## 1. Are there any necessary infrastructure needs that are not addressed in the Plan?

- 1.1 The Plan does not provide for the transport infrastructure needs of East Grinstead to sustainably accommodate the new site allocations. Furthermore, the Plan does not demonstrate how unacceptable impacts will be acceptably mitigated.
- 1.2 Paragraph 102 of the NPPF (2019) states that "transport issues should be considered from the earliest stages of plan-making and development proposals, so that: (a) the potential impacts of development on transport networks can be addressed".
- 1.3 Paragraph 104 goes on to state that "Planning policies should: (b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned".
- 1.4 Paragraph 108 states that applications for developments should ensure that "any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree".
- 1.5 East Grinstead already suffers from congestion through the town centre on the A264 and A22 corridors. Key junctions on these corridors already operate at or over capacity at busy time of the week. The recent study by WSP (2018 baseline)<sup>1</sup> shows that the A22/A264 Felbridge Junction is operating over capacity with vehicles experiencing delays of 2-3 minutes in the queue on the busiest arm of the junction in the morning and evening peak.
- 1.6 Under these conditions, there are several potential transport strategies that could be adopted to support housing growth in the town.
- 1.7 Firstly, development could be supported if there were significant mode shift away from private use to public transport, walking and cycling. The level of mode shift among existing and new residents would need to be sufficient to free up capacity on the road network for the additional trips generated by the new development. While this would undoubtedly improve quality of life for all East Grinstead residents, the current policies and governance arrangements mean that significant mode shift is simply not realistic.
- 1.8 A second alternative would be to provide significant additional highway capacity to draw trips away from the congested junctions on the network. Controversial plans for a town bypass were considered in the 1990s but have not been pursued since. Major highway infrastructure solutions are not considered affordable or feasible in East Grinstead and are not currently being promoted.
- 1.9 The third approach is to improve the capacity of the junctions on the affected corridors with more targeted capacity improvements.

- 1.10 In relation to site allocations SA19 and SA20 in the Plan, MSDC claims that these developments can be supported through a mix of the first and third strategies by *"Working collaboratively with and to the satisfaction of both Surrey and West Sussex County Council Highway Authorities, mitigate development impacts by maximising sustainable transport enhancements; where additional impacts remain, highway mitigation measures will be considered"*.
- 1.11 The policies of West Sussex County Council as the highway authority support this approach in theory. The West Sussex Transport Plan 2011-26 recognises that *"East Grinstead is affected by the A264 and the A22 passing through the town centre."* The implementation plan argues for a balanced traffic management strategy to ensure *"that future network improvements within East Grinstead will focus on encouraging sustainable alternatives to the private car and upgrading key junctions to optimise the existing road network."*
- 1.12 However, the volume of development that can be accommodated under this approach is inevitably limited and was estimated at 765 units in 2012. With over 2,000 units already completed or in the pipeline through committed development, these constraints have been grossly exceeded.
- 1.13 The congested section of the network in East Grinstead is made up of a series of junctions where the A22 and A264 merge. To understand the potential impact of increased traffic on this congestion, it is necessary to examine the whole corridor because several junctions contribute to the practical traffic capacity though the town. The last time that the critical junctions were assessed together using a locally calibrated traffic model was in 2012.
- 1.14 The East Grinstead Traffic Management Study Stage 3 Report was prepared by consultant Atkins in May 2012 and assessed five key junctions on the A22 through the town. The study sought to examine the impact of development in East Grinstead in isolation, and therefore no additional background traffic growth was included. The latest estimates for the five wards in East Grinstead in 2011 were 1,764 units in Strategic Housing Land Availability Assessment (SHLAA) developments, of which 717 were committed, and 48 in small development sites.
- 1.15 The study proposed a set of 'Do Minimum' (sometimes referred to as the A3DM works) and 'Do Something' network improvements at five junctions.

