Harlow District Council

The Harlow Spatial Options Study

Stages 1 - 3



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1. Introduction

- 1.1. Harlow Council is currently preparing a new Local Plan which will cover the period 2011 to 2031. This will be called the Harlow Local Development Plan (HLDP) and will replace the Adopted Replacement Harlow Local Plan (2006). The HLDP will contain policies and proposals to guide development and change across Harlow and will allocate land across Harlow for future development. To inform the identification of sites/areas for development the Council is preparing the Harlow Spatial Options Study to inform decisions on where and how development should be accommodated across Harlow.
- 1.2. The Council has already consulted on alternative options to accommodate growth across Harlow. These were set out in the Core Strategy Issues and Options Consultation document. The alternative options presented were taken from the *Generating and Appraising Spatial Options Study (2010)* which was commissioned on behalf of Harlow, East Hertfordshire and Epping Forest District. This assessment considered locations around Harlow to accommodate 11,000 new dwellings as required by the then East of England Plan (2008). These options were:

Option A: RSS – Northern Led

Option B: Policy Led

Option C: Combined Criteria-Led

Option D: Regeneration-Led

Option E: Sustainable transport-Led

1.3. Given the requirement that the Councils' broadly implement the strategy set out in the East of England Plan the majority of the proposed growth was to be provided to the north of Harlow with smaller extensions elsewhere. However, since the previous consultation the Government has made a number of changes to the planning system; including the abolition of the East of England Plan.

About this report

- 1.4. This report publishes the findings of stages 1 − 3 of the revised Harlow Spatial Options Study. The purpose of the assessment is to generate alternative options for consideration by the Council, the community and other stakeholders during the next stage in the preparation of the Harlow Local Plan. The responses received to the Emerging Strategy and Further Options consultation will then be used by the Council to develop the approach further. This focuses on the generation and appraisal of alternative approaches for accommodating housing development across the Harlow area. Each approach or example illustrates the spatial implications if different policy options were pursued.
- 1.5. Stages 4 and 5 of the assessment are due for completion later in 2014 and will include further information on infrastructure and include further sensitivity assessment. Stage 5 will look to identify the preferred approach to accommodating development across the Harlow area and will also take into account the responses to the Emerging Strategy and Further Options consultation. These stages may be undertaken in conjunction with adjoining authorities, as appropriate, subject to the outcome of the duty to cooperate.

2. Scope and Methodology

- 2.1. There is no standard approach or commonly agreed methodology for generating and appraising spatial development options but there are a number of sources of best practice, including Planning Advisory Service guidance.
- 2.2. The revised spatial options need to provide clear and alternate spatial policy choices for the Council to demonstrate that a range of different approaches have been considered and assessed by Strategic Environmental Assessment and Sustainability Appraisal. However, all options must be capable of delivering the objectives of the Local Plan. In particular, this means delivering the level of development proposed by the Local Plan and enabling the wider strategy (vision and core priorities) to be delivered.
- 2.3. The study is focused on generating alternative options to meet Harlow District's needs. All efforts have been made to accommodate this within Harlow District's administrative area. However, given Harlow's tight administrative boundary the level of development proposed cannot be wholly accommodated in the District. As such, the study had regard to the opportunities that might exist in areas outside the district. This information will be used when considering what locations outside Harlow District could contribute to delivering the spatial strategy being pursued in that particular example.

Approach to Developing Options

- 2.4. The methodological approach is structured to avoid developing an example that consists of the suite of sites/locations which are 'the most sustainable'. Given the compactness of the district and the accessibility to facilities/services it is likely that many sites will not vary significantly in this respect. Moreover, the 'most sustainable' option may not be the best option for delivering the objectives of the Local Plan. As such, the study seeks to identify potentially suitable sites/locations for development and then group these based on the spatial planning objectives being pursued by that option.
- 2.5. The study is focused on generating distinct examples for accommodating development to provide alternative 'policy' choices to show how Harlow could develop. Given the identified challenges of accommodating all of the proposed level of development within Harlow district the scope of the study (for data collection and analysis purposes) was extended to cover Harlow's immediate hinterland.
- 2.6. The study sets out to gather data on sites/areas which provide the basis for further assessment. Initially an exclusionary sieve is applied to rule out sites/areas that are affected by important environmental designations. Sites satisfying this are then subject to a series of discretionary sieves developed to enable a distinction to be made between the relative performance of each site/area. A further opportunity sieve is applied to allow analysis of the potential that a given site/area would have on delivering local regeneration objectives. Sites/areas were also subjected to the development principle sieve which identified areas which would satisfy or contravene the core principles developed for Harlow.

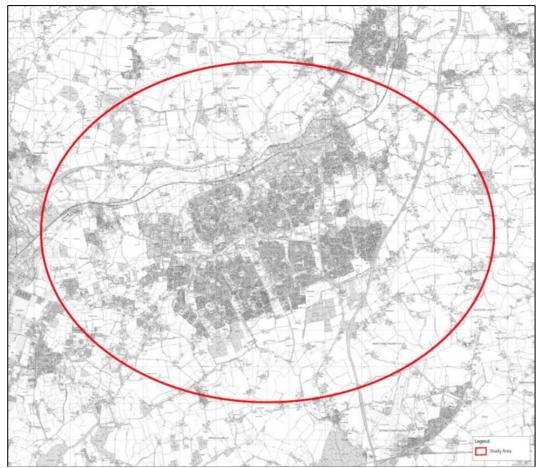


Figure 1: The 'Harlow Area' as defined for the purposes of this study

- 2.7. Those areas are then assessed to determine whether they are developable (i.e. have a realistic prospect of being developed over the plan period). Sites/areas which do not drop out of the assessment process.
- 2.8. Stage three of the study uses the pool of potentially suitable and developable sites to form alternative examples for how development could be accommodated across Harlow. Each option is then appraised against a series of key questions.
- 2.9. The following is an overview of the approach to the assessment:

1. STAGE 1 –E	1. STAGE 1 –Definition and Sieving			
1.1 Defining Sites and Areas for Assessment	Sites and areas are defined for assessment.			
1.2 The Sieving Process	All sites/areas are then sieved. The Exclusionary Sieve eliminates sites on the basis of environmental considerations. The Discretionary Sieve provides additional information on those sites/areas passing through sieve 1 to inform the collation of sites into alternative options. Finally, the Opportunity Sieve provides additional information on the relative performance of sites. These are set out below: Sieve 1 (Exclusionary Criteria)			

- 1a) National and Local nature designations (Ramsar Sites, SACs, SPAs, SSSIs, Local Nature Reserves and Local Wildlife Sites, Registered Common Land, Ancient Woodland:
- 1b) Flood Zone 2 and 3
- 1c) SAMs & listed buildings, designated parks and gardens

Sieve 2 (Discretionary Criteria)

- 2a) Socio-economic considerations
- 2b) Passenger transportation considerations
- 2c) Local facilities and services considerations
- 2d) Further environmental considerations

Sieve 3 (Opportunity Criteria)

- 3a) Priority Areas and on-going Regeneration Activities
- 3b) Opportunities to Revitalise Centres
- 3c) Opportunities for Local Public Realm Improvements
- 3d) Open Space Revitalisation

1.3 Harlow Development Principles

The sieve applied a number or development principles established by the Council to avoid developing options that are considered to unreasonable approaches for accommodating future development across Harlow. The Development Principles are:

- a) Continuing a compact town
- b) Retaining the neighbourhood structure
- c) Sequencing development

2. STAGE 2 - Identifying developable sites

2.1 Assessing Developabilit y of Potentially Suitable Sites

Is the site considered to be developable?

The potentially suitable sites are assessed to determine whether they are 'developable' (i.e. suitable for development with a reasonable prospect of being developed in the Local Plan period).

This reflects, inter alia, the existing landowner's intensions for the site or whether there are any other legal complexities (i.e. covenant restrictions) that would rule out future development then these sites are not taken forward for further consideration.

3. STAGE 3 - Generating and appraising the examples

3.1 Generating Alternative Spatial Options

This stage sets out a range of alternative spatial strategies for Harlow drawing on the results of the sieving process (bottom-up) and spatial strategy considerations (top-down). Each option is formed around established core principles but differ to reflect alternative policy options available for the district.

3.2 Appraising Spatial Options

The purpose of this stage is to undertake detailed "stress test" of each spatial option to assess whether they provide reasonable options for accommodating development in the district. The objective of this stage is to identify any significant issues that would give rise to a deliverability issue.

Each spatial option is assessed against the following:

The Reasonableness Test

- Will implementation of the option assist in fulfilling the objectives of the plan ('strategic fit test')?
- ii. Is the option sufficiently detailed to enable meaningful community involvement and SA?
- iii. Does implementation of the option fall within the legal competence of the LPA?
- iv. Does implementation of the option fall within the geographical competence of the LPA?
- v. Is it a genuine option?
- vi. Where may the necessary resources come from to deliver the option?
- vii. Will there be sufficient time within the plan period to implement the option?
- viii. Is there an acceptable risk that the option might not be fully implemented for one reason or another?
- ix. Is the option sufficiently flexible to accommodate changing circumstances?
- x. Is it in conformity with National Planning Policy?

The Community Engagement Test

xi. Has there been sufficient engagement with the local community and other stakeholders in the development of the option?

The Sustainability Appraisal Test

- xii. Has the option been appraised through the SEA/SA process to assess implications for both sustainability objectives and the plan objectives?
- 2.10. The following stages (Stage 4 and Stage 5) will be part of the Final Assessment of due for completion later in 2014.

4. STAGE 4 - Further Infrastructure Assessment

4.1 Further Infrastructure and Sensitivity Testing

Reflecting the clear need for comprehensive infrastructure improvements across the town, particularly transportation improvements, each option is subjected to further detailed infrastructure testing, including phasing and timing implications, to determine whether the spatial option has a reasonable prospect of delivery. This also identifies infrastructure capacity pinch points and thresholds across Harlow that interact with the development of options.

Each Option is assessed against the requirement, cost and phasing of infrastructure to inform the deliverability of the option during the plan period.

5. STAGE 5 - The emerging option

5.1 Emerging Preferred Option

Based on the assessment undertaken the study puts forward an emerging option for consideration. This not only reflects on the information contained in this study but considers options previously considered by the Council and the views of the public and stakeholders during previous consultations.

3. Stage 1 – Definition and Sieving

Stage 1.1 Defining Sites/Areas for Assessment

- 3.1. It was not considered appropriate to assess all sites/areas against the same criteria. Assessing a small urban site within Harlow in the same way as a large greenfield site on the edge of Harlow would not provide a comparable assessment of sites. As such, for the purposes of data collection the study area was divided into sites/areas within the existing urban envelope of Harlow and those sites/areas outside the existing urban area of Harlow. This approach provides an equal platform for assessing the relative performance of sites within the Harlow.
- 3.2. The Harlow urban envelope (shown in grey below) includes all land within the existing urban footprint of Harlowⁱ. Areas outside Harlow's boundary were based on the Spatial Land Areas (SLA) identified in the previous assessment.

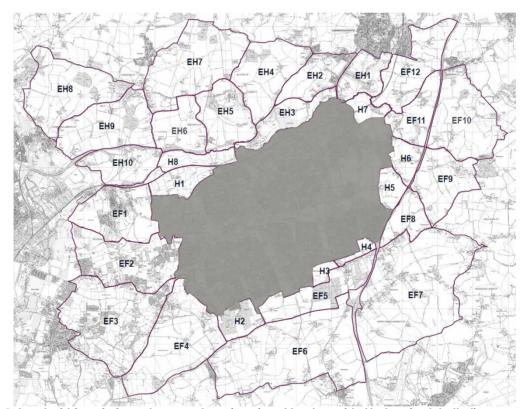


Figure 2: Land within existing urban envelope (grey) and land outside Harlow (as labelled)

3.3. Some minor changes have been made to the boundaries of the SLAs used in the previous studyⁱⁱ to fit with the definition of the Harlow urban envelope. *It is important to note that areas outside Harlow have only been defined from a data gathering perspective. Potential development sites within the SLAs have not been considered by this assessment with the exception of H1, H2, H3, H4, H5, H6 and H7. Any future development in those SLAs*

¹ This is separate from the administrative boundary of the district.

The Generating and Appraising Spatial Options for the Harlow Area (2010).

outside the Harlow boundary will need to be considered in conjunction with adjoining districts.

3.4. The subdivision of sites/areas within the Harlow urban envelope is based on the Strategic Housing Land Availability Assessment (SHLAA) for continuity. These are shown below:

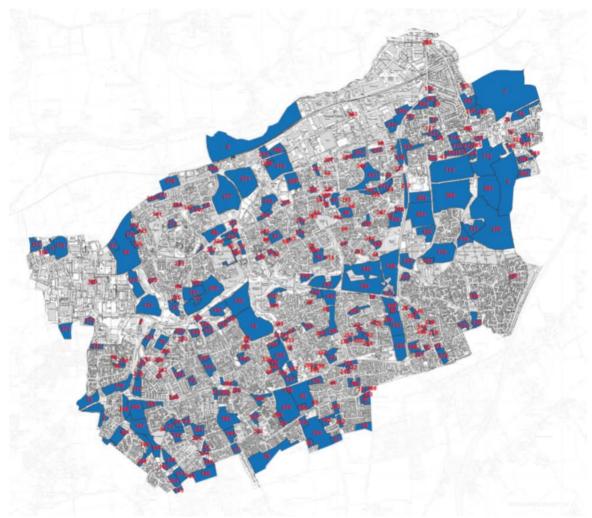


Figure 3: Sites/areas within existing urban envelope

Stage 1.2: Sieving Process

3.5. Potentially suitable sites for development have been identified following application of the Exclusionary Sieve. Sites/areas affected by the Exclusionary Criteria are removed from further consideration.

Sieve 1 - Exclusionary Criteria

Sieve 1 – Exclusionary Criteria

- 1a) National and Local nature designations (Ramsar Sites, SACs, SPAs, SSSIs, Local Nature Reserves and Local Wildlife Sites, Registered Common Land, Ancient Woodland;
- 1b) Flood Zone 2 and 3
- 1c) SAMs & listed buildings, designated parks and gardens
- 3.6. Figure 4 highlights that the application of the exclusionary criteria.

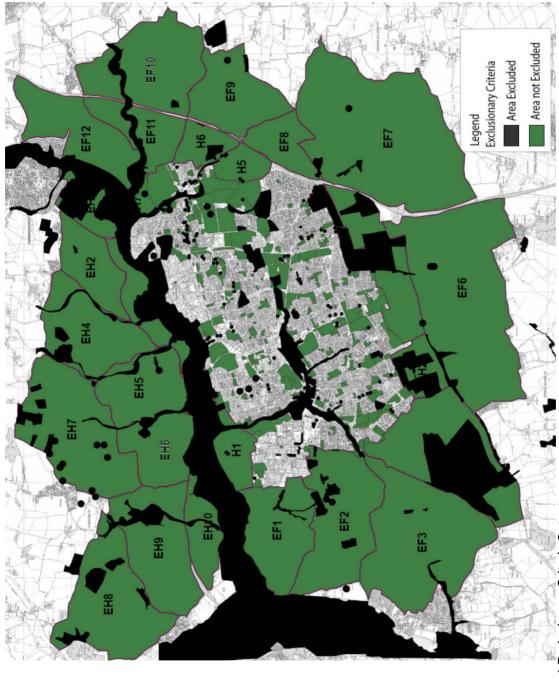


Figure 4: Sieve 1 Exclusionary Criteria Output

3.7. A large amount of land has been excluded for future development because it is affecting by ecological designations or areas of flood riskⁱⁱⁱ. The largest area is found immediately to the north of Harlow and corresponds to with the flood zones 2 and 3 of the river Stort. Also located within the Stort corridor is a Sites of Special Scientific Interest (SSSI) and a number of Local Wildlife Sites (LoWS). To the south of Harlow a number of areas have been excluded because of the presence of SSSIs and LoWS.

Sieve 2 - Discretionary Criteria

3.8. The following Discretionary Criteria were applied to the pool of sites passing through the Exclusionary Criteria Sieve referred to above. It is important to recognise that an area assessed as performing poorly against any of the criteria does not necessarily mean that the site should not be developed or would fail to deliver the overall strategy of the Local Plan. The Discretionary Criteria are:

Sieve 2 - Discretionary Criteria

- 2a) Socio-economic considerations
- **2b)** Passenger transportation considerations
- 2c) Local facilities and services considerations
- 2d) Other environmental considerations

2a) Socio-economic considerations

2a) Socio-economic considerations					
Criteria	Green	Orange	Red		
Index of Multiple Deprivation (IMD)	Contains area of 70% most deprived	Contains area of between 30% & 70% most deprived or Adjacent to an area of 30% most deprived (if outside the existing urban area)	Contains area of 30% least deprived		
IMD Employment	Contains area of 70% most deprived	Contains area of between 30% & 70% most deprived or Adjacent to an area of 30% most deprived (if outside the	Contains area of 30% least deprived		

iii If, however, the sieving process fails to yield sufficient developable land then the assessment will need to consider whether land in flood zone 2 and then flood zone 3 could be developed through the Sequential and Exception Tests.

		existing urban area)	
Education and Training	Contains area of 70% most deprived	Contains area of between 30% & 70% most deprived or Adjacent to an area of 30% most deprived (if outside the existing urban area)	Contains area of 30% least deprived
Regeneration (Combined Sites)	Site is within areas of 30% most deprived	Site is within area of between 30% & 70% most deprived	Site is within area of 70% least deprived

Index of Multiple Deprivation (IMD)

3.9. The Index of Multiple Deprivation (IMD) is a standard measure of deprivation at small area level across England^{iv} and has been used to help identify those areas most in need of regeneration.

IMD Employment

3.10. **Employment Domain:** measures employment deprivation conceptualised as involuntary exclusion of the working age population from the labour market;

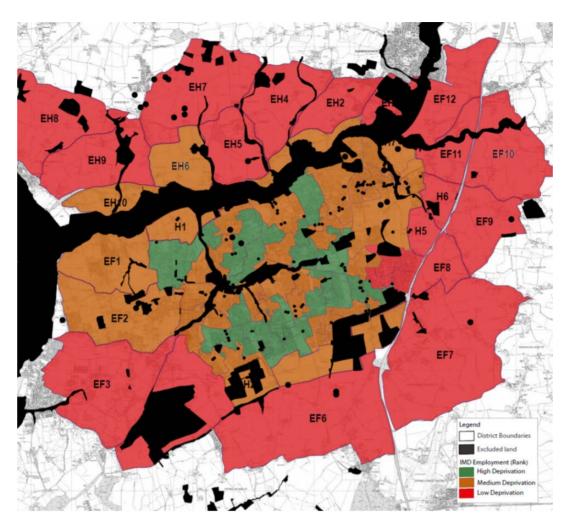


Figure 5: Index of Multiple Deprivation Employment (national rank score)

3.11. Figure 5 shows that a number of areas within Harlow are within the 30% most deprived nationally (green) with the majority of the rest of Harlow falling within the 30% - 60% bracket. Church Langley is the only area within Harlow that features within the top 30% nationally. Figure 5 shows that the areas towards the southwest, central east and central north experience higher levels of deprivation. Deprivation is considerably higher within Harlow than in the rural areas surrounding the town.

Education and Training

3.12. **Education, Skills and Training Domain:** captures the extent of deprivation in terms of education, skills and training in a local area.

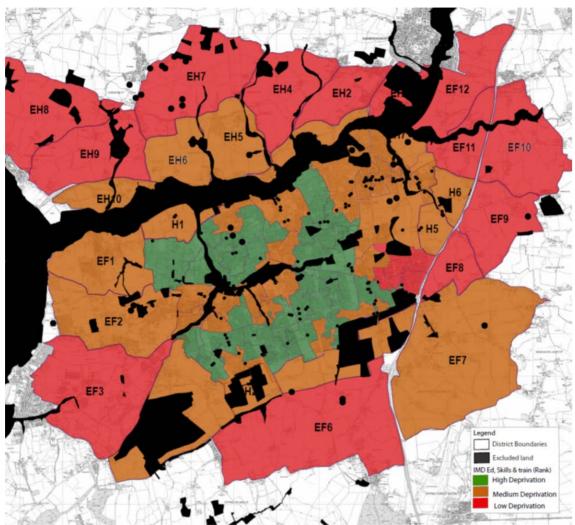


Figure 6: Index of Multiple Deprivation Education, skills and training (national rank score)

3.13. Figure 6 IMD Education, Skills and Training shows that the Harlow Area does experience some deprivation as part of this IMD domain. Large parts of the town fall within the 30% most deprived areas nationally (green) with the remaining town falling within the 30% - 60% bracket. Large parts of southern Harlow feature within the most deprived together with large parts of the central and western areas. Other than a few exceptions most of the areas within the 30% - 60% bracket are in the eastern parts of Harlow.

Index of Multiple Deprivation (IMD)

3.14. **Overall IMD:** conceptualised as a weighted area level aggregation of these specific dimensions of deprivation

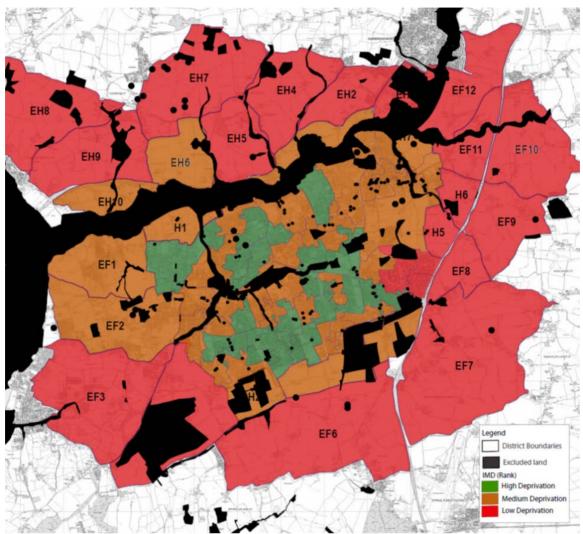


Figure 7: Index of Multiple Deprivation (national rank score)

3.15. Figure 7 shows that large parts of Harlow experience high levels of deprivation. The areas highlighted in green fall within to most deprived 30% nationally. Those in orange fall within the 30% - 60% most deprived nationally with those in red falling within the 30% least deprived nationally. Deprivation is considerably higher within Harlow than outside with areas towards the southwest, central east and central north having higher levels of deprivation. Only three Super Output Areas (SOA) in Church Langley feature within the top 30% less deprived areas nationally.

