



Charity Number: 1164985

### HINCKLEY RAIL FREIGHT TERMINAL

Response to Secretary of State's Interim Decision and Tritax Responses

CPRE Leicestershire: Unique Reference: 20038675 Sapcote Parish Council: Unique Reference 20039514

February 2025

### 1. Introduction

1.1 This note is our response to Tritax's response to the Interim Decision by the Secretary of State on the Hinckley National Rail Freight Interchange (HNRFI). It has been prepared jointly by CPRE Leicestershire and Sapcote Parish Council.

### 1.2 It addresses:

- The specific issue of HGVs through Sapcote,
- Wider modelling implications of Tritax's change in position on how many HGVs would be going through the village,
- Changes in targets for modal shift,
- The introduction of an additional bus service,
- Issues relating to motorway junctions.
- 1.3 We understand there will be concerns from residents of Narborough in relation to the Narborough Level Crossing but consider they are better able to address that.
- 1.4 We also share concerns that there may be equality implications for residents of the Aston Firs Travellers site, and would urge those to be fully addressed.
- 1.5 Most important of all:
  - i. We do not consider the proposals set out in Sapcote address the fundamental issues facing that village but would make matters worse and the strong conclusion of the Examining Authority still stands:

In our view the Proposed Development would lead to an unacceptable highway safety risk in the village of Sapcote, which could not be mitigated within the terms of the Application. (3.3.539)

ii. We are also concerned that the impact on the relevant motorway junctions may be significantly worse than is suggested.

It is our very strong view that the DCO should not be granted while this is still the case.

## 2. Sapcote.

- 2.0.1 The problems identified at Sapcote have not been resolved. There is a fundamental issue with the addition of south facing slip roads at M69 J2 which would open up a route through Sapcote from the M69 to a large area around the south of Leicester.
- 2.0.2 The B4669 route through Sapcote has several features which would make an increase in traffic very undesirable but a far greater concern is that the route would also be available to Heavy Goods Vehicles, including very large articulated lorries.
- 2.0.3 The route is clearly unsuitable for such large vehicles and the latest mitigation proposals would makes matters far worse.

### 2.0.4 We are concerned that:

- i. the problem is being downplayed in the latest material which adopts tweaks to the modelling not presented at the hearings and is inconsistent with modelling elsewhere.
- ii. although Tritax have undertaken some further general research in relation to behaviour around the key pinch point outside the local Co-Op store, they have critically not provided up to date traffic data, or undertaken more detailed local modelling at that location.
- iii. the additional mitigation, now proposed by Tritax, has been suggested without any local consultation and without prior testing of its effectiveness.
- iv. the additional mitigation only addresses issues in the centre of the village, not congestion and risk elsewhere.
- v. and most importantly the additional mitigation is completely unsuitable and, rather than resolving the issues, would add serious safety concerns to those identified at the hearings, particularly by our representatives. We set out our concerns in detail below.

# 2.1 HGV impacts

2.1.1 The reason for new and displaced HGVs to route through the village has not changed since the Examination. As stated above the provision of the two additional motorway slip roads at Jn2 of the M69 opens up a new route through Sapcote from the M69 to a large area south of Leicester.



2036 'With Development' - B4669 East of Stanton Lane (AM)

Map contains Ordnance Survey data © Crown copyright and database right 2022

From Fig 3.12 Forecast Trip Distribution for the B4669, East of the Stanton Lane Junction ES Appendix 8.1 Nov 2022, Document reference: 6.2.8.1

- 2.1.3 Congestion at that junction is only likely to get worse as a result of current and envisaged proposals for development. Despite that, Tritax are now seeking to downplay the impact with changes to the modelling outputs in their technical note on Sapcote<sup>1</sup>.
  - a. Peak and Non-peak Traffic
- 2.1.4 Tritax are now explicitly stating that they are not seeking to address peak traffic through the village only a rise in daily traffic (Para 4.1).
- 2.1.5 This is not a point we recall them making at the Examination and it is plainly material in the decision making process whether the route is safe and suitable for large HGVs during the busiest peak periods. That should have been addressed.

<sup>1</sup> TR050007-002463-Hinckley NRFI Appendix 2 - Sapcote Technical Note

- 2.1.6 Notably, those busy periods are likely to relate to times when traffic diverts to avoid congestion around the M1/M69 junction. The Examining Authority particularly noted on a late afternoon site visit that traffic was queueing back from the M1 to Junction 2 and National Highways subsequently confirmed that it was not aware of any special reason on that occasion.
- 2.1.7 There will, of course, be times of the day when traffic, as well as pedestrian and other usage in the village, will be lower. That does not mean the risk is removed at those times, nor does it absolve Tritax from addressing the implications of their scheme at the busiest times.
- 2.1.8 Furthermore, the most impacted area includes a key junction [Stanton Road/Church St/B4669]. which was not modelled or analysed for the Inquiry and where peak time impacts are likely to be serious.
- 2.1.9 Submitted diagrams showing PRTM flows around Sapcote (See map below) indicate clearly that the model only included junctions with the B4669 at Grace Road and Sharnford Road immediately to the east of the village centre (J40 staggered) and Stanton Lane around 1km to the west (J39).



- b. HGVs Increase downplayed through the village.
- 2.1.10 Tritax now also seek to downplay the potential increase in HGVs through the village.
- 2.1.11 In Table 5.1 of the note, they compare the figures quoted by the Examining Authority (based on Table 8.19 of Tritax's Environmental Statement) with figures they have created by removing, as they put it, the development HGVs from the overall number.

- 2.1.12 This, we assume, is based on assumptions about use of the restricted routes based on the HNRFI HGV Route Management Strategy, a Strategy which was criticised at the Examination, (for example, because HNRFI users may choose to pay fines to meet delivery deadlines).
- 2.1.13 They further suggest in Para 4.4 of the Note that mitigation should only be considered in relation to the opening year (2026) as opposed to the design year of 2036 when, even if they are correct, HGV numbers would have increased further through Sapcote.
- 2.1.14 This is problematic both in terms of the methodology and the failure to firmly address the longer term issues for the village.
- 2.1.15 The first issue, in this regard, is that we cannot recall any of these modelling tweaks being presented at the hearings.
- 2.1.16 The Examining Authority could only consider evidence before it, The level of HGVs through Sapcote was raised by us on several occasions. In none of the responses from Tritax was it suggested that the modelled level of HGVs in Sapcote was incorrect. This new evidence could not, therefore, be tested.
- 2.1.17 The statement in Para 5.5 of the note that: 'the ExA's analysis uses an inappropriate set of figures for the purposes of comparison.' is wholly novel, since what they now call 'appropriate' figures were not presented at the hearings.
- 2.1.18 The second issue is that the original figures (in the Environmental Statement) were based on the strategic PRTM model which underpinned the whole of ES Table 8.19. This set out modelled traffic on the individual routes included in the model, as well as underpinning other modelling evidence to the Examination.
- 2.1.19 The PRTM model was based on travel between different zones. Travel taking place entirely within a zone was not modelled. Even if this were considered appropriate for modelling local conditions in Sapcote, one cannot assume that if afterwards one excludes all HNRFI HGVs from the route through Sapcote other traffic, including other HGVs, will not reroute through Sapcote, particularly given the opportunity that is created by the proposed M69 slip-roads.
- 2.1.20 And, if traffic does reroute, such a change in modelling would have implications for the reliability of the overall model. For example, the VISSIM modelling of M69 junctions 1 and 2 was based on the same strategic PRTM figures something that is still the case, as set out in the recent Modelling Notes.<sup>2</sup> The use of incompatible PRTM flows and junction modelling is discussed in Section 4.

