	"Table 5 below summarises the data that is presented in Table 6 of Transport Assessment Part 2 for Strategic Road Network links and junctions. It includes entries for M27 J7 and M27 J8 but does not specify the exact location or direction within the junction and so it is requested that this is confirmed."	Table has been updated and TA Part 2 will be reissued.
12	3.3	11	RFC Thresholds	"To assess the severity of the impacts arising from the Eastleigh Borough Local Plan proposals, the following assessment criteria were used by Systra: ▪ A junction where the V/C on any approach arm was 85% or more in the Do-Something or Do-More scenario and has increased by 5% or more compared with the Baseline scenario, is considered as experiencing a *significant* impact; ▪ A junction where the V/C on any approach arm was 95% or more in the Do-Something or Do-More scenario and has increased by 10% or more compared with the Baseline scenario, is considered as experiencing a *severe* impact.; and ▪ A junction where the average delay per vehicle in the Do-Something or Do-More scenario was two minutes or more in any period and has increased by one minute or more compared with the Baseline scenario, is considered as experiencing a *severe* impact. **Based on the above criteria, which appear arbitrary and require further justification** (…)"	Hampshire County Council agreed the thresholds outlined in section 1.4.6 with Eastleigh Borough Council. The same thresholds have been applied to other nearby districts/boroughs in similar Local Plan commissions. The thresholds were also highlighted in the brief that was circulated prior to modelling commencing.
13	3.3	11	RFC Thresholds	"Throughout the remainder of the analysis in Section 6.5 of Transport Assessment Part 2, the impacts on the arms of each junction assessed are classified as Significant or Severe, **however, it has not been stated what criteria has been used to make these classifications**. It could reasonably be assumed that the same criteria, as outlined earlier, have been used despite the criteria now being applied to individual arms at junctions and not junctions as a whole, but the classifications that have been assigned to many of the arms are inconsistent with those earlier criteria and so this needs clarifying."	The same thresholds have been used for this classification. As outlined in section 1.4.6, the thresholds have been applied to each junction where the ratio of volume to capacity (V/C) on any **approach arm** was exceeding the defined thresholds. Those approach arms are highlighted in yellow or red throughout section 6.5 to indicate which arm has caused the junction to breach the threshold.
14	3.3	12	M3 J12 Allbrook	"Paragraphs 6.5.40 to 6.5.43 of Transport Assessment Part 2 provided some analysis of this junction performance data, however, m**uch of this analysis was found to be inconsistent with the data presented** in Tables 36 and 37 and therefore requires amendment."	This observation is correct; the text refers to an incorrect arm. Text has been amended in TA Part 2 version 3.1.
15	3.3	12	M3 J12 Allbrook	"On the A335 motorway bridge approach, flows during the AM peak significantly decrease from 599pcu to just 30pcu. Paragraph 6.5.42 of Transport Assessment Part 2 explains that this decrease is due to increased delays at the adjacent M3 J12 Northbound Roundabout in the Do-Something scenario, causing traffic to divert away from the junction onto alternative routes. Given the amount of traffic predicted by the model to divert away from the northbound M3 prior to Junction 12, **further evidence is required to help understand the full impact on M3 J12 and the**	SYSTRA has undertaken a Select Link Analysis on the A335 motorway bridge approach in the Baseline scenario. A number of O-D pairs using this link have been identified. These O-D pairs have then been analysed with flows from the Do Something 2 scenario. This analysis has shown strategic rerouting away from M3 J12 onto Allington Lane and the B3354 corridor through Boorley Green and Horton Heath. For example, traffic originating in zone 271 close to Windhover Roundabout with zone 434 as a destination (Shawford/Otterbourne) takes the M3 in the Baseline and leaves the motorway at J12. However, in the DS2 scenario all traffic of this OD pair is

				wider Strategic and Local Road Network of this very large and surprising flow change, to establish if this rerouting and its associated impacts are considered realistic and acceptable."	rerouting. As can be seen from the plots on page 5, 92% of traffic are using Allington Lane and 8% Burnetts Lane/Botley Road in the Do Something 2 scenario.
16	3.3	13	M3 J12 Allbrook	"**It is recommended that the junction coding, in particular the gap acceptance values and saturation flows, are reviewed at this junction** to ensure accuracy and consistency. It is considered that errors may exist in both scenarios with the Do-Something coding potentially allowing too little capacity at the junction leading to flow reductions on the M3 and the Do-More coding potentially allowing too much capacity at this roundabout."	Highway coding throughout the SRTM is standardised and consistent based on junction type, number of approach arms and provision of localised flaring. Gap acceptance values are applied globally. Coding at this particular junction has been checked and is consistent with the standardised values for this type of junction arrangement.
17	3.3	15	Additional Motorway Impacts	"It should be noted that the data presented in Tables 87 and 88 of Transport Assessment Part 2 for the eastbound on-slip and westbound off-slip at M27 Junction 5, was not consistent with the same data presented in Appendix B, with Appendix B assumed to be correct."	Tables 87 and 88 refer to the start of the on-slip road and respectively to the end of the off-slip road whereas this example in Appendix B refers to the end of the on-slip road where traffic is joining the main carriageway. This has been clarified in section 8.1.5.
18	3.3	16	Additional Motorway Impacts	"To properly assess the impacts on the main carriageways of the M27 and M3, flow, speed and journey time data is required between M3 Junctions 11 and 14 and M27 Junctions 4 and 9 inclusive, for both time periods and all three scenarios."	This was not included in the commission from EBC, however SYSTRA can provide this data if required and can be discussed with EBC.