IMD (applied by site)

3.16. Figure 8 illustrates the location of sites/areas within Harlow in relation to areas of low/medium and high deprivation. Concentrations of higher deprivation (green) provide a proxy for where interventions may be required through the Local Plan.

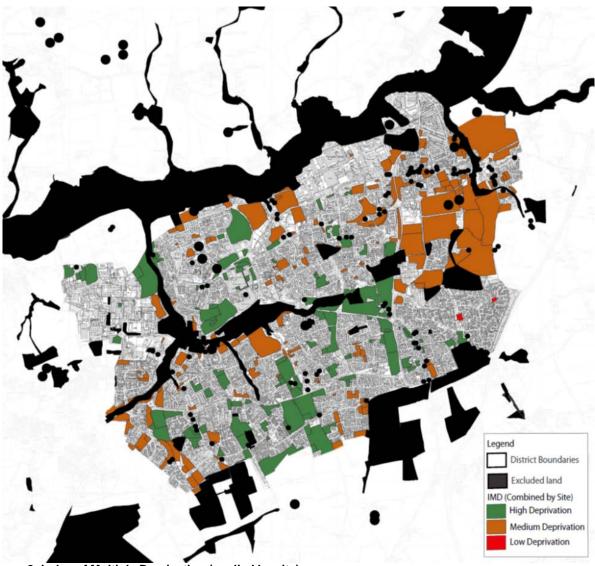


Figure 8: Index of Multiple Deprivation (applied by site)

2b) Passenger Transportation Considerations

2b) Passenger transportation considerations					
Criteria	Green	Orange	Red		
Distance of closest part of site to rail station	Site/area < 800m walk to rail station (sites/areas within existing urban envelope)	Site/Area between 800m – 1600m walk from rail station (sites/areas within existing urban envelope)	Site/Area > 1600m walk from rail station (sites/areas within existing urban envelope)		

	Site is less than 1 km from nearest train station (if outside the existing urban area)	Between 1 - 2 km to nearest train station (if outside the existing urban area)	More than 2 km from nearest train state (if outside the existing urban area)
Walking and cycling facilities	Cycle track/footpath within or adjoins site (sites in existing urban envelope only)	Cycle track/footpath < 400m from site (sites in existing urban envelope only)	Cycle track/footpath > 400m from site (sites in existing urban envelope only)
Proximity to public transport (bus)	Bus stop in or adjoins the site (sites in existing urban envelope only)	Bus stop between < 400m walk from site (sites in existing urban envelope only)	Bus stop > 400m walk from site (sites in existing urban envelope only)

Distance of closest part of site to rail station

Inside Harlow

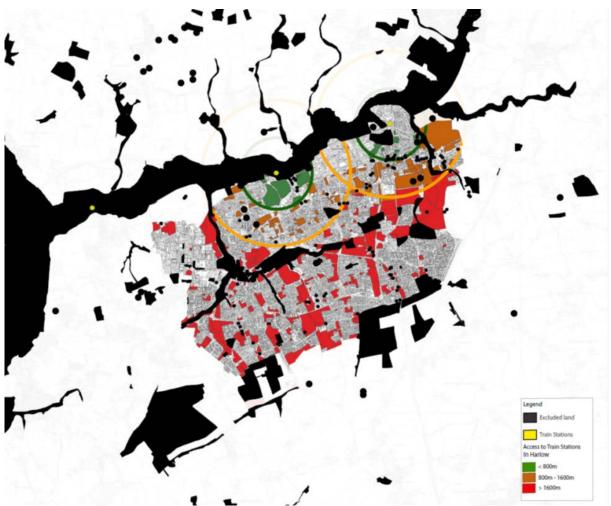


Figure 9: Sustainable Transport Considerations – Proximity to Train Stations (inside Harlow)

Figure 9 identifies the location of sites/areas in Harlow in relation to rail stations. As expected, sites/areas in the north of Harlow are best positioned to access rail stations.

Outside Harlow

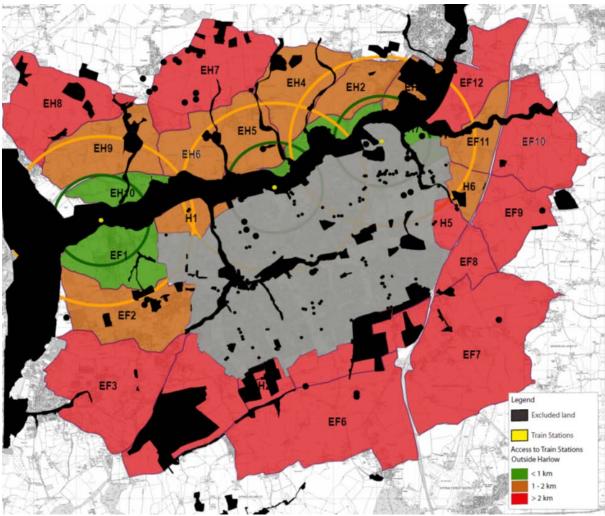


Figure 10: Sustainable Transport Considerations – Proximity to Train Stations (outside Harlow)

3.17. Figure 10 identifies the location of individual SLAs in relation to rail stations. The train stations in the area are predominately located in the north. As expected SLAs to the north of the town are best positioned to access rail stations.

Walking and cycling facilities

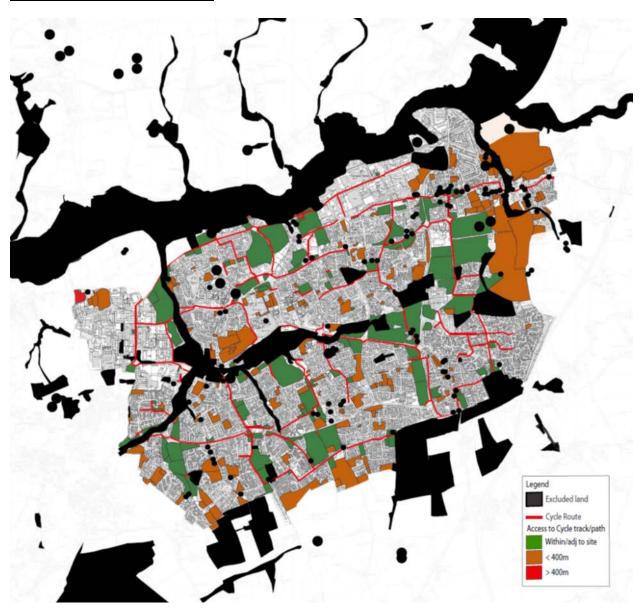


Figure 11: Sustainable Transport Considerations – Proximity to cycleway

3.18. Figure 11 illustrates that the majority of sites and areas within the town are either on or adjacent to an existing cycle path or definitive footpath. This reflects the legacy of the new town which sought to provide a network of cycle-ways across the town.

Proximity to Bus Stops



Figure 12: Sustainable Transport Considerations – Proximity to Bus Stops

3.19. Figure 12 illustrates that again the majority of sites/areas within Harlow are within easy access to a bus stop.

2c) Local Facilities and Services Considerations

2c) Local facilities and services considerations						
Criteria	Green	Orange	Red			
Access to Primary Schools	Primary School < 400m (sites in existing urban envelope only) Site is less than 1 km to existing Primary School (if outside the existing urban area)	Primary School 400 - 800m (sites in existing urban envelope only) Site is between 1 and 2 km to existing Primary School (if outside the existing urban area)	Primary School > 800m (sites in existing urban envelope only) Site is over 2 km from existing Primary School (if outside the existing urban area)			
Access to Secondary Schools	Secondary School < 800m (sites in existing urban envelope only) Site is less than 1 km to existing Secondary School (if outside the existing urban area)	Secondary School 800m - 1,600 m (sites in existing urban envelope only) Site is 1 – 2 km to existing Secondary School (if outside the existing urban area)	Secondary School > 800m (sites in existing urban envelope only) Site is > 2 km to existing Secondary School (if outside the existing urban area)			
Access to health centres	Surgery < 400m (sites in existing urban envelope only) Site is less than 1 km to Surgery (if outside the existing urban area)	Surgery 400m - 800m (sites in existing urban envelope only) Site is between 1 - 2 km to Surgery (if outside the existing urban area)	Surgery > 800m (sites in existing urban envelope only) Site is greater than 2 km to Surgery (if outside the existing urban area)			
Access to centres	Neighbourhood Centre < 400m (sites in existing urban envelope only) Town Centre < 800 m from site (sites in existing urban envelope only) Site is < 2 km from town centre (if outside the existing urban area)	Neighbourhood Centre 400m to 800m (sites in existing urban envelope only) Town Centre 800 m to 1600m from site (sites in existing urban envelope only) Site is 2 - 3 km from town centre (if outside the existing urban area)	Neighbourhood Centre > 800m (sites in existing urban envelope only) Town Centre > 1600m from site (sites in existing urban envelope only) Site is > 3 km from town centre (if outside the existing urban area)			
Access to employment areas	Employment Area < 400m (sites in existing urban envelope only) Employment Area < 2 km (if outside the existing urban area)	Employment Area between 400m – 1600m (sites in existing urban envelope only) Employment Area between 2 and 3 km (if outside the existing urban area)	Employment Area > 1600m (sites in existing urban envelope only) Employment Area between > 3 km (if outside the existing urban area)			

Access to Primary Schools

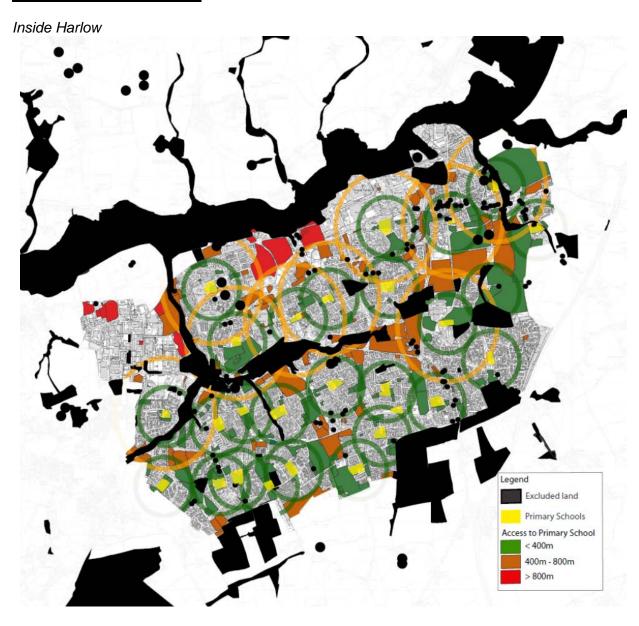


Figure 13: Local Facilities and Services – Proximity to Primary Schools (inside Harlow)

3.20. Figure 13 illustrates the location of Harlow's Primary Schools (yellow) and the proximity of sites/areas within Harlow to these. Generally, Primary Schools are well distributed across the town making the vast majority of sites/areas within reasonable distance to these facilities. However, proximity does decrease in the north and north-west of the town.

Outside Harlow

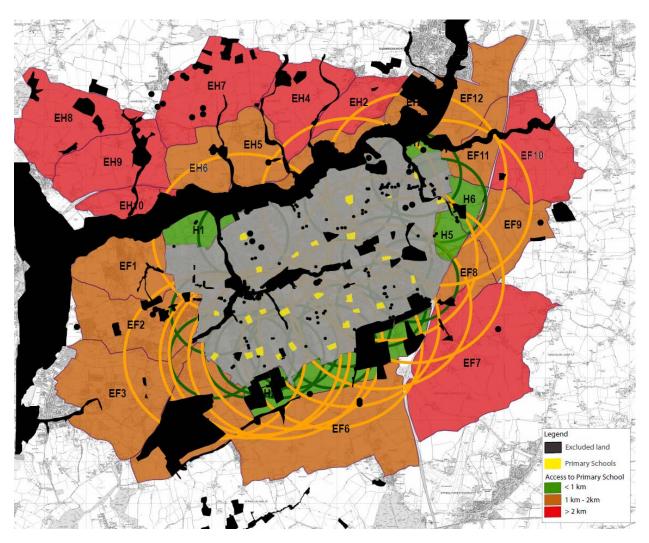


Figure 14: Local Facilities and Services – Proximity to Primary Schools (outside Harlow)

3.21. Figure 14 illustrates the location of Harlow's Primary Schools (yellow) and the proximity of SLAs to these. Generally, Primary Schools are well distributed across the town making a number of SLAs reasonably close to these facilities.

Access to Secondary Schools

Inside Harlow

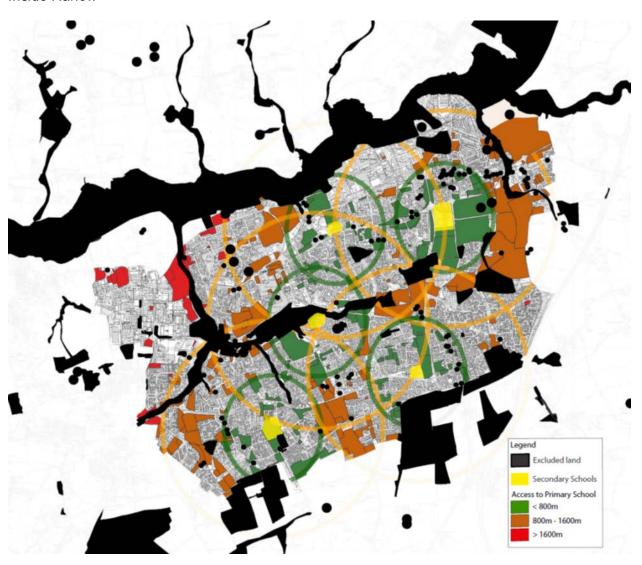


Figure 15: Local Facilities and Services – Proximity to Secondary Schools (inside Harlow)

3.22. Figure 15 illustrates the location of Harlow's Secondary Primary Schools (yellow) and the proximity of sites/areas these. Many of the sites/areas across Harlow are within reasonable distance to these facilities with the exception of the north western, western and south western fringes of the town.

Outside Harlow

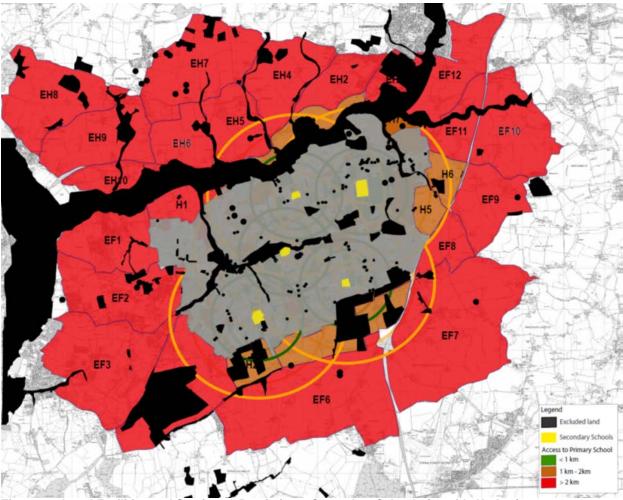


Figure 16: Local Facilities and Services – Proximity to Secondary Schools (outside Harlow)

3.23. Figure 16 illustrates the location of Harlow's Secondary Primary Schools (yellow) and the proximity of SLAs to these. Schools are well distributed across the town with the exception of a facility in the north west of Harlow. Many of the SLAs immediately adjoining the urban area are within reasonable distance to these facilities.

Access to Health Centres

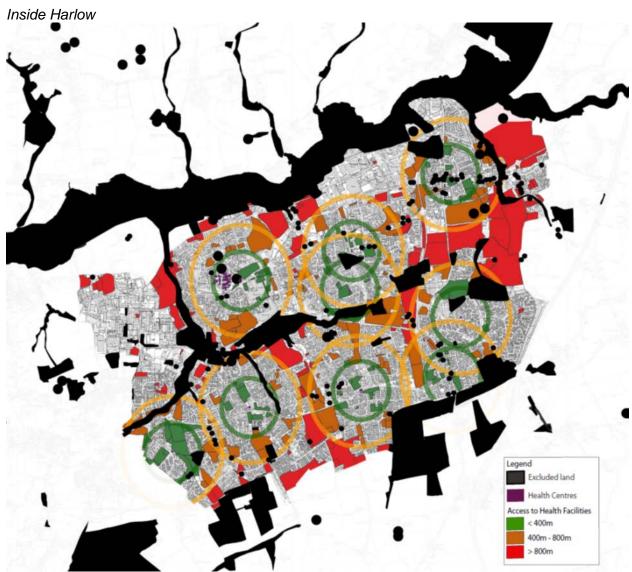


Figure 17: Local Services and Facilities – Access to Health Centres (Inside Harlow)

3.24. Figure 17 illustrates the location of Harlow's Health Centres (yellow) the proximity of sites/areas within Harlow to these. Figure 17 highlights that for most of the neighbourhood areas a health centre is within a reasonable distance. Access tends to be poor for land/sites that are currently part of the Green Wedge network.

Outside Harlow

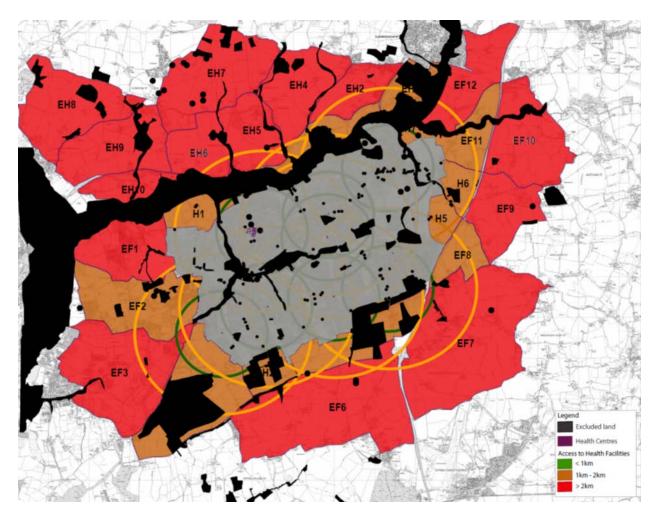


Figure 18: Local Services and Facilities – Access to Health Centres (Outside Harlow)

3.25. Figure 18 illustrates the location of Harlow's Health Centres (yellow) and proximity of SLAs to these. These facilities are well distributed across Harlow, which is reflected in most SLAs immediately adjoining the urban area being reasonably close to a facility.

Access to Centres (Town Centre)

Inside Harlow

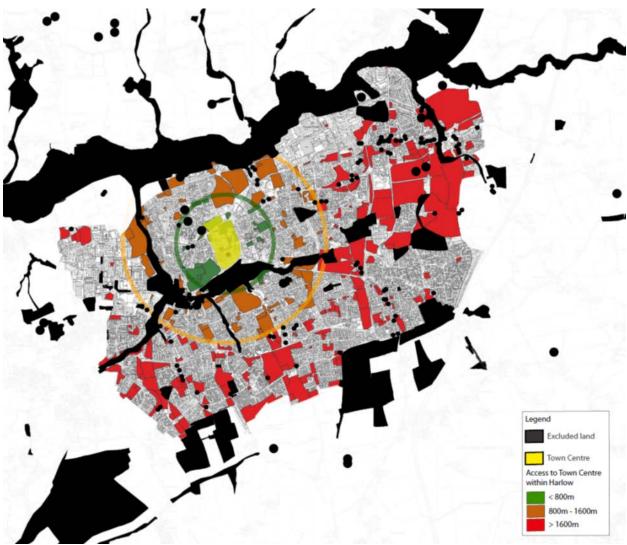


Figure 19: Local Services and Facilities – Access to Town Centre (Inside Harlow)

3.26. Figure 19 highlights the location of the town centre (yellow) and proximity of sites/areas to it. As expected sites/areas in the northern central and western areas of Harlow are closer to the town centre. Conversely, sites/areas in the south and east of Harlow are further from the town centre.

Outside Harlow

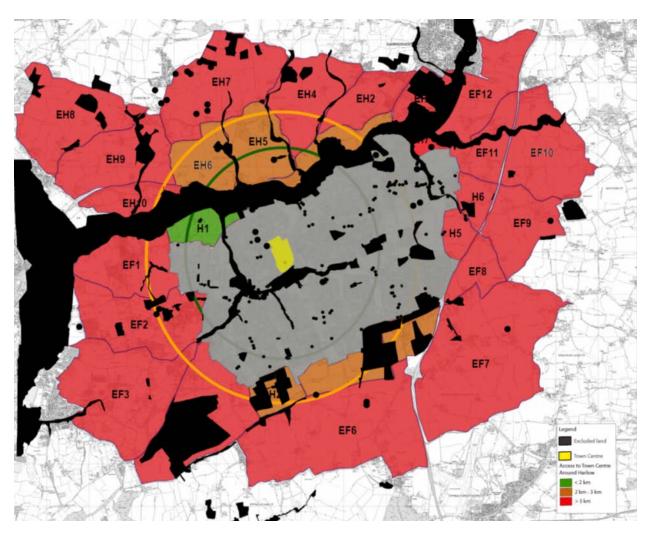


Figure 20: Local Services and Facilities – Access to Town Centre (Outside Harlow)

3.27. Figure 20 highlights the location of the town centre (yellow) and proximity of SLAs to it. Given the location of the town centre slightly to the west of centre in the northern half of Harlow the SLAs to the north are closer. Conversely SLAs to the east of Harlow are further from the town centre.