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<sup>&</sup>lt;sup>2</sup> TR050007-002494-Hinckley NRFI Appendix 12 - M69 J2 Modelling Note

- 2.1.21 The Sapcote figures in Table 5.1 of the note imply some 70 HNRFI HGVs per day in the PRTM modelling would not in fact route through Sapcote. Yet Sapcote is not the only route which is restricted to HNRFI traffic under the Route Management Strategy. There is a substantial network of restricted roads within the modelled area. If all those HGVs were redesignated to the permitted routes, it would mean the modelling of those allowed routes underestimated the impacts.
- 2.1.22 This would add to the fundamental concerns discussed in Section 4 about whether the modelling presented to the Examining Authority, or presented now, can be relied on at this or any other locations.
  - c. Differences between Traffic Links
- 2.1.23 One other notable element of the new Sapcote note is the weight put on the difference between the traffic levels on the two Links (41 and 43) on the B4669 in the middle of Sapcote.

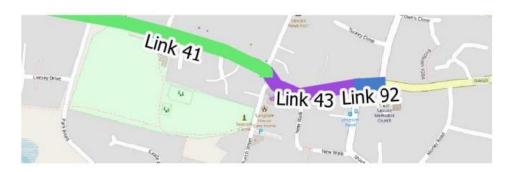


Figure 2.2 - PRTM Link IDs Through Sapcote

- 2.1.24 Link 41 lies to the west of the Stanton Road/Church Street junction and Link 43 is a very short link between Stanton Road and Sharnford Road.
- 2.1.25 Table 2.1 shows the flows for Scenarios i and ii. Scenario ii is described as 'With Development'. However, according to Para 2.2 both of these scenarios do not include the development traffic. Given this discrepancy the figures have little credibility or value.

Table 2.1 - HGV AADT in Sapcote Village							
	HGV Annual Average Daily Traffic (AADT)						
Link ID	2026 As Existing (scenario i)	2026 With Development (scenario ii)	2036 As Existing (scenario i)	2036 With Development (scenario ii)			
41 Eastbound	35	75	37	211			
41 Westbound	160	170	160	188			
43 Eastbound	45	78	48	214			
43 Westbound	92	93	94	112			

- 2.1.26 Para 2.2 of the note states that the difference between Scenario i and Scenario ii is that the latter includes only the 'highway infrastructure improvements associated with the development' while Scenario i does not.
- 2.1.27 There is no good reason for the difference since it is unlikely many HGVs would use either Stanton Road or Church Lane as they are narrow and serve few properties. In fact, there are no noticeable destinations in Sapcote, apart from the Co-Op, where HGVs might want to go on a daily basis.
- 2.1.28 However, in Para 2.13 the authors state that the difference in flow either side of the Stanton Road/Church Street junction is evidence that traffic originates in Sapcote:

The differences in the HGV flows between Link 41 and 43 reinforce the conclusion of the Transport Assessment that a large proportion of the traffic within Sapcote is not through-routeing but is using this route to access destinations within or around the village. This is particularly evident westbound as through routeing traffic would result in similar HGV numbers predicted on links 41 and 43 as vehicles travel through the village.

2.1.29 This is also fundamentally different to the answer to the same point given during the hearings. When we raised concerns about the appropriateness of the strategic modelling outputs being used on local links, including the two identified above, the differences were explained as follows:

Similarly to the above, the nature of the link changes as it leaves the residential area and therefore there is a road type change on leaving the village [Sapcote] hence the drop in traffic (opposite to the above on Stanton Lane as it enters the village, it increases) The environmental assessment is not affected by these reductions as no sensitive receptors are on these links leaving the villages.<sup>3</sup>

- 2.1.30 There is, of course, no reason why a change of road type in a traffic model should affect the flow on a road. And, as we said at the Hearings in relation both to this location and to other locations (in particular on Stanton Lane, west of Sapcote), discrepancies between such links are hard to understand.
- 2.1.31 In the case of Stanton Lane we were told at the hearings that it didn't matter because the higher 'worst case scenario' had been assumed for the critical junction on the B4669. While not convinced of the logic we agreed that it was

<sup>&</sup>lt;sup>3</sup> Response Number 55, Applicant's response to deadline 3 submissions [Part 7 - Statutory Bodies] Document reference: 18.13

<sup>&</sup>lt;sup>4</sup> Response Number 51, Applicant's response to deadline 3 submissions [Part 7 - Statutory Bodies] Document reference: 18.13

incumbent that the worst case scenario was addressed where the safety of the public is concerned.

- 2.1.32 Now, in Sapcote similar modelling differences are no longer represented as a reflection of road classifications in the model but as indicative of actual HGV destinations and are being posited in a way which avoids considering worst case scenarios.
- 2.1.33 The fact is that the use of a strategic model to assess local links is very likely to lead to such anomalies.
- 2.1.34 Strikingly, Tritax have now undertaken some pedestrian counts to try to support their case, but have not presented counts for traffic or HGVs going through the village to support their assertions.
- 2.1.35 In fact, there are not even any count points in Sapcote to underpin the PRTM model outputs or indeed anywhere on the B4669 West of the M69 Junction 2 out of Hinckley, making it hard to know what the worst case scenario actually is.
- 2.1.36 Furthermore, if HGV traffic on Link 43 is accessing other parts of Sapcote they will probably be involved in turning movements at the unmodelled Church Street/Stanton Road junction which is precisely the point at which the new scheme starts to be introduced and where congestion is likely to occur.
- 2.1.37 Lastly, it is to be noted, that any HGVs which are accessing the largely residential streets of Sapcote are likely to be predominantly smaller OGV1 classification. It is likely that it will be predominantly the larger and more dangerous OGV2 vehicles, including articulated lorries, which increase along the B4669 through Sapcote to access the new M6 junction slips.
  - d. No new detailed modelling
- 2.1.38 Given the seriousness of the Examining Authorities Concern, Tritax could, as we note above have sought to refine its understanding of existing traffic movements by undertaking traffic counts in the village, but they have not done so.
- 2.1.39 In particular, that could have allowed consideration of whether the simplifying assumptions used in the strategic model create a misleading representation of the pattern of movement.
- 2.1.40 They have provided some limited information on a survey of activity in the village but this only amounts to term time weekly averages, which do not reveal daily variations, peak time issues, or what happens out of term time.
- 2.1.41 It is not explained in the note when the week's survey was taken but given it must be since the Secretary of State's interim decision (September 2024), it is

likely to have been in the colder months when pedestrian and cycling activity in will almost certainly be lower.

- 2.1.42 What is accepted by all parties, including Tritax, is that there will be a significant increase in HGVs passing through Sapcote, Link 41 goes up from 197 to 399 and Link 43 from 142 to 326 AADT according to Table 2.1. Being AADT figures they will also mask weekday and peak-time variations.
- 2.1.43 Those rises will have serious safety implications for the village which need to be prevented or mitigated if the HNRFI site is to be consented.
- 2.1.44 However, the number of HGVs cannot be debated properly because, there is limited evidence as to the extent of the problem, uncertainties inherent in using a strategic model and conflicting descriptions of the scenarios presented, as well as no evidence regarding how many of those additional HGVs would be the more dangerous articulated OGV2 lorries.
- 2.1.45 Given this regrettable situation a worst case scenario must be assumed. Even if the number of extra HGVs were lower, as now contended, we would consider the route is still not be safe and suitable, (as required in NPPF Para 115). That impact of that deficiency would be felt primarily by those who use or cross the B4669 in the centre of Sapcote.
- 2.1.46 Finally, and obviously, if the proposed mitigation is unsuitable for the existing traffic or, as we say, is likely to make matters worse, it cannot be seen as mitigation for the new traffic.