Key Junction	'Do Nothing'	'Do Minimum' network	'Do Something' capacity
	future baseline	optimisation within	enhancement requiring
	(2021)	highway boundaries	land-take
A22 / A264	No change	<ul> <li>Signal optimisation</li> <li>wider pedestrian</li></ul>	<ul> <li>Signal optimisation</li> <li>wider pedestrian islands</li> <li>2-lane southbound exit</li> <li>2-lane northbound</li></ul>
Felbridge Junction		islands <li>2-lane southbound exit</li>	approach
A22 London Road / Imberhorne Lane	<ul> <li>Signalised pedestrian crossing</li> <li>2-lane Imberhorne Lane approach</li> <li>This was implemented as part of the Bridge Park site development (Wickes)</li> </ul>		

<sup>&</sup>lt;sup>1</sup> WSP (Oct 2019) Felbridge Junction Options Appraisal Executive Summary

Key Junction	'Do Nothing' future baseline (2021)	'Do Minimum' network optimisation within highway boundaries	'Do Something' capacity enhancement requiring land-take
A22 London Road / Lingfield Road	No change	<ul> <li>Signalisation</li> <li>2-lane southbound approach</li> <li>2-lane approach on Lingfield Road</li> </ul>	<ul> <li>Signalisation</li> <li>2-lane southbound approach 2-lane approach on Lingfield Road</li> <li>widening to 3 lanes on railway bridge with cantilevered footways</li> </ul>
A22 London Road / A22 Station Road	No change		
A22 London Road / A264 Moat Road	No change	No change	<ul> <li>Left flare on A22 southbound approach</li> <li>pedestrian crossing on Moat Road</li> </ul>

1.16 The Atkins study makes a clear recommendation on the volume of development that the 'Do Minimum' and 'Do Something' network improvements can accommodate.

"The 'Do Minimum' scenario broadly accommodates the 765 units already committed (in 2012) with the network operating within theoretical capacity, but congestion will not be eliminated. Whilst the 'Do Something' scenario offers a small amount of reserve capacity. The modelled assessments indicate that, given the level of intervention required to deliver this, the development enablement on the A22 London Road is constrained to 765 residential units as a ceiling to growth in the town.

A sensitivity test has been undertaken that has shown an additional 190 units can be accommodated by the 'Do Something' scenario for the network to operate within theoretical capacity. This assumes no background traffic growth and is considered to be indicative given the high-level nature of the development enablement review. Overall, it is considered that the development enablement is between 765 residential units (if junction improvements are limited to the 'Do Minimum' scenario) and 955 residential units (if the deliverability and affordability issues associated with the Do Something scenario can be overcome)".

- 1.17 In the intervening years, none of the Do Minimum or Do Something network improvements have been implemented.
- 1.18 During this period however, East Grinstead has seen over 1,000 housing completions as well as new housing allocations. The Council's housing land supply monitoring reports on the number of completed, committed or otherwise approved dwellings for East Grinstead shows:

Net completions since 2011	1,097
Commitments (705 with permission) on 1 April 2020	975
Unplanned permissions since 1 April 2020	279

- 1.19 As predicted in the Atkins report, congestion at these critical junctions has increased in the intervening years. The 2018 base model of the Felbridge Junction (WSP) shows that this junction is currently operating above capacity. In the morning peak, the degree of saturation (DoS) on the A264 arm is at 106.6% leading to queues of three minutes per vehicle. In the evening peak, DoS on the A264 arm is at 101.4% with queues of 115 seconds and the A22 (north) arm is also nearing its theoretical capacity with 96% DoS and queues of 76 seconds.
- 1.20 Mode shift resulting in a 5-10 percentage point reduction in car traffic would be required to reduce traffic flows at critical junctions on the A22/A264 corridor to a level where they operate within capacity at existing levels of demand. There are no sustainable transport interventions proposed that would credibly achieve this level of mode shift.
- 1.21 Peak time congestion must properly be considered in the context of the economic geography of East Grinstead. Its popularity as a residential area stems partly from its direct rail connections to London, yet many of the outward commuting trips are to other settlements in the so-called Gatwick Diamond. There is no competitive public transport serving these eastwest connections, and the main road link into these employment centres is the congested A264. The Atkins study estimated that while 20% of morning peak outbound trips would route via the A22 northbound and southbound respectively, 36% would route via the A264 westbound and a further 13% to the west of the town on Imberhorne Lane and the B2110.
- 1.22 The Mid Sussex Transport Study (2012) originally included an ambitious target of 6% mode shift from car within its primary remedial transport interventions (later amended to 4% in the Stage 2 report). This mode shift was to be achieved by area-wide (not site-specific) Travel Plans including the *"establishment Transport Management Associations (TMAs) to implement their delivery"*. The justification for, and robustness of, these targets is unclear from the Study. More robust evidence has subsequently been published from the Local Sustainable Transport Fund monitoring indicating that a reduction of per capita car traffic of 2-3 percentage points is achievable through a combination of area-wide Travel Plans and physical investment in sustainable transport<sup>2</sup>.
- 1.23 Nonetheless, area-wide Travel Plans were never enacted in East Grinstead. Travel Plans for individual sites have instead been submitted. It appears also that MSDC does not actively monitor Travel Plans or enforce related conditions. WSCC as the Highway Authority has confirmed that they have previously made comments on at least one planning application in East Grinstead but are not aware of any formal monitoring<sup>3</sup>.
- 1.24 The Plan states that SA19 and SA20 that will integrate with their surroundings and provide *"safe and convenient routes for walking and cycling to key destinations and links to the existing networks"*. However, their scale and location mean that any gains will be local in nature and will not enable mode shift in the wider population of East Grinstead. More fundamental mode shift to walking and cycling would require a network of high-quality, connected routes across the town. The recent mini-Holland demonstration projects in London show how targeted investment can generate significant area-wide reductions in car traffic, but the scale required is far beyond what can be delivered by a single edge of town development.