Access to Centres (Neighbourhood Centres)

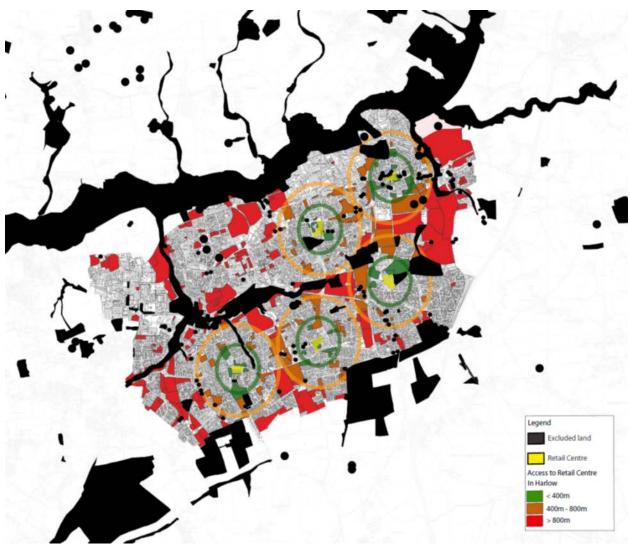


Figure 21: Local Services and Facilities – Access to Neighbourhood Centres (Inside Harlow)

- 3.28. Figure 21 highlights the location of the Neighbourhood Centres (yellow) and proximity of sites/areas to it. Many sites/areas within the neighbourhood areas are reasonably close to neighbourhood centres reflecting Harlow's original urban structure. Sites/areas that perform less well are those currently located within the existing Green Wedge network.
- 3.29. Whilst figure 21 indicates that sites/areas in the north west of Harlow are far from a neighbourhood centre, the town centre (which is not shown) provides this function.

Access to Employment Areas

Inside Harlow

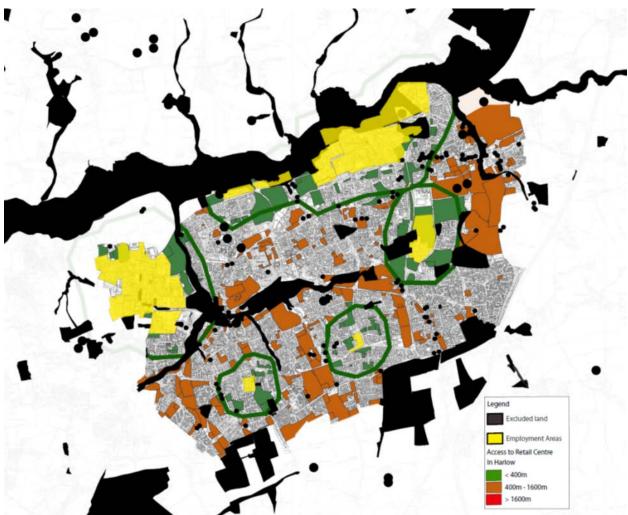


Figure 22: Local Services and Facilities – Access to Employment Areas (inside Harlow)

3.30. Figure 22 highlights the location of the Employment Areas (yellow) and proximity of sites/areas within Harlow to these locations. All sites/areas in Harlow are reasonably close to employment areas with no site/area being further than 1600m from an employment location.

Outside Harlow

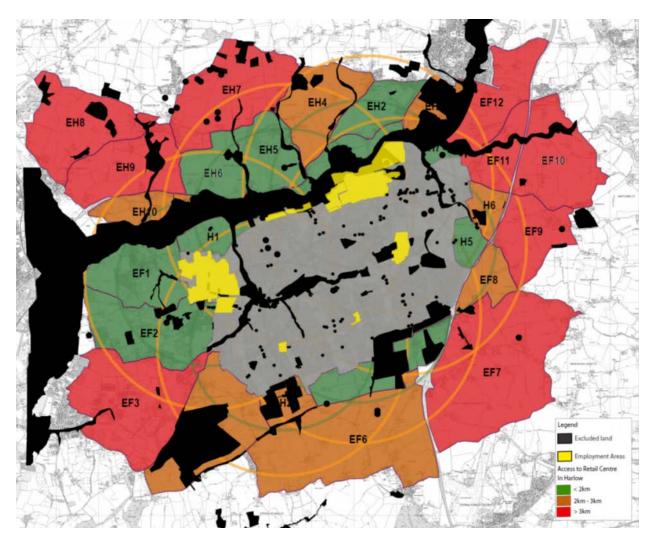


Figure 23: Local Services and Facilities - Access to Employment Areas (outside Harlow)

- 3.31. Figure 23 highlights the location of the Employment Areas (yellow) and proximity of SLAs to these locations. Given the location of the majority of employment areas in the north and western areas it is consequently the case that the SLAs adjoining the town to the north and west benefit from being close to these sites.
- 3.32. There are smaller employment locations to the east and south of Harlow (that although providing a different offer) does result in SLAs immediately adjoining the town to the south and east with good access to these facilities.

2d) **Further Environmental Constraints**

2d) Further environmental considerations					
Criteria	Blue	Green	Orange	Red	
Proximity to Designated Sites	-	Site/Area does not adjoin protected site ⁵	Site/Area adjoins protected site	N/a. Sites/areas removed during sieve 1	
Agricultural land Classification	Grade 2 (very Good)	Grade 3 (Good to Moderate)	Grade 4 (Poor)	n/a (urban area)	
Sensitivity to development ⁶	-	Land has low sensitivity to substantial development (if outside the existing urban area)	Land is moderately sensitive to substantial development (if outside the existing urban area)	Land is highly sensitive to substantial development (if outside the existing urban area)	
Green Belt purposes contradicted	-	Land contradicts 0 or 1 Green Belt principle	Land contradicts 2 or 3 Green Belt principles	Land contradicts 4 or 5 Green Belt principles	
Green Belt coalescence	-	Potentially Suitable	-	Potentially Unsuitable	
Other Historic Asset Considerations	-	Site/area does not adjoin registered Park and Garden, Historic Park or Garden or Conservation Area	Site/area adjoins registered Park and Garden, Historic Park or Garden or Conservation Area.	Site/area is within registered Park or Garden, historic park or garden or conservation area.	
Minerals Safeguarding Considerations	-	Site/area is not on mineral resource safeguarding area	Site/area is on mineral resource safeguarding area	-	

⁵National and Local nature designations (Ramsar Sites, SACs, SPAs, SSSIs, Local Nature Reserves and Local

Wildlife Sites, Registered Common Land, Ancient Woodland

⁶ Sensitivity to development is a metric obtained from the Chris Blandford Associates (2004) *Harlow Area Landscape* Environment Study [online] available at: http://www.harlow.gov.uk/about the council/council services/environment/planning/local development framework/h arlow area landscape study.aspx.

Proximity to Designated Sites

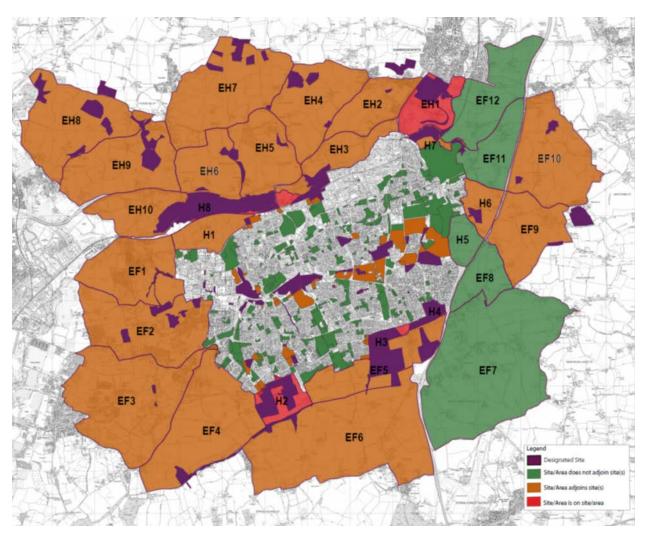


Figure 24: Other Environmental Considerations – Proximity to Designated Sites

- 3.33. Figure 24 identifies the locations of national and local ecological and wildlife sites in the Harlow area. These consist of SSSIs and Local Wildlife Sites (purple). These sites are well represented across the area with a number of large sites within Harlow or in close proximity to the northern and southern edges of the town.
- 3.34. Whilst areas/sites would not necessarily be dismissed from further consideration solely on their proximity to such sites the location of sensitive areas could be a consideration in the location of future development in and around the Council.

Agricultural Land Classification

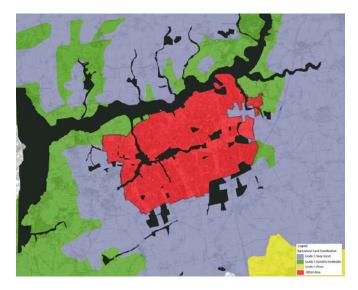


Figure 25: Other Environmental Considerations – Agricultural Land Classification

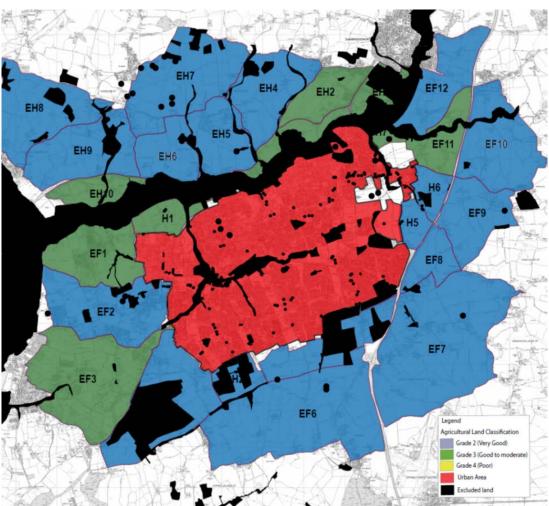


Figure 26: Other Environmental Considerations – Agricultural land classification

3.35. Figure 26 shows the quality of agricultural land around Harlow. This shows that whilst there is no land categorised as Grade 1 (excellent) the majority of land to the east, south

- and west of Harlow is categorised as Grade 2 (very good) as with land stretching beyond the north of Harlow into East Hertfordshire District.
- 3.36. There are areas around Harlow categorised as Grade 3 (good to moderate). This includes land immediately adjoining the urban area to the north of Harlow and in the north western and north eastern corners.
- 3.37. Government Policy is that where significant agricultural land is demonstrate to be necessary for development Local Planning Authorities should seek to use areas of poorer quality in preference to higher quality land. Local Planning Authorities, in reaching decisions about development, should take into account the economic and other benefits of the best and most versatile agricultural land.

Sensitivity to Development

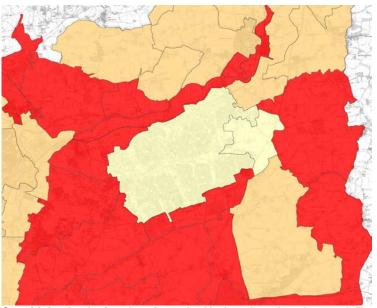


Figure 27: Landscape Sensitivity Analysis taken from the Harlow Area Landscape & Environment Study

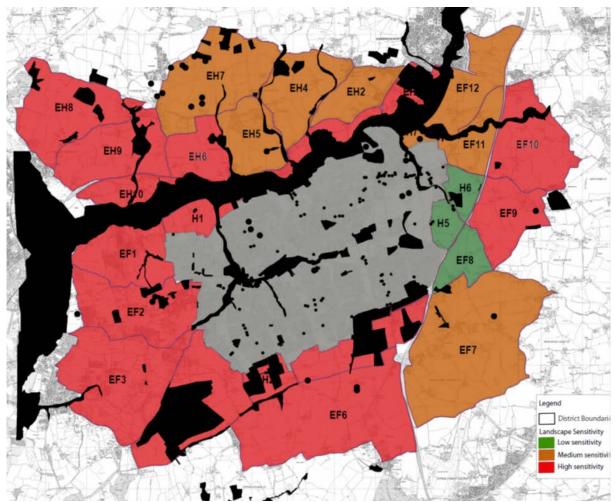


Figure 28: Other Environmental Considerations – Landscape Sensitivity Assessment (outside Harlow)

3.38. Figure 28 shows the relative sensitivity of SLAs around Harlow to substantial urban development (i.e. growth that would broadly equate to a new Harlow neighbourhood or small stand-alone new settlements). This shows that land to the east of Harlow is considered to be less sensitive to development of this scale than other locations around Harlow from a landscape sensitivity analysis. This also shows that land to the north of Harlow is of medium sensitivity to this level of development.

Green Belt Purposes Contradicted

3.39. Given the level of growth required in the Harlow area development in the Green Belt is likely to be required; this will require a Green Belt review around Harlow. A detailed Green Belt Review will be undertaken separately from this assessment but this assessment has factored in Green Belt considerations to provide an initial view on the potential suitability or otherwise of land around the town for development.

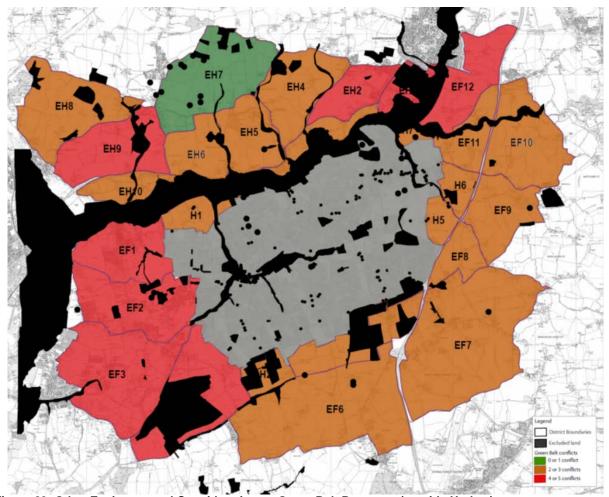


Figure 29: Other Environmental Considerations – Green Belt Purposes (outside Harlow)

3.40. Figure 29 provides an initial assessment of the extent to which substantial development around Harlow would conflict with Green Belt principles⁷. This highlights that substantial development to the west of Harlow and to the north east is likely to conflict with 4 or 5 principles for the Green Belt. Elsewhere to the south, east and north Green Belt conflicts range between 2 and 3.

⁷ The five purposes / principles of the Green Belt are:

[•] To check the unrestricted sprawl of large built-up areas;

To prevent neighbouring towns from merging into one another;

[•] To assist in safeguarding the countryside from encroachment;

[•] To preserve the setting and special character of historic towns; and

[•] To assist in urban regeneration, by encouraging the recycling of derelict and other urban land

Green Belt - Urban Coalescence

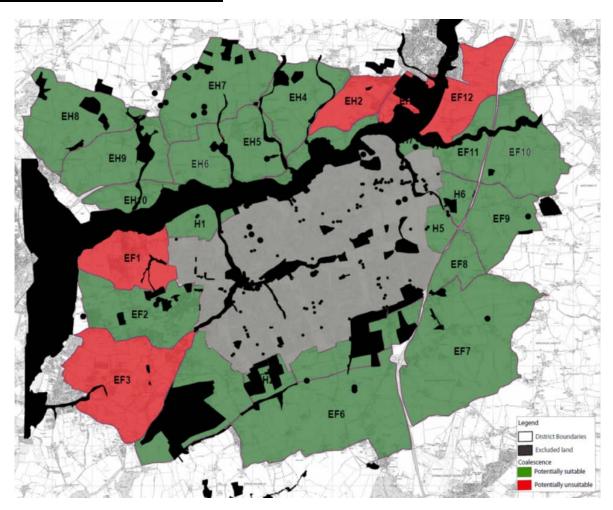


Figure 30: Other Environmental Considerations – Green Belt Coalescence (outside Harlow)

3.41. Figure 30 shows that expansion of Harlow in land to the north-west and to the far north east is likely to lead to the coalescence of Harlow with Roydon and Sawbridgeworth respectively. Expansion of Harlow in other directions is not considered to give rise to potential coalescence.

Other Historic Asset Considerations

3.42. The study has also considered the location of other potentially sensitive areas – namely conservation areas and historic parks and gardens. Whilst these sites (with the exception of registered parks or gardens) would not necessarily preclude development they do give an indication of the potential sensitivity of sites/areas for development. These sites are shown below:

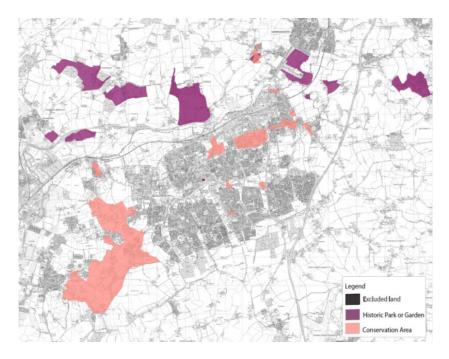


Figure 31: Other Environmental Considerations – Other Historic Asset Considerations

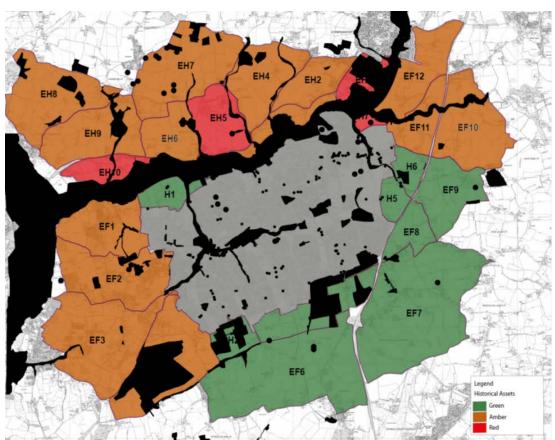


Figure 32: Other Environmental Considerations – Other Historic Asset Considerations (outside Harlow)

3.43. Figure 32 highlights the location of the other historical assets and the location of SLAs outside Harlow to these. Broadly land to the south and east of Harlow would be less likely to impact on these assets.

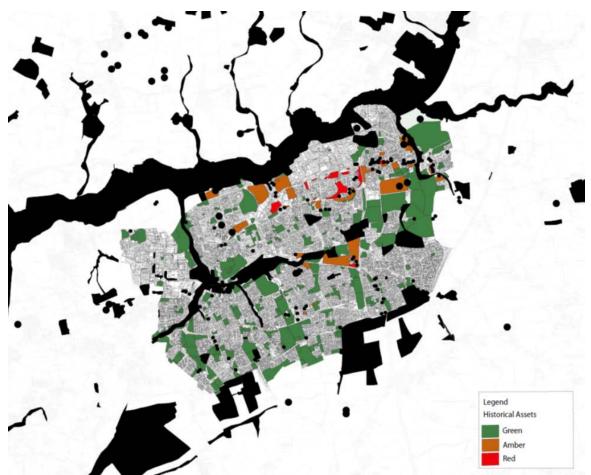


Figure 33: Other Environmental Considerations – Other Historic Asset Considerations (inside Harlow)

3.44. Figure 33 highlights the location of sites/areas within Harlow to other historical assets. This shows that sites in the south, west and eastern Harlow are less likely to impact on other historical assets within Harlow, principally Conservation Areas.

Mineral Safeguarding Considerations

3.45. Figure 34 identifies the locations around Harlow which are defined in the Replacement Minerals Local Plan as Mineral Safeguarding Areas. This does not necessarily preclude development taking place in these locations but it does provide additional information on the potential sensitivity of locations for development.

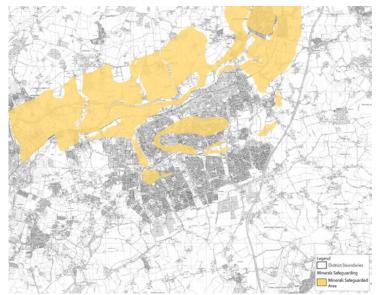


Figure 34: Other Environmental Considerations – Minerals Safeguarding Considerations (outside Harlow)

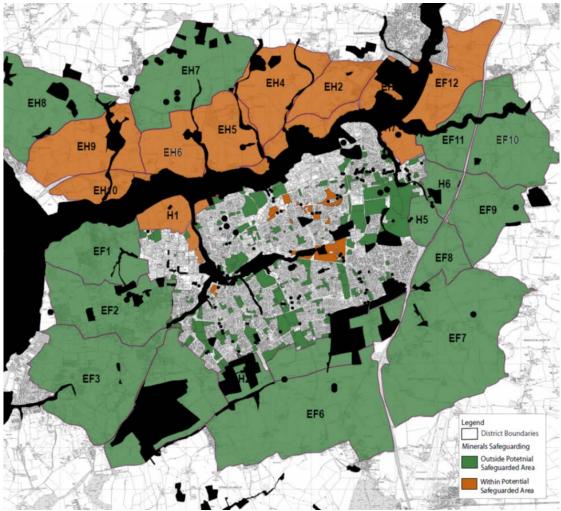


Figure 35: Other Environmental Considerations – Minerals Safeguarding Considerations (outside Harlow)

3.46. Figure 35 identifies that the SLAs to the north of Harlow are of potential minerals resource whereas areas to the south, east and west of Harlow are not. Elsewhere within Harlow there are smaller parcels of land in the central and eastern areas offer potential minerals resource.

Sieve 3 – Opportunity Criteria

3.47. The application of the Opportunity Criteria provided further information on the relative performance of sites against further considerations to help inform the generation of alternative options.

Sieve 3 – Opportunity Criteria		
	3a) Priority Areas and on-going Regeneration Activities	
	3b) Opportunities to Revitalise Centres	
	3c) Opportunities for Local Public Realm Improvements	
	3d) Open Space Revitalisation	

3a) **Opportunities for Regeneration**

3a) Opportunities for Regeneration			
Criteria	Green	Orange	Red
Priority Areas and on-going Regeneration Activities ⁸ .	Site/area has been identified as a priority area for regeneration or Development here has strong potential to deliver nearby regeneration	Development here offers medium potential to deliver nearby regeneration objective(s)	Development here is considered to have low potential to deliver nearby regeneration objective(s)
Opportunities to revitalise centres	Development here offers strong potential to revitalise nearby centre	Development here offers medium potential to revitalising nearby centre	Development here has low potential to contribute to revitalising nearby centre
Opportunities for local public realm improvements	Development here offers strong potential to deliver local public realm improvements	Development here offers medium potential to deliver local public realm improvements	Development here has low potential to deliver local public realm improvements
Open Space revitalisation	Below quality open space	-	Above quality open space

- 3.48. A central component of the Local Plan is the delivery of local regeneration objectives as part of a strategy to secure the regeneration of the town as a whole. The assessment therefore has considered what areas of town require regeneration (in the broadest sense).
- 3.49. The Council has undertaken a number of assessments that consider localised regeneration issues across Harlow including the Harlow Area Study: Masterplanning Principles & Sustainability Criteria and the Harlow Area Investment and Renewal Framework.
- 3.50. The studies have identified that the south and western parts of Harlow are where concentrations of socio-economic and physical issues exist. In contrast, the eastern side of Harlow does not experience systemic issues requiring substantial intervention. Finally, although the Netteswell and Markhall areas do not experience systemic issues there are a number of localised issues that are present. This is shown in figure 36 below:

⁸ This category has been developed to identify specific areas of the town with identified regeneration issues and to inform decisions on the ability of a site/area to contribute to the delivery of the regeneration of this site/area. This assessment does not consider cumulative impacts of multiple sites/areas on specific regeneration objectives, particularly the impact that overall levels of development outside Harlow will have on economic objectives.