# 2.2 Lack of Local Consultation

- 2.2.1 The new proposal by Tritax in the Sapcote note<sup>5</sup> is for what they call 'an enhanced mitigation scheme'. Their proposal would clearly have serious, indeed fundamental, implications for the functioning of the roads at the centre of the village and for village life more widely, even before the mitigation can be considered to address an increase of HGVs caused by the proposals.
- 2.2.2 It is important, therefore, to stress that these proposals have not been discussed with villagers, nor has any kind of local or public consultation been undertaken.
- 2.2.3 Those who devised the mitigation have quite simply not had the benefit of the practical knowledge of the local road system from those who use it every day., whether car drivers, cyclists or pedestrians.

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<sup>&</sup>lt;sup>5</sup> TR050007-002463-Hinckley NRFI Appendix 2 - Sapcote Technical Note

- 2.2.4 It seems to us fundamentally unjust and wrong to impose on the people of Sapcote a scheme of this nature without firstly asking if they consider it is suitable for addressing their traffic issues.
- 2.2.5 Furthermore, the proposals, if carried forwards, would not be tested prior to permission being granted for the HNRFI, so their effectiveness, or otherwise, would only be gauged in retrospect.
- 2.2.6 They would also not reduce, but only manage, the additional HGVs, especially larger articulated and OGV2 lorries, using that section of road, the fundamental issue which caused the Examining Authority such concern.
- 2.2.7 In fact, we do not consider they would make the route safer and no one has asked us.

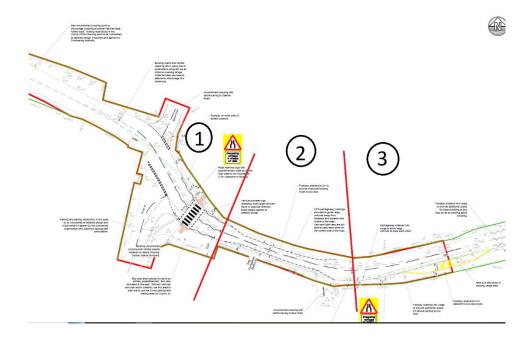
# 2.3 Impacts on the village

- 2.3.1 We set out our concerns about the impact on Sapcote of the HNRFI proposals in the Deadline 1 submission to the Relevant Representations and made further representations about the original mitigation scheme in our October 2023 response to Written Representations.<sup>6</sup>
- 2.3.2 While our concerns included the critical point at the centre of the village addressed in this mitigation plan, we also raised concerns about wider impacts on the village since the B4669 effectively bisects Sapcote. This includes both traffic impacts and impacts on vulnerable users accessing a number of facilities throughout the village.
- 2.3.3 These concerns are exacerbated by issues related to speed and highway parking which would be made worse if additional traffic, and particularly HGVs, used the route.
- 2.3.4 The so-called enhanced mitigation does not address those wider impacts but concentrates wholly on the narrow section of the B4669 close to the Co-Op Store.

### 2.4 Mitigation Proposal

2.4.1 The main aspect of the current enhanced mitigation proposals is the narrowing of the carriageway at the centre of Sapcote. The proposal is reproduced below but we have split it into three section which helps us to understand how it might work in practice and those are referenced throughout our comments.

<sup>&</sup>lt;sup>6</sup> Deadline 1 Submission - Comments on Relevant Representations (RRs) (PDF, 915KB) TR050007-001477-Sapcote Parish Council - Comments on WR



Tritax Enhanced Mitigation Scheme

- 2.4.2 In short, Cars and HGVs would approach the narrowed section of the road in Sections 1 and 3. They would then be advised that the road narrowed (Section 2), and a further vehicle activated sign (the details unclear) would direct them that a large vehicle was approaching. We currently assume, since Tritax say this is only an issues when two HGVs meet, that it would only be activated in that case.
- 2.4.3 There would be no signalisation, so the system would rely entirely on the reactions of the drivers to those warnings, and once they had committed to enter the narrow section they would need to negotiate their way past whatever they met coming the other way.
- 2.4.3 At the same time the pavement would be widened in Section 2. This would mean pedestrians would be walking further out towards the narrow section of carriageway. No provision is identified for cyclists and the safety of cyclists is not addressed in the technical note, presumably because the authors assume there are not very many.
- 2.4.4 The bus stop would be moved to Section 3, although only on one side of the road, the other side is unclear. and an extended paved area would be created round the Co-Op Store with a pedestrian crossing replacing the current refuge.
- 2.4.5 The following issues lead us to consider this both unsafe and unsuitable and we deal with each in turn.
  - Width of the road
  - Visibility of route
  - Reaction to signs, visibility of signs
  - Speeding

- Impact on junction/Parking on Church Street
- Queuing
- Pedestrians
- Cyclists
- Bus Stop
  - a. Width of the Road
- 2.4.6 The road is currently 5.4m wide as it passes through Section 2 which makes it already difficult for HGVs to pass each other. Tritax's Swept Path Analysis showed that HGVs would have limited space to pass throughout the area of their earlier mitigation.
- 2.4.7 The enhanced mitigation relies on reducing the road to 4.8 m through Section 2. This is clearly even narrower and makes it impossible for two HGVs to pass.
- 2.4.8 It is suggested by Tritax (based on Figure 7.1 of Manual for Streets, MfS) that this remains a suitable width for other vehicles to pass.

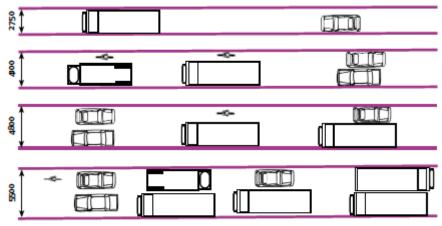


Figure 7.1 Illustrates what various carriageway widths can accommodate. They are not necessarily recommendations.

2.4.9 However, Tritax do not include the significant caveats to that diagram in MfS. Para 7.2.2 of MfS says:

Carriageway widths should be appropriate for the particular context and uses of the street. Key factors to take into account include:

- the volume of vehicular traffic and pedestrian activity;
- the traffic composition;
- the demarcation, if any, between carriageway and footway (e.g., kerb, street furniture or trees and planting);

- whether parking is to take place in the carriageway and, if so, its distribution, arrangement, the frequency of occupation, and the likely level of parking enforcement (if any);
- the design speed (recommended to be 20 mph or less in residential areas);
- the curvature of the street (bends require greater width to accommodate the swept path of larger vehicles); and
- any intention to include one-way streets, or short stretches of single lane working in two-way streets.
- 2.4.10 And in the case of bends the issue of forwards vision is particularly important.
- 2.4.11 In terms of width, we know an HGV can be 2.55 m wide and some SUVs over 2m wide. A Ford Transit van is 2.4 m wide. There is also the issue of wing mirrors. Fig 6.18 of Manual for Streets (also not quoted by Tritax) adds a further 0.25 for wing mirrors on either side, which creates a minimums width of at least 4.8m for two LGVs to pass if they touch mirrors together.
- 2.4.12 The 4.8 m width would simply not allow any vehicle to safely pass an HGV on that section of road, even at slow speed, without using the pavement.