- 1.25 WSCC has prepared schematic drawings for a proposed A22 southbound bus lane into East Grinstead town centre. The proposed scheme stretches along the A22 London Road from Halsford Court to the Lingfield Road roundabout and could be accommodated within the existing highway. The bus lane would enable buses to avoid some congestion on the A22 southbound. However, the level of congestion experienced by southbound buses through the Felbridge and Imberhorne Lane junctions would remain unchanged.
- 1.26 Buses will not achieve a perceived benefit over the car unless they can avoid the queues over the whole A22/A264 corridor into East Grinstead, including the lengthy delays experienced by vehicles entering East Grinstead via the A264 at the Felbridge Junction. Accordingly, the level of mode shift to public transport that can be achieved through a partial bus priority scheme is very limited. Furthermore, decisions on the frequencies of bus routes that use the new bus lane lie outside the control of MSDC.
- 1.27 The Infrastructure delivery Plan for the MSDC Site Allocations DPD makes reference to 'A22/A264 corridor improvements'. The maximum level of interventions/schemes in the public domain that could be implemented on this corridor would be a combined package of junction improvements akin to the 'Do Something' schemes at the Felbridge and Lingfield junctions, and the A22 bus lane proposed by WSCC.
- 1.28 There have been over 1,000 completions within East Grinstead over the last decade, and so this package of measures could be just sufficient to reduce congestion at the affected junctions to the point they operate within their theoretical capacity if implemented in full. However, this maximum package of interventions would not accommodate future growth, and therefore even committed development will result in some further deterioration.
- 1.29 This conclusion assumes that the findings of the 2012 Atkins study remain broadly valid. This is a reasonable assumption given that the strategic distribution of car trips and the fundamental junction capacity constraints have not changed significantly. The growth in dwellings is within the range assessed by Atkins in 2012 and no significant mitigating effects can be identified.
- 1.30 The total cost of this package of measures would be approximately £10-18m (in current prices), excluding any land acquisition costs.
- 1.31 Tandridge District Council submitted a Housing Infrastructure Fund bid for the Felbridge Junction scheme with a stated cost of £8.7m excluding inflation (in 2018 prices). This includes a construction cost of £2m plus design fees, land acquisition costs, 40% risk allowance, commuted sums and client fees.
- 1.32 The construction costs of the Lingfield Junction scheme (including utilities) were estimated at £1.3m in the Atkins study (2012 prices). This equates to a total cost (at 2018 prices excluding any land acquisition costs) of approximately £2.9m after design fees, 40% risk allowance and client fees are added.

- 1.33 The construction cost estimate for the A22 bus lane scheme is not known. The scheme involves some highway realignment and may incur associated drainage and/or utilities costs. A construction cost estimate in the region of £0.8 2.4m is thus plausible.
- 1.34 The largest uncertainty with these cost estimates are potential land acquisition costs. The Felbridge Junction cost includes an estimate of £2.75m for land. The WSCC bus lane scheme can be constructed within the highway boundary. The Lingfield Junction scheme requires additional land and no estimate is known.