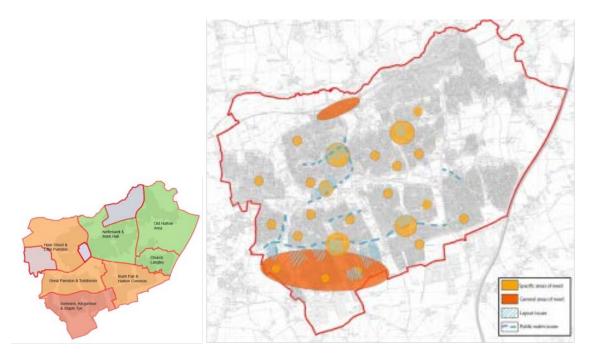


Figure 36: Identified Regeneration Priorities in Harlow

Priority Areas and On-going Regeneration Activities

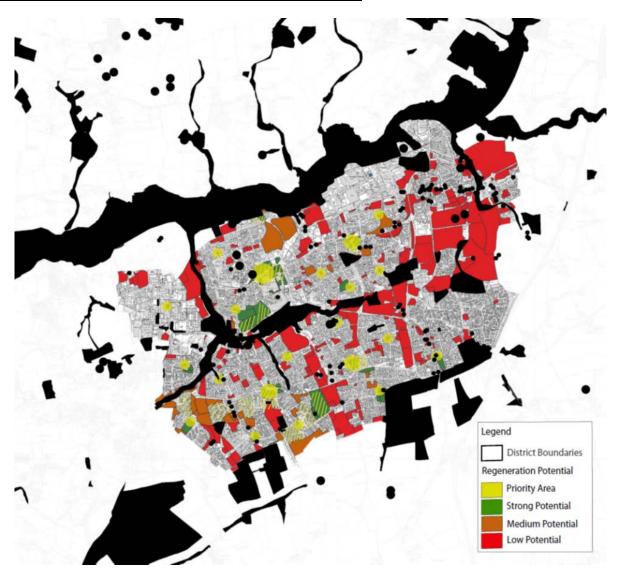


Figure 37: Identified Priority Areas and ongoing Regeneration Activities (in Harlow)

- 3.51. Figure 37 illustrates the locations (in yellow) within Harlow that are considered to be priority areas for regeneration and intervention. They largely consist of hatches, neighbourhood centres and a number of residential estates and are generally concentrated in the southern and central parts of Harlow with some sites identified in elsewhere.
- 3.52. Sites/areas have been assessed for the potential contribution development here could make towards regenerating these locations.

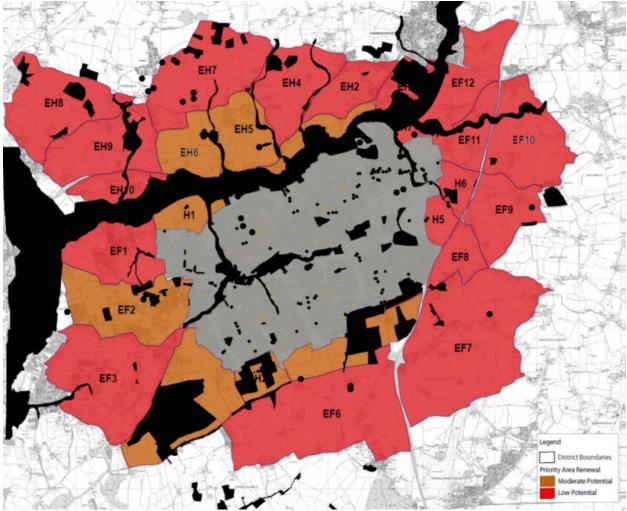


Figure 38: Identified Priority Areas and ongoing Regeneration Activities (outside Harlow)

- 3.53. Figure 38 identifies the potential for land areas outside Harlow to contribute to the renewal of these priority locations. This aspect assessed the direct relationship between a particular SLA and the priority area in question. This shows that the SLAs immediately adjoining the south and south west of Harlow provide medium potential to regenerate priority locations that are located in the southwest of the town.
- 3.54. The assessment also shows medium potential for some SLAs to the north of Harlow to contribute to the renewal of some of the priority areas in central/northern Harlow. However, beyond the immediate boundary of the town the potential for any individual SLA to contribute to the renewal of specific priority areas is considered to be low.
- 3.55. However, this assessment does not consider the cumulative impact of one or more locations in providing increase population and hence generating spending power to reinvest in the Harlow economy. The question of the ideal 'growth' is considered elsewhere in the Local Plan.

Opportunities to revitalise centres

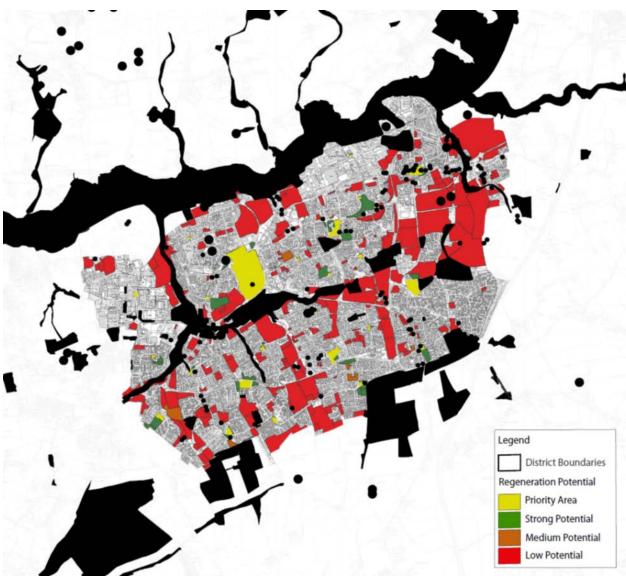


Figure 39: Identified opportunities to revitalise centres across Harlow

3.56. Figure 39 identifies all centres across Harlow (in yellow), many of which are becoming dated and require renewal. Sites/areas within Harlow were assessed for the potential contribution to revitalising and regenerating these locations through development. As expected, the assessment identifies that sites/areas in close proximity to these centres provide strong potential to revitalise and regenerate these centres through development and change.

Opportunities for local public realm improvements

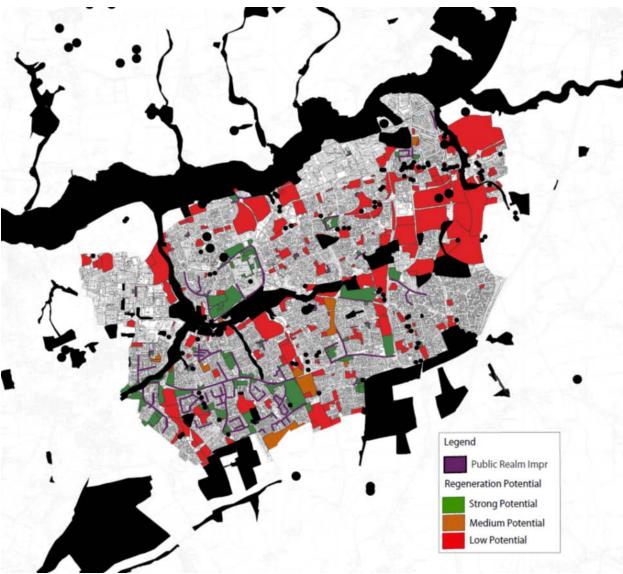


Figure 40: Opportunities for public realm improvements

- 3.57. Figure 40 identifies a number of locations across Harlow where the quality of the public realm is considered to be a particular issue requiring consideration in the development of options (in purple).
- 3.58. Public realm related issues appear to be overwhelming concentrated in the south and southwest of Harlow and linked to the estate layout and materials used in construction. There are issues in and around the town centre and in residential areas to the west. Elsewhere in Harlow to the east the majority of public realm related issues tend to be concentrated in and around Hatches and Neigbourhood centres with very few issues in residential areas.

Open Space revitalisation

3.59. Figure 41 illustrates those open spaces which have been assessed as falling below the established quality standard set out in the Harlow Open Space and Green Infrastructure Study. Sites have been assessed against the potential to improve nearby poor quality open space. Open spaces in (green) a are considered to offer potential to be improved through the development of nearby sites.

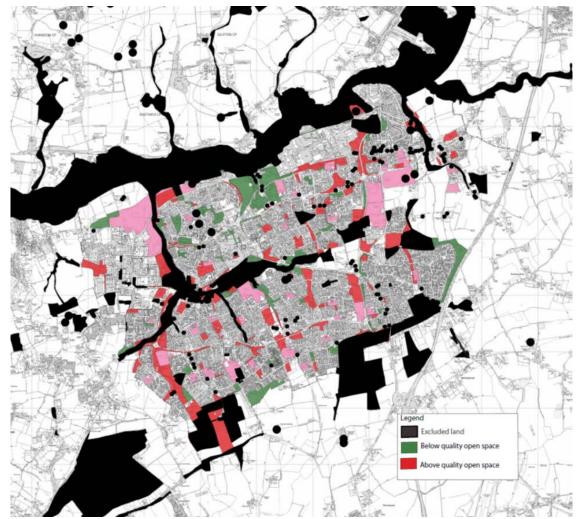


Figure 41: Below quality open space

4. Stage 1.3 Harlow Development Principles

- 4.1. To inform the development of alternative options the Council has established a number of Development Principles⁹. These provide high-order place shaping principles that the Council considers to be relevant in shaping Harlow's urban form and structure. These guide all options allowing the Council to avoid generating options which would be considered 'unreasonable' from the outset.
- 4.2. The development principles are summarised below. Further details can be found in Appendix 1.

Harlow Development Principles

- Continuing a Compact Town
- Retaining the Neighbourhood Structure
- Sequencing Development

5a) Harlow Development Principles

5a) Harlow development Principles Sieve			
Criteria	Green	Orange	Red
Continuing a compact town	Development of Site/area would maintain compact a compact town.	Some potential for core principle to be undermined.	Development of Site/area would significantly undermine the existing compact nature of Harlow
Retaining the neighbourhood structure	Development of Site/area would maintain broad neighbourhood/Green Wedge structure	Some potential for core principle to be undermined.	Development of Site/area would significantly undermine broad neighbourhood/Green Wedge structure
Sequencing development	Site/area is within the existing built up area of Harlow	Site/area is within Green Wedges but in existing urban envelope of Harlow	Site/Area is in the Green Belt

⁹ The Development Principles have been established in response to comments raised during the Issues and Options consultation. The principles are discussed in more detail in Appendix 1.

Continuing a compact town

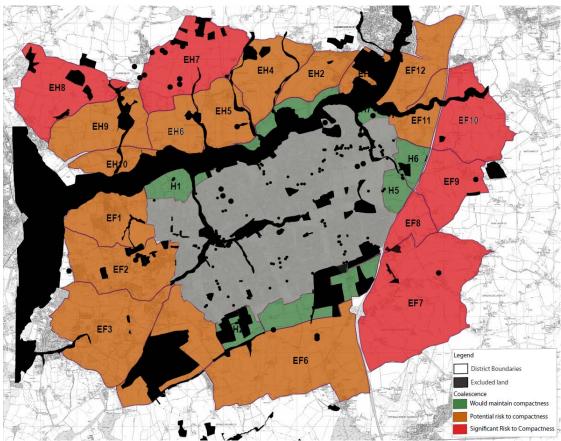


Figure 42: Implications of development on Principle 1: Continuing a compact town

- 4.3. Figure 42 illustrates the potential that development on SLAs around Harlow would have for principle 1 (continuing a compact town). This shows that development of SLAs immediately to the south, east and north of Harlow would continue the generally compact nature of Harlow. Development of the SLAs east of the M11 and in the far north would significantly undermine the existing compact nature of the Harlow.
- 4.4. There are a substantial number of SLAs around Harlow where development of some land could be achieved without significantly undermining the compact nature of Harlow. This applies to land to the west and south west of Harlow, land to the east and north east and some SLAs to the north of the town.

Retaining the neighbourhood structure

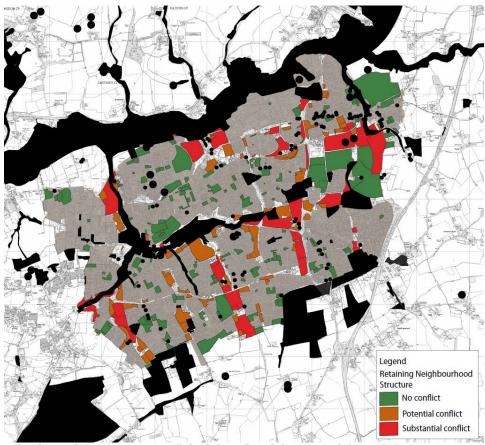


Figure 43: Implications of development on Principle 2: Retaining the neighbourhood structure

- 4.5. Figure 43 illustrates the suitability of sites/areas against principle 2 (retaining the neighbourhood structure). This shows that a considerable number of sites are within the existing built up area of Harlow and could be developed without having any impact on the integrity of the existing neighbourhood/Green Wedge structure.
- 4.6. The assessment has also identified a number of sites/areas within Harlow that although are located within the Green Wedges that could be developed/partially developed whilst maintaining the principle of the existing principle neighbourhood structure and Green Wedge network. Conversely, there are a number of sites/areas where development is likely to have a significant impact on the existing neighbourhood/Green Wedge structure.

Sequencing development

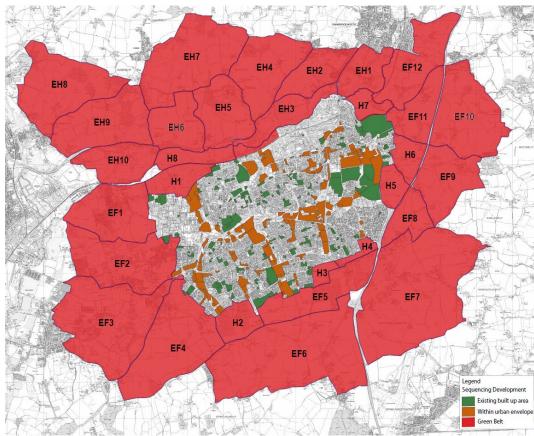


Figure 44: Implications of development on Principle 3: Sequencing Development

4.7. Figure 44 illustrates the suitability of sites/areas against principle 3 (sequencing development). This provides an overview where sites/areas fall on the sequencing approach outlined in principle 3. Figure 44 does not indicate which sites/areas are more/less suitable for development overall as this will depend on other factors.

5. Stage 2 – Identifying developable sites

Stage 2.1 Assessing Developability of Potentially Suitable Sites

- 5.1. The sieving process has provided information on the potential suitability of areas within and around Harlow for development. However, although a site may provide a potentially suitable site for development it must also be considered to be 'developable' i.e. there is a reasonable prospect that the site is available and could be viably developed at the point envisaged. Sites which are not developable cannot be taken forward for further consideration.
- 5.2. The assessment of whether a site is developable or not has been taken from the Council's Strategic Housing Land Availability Assessment. The SHLAA did not consider the developability or otherwise of locations outside the district boundary as this is a matter for the relevant adjoining authority. However, as this work progresses the Council will work with adjoining authorities to share the assessment of sites.

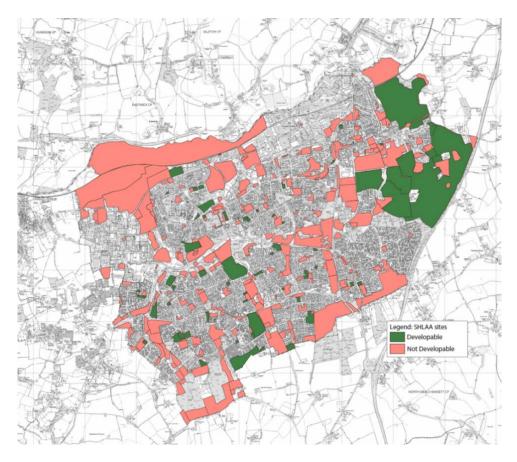


Figure 45: Sites in Harlow assessed to be developable and not developable at this stage

5.3. The outcome of the developable site assessment concluded that there is sufficient developable land in Harlow District to accommodate 8,886 dwellings. This consists of 4,027 dwellings that have planning permission and 541 dwellings that have been completed since 2011. This leaves sufficient new sites in Harlow to accommodate 4,318 dwellings.

5.4. The implication for the generation of development scenarios is that the Council will need to work with adjoining authorities to identify sufficient land to provide between 3,200 and 6,200 new dwellings to meet Harlow's needs.

6. Stage 3 – Generating and Appraising the examples

Stage 3.1 Generating Alternative Spatial Options

- 6.1. Using the pool of sites/areas identified through the sieving process five alternative options for accommodating growth in and around Harlow have been generated. These present the Council with alternatives for accommodating development across Harlow. The examples have been developed to reflect alternate policy objectives for Harlow and therefore provide different spatial approaches. However, all options share the following key characteristics:
 - 1. Each provides for Harlow's identified development requirement of between 12,000 & 15,000 new dwellings The Council's evidence highlights that this is the level of development required in the Harlow area between 2011 & 2031. This level of development meets the District's objectively assessed development needs and is the level of growth required to deliver a number of regeneration objectives for Harlow.
 - 2. Reflect the Harlow Development Principles Each option has been developed to ensure it broadly fits with the established development principles for Harlow, namely continuing a compact town (where possible), maintaining the neighbourhood and green wedge structure and sequencing development to maximise previous developed land first, then appropriate open spaces and finally the green belt. However, given limited land availability in Harlow the amount of development proposed within the existing town does vary. This is influenced by spatial priorities being promoted through that option.

How Much Housing Can Be Accommodated in Harlow?

- 6.2. As identified in the previous section the Strategic Housing Land Availability Assessment (SHLAA) 2013 has shown there to be sufficient developable land to accommodate **8,886** new dwellings in the Harlow District administrative area. There is some potential to increase this if higher density development was pursued through redeveloping parts of Harlow Town Centre and selected Neighbourhood Centres. These figures indicate the likely maximum amount of development that could be provided in Harlow district if all identified sites are developed, regardless of the strategy being adopted by the Council.
- 6.3. These sites are subject to further viability and delivery assessment and will need to be considered against the wider strategy being promoted. If this assessment concludes that some sites cannot be delivered, or are not appropriate for the wider strategy, then the Council will need to revise down its assumptions about developable land in Harlow District. Notwithstanding the above it is clear that the Council will need to work with adjoining districts in accordance with the duty to cooperate to deliver a proportion of Harlow's development needs.
- 6.4. Reflecting the likelihood that some development will be required outside Harlow's administrative boundary the assessment has developed examples that include locations within the district's administrative boundary but also suggest logical locations for growth outside Harlow's administrative boundary in accordance with the principles set out in that particular example.

6.5. Locations have been selected on the strength of their conformity with the relevant principles being pursued through that option.

Example 1 – Focused on Priority Regeneration Areas

Introduction

- 6.6. The assessment has identified a number of locations within Harlow where focused development could deliver local regeneration priorities for the town. These sites/areas scored better against the socio-economic and the local regeneration considerations criteria contained in the Discretionary and Opportunity sieves. This includes locations to the south of Harlow together with the town centre, neighbourhood centres and hatches.
- 6.7. Under this example the majority of development would be focused in the and south west of Harlow where the majority of priority regeneration areas have been identified. Growth to the north of Harlow would be introduced if 15,000 dwellings were required to further support the regeneration of the town centre. This option would also utilise a number of open spaces to support local regeneration.
- 6.8. This pattern of growth would involve approximately 7,500 dwellings being provided within Harlow district, principally on previously developed land but with some utilisation of existing open spaces. This option would not require green belt release in Harlow. Under this example between 4,500 to 7,500 dwellings would need to be provided outside Harlow district. To deliver development in accordance with the principles set out in this example the study proposes urban extensions outside Harlow to the south and south west. If 15,000 dwellings are required then the study proposes introducing development to the north of Harlow.
- 6.9. The distribution of development in Example 1 (at 15,000 dwellings) is shown below:

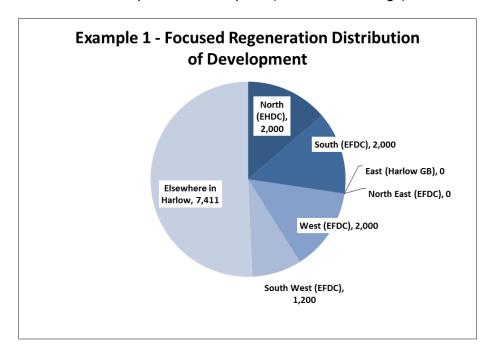
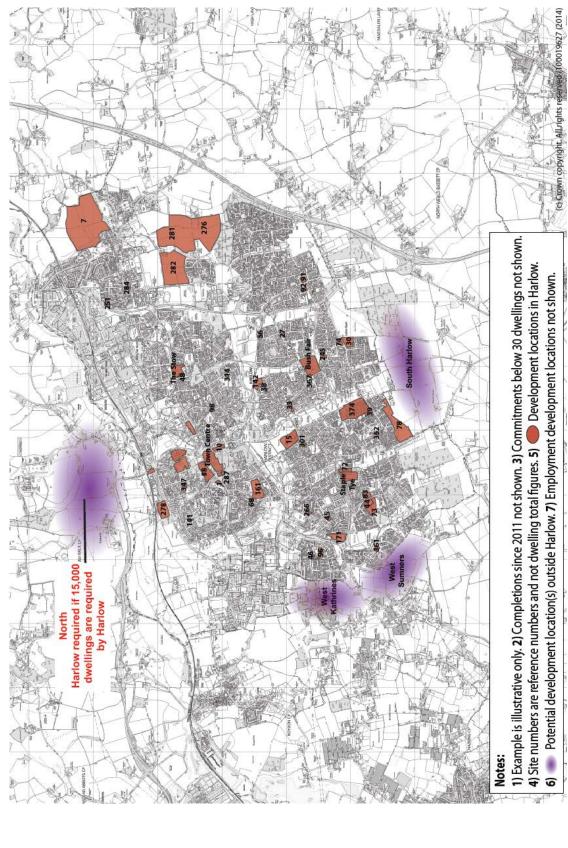


Figure 46: Example 1 Distribution of Development



The sites/areas identified for this option are shown below:

Figure 47: Focused on Priority Regeneration Areas (Internal Sites & External Growth Locations)

Implications for Core Priorities and Places

6.10. The following table summarises the likely implications of this example on the strategic priorities that have been developed to underpin the local plan.