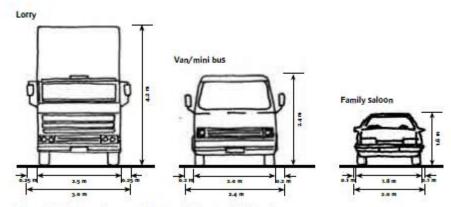


Figure 6.18 Private and commercial motor-vehicles - typical dimensions.

- 2.4.13 MfS also says these tolerances are appropriate for a speed limit of 20 mph. That is less than the 30 mph speed limit on the B4669. MfS also specifically excludes 'short stretches of single lane working in two-way streets', which is precisely what is envisaged by assuming HGVs will use the centre of the carriageway, to the exclusion of other vehicles.
- 2.4.14 In practice it is clear to us, that once vehicles enter this section of road, and are committed they will in many cases not be able to pass and so will mount the pavement.
- 2.4.15 If cyclists are in Section 2 there will also be little space for adequate separation from on-coming vehicles, particularly HGVs.

2.4.16 Not only that but there would be significant confusion because HGVs are expected to travel in the centre of the road while other vehicles should pass on either side of the carriageway. It becomes neither a one-way or two-way street.

# b. Visibility of route

2.4.17 Tritax have provided some visibility sight-lines in relation to the pedestrian crossing and signage. However, critically to the operation of the scheme is the forward visibility of drivers approaching Section 2 from either end.



- 2.4.18 This photograph above shows the drivers view as they approach from the West. They have no visibility of cars or HGVs approaching from the opposite direction so are completely blind.
- 2.4.19 The following three photographs above follow a car from the East. They also have no visibility of cars in Section 1. Indeed, this is not only while they are in Section 3 but also as they progress through Section 2. Indeed, this lack of visibility in the current layout is exacerbated by the narrower proposed carriageway.







- 2.4.20 In other words what is clearly currently an unsatisfactory situation in terms of visibility is made worse by the proposals where lack of visibility becomes more critical.
  - c. Reaction to signs, visibility of signs
- 2.4.21 Given that limited visibility the enhanced mitigation relies heavily on the use of signs. There is firstly a road narrows sign and then a vehicle activated sign. It is unclear when that would be activated.
- 2.4.22 Three examples are given of the use of such signs in the Sapcote Technical Note. None relate to a deliberate narrowing of a road.
- 2.4.23 One relates to a rural bridge on the A610 at Ambergate which has little relevance to this scheme.
- 2.4.24 The second is on the A6006 at Wymeswood where an overhanging building limits the carriageway. Notably it is not at the centre of the village or at a location with village facilities. There is also a 20 mph speed limit.
- 2.4.25 The last is on the A606 at Nether Broughton where a building narrows the road, as it does in other villages nearby. Nether Broughton is a small village and the site is away from the village centre and in a place where few people would walk along, loiter or cross the road.
- 2.4.26 In all cases there is a long clear approach to the signage.

- 2.4.27 In other words, none of the examples given are comparable with the location in Sapcote where there is a local store and other nearby facilities, a complex junction, considerable pedestrian movement, as well as on street parking and where the visibility of the signs may be limited.
- 2.4.28 The Road Safety Auditor did pick up on both the visibility and obstruction of the Eastern sign and asked for it to be moved.
- 2.4.29 However, there is also in our view visibility concerns with the signage from the West. Sightlines are given which suggest the signs would be visible. However, they are directly in front of the bus layby. If buses or other users of the layby (which we discuss later) do not pull fully in, then the signs may well be obscured.
- 2.4.30 The Auditors are also concerned that:
- 'The lack of an obvious reason for the warning signs and markings may result in failures for some drivers to slow or give way to large vehicles, resulting in offside to offside collisions.'
- 2.4.31 In fact, given the likelihood of a build-up of traffic negotiating this narrow stretch, especially at peak times, we think the likelihood of some traffic continuing despite the signs is high.
- 2.4.32 Once traffic is within Section 2, as said above, there is little it can do but negotiate the opposing traffic, especially eastbound where drivers cannot see behind to reverse and where there may be congestion around the Church Street junction.
- 2.4.33 For those who obey the signs stopping will inevitably increase delays on a road made more congested as a result of the HNRFI changes. Traffic is likely to back up across the pedestrian crossing immediately behind the sign and over the Church Street/Stanton Road junction. Even as vehicles approach the signs they will be unable to see if the road is now clear.

### d. Speeding

- 2.4.34 The Sapcote Technical Report refers to the 85<sup>th</sup> percentile speed through the village being lower than 30 mph. It is not made clear exactly where this was measured and so may not represent the location of the mitigation.
- 2.4.35 Villagers experience speeding and there is little question that vehicle speeding would increase the danger as drivers would have less time to react.
  - e. Impact of junction and Parking
- 2.4.36 The scheme would also impact on the Church Street/Stanton Road junction and be impacted by it.

2.4.37 Because of the location of the Co-Op there is considerable activity around the junction which has only increased with the installation of a parcel collection point on the corner of the Co-Op (see photo below).



2.4.38 The Co-Op has five parking spaces, one of which is disabled. This means there is on-street parking commonly on both sides of Church Street (see photo below), and as noted by Tritax, some 150 per day illegally park in the bus parking area. This problem is further exacerbated by the limited parking on Church Street, where many properties do not have off-street parking



- 2.4.39 There seems to be an implicit assumption that this behaviour will stop once the scheme is in place but in reality the problem would most likely simply move to the edge of the new paved area, which would now extend further into Church Street narrowing the carriageway at that junction.
- 2.4.40 Parking at that location and on the B4669 pavement beside the pedestrian crossing would lead to congestion and both directly and indirectly effect the traffic going through the narrow section of road.

- 2.4.41 Parking would also cause problems at the other end of the scheme (Section 3).
- 2.4.42 It is likely that there would be illegal parking in the bus layby when it is not used by buses.
- 2.4.43 As importantly, there is commonly on-street parking on the opposite side of the road, particularly at Lord Bassets Close where delivery vans pull up on the pavement rather than enter the close as shown in the photograph below.



2.4.44 Lastly, parking at the Sapcote Club on the B4669 travelling East (noted on Page 22 of the Technical Report) can also increase congestion. Residences and customers of the hairdressing salon on the corner of Stanton Road have no off street parking and so may also park on the carriageway or paths blocking views.

### f. Queuing

- 2.4.45 This inevitably leads to the question of queuing and congestion as cars traverse Section 2 of the scheme or try to navigate the Church Street junction.
- 2.4.46 The Sapcote Technical Report claims:

Traffic modelling shows that the ability for lighter vehicles to pass each other means that no significant queueing is seen in the village as a result of these proposals and that when a queue does form due to an HGV waiting for a vehicle in the opposite direction, it dissipates very quickly.

