

The appraisal found that for a number of topics the alternatives tested did not result in any significant differences or were likely to generate any significant effects at a District scale. There were differences between alternatives at a local level in terms of positive and negative effects against the majority of SA topics. This in particular relates to Biodiversity, Landscape, Historic Environment and Transport. However since they were localised effects that were not found to be significant once mitigation is taken into account (Paragraph 7.35).

The SA notes that in terms of significant effects the appraisal found that all of the alternatives have the potential to have a significant long term positive effect on matters relating to Community Wellbeing, Economy and Employment and Housing. The delivery of housing and employment as well as associated improvements in infrastructure, including community facilities/services and public transport would help to meet the needs of communities and have a positive effect for the District. Alternative B performed slightly better against the housing topic as it would deliver a slightly higher level of overall housing growth.

There is the potential for the alternatives to have a significant negative effect on the Land and Waste through the loss of greenfield and agricultural land. Technical Assessment B performs the worst against this topic as it proposes less brownfield development in Loughton compared to the others.

The alternatives scored evenly (District-wide) in respect of Air Quality, Community and Wellbeing, Economy and Employment, Equality, Diversity and Inclusion, Historic Environment, Landscape and Water. Alternative C was preferable in respect of Biodiversity and Green Infrastructure as it directs more growth away from the sensitive receptors such as Epping Forest and the Lee Valley Regional Park.

In respect of Transport there is existing congestion in the south of the District and focusing development there could exacerbate this. However, conversely the settlements in the south of the District also have good access to the London Underground network and services/facilities. This therefore means that housing within and around these settlements with accompanying improvements to public transport infrastructure could help to reduce the use of the private vehicles and therefore traffic by encouraging the use of more sustainable modes of transport. Alternative A proposes the greatest level of growth along the London Underground Central Line, so performs better against Transport than the other alternatives. It was followed by Alternative C with Alternative B performing worse as it directs growth away from the London Underground Central Line.

Following on from the findings of the transport assessment, the appraisal found that Alternative A performed slightly better against climate change as it is more likely to reduce the need to travel and use of the private vehicle so would minimise traffic related emissions to air.

Overall, Alternative A was rated against three topics as the most sustainable option – they were Climate Change and Transport with positive effects and Land and Waste with the least negative effects of the three scenarios. Refer to Page 41 of the SA report for the full summary of findings.

Transport – Overview and Findings

The transport testing used District modelling to assess the likely traffic impacts of the alternatives, forecast the traffic impacts and report on the main traffic issues. The full Highways Assessment Report (2017) then evaluated traffic patterns and likely modal shift across the District to inform the Local Plan Submission Version (available on the Epping Forest District Local Plan website³⁰). The technical assessments are labelled 6a, 6b and 6c in the report under Assessment 4; the SA assessment of transport impacts is derived from this assessment.

The modelling found that key traffic impacts were likely to arise in Epping and Waltham Abbey, with the Wake Arms Roundabout being a key constraint. The outcomes of the assessment indicated that even with an allowance for increased school traffic, the proposed lower level of employment and redistributed housing growth in all of the technical assessments would generally improve on the Draft Local Plan forecast highway impact with respect to average model network flow. The Draft Local Plan scenario (including a high level of employment growth with reasonable modal shift) represents a forecast approximately a 52% increase in traffic. Alternative A presents the lowest likely general traffic growth across the network (at approximately 40% increase) whilst Alternatives B and C could also reduce the impact on some parts of the network. The inclusion of secondary schools at Waltham Abbey and Epping would have some minor localised impacts not previously identified caused by increases in school traffic. This impact is generally isolated to the morning peak period and most notably in Waltham Abbey in Alternative B and Epping in Alternative C where two new secondary schools were tested respectively. The differences between the alternatives are summarised in Table 6, for full explanation of the traffic impacts please refer to the Highways Assessment Report.

Table 6: Traffic Impacts of Alternatives - Peak Periods*

	Morning Peak	Afternoon Peak	Comment
Wake Arms Roundabout	Alternative C performs slightly worse. No significant differences between Alternatives A and B.	No significant differences between alternatives.	All alternatives bring reduced traffic impact compared to Draft Local Plan.
Epping	Alternative B performs best. Alternative C performs worst due to new school at Epping. Alternative A falls between Alternatives B and C.	Alternative B performs best. Alternatives A and C perform similarly.	All alternatives bring increased traffic impact compared to Draft Local Plan apart from Alternative B in the afternoon.
Loughton	All alternatives perform similarly.	All alternatives perform similarly.	All alternatives bring reduced traffic impact, particularly in the

³⁰ Highway Assessment Report, 2017 <http://www.efdclocalplan.org/wp-content/uploads/2017/12/Highway-Assessment-Report-Ringway-Jacobs-2017-EB502.pdf>

	Morning Peak	Afternoon Peak	Comment
			morning, compared to Draft Local Plan.
Waltham Abbey	Alternative B performs significantly worse. No significant differences between Alternatives A and C.	Alternative B performs significantly worse. No significant differences between Alternatives A and C.	All alternatives bring increased traffic impact compared to Draft Local Plan.
Harlow	Alternative A performs better likely due to higher level of employment growth at the Harlow Strategic Sites in Alternatives B and C. Alternative B performs worse followed by C.	Alternative A performs better likely due to higher level of employment growth at the Harlow Strategic Sites in Alternatives B and C. Alternative B performs worse followed by C.	All alternatives bring increased traffic impact compared to Draft Local Plan, apart from Alternative A in the afternoon.