Strategic Priority	Discussion of likely Implications
Delivering a growing, sustainable and regenerated Harlow	In addition to providing a growing and sustainable Harlow this approach seeks to further drive the town's regeneration by focusing development and change in areas in greater need of regeneration, namely the priority areas in the south of the town.
Meeting Housing Needs	This option would deliver the required level of market and affordable housing required across Harlow.
Delivering Neighbourhood Renewal	This option would provide significant opportunities for neighbourhood renewal across Harlow by focusing more development within the exiting built up area and adjoining priority neighbourhoods in the south of Harlow. If 15,000 dwellings are provided further growth to the North of Harlow is introduced to provide further stimulus to the regeneration of the town centre.
Securing Economic Revitalisation	This option provides for the creation of approximately 8,000 new jobs between 2011 and 2031. The approach would be to allow the loss of vacant and underused offices in the town centre, where there are too many, whilst promoting industrial and manufacturing in Harlow. Other elements of the strategy would be to promote the Enterprise Zone sectors whilst also allowing for some churn of employment land to allow forecasted growth sectors to grow. Key employment areas would be protected but some reconfiguration of existing employment space would be provided to support local regeneration objectives across Harlow. If higher growth is provided additional employment land would be allocated as part of urban expansions. The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan.
Renewing the Town Centre and other Centres	This approach would provide significant opportunities to regenerate these areas through restructuring centres and providing additional growth. Existing centres would also accommodate additional provision of services and facilities to sustain new communities. As part of this strategy significant upgrade in the public realm will be implemented.
Fostering Quality Streets and Spaces	Under this option the public realm around development areas would be activated, particularly along Southern Way. This option would also deliver selective renewal and redevelopment elsewhere across Harlow providing substantial opportunities for improvements to streets and spaces.
Revitalising Green Spaces Needs	All approaches seek to revitalise open spaces by increasing activity and surveillance through appropriately cited development. This option includes some losses of open space across Harlow to support other objectives but the losses have been minimised to avoid adverse impacts on the Gibberd principles.

Adapting to and Mitigating the Impacts of Climate Change	The example has sought to minimise green belt land by focusing development within the urban area. The concentration of growth in and around the town centre is proposed to utilise the bus interchange in the town and better access to Harlow Town Station. The example has also sought to steer new development away from flood 2 and 3.
Improving Accessibility and Connectivity	By providing more development within the existing urban area (particularly in and around centres) this approach is likely to provide greater support for local passenger transport services across Harlow, particularly improving links from the south of Harlow into the town centre.
Supporting Development and Change	An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

6.11. The following table illustrates the potential implications of example 1 on different parts of the town.

Implications for Places	Discussion of likely implications
Town Centre	This option seeks to focus future development in this location and drive the town centre up the retail hierarchy through restructuring and expansion. This option would seek additional residential development within the northern part of the centre and appropriate expansions of the current offer. The increases in residential development in the town centre will help to sustain the long term viability of the town centre and address current underperformance.
Neighbourhood Centres	The option seeks to sustain the long term viability of Neighbourhood Centres by supporting their restructure and growth. The strategy will seek to provide for additional residential development in these centres coupled with increases in provision of retail and other facilities. The strategy will seek to deliver improvements to the public realm.
Hatches	The option seeks to sustain the long term viability of hatches by supporting their restructure and growth. The strategy will seek to provide for additional residential development in these centres to improve viability of these areas. Central to the strategy will be providing substantial physical improvements to the public realm.
Green Wedges and Open Spaces	The strategy will involve the loss of some selected open spaces across Harlow to support selective development. Although this scenario would include a net loss in the quantity of space evidence has demonstrated that the town will still have adequate provision in all areas.
The Green Belt	This option does not require the release of green belt land in Harlow. However, given the constraints on the existing town some green belt development would be required in the south and south west of Harlow. If 15,000 dwellings were required to meet Harlow's need then further green belt release would be provided to the north of Harlow.
Employment Areas	This option does include some reconfiguration of employment land in the south of Harlow to support local regeneration objectives. This option also includes

the use of vacant office space within the town centre to support increased residential development. The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan. **Church Langley** Minimal change proposed in and around this area. Little Parndon and Hare Selective redevelopment of Hatches and existing employment land, Street Northbrooks and the town centre and adjoining land offer improvements to retail, services and facilities. Kathrines, Great Parndon, Area for focused change with redevelopment of Hatches and use of underused **Passmores** open spaces to facilitate public realm improvements and local regeneration objectives. Substantial improvements proposed for Southern Way and the provision of a southern Bypass to the town to accommodate growth. Town Park, Markhall, The majority of investment is focused towards the Stow through selective Netteswell redevelopment of the Neighbourhood Centre to provide additional residential development. However, if 15,000 dwellings are required then green belt development to the North would require further improvements to the A414 across the area. Old Harlow, Churchgate Change will arise from existing commitments (Newhall and Gilden Way) Street, Newhall Further development will be limited to selective development of a small number of sites. This option seeks to deliver transformational change to the area by improving Sumners, Kingsmore, Staple Tye the quality of the public realm, reinvigorating Staple Tye Neighbourhood Centre and the Hatches. In addition, substantial public realm improvements along Southern Way will be sought. There will be some losses of open space to facilitate local regeneration and housing objectives. Further investment and change proposed through green belt development to the south and south west. Bush Fair, Brays Grove, This option seeks to deliver selective improvements to the public realm and the Potter Street, Latton Bush redevelopment of Hatches and the Bush Fair Neighbourhood Centre. In particular, opportunities to deliver improvements to Southern Way will also be implemented.

Example 2 – Environmental / Landscape Led

Introduction

- 6.12. This example has been developed by selecting those sites/areas considered to have relatively less impact against the environmental and landscape criteria contained in the Discretionary Sieve. This includes proximity to designated ecological sites, agricultural land classification, landscape sensitivity, minerals safeguarding areas, green belt considerations and other historical assets.
- 6.13. Under this example the majority of new development would be located to the east and north east of the town. Development to the south of the town is also included in this option compared to the north given principally because of the absence of minerals safeguarding areas and fewer historical assets being present. Growth to the south west of Harlow is introduced if 15,000 dwellings are required.
- 6.14. This pattern of growth would involve approximately 8,000 dwellings within Harlow, including Green Belt land in Harlow district. To deliver development in accordance with the principles set out in this Example the Council would be looking to work with adjoining districts to provide the additional 4,000 to 7,000 dwellings outside Harlow district. The study suggests development to the north east and to the south of Harlow to deliver the required level of development. The Council would need to work with Epping Forest District Council to accommodate both the lower and higher level of development to Harlow.
- 6.15. The distribution of development in example 2 (at 15,000 dwellings) is shown below:

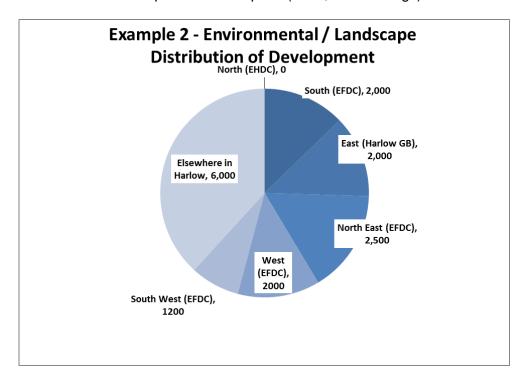


Figure 48: Example 2 Distribution of Development

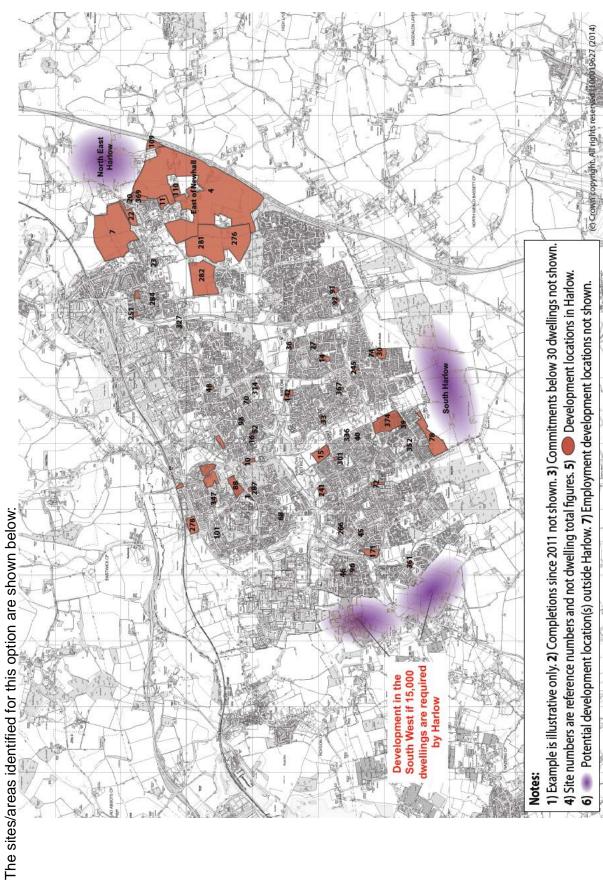


Figure 49: Environmental / Landscape Led (Internal Sites & External Growth Locations)

Implications for Core Priorities and Places

6.16. The following table illustrates the potential implications of example 2 on the strategic priorities that have been developed to underpin the local plan.

Strategic Priority	Discussion of likely Implications
Delivering a growing, sustainable and regenerated Harlow	This option seeks to provide for a growing Harlow by accommodating the majority of new development to the east of the existing town through sustainable urban extensions to the east of Harlow, supplemented by smaller extensions to the south. If 15,000 dwellings are required then further growth is proposed through urban extensions to the south west of Harlow.
Meeting Housing Needs	This option would deliver the required level of market and affordable housing required across Harlow.
Delivering Neighbourhood Renewal	This option provides some opportunities for neighbourhood renewal but these are limited to selected locations in the south of Harlow, mainly through the use of selected open spaces.
Securing Economic Revitalisation	This option provides for the creation of approximately 8,000 new jobs between 2011 and 2031. Harlow's main employment areas would be protected but a small amount of existing employment space would be provided to support local regeneration objectives across Harlow. If higher levels of growth are provided then additional employment land would be provided as part of urban expansions to Harlow.
	The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan.
Renewing the Town Centre and other Centres	This option provides some opportunities to renew these centres. Residential development in the town centre would be limited to land to Wych Elm area immediately to the north. Much more limited change would be proposed in and around the Neighbourhood Centres. A number of Hatches would however experience some renewal.
Fostering Quality Streets and Spaces	Under this option the public realm improvements within Harlow would be limited to the proposed development sites. The majority of change would be provided in the south of Harlow through selective renewal.
Revitalising Green Spaces Needs	All options seek to revitalise open spaces by increasing activity and surveillance through appropriately cited development. This option includes a small number of losses of open space across Harlow but overall these are minimised.
Adapting to and Mitigating the Impacts of Climate Change	The example has sought to provide development outside Harlow in those areas identified to have fewer environmental and landscape constraints. Notwithstanding this, the option does seek to promote development within the existing urban area of Harlow to reduce the reliance on land outside of Harlow.
Improving Accessibility and Connectivity	By providing more development to the east of Harlow the option is expected to provide greater support for local passenger transport services from the east and serving the town centre.

Supporting Development and Change

An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

6.17. The following table illustrates the potential implications of example 2 on different parts of the town.

Implications for Places	Discussion of likely implications
Town Centre	This option provides for the redevelopment of the Wych Elm area to accommodate further residential development. The increases in residential development in the town centre will help to sustain the long term viability of the town centre and address current underperformance.
Neighbourhood Centres	The strategy is focused on increasing the viability of neighbourhood centres by providing small scale residential development close to existing centres to support the long term viability of centres. However, this option does not promote the redevelopment of neighbourhood centres as part of a renewal programme.
Hatches	The option seeks to sustain the long term viability of hatches by supporting the redevelopment of selected locations. The strategy will seek to provide for additional residential development in these centres to improve viability of these areas.
Green Wedges and Open Spaces	The strategy will involve smaller losses of some open spaces across Harlow but these are minimised to a small number of selected locations.
The Green Belt	This option requires the release of green belt land in Harlow in the east of Harlow and to the north east and south of Harlow in Epping Forest District. If 15,000 dwellings were required to meet Harlow's need then further green belt release would be provided to the south west of Harlow.
Employment Areas	The majority of employment land would be retained but there would be some reconfiguration of employment land to the south to support local regeneration objectives. The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan.
Church Langley	Minimal change proposed in this area but substantial development proposed to the north.
Little Parndon and Hare Street	Redevelopment of Hatches and implementation of previous allocations.
Kathrines, Great Parndon, Passmores	At 12,000 dwellings development is limited in this area to a small number of greenfield sites being identified for development. If 15,000 dwellings are required then urban extensions to the south west of Harlow would be promoted.

Town Park, Markhall, Netteswell	Selected development of a small number of sites focused towards the Stow and other small sites across the area.
Old Harlow, Churchgate Street, Newhall	Substantial development and change through the creation of a number of neighbourhood areas to the east and north east of the existing town. Development would be accommodated through a green belt review undertaken (in part) with Epping Forest District Council.
Sumners, Kingsmore, Staple Tye	At 12,000 dwellings development within the urban area is limited. Development provided on some greenfield sites but some previously developed sites are also identified. Development to the south of Harlow is included. If 15,000 dwellings are required then urban extensions to the south west of Harlow would be promoted.
Bush Fair, Brays Grove, Potter Street, Latton Bush	Development on a small number of sites across the area primarily on previously developed land but also some selective use of greenfield sites. Development also provided to the south of Harlow through green belt release.

Example 3 – Passenger Transport Led

Introduction

- 6.18. This example has been developed by selecting those sites/areas that scored better against passenger transportation considerations in the Discretionary Criteria sieve. This principally focuses on the location of passenger transport hubs such as railway stations and other hubs such as the town centre.
- 6.19. Under this example the majority of new development is located in the northern and eastern parts of Harlow in areas considered to have better access to railway stations. This option would also focus further residential development in and around the town centre. Development and change is generally minimised in the south of Harlow where access to railway stations is poorest. If growth up to 15,000 new dwellings is required then further development to the north of Harlow would be provided to utilise passenger transport connections.
- 6.20. This pattern of growth would involve approximately 7,800 dwellings being provided within Harlow district. This example would require Green Belt development within Harlow. To deliver the full amount of development in accordance with this approach the study suggests urban extensions to the north of Harlow in East Hertfordshire District area to provide between 4,200 and 7,200 dwellings.
- 6.21. The distribution of development in example 3 (at 15,000) is shown below:

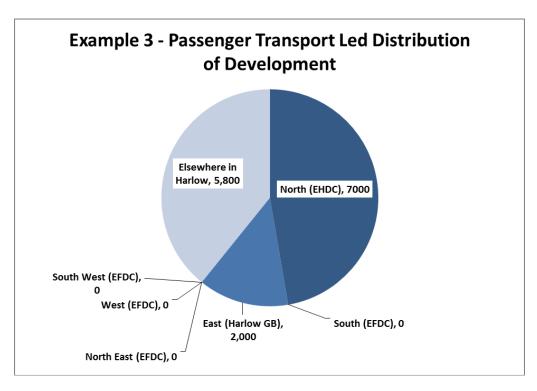


Figure 50: Example 3 Distribution of Developme

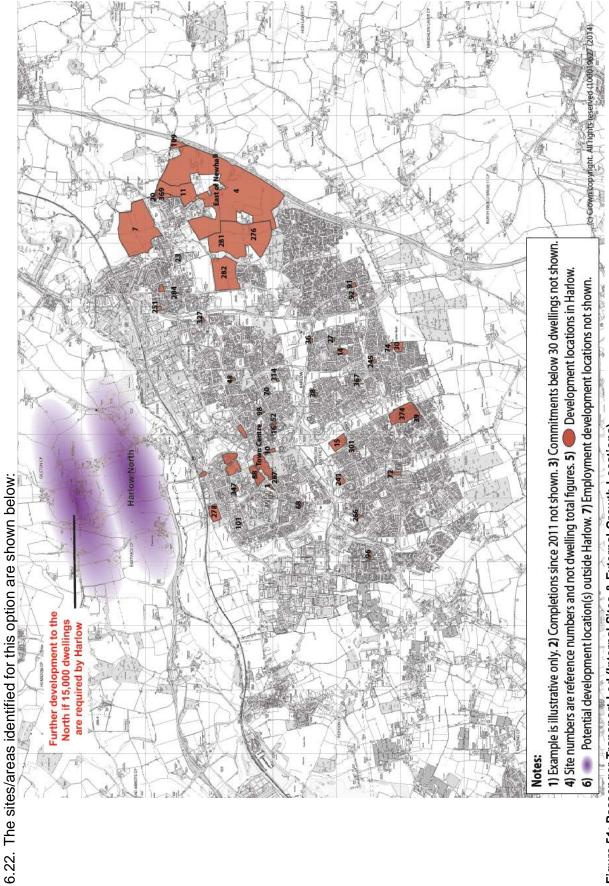


Figure 51: Passenger Transport Led (Internal Sites & External Growth Locations)

Generating and Testing Spatial Options (Stages 1 – 3)

Implications for Core Priorities and Places

6.23. The following table illustrates the potential implications of example 3 on the strategic priorities that have been developed to underpin the local plan.

Strategic Priority	Discussion of likely Implications
Delivering a growing, sustainable and regenerated Harlow	In addition to providing a growing Harlow this option seeks to provide development in closer proximity to passenger transport services such as rail stations and bus interchanges.
Meeting Housing Needs	This option would deliver the required level of market and affordable housing required across Harlow.
Delivering Neighbourhood Renewal	This option would not promote neighbourhood renewal as a key objective of the strategy. As such only a small number of sites within the existing urban area are identified for development. This option does not provide for the renewal of identified priority residential areas in the south of Harlow.
Securing Economic Revitalisation	This option provides for the creation of approximately 8,000 new jobs between 2011 and 2031. The approach would be to allow the loss of vacant and underused offices in the town centre, where there are too many, whilst promoting industrial and manufacturing in Harlow. Other elements of the strategy would be to promote the Enterprise Zone sectors whilst also allowing for some churn of employment land to allow forecasted growth sectors to grow. At higher levels of growth additional employment land would be sought through urban extensions to Harlow. Key employment areas would be protected but some reconfiguration of existing employment space would be provided to support local regeneration objectives across Harlow.
Renewing the Town Centre and other Centres	This option would provide significant opportunities to regenerate the town centre as this would be a location for further residential development. Much more limited change would be proposed in and around the Neighbourhood Centres. A number of Hatches would however experience some renewal.
Fostering Quality Streets and Spaces	Under this option the public realm improvements within Harlow would be limited to the proposed development sites.
Revitalising Green Spaces Needs	All options seek to revitalise open spaces by increasing activity and surveillance through appropriately cited development. This option includes a small number of losses of open space across Harlow but overall these are minimised.
Adapting to and Mitigating the Impacts of Climate Change	The example promotes future development in areas in closer proximity to passenger transport services, particularly train stations and bus interchanges. The example has also sought to steer new development away from flood 2 and 3.
Improving Accessibility and Connectivity	The option seeks to promote improved accessibility by providing development in the most accessible locations in and around Harlow. Increased residential development in the town centre will increase the viability of bus routes operating from the town.
Supporting Development and Change	An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This

assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

6.24. The following table illustrates the potential implications of Example 3 on different parts of the town.

Implications for Places	Discussion of likely implications
Town Centre	This option seeks to focus future development in this location and drive the town centre up the retail hierarchy through restructuring and expansion. This option would seek additional residential development within the northern part of the centre and appropriate expansions of the current offer. The increases in residential development in the town centre will help to sustain the long term viability of the town centre and address current underperformance.
Neighbourhood Centres	The strategy is focused on increasing the viability of neighbourhood centres by providing small scale residential development close to existing centres to support the long term viability of centres. However, this option does not promote the redevelopment of neighbourhood centres as part of a renewal programme.
Hatches	The option seeks to sustain the long term viability of hatches by supporting the redevelopment of selected locations. The strategy will seek to provide for additional residential development in these centres to improve viability of these areas.
Green Wedges and Open Spaces	The strategy seeks to minimise the extent to which open spaces and green wedges in Harlow are utilised. However, the option does utilise a small number of open spaces across Harlow.
The Green Belt	This option would require land in the Green Belt to accommodate the level of development proposed. Development would take place in those areas that satisfy the Green Belt Review and satisfy the long term objectives for the Green Belt.
Employment Areas	The majority of employment land would be retained but there would be some reconfiguration of employment land to the south to support local regeneration objectives. The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan
Church Langley	Minimal change proposed in this area but substantial development proposed to the north.
Little Parndon and Hare Street	Small scale development focused towards existing Hatches and previous housing allocations.
Kathrines, Great Parndon, Passmores	Small scale development close to existing Hatches together with selective open space utilisation and the redevelopment of school site.
Town Park, Markhall, Netteswell	Small scale development proposed within the existing urban area focused towards the Neighbourhood Centre and Hatches, supplemented with a small

	number of other sites across the area.
Old Harlow, Churchgate Street, Newhall	This area would be subject to significant change resulting from the continued development of existing local plan commitments and further Green Belt development to the east towards the M11. Associated with these changes will be the provision of supporting infrastructure such as schools, a new junction on the M11 and the construction of a link road to the town to accommodate the proposed growth.
Sumners, Kingsmore, Staple Tye	This option seeks to deliver some change in this part of Harlow but this will be principally focused on locations outside of the existing urban area.
Bush Fair, Brays Grove, Potter Street, Latton Bush	This option seeks to deliver some localised development at the Bush Fair Neighbourhood Centre and at Hatches. Other small scale development is promoted but is minimised.