- 2.4.47 That traffic modelling is not presented in the note, so it remains unproven but is likely to assume:
  - i. that the modified PRTM traffic modelling is fit for purpose in terms of traffic in Sapcote (as we discussed earlier),
  - ii. that light vehicles actually being able to pass easily and do not conflict with HGVs,
  - iii. assumptions about the reaction to the signage, and
  - iv. no impact from additional congestion caused by parked vehicles or vehicles in the bus layby either overshooting or too far out.
- 2.4.48 We are simply not convinced that the technical scenario will occur in reality, where the increase in traffic will inevitably cause added congestion which will be exacerbated as drivers negotiate this new and complex arrangement.
- 2.4.49 Fundamentally the approach would be untested.
  - g. Pedestrians
- 2.4.50 The safety of vulnerable users, pedestrians, cyclists and equestrians is always of particular importance in such schemes. There are a considerable number at the centre of the village. The Sapcote Technical Note suggests 600-700 a day and 125-145 crossing the B4669 either to get to the Co-Op or to get between Stanton Road and Church Street. These are school term weekly averages and so may mask higher numbers at weekends and in school holidays, and there will also be particular times of heavy usage, such as children going to and from school.
- 2.4.51 The Note identifies children waiting for buses but not where they come from. Clearly this is important because moving the bus stop away from the centre of the village could mean more children having to negotiate Section 2 of the proposals than currently do.
- 2.4.52 The scheme does have the effect of widening the pavement in Section 2 and, on the face of it, this is an improvement, but only if the assumption that traffic can easily pass proves to be correct. If traffic regularly mounts the pavement it would lead to on-going conflict with pedestrians.
- 2.4.53 We would also be particularly concerned that increased congestion on and around the new pedestrian crossing and the informal Church Street/Stanton Road

crossing may force pedestrians to cross in unsafe ways. This would not only impact on adults but on a key crossing point for primary school children walking to the school in Bassetts Lane. Notably the refuge is removed for the pedestrian crossing, so there is no longer a safe place in the middle of the road at that location.

2.4.54 The refuge is not removed at the informal crossing on the other side of the junction which is already identified as unsatisfactory, albeit necessary. Tritax's own Swept Path Analysis suggests that is difficult for HGVs to negotiate so risks there would increase as traffic mounted.

# h. Cyclists

2.4.55 There is little consideration of cyclists, which we are told by Tritax average 20 per day, in the Technical Note. This again may mask higher numbers at the weekend and organised groups. The Strava Heatmap provided in the Sustainable 2.4.56 Transport Strategy (and quoted by Tritax elsewhere) has the route marked down as popular.

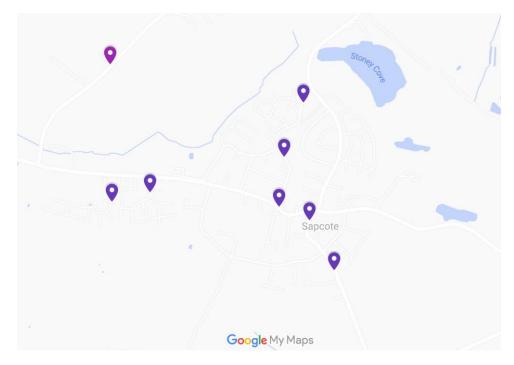


From HNRFI Sustainable Transport Strategy (Appendix 8.1 Hinckley HNRFI)

- 2.4.57 There are also likely to be additional cyclists during the summer months and in the holidays.
- 2.4.58 Indeed, increasing cycling is a key aim of national and local transport policy aimed at reducing car dependency and travel, reduce congestion and contribute to more healthy lifestyles.
- 2.4.59 Notwithstanding the exact number of cyclists, as vulnerable users their safety should be considered a priority. When entering the narrow section, they would be forced further into the middle of the road, with less space between them and other users and less opportunity to avoid on-going traffic if it swings wide except by mounting the curb.

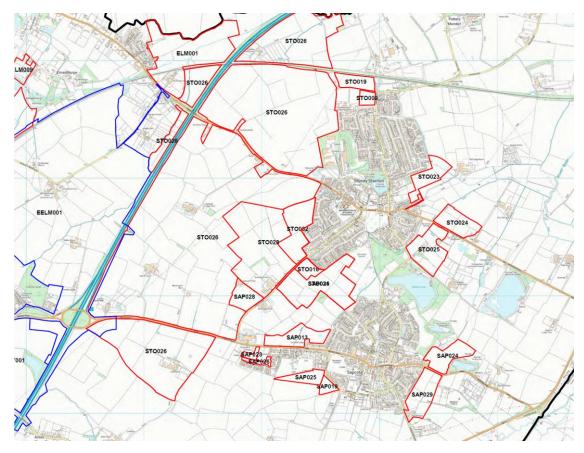
### i. Bus Stop

- 2.4.60 Para 3.12 of the Sapcote Note refers to 2 school buses using the layby. We are not sure how this figure was achieved since we are aware of 7 buses picking up and dropping off, as set out below.
  - 1 Bus to Thomas Estley in Broughton Astley to the east of the village
  - 1 Bus to Lutterworth Grammar to the east (there is also Lutterworth High but we think they share a bus)
  - 1 Bus to Redmoor in Hinckley to the west
  - 1 Bus to Hastings in Burbage to the west
  - 1 Bus to St Martins in Stoke Golding (north of Hinckley) to the west
  - 2 Buses (school bus and beaver bus) to Hinckley School to the west
- 2.4.61 Tritax also do not refer to the FoxConnect dial-up bus service which uses the Co-Op Store layby as a pick-up point, although, since this is intermittent, there may simply have been no picks up while they monitored the site.



Sapcote Fox Connect Stops Service details

2.4.62 Tritax point out correctly that Sapcote currently has no regular scheduled bus services. Like many villages those services have sadly been cut. However, it remains an aspiration to have a future service to the village. This may become more likely if nearby housing gets approved.



Sites submitted for assessment for inclusion in the Draft Blaby Local Plan 2021

- 2.4.63 In particular work on an updated Blaby Local Plan in 2021 assessed 18 sites around Sapcote and Stoney Stanton with a claimed potential for over 6400 houses. 13 of the 18 sites were considered 'reasonable for further consideration'.
- 2.4.64 That included, notably, a significant aspiration for 5000 houses north of the B4669 lying between the M69 and Stanton Lane.
- 2.4.65 One would hope that such an increase in housing would facilitate additional bus services through Sapcote.
- 2.4.66 While the new evidence shows children waiting for buses it is unclear where they come from, so the impact of moving the bus stop, particularly in relation to pedestrian movements in Section 2 is unclear.
- 2.4.67 It is certainly the case that moving the bus stop away from the centre of the village, particularly the Co-Op store, would mean linked trips would now need to walk along Section 2, an issue of even more concern if regular bus services could be returned to the village.
- 2.4.68 It is also not clear what happens to the Eastbound bus stop. It is not shown on the latest mitigation diagram, and if retained would be over the hatched lines for the pedestrian crossing. If moved it would need to be beyond Lord Bassetts Close, obstructing the highway, and complicating the approach in Section 3, or further out beyond the pedestrian crossing east of Section 3, taking it even further from the heart of the village.

# j. combined impacts

2.4.69 We consider in combination these various impacts will make the mitigation worse than the current situation. It will also fail to address the fundamental issues raised by the Panel, which mean the development should not progress until measures can be implemented to resolve these deep concerns.

# 3. Changes in targets for Modal Shift and Bus Proposals.

- 3.1 In response to the Examining Authority's concerns about modal shift the new Sustainable Transport Strategy has a revised Table 6 which shows a new anticipated modal share. Changes are only applied to the 10 Year target.
- 3.2 There are two elements to the assumed improvement, the majority coming from assumptions about higher public transport, notably bus access. We raised concerns at the Hearing Stage about the practicality and viability of enhanced bus services. We agree with the Examining Authority view that these are unambitious. (3.3.411).
- 3.3 An additional service is described in the revised Sustainable Transport Strategy as<sup>7</sup>:

A private bus service to connect the South East of Leicester City area to cover staff demand, where journey times on the x6 are above 60 mins.