Education – Overview and Findings

The location of new secondary schools is a key issue shaping education provision during the Plan period. The education assessment was undertaken by Essex County Council and evaluated the impacts of different approaches to school provision and assessed the alternatives in respect of supporting new and expanded schools. The key results relate to secondary schools as their potential impact is greater than primary schools when assessing the distribution of development within the district wide spatial strategy.

The location of a new school at the East of Harlow site was factored into all alternatives and can be accommodated. However, there were significant doubts in relation to the ability to deliver a new secondary school at Waltham Abbey at the current time as a result of concerns arising from forecast traffic impacts and whether the level of growth would be sufficient to deliver the school. Latton Priory formed Essex County Council's preferred location for a second school because it has a comparatively reduced impact on traffic. The assumption made was that secondary schools in the south of the District would be expanded to cater for growth needs. Through discussion with Essex County Council, the potential for the relocation and expansion of King Harold School at Waltham Abbey into the new masterplan area to the north of Waltham Abbey emerged as a possibility to be explored further.

Conclusion

The assessment findings were presented at officer workshops during October 2017, which focused on identifying sites for allocation in the Local Plan Submission Version. The Council re-visited conclusions reached in 2016 and determined whether any draft site allocations should be removed, and whether any sites not previously identified for allocation should be proposed. The outcomes of the technical assessments were considered alongside analysis of the Draft Local Plan consultation feedback, updated evidence base information, emerging

Neighbourhood Plans and local knowledge (for full list of considerations please see paragraphs 2.131 and 2.132 of the Report on Site Selection). Sites were assessed in accordance with the Local Plan strategy and associated hierarchy with factors such as accordance with settlement visions, five year land supply, providing a mix of size sizes, infrastructure constraints arising from the Infrastructure Delivery Plan and availability/achievability assessments taken into account. For a more detailed overview of the decisions reached regarding sites proposed for allocation refer to Report on Site Selection (2018) (Section 4.7.3).

Site Schedule: Technical Assessment A

Epping	Loughton	Waltham Abbey	Ongar	Buckhurst Hill	North Weald Bassett	Chigwell	Theydon Bois	Roydon	Nazeing	Thornwood	Coopersale	Fyfield	High Ongar	Lower Sheering	Sheering	Stapleford Abbots	Harlow
SR-1002	SR-0974	SR-0099	SR-0067i	SR-0225-N	SR-1033	SR-0557	SR-0026B	SR-0169	SR-0011	SR-0149	SR-0987	SR-0049	SR-0181	SR-0032	SR-0033	SR-0873	SR-0146C-N
SR-1018	SR-0226-N	SR-0104	SR-0102	SR-0176	SR-0410	SR-0588	SR-0228i	SR-0197	SR-0300		SR-0404				SR-0073		SR-0964-Z
SR-1021	SR-0984	SR-0219	SR-0120	SR-0813	SR-0072	SR-0601	SR-0026C	SR-0890	SR-0473						SR-0311		SR-0068-N
SR-0281-N	SR-0986	SR-0541	SR-0184		SR-0417	SR-0895	SR-0228ii		SR-0150								SR-0046A-N
SR-0113A	SR-0993	SR-0903	SR-0185		SR-0455	SR-0896	SR-0070										
SR-0153	SR-0999	SR-0381	SR-0186		SR-0195B	SR-0894											
SR-0113B	SR-1006		SR-0390		SR-0512	SR-0898											
SR-0229	SR-1007		SR-0842		SR-0158A	SR-0478B											
SR-0445	SR-1026		SR-0848		SR-0003												
SR-0333Bi	SR-1027				SR-0036												
SR-0347	SR-1032																
SR-0556	SR-0565-N																

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SR-0069/33			SR-0989-Z														
SR-0069																	
SR-0349																	
SR-0348																	

Site Schedule: Technical Assessment C

Epping	Loughton	Waltham Abbey	Ongar	Buckhurst Hill	North Weald Bassett	Chigwell	Theydon Bois	Roydon	Nazeing	Thorndon	Coopersale	Fyfield	High Ongar	Lower Sheering	Sheering	Stapleford Abbots	Harlow
SR-1002	SR-0974	SR-0099	SR-0067i	SR-0225-N	SR-1033	SR-0557	SR-0228i-N	SR-0169	SR-0011	SR-0149	SR-0987	SR-0049	SR-0181	SR-0032	SR-0033	SR-0873	SR-0146C-N
SR-1018	SR-0226-N	SR-0104	SR-0102	SR-0176	SR-0410	SR-0588	SR-1020	SR-0197	SR-0300		SR-0404				SR-0073		SR-0964-Z
SR-1021	SR-0984	SR-0219	SR-0120	SR-0813	SR-0072	SR-0601	SR-0070	SR-0890	SR-0473						SR-0311		SR-0068-N
SR-0281-N	SR-0986	SR-0541	SR-0184		SR-0417	SR-0895			SR-0150								SR-0046A-N
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SR-0348	SR-0834																
	SR-0835																
	SR-0227																
	SR-0289																
	SR-0356																
	SR-0361																