Example 4 – Regeneration and Landscape Led

Introduction

- 6.25. This example has been developed by balancing regeneration and landscape considerations. Initially, the sites/areas within the Harlow urban envelope that scored well against the socio-economic and the local regeneration considerations criteria contained in the Discretionary and Opportunity sieves were identified. These sites were then combined with the sites/areas outside the existing urban envelope that performed better against the local regeneration considerations and the landscape sensitivity considerations in the Discretionary and Opportunity Criteria.
- 6.26. Under this example the location of new development is split between selected sites within the urban area together with urban extensions to the east of Harlow and to the south west into Epping Forest District. If 15,000 dwellings are needed then additional urban extension to the west of Harlow could be provided.
- 6.27. This pattern of growth would involve approximately 8,800 dwellings being provided within Harlow District. Green Belt land within Harlow would also be required to accommodate development. To deliver the full amount of development in accordance with this approach would require between 3,200 and 6,200 dwellings. The study suggests that providing this level of development in accordance with these principles would require urban extensions to Harlow to the north east and south west of Harlow with further development to the west being proposed if 15,000 dwellings are proposed.
- 6.28. The distribution of development of Example 4 (at 15,000 dwellings) is shown below:

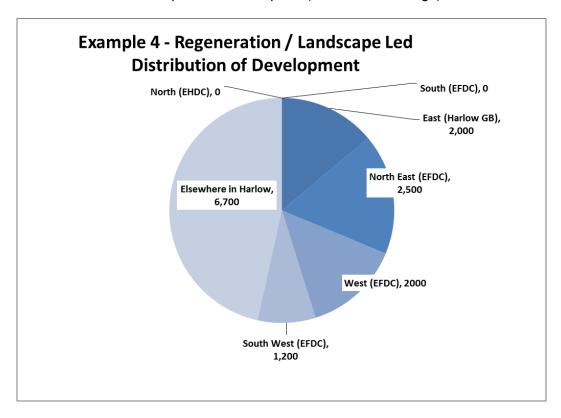


Figure 52: Example 4 Distribution of Development

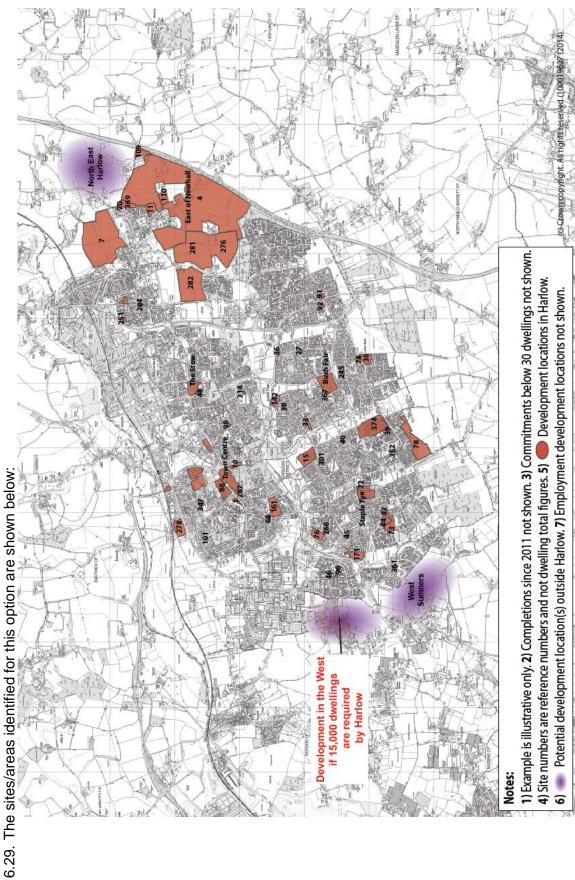


Figure 53: Regeneration and Landscape Led (Internal Sites & External Growth Locations)

Implications for Core Priorities and Places

6.30. The following table illustrates the potential implications of example 4 on the strategic priorities that have been developed to underpin the local plan.

Strategic Priority	Discussion of likely Implications			
Delivering a growing, sustainable and regenerated Harlow	In addition to providing a growing and sustainable Harlow this option seeks to further drive the town's regeneration by focusing development and change in areas in greater need of regeneration, namely the priority areas in the south of the town.			
Meeting Housing Needs	This option would deliver the required level of market and affordable housing required across Harlow.			
Delivering Neighbourhood Renewal	This option would provide significant opportunities for neighbourhood renewal across Harlow by focusing more development within the exiting built up area and adjoining priority neighbourhoods in the south of Harlow.			
Securing Economic Revitalisation	This option provides for the creation of approximately 8,000 new jobs between 2011 and 2031. The approach would be to allow the loss of vacant and underused offices in the town centre, where there are too many, whilst promoting industrial and manufacturing in Harlow. Other elements of the strategy would be to promote the Enterprise Zone sectors whilst also allowing for some churn of employment land to allow forecasted growth sectors to grow. If 15,000 dwellings are proposed then additional employment land will be sought through the proposed urban extensions of Harlow.			
	There would be some reconfiguration of existing employment space to support local regeneration objectives across Harlow. The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan.			
Renewing the Town Centre and other Centres	This option would provide significant opportunities to regenerate these areas through restructuring centres and providing additional growth. Existing centres would also accommodate additional provision of services and facilities to sustain new communities. As part of this strategy significant upgrade in the public realm will be implemented.			
Fostering Quality Streets and Spaces	Under this option the public realm around development areas would be activated, particularly along Southern Way. This option would also deliver selective renewal and redevelopment elsewhere across Harlow providing substantial opportunities for improvements to streets and spaces.			
Revitalising Green Spaces Needs	All options seek to revitalise open spaces by increasing activity and surveillance through appropriately cited development. This option includes some losses of open space across Harlow to support other objectives but the losses have been minimised to avoid adverse impacts on the Gibberd principles.			
Adapting to and Mitigating the Impacts of Climate Change	The example has sought to minimise green belt land by focusing development within the urban area. The concentration of growth in and around the town centre is proposed to utilise the bus interchange in the town and better access to Harlow Town Station. The example has also sought to steer new development away from flood 2 and 3.			

Improving Accessibility and Connectivity By providing more development within the existing urban area (particularly in and around centres) the option is likely to provide greater support for local passenger transport services across Harlow, particularly improving links from the south of Harlow into the town centre. Supporting Development and Change An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

6.31. The following table illustrates the potential implications of example 4 on different parts of the town.

Implications for Places	Discussion of likely implications	
Town Centre	This option seeks to focus future development in this location and drive the town centre up the retail hierarchy through restructuring and expansion. This option would seek additional residential development within the northern part of the centre and appropriate expansions of the current offer. The increases in residential development in the town centre will help to sustain the long term viability of the town centre and address current underperformance.	
Neighbourhood Centres	The option seeks to sustain the long term viability of Neighbourhood Centres by supporting their restructure and growth. The strategy will seek to provide for additional residential development in these centres coupled with increases in provision of retail and other facilities. The strategy will seek to deliver improvements to the public realm.	
Hatches	The option seeks to sustain the long term viability of hatches by supporting their restructure and growth. The strategy will seek to provide for additional residential development in these centres to improve viability of these areas. Central to the strategy will be providing substantial physical improvements to the public realm.	
Green Wedges and Open Spaces	The strategy will involve the loss of some selected open spaces across Harlow to support selective development. Although this scenario would include a net loss in the quantity of space evidence has demonstrated that the town will still have adequate provision in all areas.	
The Green Belt	The option does provide for green belt release to east and north east of Harlow together with release to the south west of Harlow. If 15,000 dwellings were required to meet Harlow's need then further green belt release would be provided to the north of Harlow.	
Employment Areas	This option does include some reconfiguration of employment land in the south of Harlow to support local regeneration objectives. This option also includes the use of vacant office space within the town centre to support increased residential development. The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan.	

Church Langley	Minimal change proposed in and around this area.
Little Parndon and Hare Street	Selective redevelopment of Hatches and existing employment land. The development of land adjoining the Northbrooks estate to support renewal.
Kathrines, Great Parndon, Passmores	Area for focused change with redevelopment of Hatches and use of underused open spaces to facilitate public realm improvements and local regeneration objectives. Substantial improvements proposed for Southern Way. Further development to the west of Kathrines proposed if 15,000 dwellings are required in the Harlow area.
Town Park, Markhall, Netteswell	The majority of investment is focused towards the Stow through selective redevelopment of the Neighbourhood Centre to provide additional residential development.
Old Harlow, Churchgate Street, Newhall	Area for significant development and change including build out of existing commitments (Newhall and Gilden Way) and further green belt release to the east of Harlow up to the M11 and further to the north east into Epping Forest District.
Sumners, Kingsmore, Staple Tye	This option seeks to deliver transformational change to the area by improving the quality of the public realm, reinvigorating Staple Tye Neighbourhood Centre and the Hatches. In addition, substantial public realm improvements along Southern Way will be sought. There will be some losses of open space to facilitate local regeneration and housing objectives. Further investment and change proposed through green belt development to the south west.
Bush Fair, Brays Grove, Potter Street, Latton Bush	This option seeks to deliver selective improvements to the public realm and the redevelopment of Hatches and the Bush Fair Neighbourhood Centre. In particular, opportunities to deliver improvements to Southern Way will also be implemented.

Example 5 – Northern Bypass Led Option

Introduction

- 6.32. This example has been developed by selecting those sites/areas which are considered to offer greater support for the construction of a new bypass to the north of Harlow. Furthermore, to provide additional support this option proposes a total of 20,000 dwellings across the Harlow area. Under this example the majority of new development is located in the northern and eastern parts of Harlow through focusing new investment in the creation of substantial new neighbourhoods to the north and east of the existing town.
- 6.33. This pattern of growth would involve approximately 7,800 dwellings being provided within Harlow, including in the Green Belt in the east of the District. In order to provide 20,000 dwellings in accordance with these principles the study suggests providing urban extensions to the north east of the town (2,500 dwellings), in Epping Forest District and a further 10,000 dwellings to the north of Harlow in East Hertfordshire District Council area. The Council would need to work with both East Hertfordshire District and Epping Forest District to implement this example.
- 6.34. The distribution of development of example 5 is shown below:

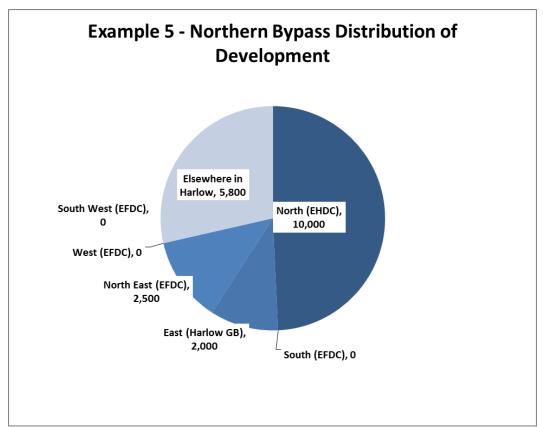


Figure 54: Distribution of Developmen

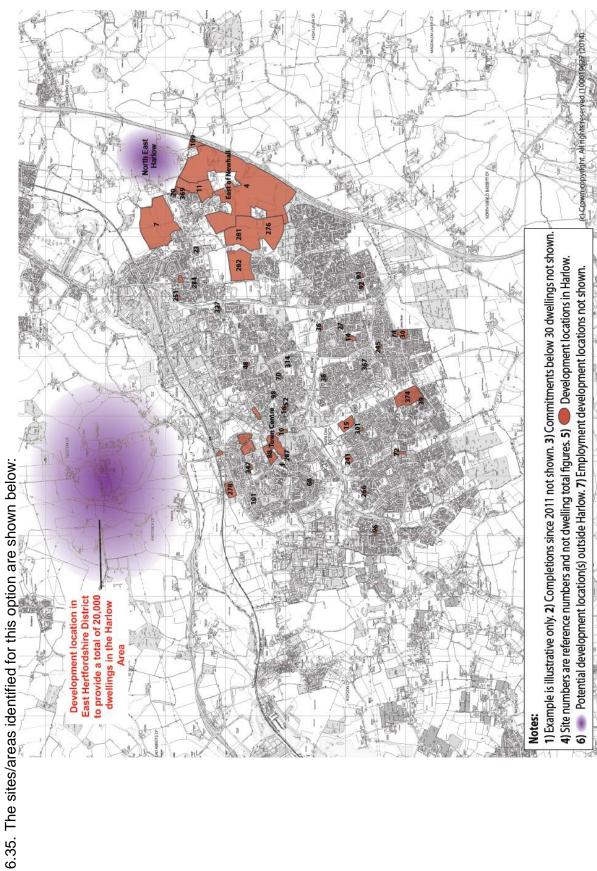


Figure 55: Focused on Priority Regeneration Areas (Internal Sites & External Growth Locations

Implications for Core Priorities and Places

6.36. The following table illustrates the potential implications of Example 5 on the strategic priorities that have been developed to underpin the local plan.

Strategic Priority	Discussion of likely Implications		
Delivering a growing, sustainable and regenerated Harlow	In addition to providing a growing Harlow this option seeks to provide development in closer proximity to passenger transport services such as rail stations and bus interchanges. The option also seeks to help the case for a new bypass to the north of Harlow.		
Meeting Housing Needs	This option would deliver the required level of market and affordable housing required across Harlow and also provides for a proportion of the needs of East Hertfordshire District Council.		
Delivering Neighbourhood Renewal	This option would not promote neighbourhood renewal as a key objective of the strategy. As such only a small number of sites within the existing urban area are identified for development. This option does not provide for the renewal of identified priority residential areas in the south of Harlow.		
Securing Economic Revitalisation	This option provides for the creation of approximately 18,000 new jobs between 2011 and 2031. The approach would be to allow the loss of vacant and underused offices in the town centre, where there are too many, whilst promoting industrial and manufacturing in Harlow. Other elements of the strategy would be to promote the Enterprise Zone sectors whilst also allowing for some churn of employment land to allow forecasted growth sectors to grow. Additional employment land would be provided as part of urban extensions to the town. Key employment areas would be protected but some reconfiguration of existing employment space would be provided to support local regeneration objectives across Harlow.		
Renewing the Town Centre and other Centres	This option would provide significant opportunities to regenerate the town centre as this would be a location for further residential development. Much more limited change would be proposed in and around the Neighbourhood Centres. A number of Hatches would however experience some renewal.		
Fostering Quality Streets and Spaces	Under this option the public realm improvements within Harlow would be limited to the proposed development sites.		
Revitalising Green Spaces Needs	All options seek to revitalise open spaces by increasing activity and surveillance through appropriately cited development. This option includes a small number of losses of open space across Harlow but overall these are minimised.		
Adapting to and Mitigating the Impacts of Climate Change	The example promotes future development in areas in closer proximity to passenger transport services, particularly train stations and bus interchanges. The example has also sought to steer new development away from flood 2 and 3.		
Improving Accessibility and Connectivity	The option seeks to promote improved accessibility by providing development in the most accessible locations in and around Harlow. Increased residential development in the town centre will increase the viability of bus routes operating from the town.		

Supporting Development and Change

An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

6.37. The following table illustrates the potential implications of example 5 on different parts of the town.

Implications for Places	Discussion of likely implications
Town Centre	This option seeks to focus future development in this location and drive the town centre up the retail hierarchy through restructuring and expansion. This option would seek additional residential development within the northern part of the centre and appropriate expansions of the current offer. The increases in residential development in the town centre will help to sustain the long term viability of the town centre and address current underperformance.
Neighbourhood Centres	The strategy is focused on increasing the viability of neighbourhood centres by providing small scale residential development close to existing centres to support the long term viability of centres. However, this option does not promote the redevelopment of neighbourhood centres as part of a renewal programme.
Hatches	The option seeks to sustain the long term viability of hatches by supporting the redevelopment of selected locations. The strategy will seek to provide for additional residential development in these centres to improve viability of these areas.
Green Wedges and Open Spaces	The strategy seeks to minimise the extent to which open spaces and green wedges in Harlow are utilised. However, the option does utilise a small number of open spaces across Harlow.
The Green Belt	This option would require land in the Green Belt to accommodate the level of development proposed. Development would take place in those areas that satisfy the Green Belt Review and satisfy the long term objectives for the Green Belt.
Employment Areas	The majority of employment land would be retained but there would be some reconfiguration of employment land to the south to support local regeneration objectives. The Council will be undertaking further assessment of employment land in Harlow to establish whether this meets identified requirements for future employment. Any further reconfiguration of existing space or locations for future employment development will be assessed through the Local Plan.
Church Langley	Minimal change proposed in this area but substantial development proposed to the north.
Little Parndon and Hare Street	Small scale development focused towards existing Hatches and previous housing allocations.
Kathrines, Great Parndon, Passmores	Small scale development close to existing Hatches together with selective open space utilisation and the redevelopment of school site.

Town Park, Markhall, Netteswell

Small scale development proposed within the existing urban area focused towards the Neighbourhood Centre and Hatches, supplemented with a small number of other sites across the area. However, significant development and change would take place to the north of the town and is likely to have an impact on the local road network, particularly the A414 which runs east to west.

Old Harlow, Churchgate Street, Newhall

This area would be subject to significant change resulting from the continued development of existing local plan commitments and further Green Belt development to the east towards the M11. Further, green belt development to the north east of Harlow in Epping Forest District would also be provided. Associated with these changes will be the provision of supporting infrastructure such as schools, a new junction on the M11 and the construction of a northern link road to the town.

Sumners, Kingsmore, Staple Tye

This option seeks to deliver some change in this part of Harlow but this will be principally focused on locations outside of the existing urban area.

Bush Fair, Brays Grove, Potter Street, Latton Bush

This option seeks to deliver some localised development at the Bush Fair Neighbourhood Centre and at Hatches. Other small scale development is promoted but is minimised.

7. Stage 3.2 Appraising Spatial Options

- 7.1. PAS guidance suggests that there are **four** tests that potential options should undergo. One test is the **'reasonableness' test**. This primarily involves establishing if the option is realistic and can genuinely be implemented in practice. Those options considered reasonable should then be subject to **community engagement**, **Sustainability Appraisal** and **Habitats Regulation Assessment**.
- 7.2. A wide range of sources have informed this analysis including technical studies undertaken by the LPAs and other information provided by stakeholders, landowners, infrastructure providers and input from adjoining authorities and members of the public.

Reasonableness Test

- 7.3. Both the SEA Directive and Planning Inspectorate guidance on assessing the soundness of DPDs emphasise the importance of considering all 'reasonable' alternatives. PAS guidance suggests that each option generated by the LPA as part of the preparation of DPDs should be assessed for its 'reasonableness' prior to being taken forward for consultation or SA. This involves asking the following questions for each option: 1) will the option effectively contribute towards the objectives of the plan; 2) is the option expressed in sufficient detail to enable meaningful community involvement and SA; and 3) whether or not it can genuinely be implemented in practice.
- 7.4. In addition to these the study assessment has posed additional questions to provide more detailed assessment of each option. Therefore, in assessing the reasonableness of spatial options, it is suggested that the following series of questions should be posed and commented on:
 - Will implementation of the option assist in fulfilling the objectives of the plan ('strategic fit test')?
 - Is the option sufficiently detailed to enable meaningful community involvement and SA?
 - Does implementation of the option fall within the legal competence of the LPA?
 - Does implementation of the option fall within the geographical competence of the LPA?
 - Is it a genuine option?
 - Where may the necessary resources come from to deliver the option?
 - Will there be sufficient time within the plan period to implement the option?
 - Is there an acceptable risk that the option might not be fully implemented for one reason or another?
 - Is the option sufficiently flexible to accommodate changing circumstances?

Example 1 – Focused on Priority Regeneration Areas

Question	Description
- Question	Description
Will implementation of the option assist in fulfilling the objectives of the plan ('strategic fit test')?	Accommodating development principally within the existing urban area of Harlow and to the south and south west of the town would contribute towards delivering the development required by Harlow over the plan period. By providing the majority of new dwellings in and around centres and priority areas the option will provide for the implementation of key plan objectives to revitalise existing centres and to renew existing neighbourhoods. This would also provide opportunities to improve the quality of streets and spaces within Harlow, particularly in those areas identified as priority locations for regeneration. Implementing this option is considered to provide for the critical mass to deliver renewal of key areas of the town. However, it could be argued that providing low levels of new dwellings to the east of Harlow may represent a wasted opportunity as the landscape sensitivity is relatively low. The substantial levels of development to the south should be of a sufficient scale to facilitate large investments in new road and public transport infrastructure thereby encouraging a modal shift away from private car use, particularly given proximity to the train stations. This option will also contribute towards improving accessibility throughout the town and meeting climate change objectives as this approach will provide for compact forms of development.
Is the option sufficiently detailed to enable meaningful community involvement and SA?	This option is considered to be provided at sufficient detail, with the likely spatial implications of the option set out for public and stakeholder involvement.
Does implementation of the option fall within the legal competence of the LPA?	This option does fall within the legal competence of Local Planning Authorities in terms of statutory duty.
Does implementation of the option fall within the geographical competence of the LPA?	Whilst this option provides for a substantial amount of development within Harlow district this example suggests that new development will be required outside of the Harlow administrative area, in Epping Forest District Council area. If 15,000 dwellings are proposed then further development in East Hertfordshire district is proposed. As such close working will be required with adjoining districts through the duty to cooperate if this option was selected as the most appropriate way of meeting future development needs in the area.
Is it a genuine option?	All options have been generated with the intention that they form genuine options and have not simply been added to 'make up the numbers'. This particular option is considered to provide growth in locations that would focus development in areas in greatest need of regeneration.
Where may the necessary resources come from to deliver the option?	An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

Will there be sufficient time within the plan period to implement the option? The Local Plan is seeking to deliver between 12,000 and 15,000 dwellings within a 20 year period (or between 600 and 750 dpa). With all options there is a degree of uncertainty surrounding whether the option is capable of being delivered. This refers not only to the quantum of growth proposed (particularly at 15,000 dwellings) but also the timing of the necessary infrastructure to deliver this growth in the locations proposed.