This is proposed to be for key shift changeover times, subject to demand, for the 7-day operational period. The service will be available between 04:30 and 23:20, seven days a week. The service will not operate on Christmas Day, Boxing Day and New Year's Day

Service patronage and effectiveness of provision will be reviewed annually by the Travel Plan Coordinator and reported to Leicestershire County Council Highways and the Travel Plan Steering Group.

- 3.4 No further details are given about the service, or how 'subject to demand' will be determined or if and how the annual reviews will be acted on.
- 3.5 Nor is it explained why the South East of Leicester City area has been chosen, which specific locations the bus would serve, nor the anticipated patronage. The relevant Appendix 7 is not included in the material provided by Tritax.
- 3.6 Yet this single change is expected to have a very large impact on bus use, increasing it by approximately 27%, (4% of total travel) although this appears only to be anticipated to kick in after 5 years.

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<sup>&</sup>lt;sup>7</sup> Ref Appendix 6 ES Appendix 8.1 Document reference: 6.2.8.1F

- 3.7 It is hard from the evidence provided to know how such a dramatic increase is achieved and whether it is robustly based. We are not convinced it is realistic.
- 3.8 An additional 1% of car drivers are also now assumed to become passengers. The car-sharing element has been increased but notably there are no specific measures identified to achieve this beyond advertising and encouragement if the target is not met. So, although greater emphasis is now placed on car sharing, in reality there is little difference of approach to the one the Examining Authority criticised.
- 3.9 Overall, we remain doubtful about the robustness of the approach to sustainable transport, and while the target for car usage has been reduced in the longer term, this relies on assumptions about a private bus service, the details of which are too vague to assess.
- 3.10 Indeed, the lack of change to the 5 year targets suggests these new figures may be more wishful thinking than solidly reliable.

Table 6: Provisional Employee Modal Splits Targets

Mode of Travel	Baseline For HNRFI	Suggested HNRFI Target 5 years	Suggested HNRFI Target 10 Years
Car Driver	75%	65%	<del>60</del> 55%
Car Passenger	9%	12%	<del>1</del> 4 <u>15</u> %
Public Transport <u>and</u> <u>Private Bus/DRT</u>	8%	15%	<del>15</del> <u>19</u> %
Active	4%	5%	8%
Motorbike	1%	1%	1%
Working From Home	2%	2%	2%
Other	1%	<1%	0%

<u>Table 7: Provisional Employee Modal Splits Targets- Car Sharer/Single Occupancy</u>

Mode of Travel	<u>Baseline</u> For HNRFI	Suggested HNRFI Taraet 5 vears	Suggested HNRFI Target 10 Years
Car Single Occupancy	<u>66%</u>	<u>53%</u>	<u>40%</u>
<u>Car Share</u>	<u>18%</u>	<u>24%</u>	<u>30%</u>
Public Transport and Private Bus/DRT	<u>8%</u>	<u>15%</u>	<u>19%</u>
<u>Active</u>	<u>4%</u>	<u>5%</u>	<u>8%</u>
<u>Motorbike</u>	<u>1%</u>	1%	1%
Working From Home	<u>2%</u>	<u>2%</u>	<u>2%</u>
<u>Other</u>	<u>1%</u>	<u>&lt;1%</u>	<u>0%</u>

Table 8: Morning Peak Hour Person Trip Generation Forecasts

Mode of Travel	Base Year	5 Years	10 Years	Difference (base vs 10 years)
Car Driver	1016	881	<del>813</del> 745	- <del>203</del> 339
Car Passenger	122	163	<del>190</del> 203	<del>±68</del> <u>81</u>
Public Transport	108	203	<del>203</del> 257	<del>+95</del> 149
Active Travel	54	68	108	<b>→</b> 54
Motorbike	14	14	14	0

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Mode of Travel	Base Year	5 Years	10 Years	Difference (base vs 10 years)
Working from Home	27	27	27	0
Other 14		0	0	-14
Total	1355	1355	1355	0

Table 9: Evening Peak Hour Person Trip Generation Forecasts

Mode of Travel	Base Year	5 Years	10 Years	Difference (base vs 10 years)
Car Driver	1273	1103	<del>1018</del> 933	- <del>255</del> 340
Car Passenger	153	204	<del>238</del> 255	<del>+85</del> 102
Public Transport	136	255	<del>255</del> 322	<del>+119</del> 186
Active Travel	68	85	136	<b>±</b> 68
Motorbike	17	17	17	0
Working from Home	34	34	34	0
Other	17	0	0	-17
Total	1697	1697	1697	0

# 4. Issues relating to motorway junctions

- 4.0.1 Motorway junctions have been modelled using various techniques. The strategic PRTM model has been used to forecast 2036 flows. Junction 3 was then assessed using LINSIG while VISSIM was used for Junctions 1 and 2.
- 4.0.2 This inconsistency is concerning as we comment in more detail in relation to Junction 3.

4.0.3 Moreover, given the recognition that congestion at the M1/M69 junction puts an effectively cap on the traffic using the M69, meaning it is displaced traffic onto other routes, we do not see how any credibility can be given to the promoter's analysis of the three M69 junctions.

#### 4.1 M69 / A5 Junction 1

- 4.1.1 This is dealt with in the M69 Junction 1 A5 Modelling Note (TR050007-002512)
- 4.1.2 We are aware that Junction 1 currently suffers congestion with slow moving queues along the A5 which can extend all the way to the Dodwells roundabout, southwest of Hinckley, a distance of 4km. The A5 west exit also blocks back into the junction.
- 4.1.3 It is also hard to conceive that with all the permitted logistics and other development along and around the A5 it will not deteriorate further even if more people avoid it. Just two months ago, in December 2024, Rugby Council approved a large logistics development to the north of the M69/M6 junction which is effectively Junction 0. This site had not been identified for development in any Plan and therefore does not appear in the PRTM Uncertainty Log or the model.
- 4.1.4 The draft Hinckley Local Plan also includes several large scale proposals around Hinckley, Burbage, Barwell and Earl Shilton and along the A5. One site straddles the only gap that exists which could accommodate an off-line diversion to the constrained Dodwells-Longshoot section.
- 4.1.5 We are not aware of any transport or land-use strategy to deal with all the development or to get to grips with reducing its traffic generation. Indeed, any proposal (by National Highways or others) to increase capacity of the A5, (such as that envisaged at Gibbet Hill), could further add to the problems at many junctions, including at this junction.
- 4.1.6 The Tritax modelling note includes reference to significant 'latent demand'. This is traffic forecast by PRTM which the more detailed VISSIM model cannot accommodate in the modelled period. In such circumstances an iterative process, as suggested for LinSig, should be used to align the output of the strategic model to that of the junction model. That would force PRTM to divert more traffic on to other routes.
- 4.1.7 This may be reduced in the 'with development' case but presumably only because traffic is assumed to use the new South slips of Jn 2 of the M69 (adding presumably to pressure on the B4669 through Sapcote and other routes).
- 4.1.9 However, we must also take into account the issues (as raised above) in regards to the strategic nature of PRTM modelling, as well as the concerns (expressed by Leicestershire County Council as well as us) regarding displaced traffic and the increased use of unsatisfactory routes.