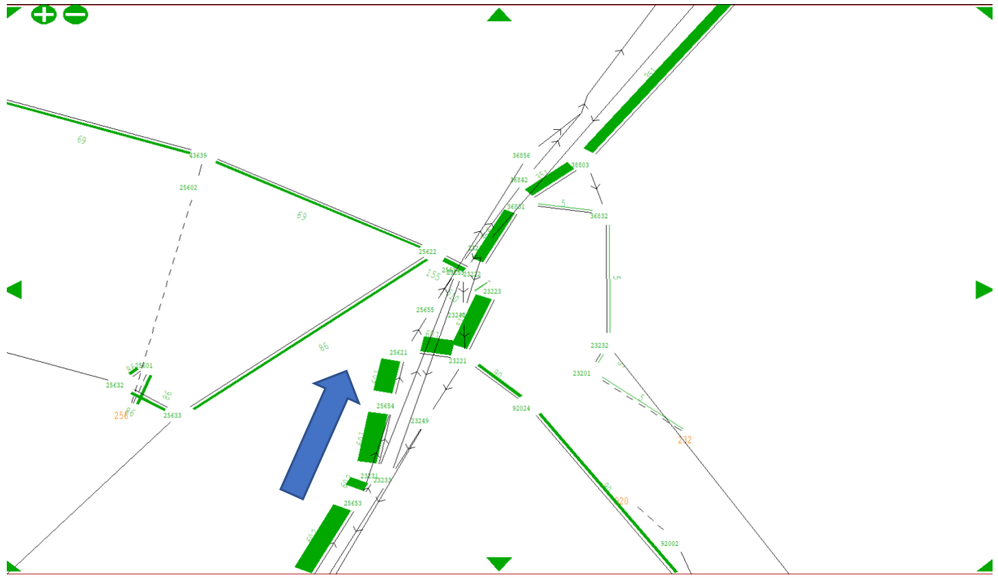
Screenshot related to no 7

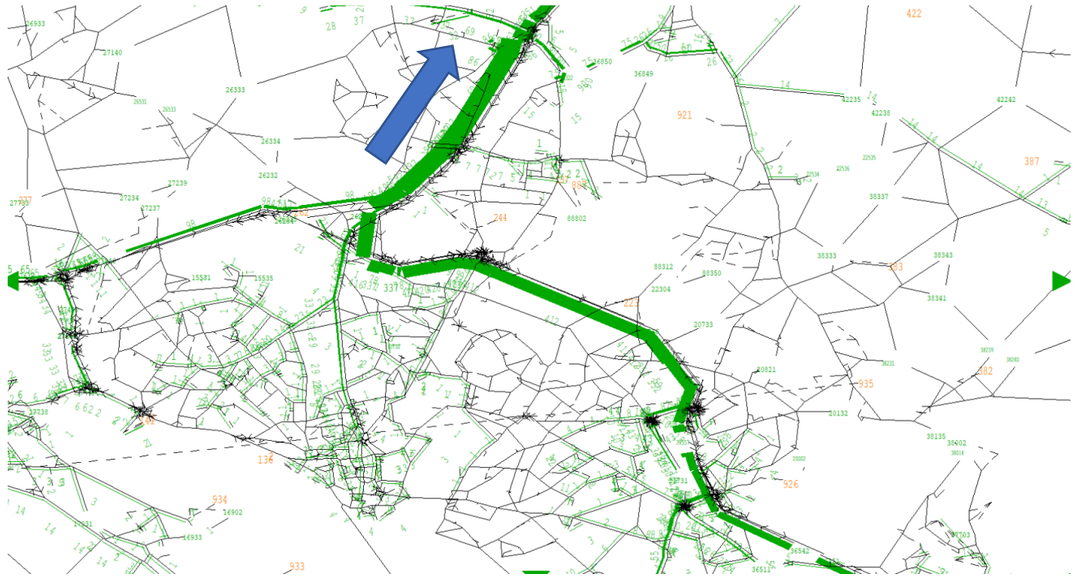




Screenshot related to no 15

Baseline flows using leaving the M3 at J12 northbound:





DS2 Flows showing rerouting for an examplary OD pair (from zone 217 to zone 341). All traffic that used M3 J12 in the Baseline is now rerouting.