The delivery of all examples is contingent on the construction of a new junction on the M11 (J7a) to ensure that severe traffic impacts on the local and strategic road network are avoided. This is a substantial investment and will take time to plan and implement. If the junction is delayed there is a risk that not all development could be accommodated within the plan period.

Further assessment of infrastructure will be required before any conclusions can be reached about the implementation of this example.

Is there an acceptable risk that the option might not be fully implemented for one reason or another?

This spatial option comprises a larger number of smaller sites within Harlow coupled with larger urban extensions to the town. This option distributes the impact of development over a wider area and onto a greater number of services and facilities. In addition, major improvements are expected to be required to the existing road network in Harlow together with a new junction on the M11 (7a). If a new junction is not provided then there is some concern whether all of the proposed growth could be accommodated.

Furthermore, the proposed urban extensions to Harlow will take place in adjoining authorities and as such Harlow Council will not be the Local Planning Authority making the decisions on any subsequent planning application for these areas.

Further assessment will be required to assess issues around the implementation of this example before any conclusions can be reached.

Is the option sufficiently flexible to accommodate changing circumstances?

This example includes a number of locations for development across Harlow (both large and small). If issues arose on a particular site the Council considers that development could potentially be increased at other location across Harlow to compensate for this. However, the majority of larger sites are in adjoining districts and Harlow District would not be the local planning authority for these areas. It may become difficult for the Local Plan to adapt to any significant change in circumstances. The Council will need to continue to work closely with adjoining authorities to address issues that may arise.

In addition, the implementation of the strategy is contingent on the delivery of a new junction (7a) on the M11 which is not currently a committed scheme. There is a risk that the strategy would be unable to respond if a new junction was not implemented.

Example 2 - Environmental / Landscape Led

Question **Description** Will Accommodating development principally around the existing urban area of Harlow, to the implementation east (in the Green belt) and to the south would contribute towards delivering the of the option development required by Harlow over the plan period. The focus on creating a larger new assist in fulfilling neighbourhood to the town would also provide opportunities to improve the quality of streets the objectives of and spaces within Harlow the expanded areas and providing for significant accessibility and the plan connectivity improvements. This option would also make the most of the relatively lower ('strategic fit landscape sensitivity in the east of Harlow by providing a substantial amount of the town's test')? development in this location. There would also be benefits for neighbourhood renewal in the south of Harlow through expanding these areas and leveraging these developments to improve the adjoining areas. Elsewhere, opportunities for internal renewal would be limited. Furthermore, the option could be seen as a natural extension to the town which could easily incorporate many of the

landscape principles, e.g. green wedges, upon which Gibberd designed the new town. Is the option This option is considered to be provided at sufficient detail, with the likely spatial implications sufficiently of the option set out for public and stakeholder involvement. detailed to enable meaningful community involvement and SA? Does This option does fall within the legal competence of the LPA in terms of its statutory duty. implementation However, it is recognised that urban extensions will be required to the south and southwest of the option fall of Harlow into Epping Forest District. Close working will be required with the adjoining within the legal district and with infrastructure providers to ensure that necessary highways and sewerage competence of improvements are implemented in accordance with the development proposed. the LPA? **Does** Whilst this option provides for a substantial amount of development within Harlow district (to implementation the east of Newhall) significant new development will be required outside of the Harlow of the option fall administrative area to the south, in Epping Forest district. As such joint cooperation will be within the required between the authorities to deliver the growth required. geographical competence of the LPA? Is it a genuine All options have been generated with the intention that they form genuine options and have option? not simply been added to 'make up the numbers'. This particular option is considered to provide growth in locations that would focus development in areas in greatest need of regeneration. Where may the An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. necessary This will include an assessment of the infrastructure required to ensure it can be satisfactory resources come accommodated within the plan period. This assessment incudes social, physical and green from to deliver infrastructure. The assessments will test emerging patterns of growth so that a preferred the option? approach can be identified. Will there be The Local Plan is seeking to deliver between 12,000 and 15,000 dwellings within a 20 year sufficient time period (or between 600 and 750 dpa). With all options there is a degree of uncertainty within the plan surrounding whether the option is capable of being delivered. This refers not only to the period to quantum of growth proposed (particularly at 15,000 dwellings) but also the timing of the implement the necessary infrastructure to deliver this growth in the locations proposed. option? The delivery of all examples is contingent on the construction of a new junction on the M11 (J7a) to ensure that severe traffic impacts on the local and strategic road network are avoided. This is a substantial investment and will take time to plan and implement. If the junction is delayed there is a risk that not all development could be accommodated within the plan period. Further assessment of infrastructure will be required before any conclusions can be reached about the implementation of this example. Is there an This spatial option provides the majority of new development through new urban extensions acceptable risk to Harlow. In addition, major improvements are expected to be required to the existing road that the option network in Harlow together with a new junction on the M11 (7a). If a new junction is not might not be fully provided then there is some concern whether all of the proposed growth could be implemented for accommodated. one reason or another? Furthermore, the proposed urban extensions to Harlow will take place in adjoining authorities and as such Harlow Council will not be the Local Planning Authority making the decisions on

any subsequent planning application for these areas.

Further assessment will be required to assess issues around the implementation of this example before any conclusions can be reached.

Is the option sufficiently flexible to accommodate changing circumstances?

This example includes a number of locations for development across Harlow (both large and small). If issues arose on a particular site the Council considers that development could potentially be increased at other locations across Harlow to compensate for this. However, the majority of larger sites are in adjoining districts and Harlow District would not be the local planning authority for these areas. It may become difficult for the Local Plan to adapt to any significant change in circumstances. The Council will need to continue to work closely with adjoining authorities to address issues that may arise.

In addition, the implementation of the strategy is contingent on the delivery of a new junction (7a) on the M11 which is not currently a committed scheme. There is a risk that the strategy would be unable to respond if a new junction was not implemented. This is particularly the case for development in the east and north east of Harlow.

Example 3 – Passenger Transport Led

Question	Description
Will implementation of the option assist in fulfilling the objectives of the plan ('strategic fit test')?	Accommodating development in the existing urban area of Harlow, to the east of the town (in the Green belt) and to the north of Harlow would contribute towards delivering the development required by Harlow over the plan period. The focus on creating two larger new neighbourhoods to the town would also provide opportunities to foster quality streets and spaces within Harlow within the expanded areas and providing for significant accessibility and connectivity improvements. This option would utilise the location of the town's railway stations and other passenger transport hubs. Focusing development and change in/around the town centre would also support its regeneration and redevelopment.
Is the option sufficiently detailed to enable meaningful community involvement and SA?	This option is considered to be provided at sufficient detail, with the likely spatial implications of the option set out for public and stakeholder involvement.
Does implementation of the option fall within the legal competence of the LPA?	This option does fall within the legal competence of the LPA in terms of its statutory duty. However, it is recognised that urban extensions will be required to north of Harlow in East Hertfordshire District. Close working will be required with the adjoining district and with infrastructure providers to ensure that necessary improvements are implemented.
Does implementation of the option fall within the geographical competence of the LPA?	Whilst this option provides for a substantial amount of development within Harlow district (to the east of Newhall) significant new development will be required outside of the Harlow administrative area to the north, in East Hertfordshire district. As such joint cooperation will be required between the authorities to deliver the growth required.

Is it a genuine option?

All options have been generated with the intention that they form genuine options and have not simply been added to 'make up the numbers'. This particular option is considered to provide growth in locations that would facilitate greater use of passenger transport.

Where may the necessary resources come from to deliver the option?

An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

Will there be sufficient time within the plan period to implement the option?

The Local Plan is seeking to deliver between 12,000 and 15,000 dwellings within a 20 year period (or between 600 and 750 dpa). With all options there is a degree of uncertainty surrounding whether the option is capable of being delivered. This refers not only to the quantum of growth proposed (particularly at 15,000 dwellings) but also the timing of the necessary infrastructure to deliver this growth in the locations proposed.

The delivery of all examples is contingent on the construction of a new junction on the M11 (J7a) to ensure that severe traffic impacts on the local and strategic road network are avoided. This is a substantial investment and will take time to plan and implement. If the junction is delayed there is a risk that not all development could be accommodated within the plan period.

Further assessment of infrastructure will be required before any conclusions can be reached about the implementation of this example.

Is there an acceptable risk that the option might not be fully implemented for one reason or another?

This spatial option focuses new development to the east (within Harlow District Council area) and to the north of the town (in East Hertfordshire District area). Whilst Harlow Council will be the Local Planning Authority for development proposed to the east this would not be the case for development to the north of the town.

In addition, major improvements are expected to be required to the existing road network in Harlow together with a new junction on the M11 (7a). If a new junction is not provided then there is some concern whether all of the proposed growth could be accommodated.

Further assessment will be required to assess issues around the implementation of this example before any conclusions can be reached about the implementation of this example.

Is the option sufficiently flexible to accommodate changing circumstances?

This example includes a number of locations for development across Harlow (both large and small). If issues arose on a particular site the Council considers that development could potentially be increased at other locations across Harlow to compensate for this. However, the majority of larger sites are in adjoining districts and Harlow District would not be the local planning authority for these areas. It may become difficult for the Local Plan to adapt to any significant change in circumstances. The Council will need to continue to work closely with adjoining authorities to address issues that may arise.

In addition, the implementation of the strategy is contingent on the delivery of a new junction (7a) on the M11 which is not currently a committed scheme. There is a risk that the strategy would be unable to respond if a new junction was not implemented. This is particularly the case for development in the east and north east of Harlow.

Example 4 – Regeneration and Landscape Led

Question	Description
Will implementation of the option assist in fulfilling the objectives of the plan ('strategic fit test')?	Accommodating development principally within the existing urban area of Harlow and to the east and south west would contribute towards delivering the development required by Harlow over the plan period. By providing the majority of new dwellings in and around centres and priority areas the option will provide for the implementation of key plan objectives to revitalise existing centres and to renew existing neighbourhoods. This would also provide opportunities to foster quality streets and spaces within Harlow, particularly in those areas identified as priority locations. This option also utilises land of lesser landscape quality to the east of Harlow.
Is the option sufficiently detailed to enable meaningful community involvement and SA?	This option is considered to be provided at sufficient detail, with the likely spatial implications of the option set out for public and stakeholder involvement.
Does implementation of the option fall within the legal competence of the LPA?	This option does fall within the legal competence of the LPA in terms of its statutory duty. However, it is recognised that urban extensions will be required to north east and south east of Harlow. Close working will be required with the adjoining district and with infrastructure providers to ensure that necessary improvements are implemented in accordance with the development proposed.
Does implementation of the option fall within the geographical competence of the LPA?	Whilst this option provides for a substantial amount of development within Harlow district significant new development will be required outside of the Harlow administrative area to the north east and south west in Epping Forest district. As such joint cooperation will be required between the authorities to deliver the growth required.
Is it a genuine option?	All options have been generated with the intention that they form genuine options and have not simply been added to 'make up the numbers'. This particular option is considered to provide growth in locations that would focus development in areas in greatest need of regeneration.
Where may the necessary resources come from to deliver the option?	An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.
Will there be sufficient time within the plan period to implement the option?	The Local Plan is seeking to deliver between 12,000 and 15,000 dwellings within a 20 year period (or between 600 and 750 dpa). With all options there is a degree of uncertainty surrounding whether the option is capable of being delivered. This refers not only to the quantum of growth proposed (particularly at 15,000 dwellings) but also the timing of the necessary infrastructure to deliver this growth in the locations proposed.

The delivery of all examples is contingent on the construction of a new junction on the M11 (J7a) to ensure that severe traffic impacts on the local and strategic road network are avoided. This is a substantial investment and will take time to plan and implement. If the junction is delayed there is a risk that not all development could be accommodated within the plan period.

Further assessment of infrastructure will be required before any conclusions can be reached about the implementation of this example.

Is there an acceptable risk that the option might not be fully implemented for one reason or another?

This spatial option focuses the majority of new development within Harlow District, either in the existing urban envelope of in the Green Belt to the east of the town. However, some urban extensions would be required to the north east and to the south west (in Epping Forest District Council area) to provide for 12,000 and 15,000 dwellings. Whilst Harlow Council will be the Local Planning Authority for development proposed to the east this would not be the case for development to the north east and south west of the town.

In addition, major improvements are expected to be required to the existing road network in Harlow together with a new junction on the M11 (7a). If a new junction is not provided then there is some concern whether all of the proposed growth could be accommodated.

Further assessment will be required to assess issues around the implementation of this example before any conclusions can be reached about the implementation of this example.

Is the option sufficiently flexible to accommodate changing circumstances? This example includes a number of locations for development across Harlow (both large and small). If issues arose on a particular site the Council considers that development could potentially be increased at other location across Harlow to compensate for this. However, the majority of larger sites are in adjoining districts and Harlow District would not be the local planning authority for these areas. It may become difficult for the Local Plan to adapt to any significant change in circumstances. The Council will need to continue to work closely with adjoining authorities to address issues that may arise.

In addition, the implementation of the strategy is contingent on the delivery of a new junction (7a) on the M11 which is not currently a committed scheme. There is a risk that the strategy would be unable to respond if a new junction was not implemented.

Example 5 – Northern Bypass Led

Question Description This option provides for approximately 20,000 dwellings in the Harlow area principally to the Will east and north of the town. This approach would contribute towards providing for implementation substantially more housing required by Harlow and would contribute to meeting the needs of the option of adjoining authorities as part of a large scale sustainable urban extension to the north of assist in fulfilling the objectives of the plan The focus on creating two larger new neighbourhoods to the town would also provide ('strategic fit opportunities to foster quality streets and spaces within Harlow the expanded areas and test')? providing for significant accessibility and connectivity improvements. This option would utilise the location of the town's railway stations and other passenger transport hubs. Focusing development and change in/around the town centre would also support its regeneration and redevelopment. Is the option This option is considered to be provided at sufficient detail, with the likely spatial implications sufficiently of the option set out for public and stakeholder involvement. detailed to enable

meaningful community involvement and SA?

Does implementation of the option fall within the legal competence of the LPA?

This option does fall within the legal competence of the LPA in terms of its statutory duty. However, it is recognised that urban extensions will be required to north of Harlow in East Hertfordshire District and to the north east in Epping Forest District. Close working will be required with the adjoining district and with infrastructure providers to ensure that necessary improvements are implemented in accordance with the development proposed.

Does implementation of the option fall within the geographical competence of the LPA?

Whilst this option provides for a substantial amount of development within Harlow district (to the east of Newhall) significant new development will be required outside of the Harlow administrative area to the north, in East Hertfordshire district and to the north east in Epping Forest District. As such joint cooperation will be required between the authorities to deliver the growth required.

Is it a genuine option?

All options have been generated with the intention that they form genuine options and have not simply been added to 'make up the numbers'. This particular option is considered to provide growth in locations that would focus development in areas in greatest need of regeneration.

Where may the necessary resources come from to deliver the option?

An update of the Stage 1 baseline Harlow Infrastructure Study is currently being undertaken. This will include an assessment of the infrastructure required to ensure it can be satisfactory accommodated within the plan period. This assessment incudes social, physical and green infrastructure. The assessments will test emerging patterns of growth so that a preferred approach can be identified.

Unlike other options being proposed this example seeks to provide sufficient growth to support the implementation of a new northern bypass to Harlow. The Council will need to explore further whether a new bypass would be necessary to support this level of growth or whether other improvements provide a better cost/benefit ratio.

Will there be sufficient time within the plan period to implement the option?

This option seeks to provide 20,000 dwellings over a 20 year period (or 1,000 dpa). This is a challenging level of development to provide in the Harlow area given the infrastructure required to implement the option. As with all options future growth is contingent on a new junction being provided on the M11 (J7a) to ensure that severe traffic impacts on the local and strategic road network are avoided.

The delivery of all examples is contingent on the construction of a new junction on the M11 (J7a) to ensure that severe traffic impacts on the local and strategic road network are avoided. This is a substantial investment and will take time to plan and implement. If the junction is delayed there is a risk that not all development could be accommodated within the plan period. Furthermore, this option is linked to the provision of a new northern bypass to Harlow. This is expected to be a more costly and pose greater technical challenges and as such will take longer to implement. If a new northern bypass is required to deliver this level of growth (particularly that proposed to the north of Harlow) there are concerns whether this could be provided (and the development built) within the plan period.

Further assessment of infrastructure will be required before any conclusions can be reached about the implementation of this example.

Is there an acceptable risk

This spatial option focuses the majority of new development to the east (within Harlow District Council area) and to the north of the town (in East Hertfordshire District area). Whilst Harlow

that the option might not be fully implemented for one reason or another? Council will be the Local Planning Authority for development proposed to the east this would not be the case for development to the north and to the north east of Harlow.

In addition, major improvements are expected to be required to the existing road network in Harlow together with a new junction on the M11 (7a). If a new junction is not provided then there is some concern whether all of the proposed growth could be accommodated. Furthermore, implementing this option would require the completion of 1,000 dwellings per annum. Given the anticipated lead-in time to plan and construct a new junction on the M11 there are concerns that not all of the 20,000 dwellings proposed could be implemented, particularly if growth prior to completion is capped.

Further assessment will be required to assess issues around the implementation of this example before any conclusions can be reached about the implementation of this example.

Is the option sufficiently flexible to accommodate changing circumstances? This example consists of larger urban extensions to Harlow as opposed to sites within the existing urban area. There are still a number of sites across Harlow where compensation could be made if circumstances were to change. However, given the level of development proposed in this option any significant change in circumstances would make delivery of this option difficult to deliver.

Whilst a substantial amount of development will be provided within Harlow the majority of development would be required in adjoining districts, principally East Hertfordshire District Council area. It may become difficult for the Local Plan to adapt to any significant change in circumstances. The Council will need to continue to work closely with adjoining authorities to address issues that may arise.

The implementation of the strategy is contingent on the delivery of a new junction (7a) on the M11 which is not currently a committed scheme. There is a risk that the strategy would be unable to respond if a new junction was not implemented. In addition, this option includes the provision of a new northern bypass to Harlow. This is expected to be a more costly and pose greater technical challenges and as such will take longer to implement. Moreover, there are some uncertainties surrounding the business case for such an investment. The Council will need to explore whether this option could still be provided if it is concluded that a new northern bypass is not feasible.

8. Community Engagement Test

- 8.1. The original spatial options were subject to community consultation during the Issues and Options consultation (2010/11). As summarised earlier in this paper the alternative options were:
 - Option A: RSS Northern Led
 - Option B: Policy Led
 - Option C: Combined Criteria-Led
 - Option D: Regeneration-Led
 - Option E: Sustainable transport-Led

8.2. This study has developed a new set of options (examples) which are set out in the Emerging Strategy and Further Options consultation. These are based on revised evidence following the Government's changes to the planning system. This provides the public and other stakeholders with further opportunity to comment on the revised examples before the preferred option is finalised.

9. Sustainability Appraisal Test

9.1. A Strategic Environmental Assessment incorporating Sustainability Appraisal has been prepared for the five options generated by this assessment. The following section presents the findings of the assessment. The full SEA/SA has been published separately.

Spatial Examples tested (lower and higher development levels)

	Alternative spatial strategies			
1a	Focused on Priority Regeneration Areas providing approximately 12,000 dwellings and 8,000 jobs in and around Harlow			
1b	As per 1a plus additional growth to the west and south of the district and to the north of Harlow providing approximately 15,000 dwellings and 12,000 jobs in and around Harlow			
2a	Environmental Constraints Led providing approximately 12,000 dwellings and 8,000 jobs in and around Harlow			
2b	As per 2a plus additional growth to the south west and north east of Harlow providing approximately 15,000 dwellings and 12,000 jobs in and around Harlow			
3a	Passenger Transport Led providing approximately 12,000 dwellings and 8,000 jobs in and around Harlow			
3b	As per 3a plus additional growth to the north of Harlow providing approximately 15,000 dwellings and 12,000 jobs in and around Harlow			
4a	Regeneration and Landscape Led providing approximately 12,000 dwellings and 8,000 jobs in and around Harlow			
4b	As per 4a plus additional growth to the west and north east of Harlow providing approximately 15,000 dwellings and 12,000 jobs in and around Harlow			
5	Northern Bypass Led Option providing approximately 20,000 dwellings and 18,121 jobs in and around Harlow			

Appraisal findings: Alternative spatial strategies

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	4a			ო		
ank	3b	7				
Option / Rank	3a			\-\frac{1}{2}		
Opt	2b			4		
	2a			ო		
	1b			4		
	<u>1a</u>			ო		
Discussion		There are no Air Quality Management Areas designated in Harlow, however traffic emissions are identified as being the most significant source of air pollution in the district. By increasing housing and employment provision in the district, all nine options would put increased pressure on transport routes and would increase energy consumption thus generating increased carbon emissions. All options are therefore expected to result in some negative effects in terms of the objective.	In terms of their relative merits, the options that are likely to promote greater use of sustainable modes of transport are expected to have the most positive effects in terms of improving air quality in the district.	By directing the majority of new development to urban areas where opportunities for passenger transport uptake are highest (e.g. to the northern and eastern parts of Harlow which have good access to railway stations, as well as the town centre which is a key passenger transport and service hub), Option 3a is expected to have the most significant positive effects in terms of air quality. This is due to this option being considered likely to lead to increases in passenger transport uptake as well as a reduction in the reliance on private car use, thus resulting in less car emissions.	Option 5 is likely to lead to the highest level of growth (both in terms of housing and employment) through promoting development in and around the town centre and directing significant levels of growth to greenfield sites within and outside the district. While a bypass is not part of the Local Plan, it is likely that a bypass would be required in the north of the district to deliver this option. This option is considered most likely to increase car use, congestion, and consequently GHG emissions in the district; therefore it is considered to perform least favourably in terms of the air quality objective.	Option 2b would direct significant levels of housing development to the southern edges of the district, where public transport accessibility is currently relatively poor. This approach would require significant investment in passenger transport provision in order to ensure the development is linked with the town centre and other passenger transport hubs.
Topic		Air Quality				

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ank	3b	ю
Option / Rank	3a	8
ð	2b	
	2a	7
	1b	m
	<u>1a</u>	
Discussion		green subject to factors such as design and density. Consequently the options proposing infrastructure subject to factors such as design and density. Consequently the options proposing higher levels of development on greenfield land could, in theory, be expected to result in the greatest loss of biodiversity. However, whilst most land has some importance for biodiversity (including gardens, roadside verges and riverside in towns and villages) not all greenfield land has the same importance for biodiversity. Land with biodiversity designations is clearly more important in terms of biodiversity than land without such designations is clearly more important in terms of biodiversity than land without such designations is clearly more important in terms of biodiversity than land without such designations is clearly more important in terms of biodiversity than land without such designations and Parndon Woods Special Scientific Interest (SSSI)). The options that would have most impact on these areas, mainly due to proximity are therefore likely to have the greatest impacts on biodiversity. Option 1a proposes the least amount of growth overall and would focus the majority of new development on previously developed land within the existing urban area. This approach would limit the amount of development on greenfield land, and avoid designated areas, thus helping to conserve and enhance biodiversity. However it should be noted that brownfield sites, particularly those that have been vacant for several years, are often also rich in biodiversity and home to protected species.
Topic		Biodiversity and green infrastructure

By focusing growth within the urban parts of the district as well as to the east of the town where there are fewer local level biodiversity designations and no national or international designations, **Options 2a**, **3a** and **4a** are predicted to have fewer effects on the district's biodiversity and are therefore considered to perform more favourably in terms of the biodiversity and green infrastructure objectives after **Option 1a**.