4.1.10 We remain, therefore, sceptical in relation to the functioning of this junction and any claimed benefits as well as the balance between traffic using this route and Jn 2 of the M69.

### 4.2 M1 Junction 21/M69 Junction 3

- 4.2.1 This is addressed in TR050007-002458 Appendix 1 Dec 2024 (and was also considered in the February 2024 M1 J21 Modelling Note, Document reference: 18.18 TR050007-002512)
- 4.2.2 In the updated report on the junction videos have been used to validate the modelling of the junction against a snapshot of recent observed flows.
- 4.2.3 They show the M69-M1 single lane free-flow left turn working reasonably well with the current demand, but cannot validate a future situation with significantly greater traffic demands.
- 4.2.4 They also show long queues occur on the M69 approach (as the ExA observed) so that some drivers may choose another route, reducing the demand on that approach.
- 4.2.5 This is clearly unsatisfactory and we do not consider the current attempt to compare today's situation with a seemingly heavily tweaked model to give confidence for Tritax's future projections.
- 4.2.6 In particular Para 2.1 of the junction note claims that the problem is the width of the bridges under the M1. Our experience is that those lanes deal quite well with the traffic that can get to them. In our view, the main problem occurs with the merge onto the M1 going north and the diverging southbound. It is very concerning that this problem has not been fully diagnosed.
- 4.2.7 Observation shows that at busy time merging traffic onto a motorway is often given priority and the main line traffic flow slows down to let them in. This creates a shock wave of slower or stationary traffic moving back upstream until the problem eases.
- 4.2.8 At this junction the northbound merge comes from two separate streams. The 2-lane exit from the roundabout reduces very quickly to a single lane and seems to be the primary cause of it blocking the roundabout. It is then squeezed between the single free flow lane from the M69 and traffic on the M1 main line which makes it more difficult.
- 4.2.9 At the same time some main line traffic weaves to the left from the mainline to access Leicester Forest East Services. The single lane from the M69 to M1 usually experiences little delay as the main line widens from three to four lanes and it has a dedicated lane. Capacity problems can occur downstream primarily caused by

the merge from the service area and bad road markings approaching the Junction 21a diverge.

- 4.2.10 In the M1 southbound direction, however, slow moving or stop-start traffic often stretches back to J21a or beyond. At peak periods this affects the flow of traffic in all lanes.
- 4.2.11 Slow moving traffic on the M1 and traffic accessing the LFE Services conspire to reduce the flow that is able to reach the two diverging lanes.
- 4.2.12 The left lane is used almost exclusively by traffic turning left to the A5460 and this has a free flow lane which avoids the roundabout. The right lane is used almost exclusively by traffic heading for the M69.
- 4.2.13 This diverges on the slip road into three lanes before reaching the roundabout. The queue that forms on this slip road usually clears each cycle.
- 4.2.14 It is very evident that the queue that forms on the M1 upstream is caused by the two lane diverge which is aggravated by sub-optimal, hesitant driver behaviour and lane utilisation. It is definitely not caused by the bridge or the signalised roundabout.
- 4.2.15 The three lanes for the M69 then continue around the roundabout and under the M1.
- 4.2.16 The traffic signals usually cope well with traffic heading for the M69. However, two of the three lanes which leave the roundabout immediately encounter a short merge to one lane.
- 4.2.17 This reverts back to two lanes after a short distance when they join the originally envisaged three lane M69 alignment.
- 4.2.18 The short merge can be confusing but is not usually a critical bottleneck.
- 4.2.19 It does however discourage M69 traffic using the third lane of the four lanes under the M1 bridge.
- 4.2.20 While it may be surprising that the need to merge on the M69 exit was not eliminated years ago, the failure to recognise the factors that cause problems at this junction is concerning and is likely to be misrepresented or ignored in the modelling.
- 4.2.21 And it has consequences. Having concluded the problem is the width of the bridges under the M1, the junction report goes on to claim that, consequently, there is a very modest impact from the development, as the junction is constrained by the lack of capacity.

4.2.22 Table 7 (M1 Junction 21 Modelling Results (AM peak hour)) shows Degrees of Saturation in both the AM and PM peaks (AM DoS Max and PM DoS Max)).

Table 7: M1 Junction 21 Modelling Results (AM peak hour)

		PRO	C Max Per A	pproach				
		AM DoS Max			PM DoS Max			
		2036WoD	2036 WD	2036 WoD +Dev	2036Wo D	2036 WD	2036 WoD +Dev	
M1 SB Off-Slip	Lane 1	74%	80%	84%	68%	85%	79%	
MT 3B OII-3IIP	Lane 2	75%	81%	85%	68%	80%	80%	
	Lane 1	100%	105%	112%	94%	92%	103%	
A5460	Lane 2	87%	92%	98%	83%	81%	90%	
AJ400	Lane 3	108%	107%	108%	92%	94%	95%	
	Lane 4	102%	102%	102%	87%	90%	90%	
AA1 NID Off Clin	Lane 1	80%	80%	80%	83%	85%	83%	
M1 NB Off-Slip	Lane 2	90%	90%	90%	84%	88%	84%	
M69 EB	Lane 1	105%	108%	107%	104%	111%	122%	
NI67 ED	Lane 2	105%	108%	107%	105%	106%	122%	
		AM A	verage Dek	ay (s)	PM A	verage Dela	ıy (s)	
AA1 CD Off Clip	Lane 1	30.6	36.2	39	26.3	39.6	34.2	
M1 SB Off-Slip	Lane 2	26.5	30.3	32	24.1	34.3	29.9	
	Lane 1	90.2	152.9	252.7	52.9	45.3	125.6	
A5460	Lane 2	36.4	43.9	68.1	30.1	28.1	39.9	
A3460	Lane 3	183	171.1	181.1	41.4	46.9	50.8	
	Lane 4	102.9	96.3	104.1	31.8	34.4	36.2	
M1 ND Off Clin	Lane 1	60.1	60.1	60.1	65.3	70	65.3	
M1 NB Off-Slip	Lane 2	87.1	89.9	87.1	68.6	76.8	68.6	
M69 EB	Lane 1	164.8	204.4	186.2	173.4	265	397.6	
NIO7 ED	Lane 2	146.8	189.9	168.4	150.2	166.8	366.1	
			AM MMQ			PM MMQ		
MAI CD Off Clim	Lane 1	10.9	11.9	13	9.9	12.7	11.9	
M1 SB Off-Slip	Lane 2	11.1	12.1	13.2	10.1	12.4	12.2	
	Lane 1	27.3	41.3	65.2	20.2	18.9	36.6	
A5460	Lane 2	16.4	19.1	26.1	15.1	14.8	18.5	
A3400	Lane 3	60	56.6	59.5	20.7	23.5	23	
	Lane 4	40.5	38.6	40.8	18.5	20.4	19.5	
M1 NB Off-Slip	Lane 1	6.3	6.3	6.3	6.9	7.5	6.9	
	Lane 2	7.9	8.2	7.9	7.1	8.0	7.1	
MZO ER	Lane 1	41.5	46.3	43.7	24.5	30.3	44.7	
M69 EB	Lane 2	54.4	64.9	59.3	51.5	54	90.8	
			PRC AM (%)			PRC PM (%)		
Junction I	PRC	-19.7	-20.5	-24.7	-16.7	-23.7	-35.7	

- 4.2.23 Worryingly, most of the results for the A5460 and M69 are over 100% and two (on the M69) show 122%.
- 4.2.24 AECOM's LinSig Overview<sup>8</sup> notes that a DoS of over 110% indicates queuing is carried over from cycle to cycle. LinSig also averages out variations so the potentially significant impact of small peaks would be not be represented in the output.

The Overview notes that:

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<sup>8</sup>https://www.mhaplus.org.uk/wp-content/uploads/filebase/professional\_services/Presentation-content/LinSig-Overviewc.pdf

'Queues in the LinSig model are assumed to stack "vertically", so if a downstream link is full, the model will still send traffic through. It is not a microsimulation model'

- 4.2.25 What is still not clear to us why a microsimulation model (VISSIM) was used at Junctions 1 and 2 but not Junction 3 and whether LinSig is suitable.
- 4.2.26 This choice appears to have been agreed at an early meeting of the Transport Working Group although documentation or notes of such meetings do not appear to be in the public domain.
- 4.2.27 Transport for London (TfL) produced a comprehensive guide on modelling and has devised a rigorous auditing methodology for assessing the use and outputs of traffic models as used in the UK<sup>9</sup>.

The TfL modelling guidance 4.1.3.1 noted that:

'LinSig is often unable to provide suitable representation where more complex situations exist such as vehicle merging, junction exit-blocking, traffic reassignment or the dynamic operation of demand-dependent stages.'

- 4.2.28 The LinSig Overview also states that where flows come from a strategic model (like PRTM) then the LinSig capacities should be consistent with those used and that some iterations may be needed. We think it is very unlikely that they are consistent in this case.
- 4.2.29 On that basis we are not convinced the LinSig assessment provides a suitable representation given the blocking back and evident merging problems which are already evident.
- 4.2.30 Indeed, the Statement of Common Ground (SoCG) between the Applicant and National Highways (NH) lists 22 items that are shown as 'Matter Agreed'. Number 19 states 'inter alia' that 'Forecast VISSIM models M69 J1 and 2 agreed'. However, only numbers 1 to 8 are shown to have a Record of Agreement. 4 items are shown as 'Matter not agreed'.
- 4.2.31 A further 4 items are shown as not having been revised following the ExA/SoS decision. These are also shown as 'Matter not agreed'. One these relates to a disagreement regarding the modelling of M1 J21/M69 J3 concerning the use of VISSIM versus LinSig.
- 4.2.32 We know the strategic PRTM model has been used to forecast 2026 and 2036 flows. M1 J21/M69 J3 has been assessed using LinSig while VISSIM has been used for

<sup>&</sup>lt;sup>9</sup> https://tfl.gov.uk/cdn/static/cms/documents/traffic-modelling-guidelines.pdf https://tfl.gov.uk/cdn/static/cms/documents/model-auditing-process.pdf

Junctions 1 and 2. As the SoCG shows the use of LinSig at J3 has not been agreed while the principle of using VISSIM in some form was agreed for the other two.

- 4.2.33 Be that as it may, in Section 4 of the Technical Note it is recognised that the forecast congestion is such that 'development traffic' will displace other traffic to other routes.
- 4.2.34 This implies that flows through the junction are not going to change significantly which would have a bearing on the modelling of the other junctions on the M69 and routes used by displaced traffic.
- 4.2.35 As it says in Paras 4.4 and 4.5 of the Technical Note:

Further to the above, analysis of the PRTM data was undertaken to understand the breakdown of the development traffic routing through the junction. A summary of this is provided below in **Table 6**.

Table 6 demonstrates that in the AM peak hour, 22% of development light vehicles and 23% of HGVs are predicted to route through M1 Junction 21. In the PM peak hour, 26% of development light vehicles and 23% of HGVs are predicted to route through the M1 junction.

- 4.2.36 However, as pointed out above, Tritax are now saying that the PRTM data cannot be relied on in relation to HGVs on restricted routes (as in their latest Sapcote report).
- 4.2.37 If that is the case it must impact on the reliability of the modelling at other not restricted route junctions, including this one.
- 4.2.38 Moreover, while the success of the Sustainable Transport Strategy may impact on to a degree on the number of additional light vehicles using the junction (as Tritax contend), it is unlikely to impact on HGVs and cannot be relied on as a worst case scenario.
- 4.2.39 Even if the modelling could be relied on, Table 7 of their note shows a deterioration in the junction as a result of the development. It also highlights the extent to which that is only mitigated in the model by the displacement of traffic onto other potentially unsuitable routes.

### 4.2.40 At it says in Para 5.1:

Due to the existing constraints at M1 Junction 21, the PRTM demonstrates that the proposed development traffic results in background traffic re-routing onto alternative routes.

4.2.41 Given the congestion already experienced in and around Leicester, that in itself is likely to cause additional disbenefits in surrounding areas and may, in reality, be undermined by congestion on those routes.

- 4.2.42 Furthermore, as we noted in Sapcote, The strategic PRTM's ability to model individual local links is always going to be limited, so rerouting may never actually happen, especially if there is additional development on those routes, for example to meet local housing need.
- 4.2.43 That is why we agree with the need to model this junction in an unrestrained manner as if all development traffic used it.
- 4.2.44 In that case, according to Tritax's note, the junction's practical reserve capacity (PRC) deteriorates much more significantly by 5% (not 0.8%) in the am peak and 19% (as opposed to 8%) in the pm peak.
- 4.2.45 While such percentages may not seem large the effect of such changes on congestion and flow breakdowns can be very significant.
- 4.2.46 The pm peak is the most worrying but Tritax have a way round this.

# 4.2.47 Para 5.9 says:

However, it should be noted that the base model was calibrated in the PM peak hour to restrict vehicles egressing from M69 EB to replicate on site observation of M1 NB blocking back onto the junction. Consequently, an additional assessment was undertaken to analyse the junction's operation in the scenario where the M1 NB on slip is not obstructed.

- 4.2.48 This tweak drastically reduces the peak time problem. It makes the situation start off better and only deteriorate by 3.5% with rerouting, 10.3% in the unrestrained case. But it is by definition inconsistent with actual experience. The use of such tweaks to achieve better result inevitably reduces confidence in the modelling for future predictions.
- 4.2.49 The upshot of all this is that we have several problems with the conclusions from modelling on this junction:
  - I. restricted routes are likely to increase HGVs using this junction.
  - II. the assumed background traffic displacement could have serious issues on other routes.
- III. if the displacement of background traffic does not occur in practise, or to a much lower degree, this would impact on the functioning of the junction.
- IV. the observed queuing patterns that informed the modelling suggest particular problems in the pm peak, which are then discounted by Tritax for reasons which are hard to understand.
- 4.2.50 Overall, we consider there are a number of significant issues with the modelling of this junction that do not give us confidence that it will function as

well as Tritax claim, which in itself is a deterioration compared to the scenario without HNRFI.

### 5. Conclusion

- 5.1 Our simple conclusion is that Tritax have not addressed the fundamental issues which led the ExA to advise against approval of the HNRFI.
- 5.2 Most importantly:
  - i. they have failed to mitigate the unacceptable issues in Sapcote, or to properly consult on those proposals.
  - ii. they have not shown the impacts on the motorway junctions, particularly M1 Junction 21-M69 Junction 3 and its surrounding network, is acceptable.
- 5.3 As a result, the DCO should not be granted by the Secretary of State.