Options 1b and **2b** would direct a significant amount of growth to the south and south west of the town, which would be in close proximity to the Harlow Woods SSSI and Mark Bushes Wood LoWS; this is considered to have the potential to lead to increased recreational use at these sites which could result in potentially **significant negative effects**. In addition **Option 1b** would direct growth to the north of Harlow which would be in proximity to the Hunsdon Mead SSSI; it is considered that recreational activities in the area could result in damage to important plant species, thereby resulting in further potentially **significant negative effects** in terms of the biodiversity objectives.

Option 3b and **5** propose significant growth to the north of Harlow, some of which falls within Green Belt land. Given that the Hunsdon Mead SSSI falls within this area, these options may potentially result in **significant negative effects** in terms of biodiversity.

Option 4b proposes significant growth to the south west of the town, which would be in close proximity to the Harlow Woods SSSI and Mark Bushes Wood LoWS; this is considered to have the potential to lead to increased recreation on the SSSI and LoWS which could result in potentially **significant negative effects**.

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ank	3b	•
Option / Rank	3a	
Opt	2b	1
	2a	
	1 _b	ı
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Discussion		The National Planning Policy Framework (NPPF) requires that development should be directed away from areas at highest risk of flooding, but where new development is proposed, it requires that it makes flooding no worse than it currently is. Therefore in relation to flooding , there should in theory be no significant effects for any of the options as it is assumed that new development would be located outside of flood zones or flood risk would be managed in accordance with the NPPF. Areas identified as Zone 1 are those with the lowest probability of flooding, Zone 2 are those with medium probability, Zone 3a are those with high probability and Zone 3b is land within the functional floodplain. Figure 12-1* below provides a strategic overview of the areas within the district that are at greatest probability of flooding. Figure 12-1: Strategic overview of flood risk in Harlow
Topic		Climate change

* Epping Forest District Council and Harlow District Council (2011) Level 1 Strategic Flood Risk Assessment [online] Available at: http://www.harlow.gov.uk/content/forward-planning-ldf-evidence-base-strategic-flood-risk-assessment-2011pdf (accessed 04/2014)

Harlow falls within the River Stort catchment area with the river running along the northern boundary of the district. There have been a number of floods since a major flood in 1947, most of which have been confined to the functional floodplain in the north of the town. The figure above shows that the areas at greatest risk of flooding in the district (i.e. Zones 2 and 3a and 3b) are located along the River Stort	The use of greenfield land generally is likely to lead to an increase in impermeable surfaces, which could potentially lead to an increase in flood risk in the district. The impact of the various strategic options will depend on many issues, including their land take, topography, and soil conditions.	However, while development of large greenfield sites may increase surface water flood risk, they may include flood mitigation measures such as balancing ponds and / or sustainable urban drainage Systems (SUDS). This has the potential to help to avoid potential impacts in relation to surface water flooding.	It is notable that Options 3b and 5 propose significant growth to the north of the district, in areas that are in relatively close proximity to Zones 2 and 3. Provided development falls outside the functional flood plain, these options should not have a negative effect in terms of this objective.	In relation to Greenhouse Gas (GHG) emissions , the incorporation of sustainable building technologies, such as district heating systems, are more likely to be achieved in larger developments where these are likely to be more feasible and cost effective, thus rendering them viable. Therefore the options which propose larger scale development, such as Options 1b, 2b, 3b, 4b and 5 , offer the greatest potential for supportunities for District Heating, and Biomass.	However, sustainable construction only plays a small part in helping to reduce GHG emissions. The ability of the options to support greater use of sustainable modes of transport is also an important consideration. By focusing development within the existing urban area, Options 1a, 2a, 4a and particularly 3a (with development focused around key transport hubs) would provide for compact forms of development which should help to reduce a need to travel, and when travel is required, promote the use of public modes of transport, thereby helping to lower GHG emissions.

	2				4	
	4p				8	
	4a				8	
ank	3b				4	
Option / Rank	3a				4	
Opt	2b				က	
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	<u>1a</u>			<	X T	
Discussion		Community and Harlow is a relatively deprived district and this is reflected in its national ranking wellbeing (95 th most deprived out of 326 authorities in England). Some of Harlow's neighbourhoods are experiencing localised deprivation, with deprivation highest in and around the town centre and in the south of the district.	Options are assumed to perform better where the effect would be to support provision of new or improved facilities, or facilitate enhancements to existing facilities.	Options 1a and 1b would focus the majority of new residential development in and around neighbourhood centres, hatches and priority areas in the south west of the district, where the majority of priority regeneration areas have been identified.	These options are more likely to incorporate higher density development at key locations across Harlow to facilitate regeneration. Although these centres would continue to provide key services and facilities they would be upgraded through development to provide an appropriate fevel of provision for future residents.	land as a mechanism for focusing investment and change into identified priority areas. The approach set out in Options 1a and 1b would also seek to build on opportunities to foster quality streets and spaces within Harlow, particularly in those areas identified as priority locations. These options are expected to help revitalise existing centres, renew deprived neighbourhoods, and increase provision of key facilities and services, thereby having a significant positive effect in terms of the Community and wellbeing topic.
Topic		Community and wellbeing				

Options 2a and 2b seek to provide for a growing Harlow by accommodating the majority of new development to the east of the town through the development of sustainable urban extensions, supplemented by smaller extensions to the south. While these options provide some opportunities for neighbourhood renewal, these are limited to selected locations in Harlow (namely the town centre and hatches), largely through the use of selected open spaces. Therefore while these options are expected to have some positive effects in terms of the community and well-being objectives, they are not expected to be as significant as those created by **Options** 1a, 1b, 4a and 4b.

Options 3a and 3b seek to deliver some renewal of the existing town, particularly in the town centre and in the hatches. The strategy for both options is to focus growth to the east of the existing town, rather than renew priority residential areas in the south of the town. Consequently while it is considered that these options would result in regeneration of the town centre, they would lead to minimal regeneration of the district's most deprived neighbourhoods, particularly those in the south, thereby having limited effects in terms of the baseline with regards to reducing poverty, social exclusion and improving health.

A key focus of **Options 4a and 4b** is to drive the regeneration of the town by focusing new development and change in the areas in greatest need of regeneration. In doing so it is considered that this should result in the provision of new facilities and services which would help to reduce inequalities in these areas; consequently, like Options 1a and 1b, these options are expected to have **significant positive effects** on the baseline.

Under **Option 5**, growth would be directed to the north of the district and urban renewal would not be a priority; consequently lower densities would be provided on sites within Harlow and new development would be minimised in the south of the town. In addition this option does not provide for the renewal of identified priority residential areas; therefore, like **Options 3a and 3b** it is considered unlikely that it would result in any significant positive effects in terms of the baseline with regards to reducing poverty and social exclusion in the most deprived parts of the district.

Topic	Discussion				Opti	Option / Rank	ank			
		1a	1b	2a	2b	3a	3b	4a	4b	2
Economy & employment	Harlow has experienced weak economic growth in recent years and notably it has performed less well in comparison to comparable towns on a range of measures including GVA per worker, knowledge based businesses, skills base and retail ranking. While Harlow has traditionally been a good location for manufacturing and industrial businesses, it has experienced a decline in the number of such businesses in recent years.									
	In terms of employment, Harlow has a high unemployment rate in comparison to national and regional levels.									
	The options promoting greater overall growth in terms of housing provision seek to create a higher number of new jobs in the district.									
	By promoting a strategy that seeks to provide up to 20,000 new dwellings, Option 5 seeks to create 18,121 new jobs in and around Harlow, through the creation of new employment opportunities in urban extensions to the north and east of the district, as well as by promoting growth on the Enterprise Area sites in the east of the district. As such this option is predicted to have the most significant positive effects in terms of the employment and economy objectives.	ო	7	ო	8	ო	7	ო	8	\ <u>-</u> \
	Options 1b, 2b, 3b and 4b all seek to provide a level of housing growth that has the potential to create up to 12,000 new jobs in the district over the plan period. Consequently these options are all predicted to have a significant positive effect in terms of the economy and employment baseline.									
	Options 1a , 2a , 3a and 4a seek to provide a level of housing growth capable of supporting the creation of 8,000 new jobs in the district over the plan period. The approach would seek to utilise vacant and underused offices in the town centre, whilst promoting industrial and manufacturing in Harlow. The approach would also seek to promote the Enterprise Zone sectors whilst also allowing for some change in employment land to allow forecasted growth sectors to grow. Although this approach is expected to have some positive effects in terms of the baseline by creating new jobs, it is not clear whether these options would meet the identified employment needs in Harlow. The Council will be undertaking further assessment of employment land in Harlow to establish this.									

Topic	Discussion				Opti	Option / Rank	ank			
		6	1b	2a	2b	3a	3b	4a	4b	2
Historic environment	Historic assets such as scheduled monuments and listed buildings can be protected from development through sensitive design and layout regardless of the broad spatial strategy. However, when considering the implications of the spatial strategies on the setting of the distinct areas of Churchgate Street, Old Harlow and Newhall, some differentiation between the options is possible.			٠	·	c	,	،	٠	c
	All of the options propose development to the east of the town centre, however Options 1a and 1b propose significantly less new development on land close to Old Harlow, Churchgate Street and Newhall in comparison to all of the other options. As such Options 1a and 1b are considered to perform most favourably in terms of the historic environment objectives.	Z	3	N	N	٧	N	N	N	N

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	4 a				т		
ank	3b				8		
Option / Rank	3a				ო		
Opt	2b				8		
	2a				м		
	1b				N		
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Discussion		The Council has identified that between 12,000 and 15,000 (600 and 750 dwellings per annum) new dwellings and 8,000 to 12,000 jobs (400 and 600 new jobs per annum) between 2011 and 2031 are required to meet Harlow's objectively assessed development needs. The Council's Strategic Housing Land Availability Assessment (SHLAA) concluded that there is enough land in Harlow to provide approximately 8,900 new dwellings within the district.	There is a mismatch between earnings and average house prices in the district, and the disparity between wages and the cost of homes is predicted to grow over the plan period; as such it is considered that there will be an increasing demand for more social-rented accommodation in Harlow over the next twenty years.	All nine options provide for additional housing in the district. The issue is the extent to which each option will provide sufficient housing to meet housing need in Harlow. In theory, the higher the number of homes, the better the performance in terms of the housing objective.	Options 1a, 2a, 3a and 4a seek to deliver between 7,500 and 8,800 new dwellings in the district over the plan period, with a total of 12,000 new dwellings to be provided within Harlow and in neighbouring districts. This equates to a rate of 600 new dwellings per annum and the lowest level of housing identified as being required to meet the district's housing needs. While this level of housing provision should help to meet the identified housing shortfall, it would provide a significantly lower level of housing provision overall in comparison to Options 1b, 2b, 3b, 4b and 5 , therefore meaning that fewer affordable homes would be built and house prices are likely to continue to rise.	Options 1b, 2b, 3b and 4b seek to deliver up to 15,000 new homes in and around the district. This equates to a rate of 750 new dwellings per annum and the highest level of housing identified as being required to meeting the district's housing needs. In doing so they are expected to deliver the required level of market and affordable housing needed in Harlow. As such these higher growth options are predicted to have significant positive effects in terms of the housing objectives.	Option 5 would deliver the greatest number of houses and also contribute to meeting the needs of East Herfordshire District Council through the creation of a large scale sustainable urban extension to the north of Harlow; as such it is considered to perform the best in terms of this objective.
Topic		Housing					

Topic	Discussion				Opt	Option / Rank	ank			
		<u>1</u>	1b	2a	2b	3a	3b	4 a	4b	2
Land	The amount of developable brownfield land in the district on its own is considered insufficient to meet local housing need, consequently all of the options propose some development on greenfield land, however all options other than Option 1a would also require significant release of land currently designated as Green Belt.									
	Option 1a seeks to focus new development within the existing built up area of Harlow, which is predicted to offer the greatest potential for remediating contaminated land in the district. Furthermore, given that this option would not require release of land within the Green Belt, it is considered to perform the best in terms of the 'Land' objectives.	<								
	By proposing the greatest level of development during the plan period in the district, in particular on land within East Herffordshire, and in the north east of Harlow, Option 5 would require the largest release of Green Belt land. As such this option is predicted to have the most significant negative effects in terms of the objectives under the 'Land' topic.	X	ო	7	ო	N	ო	8	7	4
	All of the other options would require release of Green Belt land for development, however Options 2a , 3a , 4a and 4b would require less development on Green Belt land than Options 1b , 2b and 3b , with Options 4a and 4b directing growth to lesser quality landscape to the east of Newhall up to the M11, therefore these approaches are considered to perform more favourably.									

Topic	Discussion				Opti	Option / Rank	ank			
		1a	1b	2a	2b	3a	3b	4 a	4b	2
Landscape	Overall, all of the options seek to revitalise open spaces by increasing activity and surveillance through appropriately cited development. However, all of the options would require the selective use of open space to accommodate new development thereby resulting in some loss of open space in Harlow.									
	The approach set out by Options 1a and 1b would involve the development of a larger number of smaller sites within Harlow coupled with larger urban extensions to the north east of the town. The approach would involve the loss of some open spaces across the district to support development. While these options would result in a net loss in the quantity of open space, it is considered that the town would still have adequate provision in all areas. However Option 1a performs more favourably than Option 1b in terms of this objective as it would not involve release of Green Belt land.									
	Option 2a seeks to focus growth outside Harlow to areas identified as having fewer landscape constraints whilst also maximising the amount development within the existing urban area of Harlow to reduce the need to develop on green field land outside the district.	\ <u>-</u> \	8		7	8	8	7	8	ო
	While Options 2b, 3a, 3b, 4a and 4b would involve a small number of losses of open space across Harlow, overall these options seek to minimise the amount of open space lost to development; however all would also require some release of Green Belt land in and outwith the district so perform slightly less favourably than Option 1a . In terms of Options 4a and 4b , it is notable that the approach seeks to direct growth to lesser quality landscape to the east of Newhall up to the M11.									
	Option 5 includes a small number of losses of open space across Harlow but overall these are minimised. This option would have reduced impact on the town's green wedges and open spaces and future employment development would be provided through urban extensions around Harlow. However this option would result in the highest level of development and would require the greatest release of Green Belt land; therefore it is considered to perform least favourably in terms of the landscape objective.									

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	4b			4		
	4 a			ო		
ank	3b			8		
Option / Rank	3a			\-\frac{1}{2}	3	
Opt	2b			4		
	2a			ო		
	1b			4		
	<u>1a</u>			ო		
Discussion		Although Harlow is considered to have a reasonable level of infrastructure provision to facilitate travel by sustainable modes, there is still a high dependency on the private car.	By increasing housing and employment provision, all nine options would put increased pressure on transport routes. The issue is the extent to which each option will help to promote a sustainable modal shift.	By directing the majority of new development to urban areas where opportunities for passenger transport uptake are highest (e.g. to the northern and eastern parts of Harlow which have good access to railway stations, as well as the town centre which is a key passenger transport and service hub), Option 3a is expected to have the most significant positive effects in terms of transport. This is due to this option being considered likely to lead to increases in passenger transport uptake as well as a reduction in the reliance on private car use.	Option 5 seeks to create the highest level of growth (both in terms of housing and employment) through promoting development in and around the town centre and directing significant levels of growth to greenfield sites within and outside the district. While a bypass is not part of the Local Plan, it is likely that a bypass would be required in the north of the district to deliver this option. This option is therefore considered most likely to increase car use and demand, as well as congestion; therefore it is considered to perform least favourably and result in significant negative effects in terms of the transport objectives.	Option 2b would direct significant levels of housing development to the southern edges of the district, where public transport accessibility is currently relatively poor. This approach would require significant investment in passenger transport provision in order to ensure the development is linked with the town centre and other passenger transport hubs.
Topic		Transport				

Topic	Discussion				Opti	Option / Rank	nk			
		1a	1b	2a	2b	3a	3b	4 a	4b	5
Water	Harlow falls within an area identified as being in serious 'water stress' and the situation is likely to worsen in the future as a result of climate change. In terms of water efficiency, while additional development would place additional demands on water resources and thus could exacerbate the situation, it is assumed that larger scale developments are more able to viably achieve higher standards of water efficiency. On the basis that larger schemes would be more likely to lead to achieve higher standards of water efficiency through the incorporation of development-wide efficiency measures, the options seeking to create urban extensions (i.e. Options 1b , 2b , 3b , 4b and 5) within and outside the	N		N		N		N	\$	\$7
	district are considered to perform most lavourably.				_	_				

Summary of Interim SEA/SA

- 9.2. The appraisal has predicted a number of significant positive and negative effects across the nine alternative options, with all of the options identified as having merit in different regards.
- 9.3. The appraisal predicts that the options proposing higher levels of both housing and employment growth, in particular example 5, followed by examples 1b, 2b, 3b and 4b, would result in significant positive effects in terms of the housing and economy and employment objectives by providing for a level of growth that should meet the identified housing and employment needs of the district.
- 9.4. In terms of the community and well-being objectives, examples 1a, 1b, 4a and 4b are identified as having the greatest potential to revitalise existing centres, renew deprived neighbourhoods, and increase provision of key facilities and services. For these reasons, they are predicted to have significant positive effects in this regard.
- 9.5. In terms of the air quality and transport objectives, example 3a is identified as the most favourable option, followed by example 3b, and is predicted to have significant positive effects.
- 9.6. In terms of the environmental topics, example 5 performs least favourably and is predicted to result in significant negative effects in terms of the air quality, biodiversity, land and transport objectives.

10. Summary of Harlow Spatial Options Study (Stages 1 – 3)

- 10.1. The Harlow Spatial Options Study (stages 1 3) has generated and appraised a number of examples for how development could be accommodated across the Harlow area. The assessment has generated five alternative examples for Harlow and should be taken forward for further assessment and public consultation. At this stage the study is unable to draw conclusions about which example might emerge as the preferred approach for accommodating growth across Harlow. The assessment identifies that further information on infrastructure and deliverability is required before any conclusions are reached. Moreover, at this stage a 'blend' of locations cannot be ruled out.
- 10.2. Further work will be required in stages 4 and 5 to provide additional assessment of the implications of each before a preferred approach can be identified. Nonetheless, it is considered that the alternative options are presented in sufficient detail to enable public and stakeholder comment. The options are also sufficiently detailed to enable continued discussion with adjoining authorities through the duty to cooperate.

Appendix 1 - Establishing Development Principles for Harlow

This section discusses the Harlow development principles that have been established to inform the development of the spatial options. These provide a number of guiding principles for all options and to avoid considering options that are entirely unreasonable and couldn't be implemented. The principles are listed below:

- 1. Continuing a compact town
- 2. Retaining the neighbourhood structure
- 3. Sequencing development

1. Continuing a Compact Town

The original Masterplan acknowledged key landscape features and integrated these into the overall design and layout of the town. The most powerful topographical features were the Stort Valley with the rising ground of the Hertfordshire Hills on the north and Rye Hill on the south. The Stort valley formed as a baseline for the town to develop in a semi-circular way from this.



Figure 56: key landscape features of the Harlow area (right) and how the neighbourhood layout reflected these features (right).

The Council considers that the principle of compaction is sound and has a number of sustainability benefits including accessibility to services and key facilities by walking and cycling. As such future development and expansion for Harlow should be orientated towards the existing town as much as possible.

2. Retaining the Neighbourhood Structure

Fundamental to Harlow's urban form and structure is separate residential neighbourhoods surrounded by landscaped wedges (known as green wedges). Although separate features they are intrinsically linked and were key components of the original Gibbered masterplan.

Neighbourhood Pattern

The original neighbourhood pattern is a result of a number of interrelated factors. First, the town centre was a long way from much of the housing and as such the town itself was divided by the landscape into four districts. Three of the districts have large shopping and social centres and

the fourth has the town centre itself. Each district was subdivided further on the basis of primary school catchments. The school and the shopping/social centres were placed at the heart of the neighbourhoods and positioned away from traffic. All of these were divided by landscaped wedges that went through the town and into the countryside as shown below:



Figure 57: Neighbourhood structure as originally intended by Gibberd in the 1947 Masterplan

Over time the town has grown to accommodate additional development. Expansions to the town include Church Langley to the south east and Kathrines and Sumners in the south west. More recently has been expansion to the east of Harlow (Newhall). Nonetheless, the general plan pattern of Harlow (separate neighbourhoods surrounded by green wedges) has been retained. The town as it exists today is shown below.



Figure 58: The Harlow urban form today

The neighbourhoods function as separate entities but are linked to form a whole. In particular, each neighbourhood has key local amenities and services (in the form of Neighbourhood Centres, Hatches and schools) within easy reach of the majority of residential population. These are shown below.

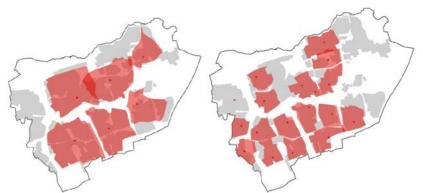


Figure 58: 10 min walking catchment to Neighbourhood Centres (left) and 5 min walking catchment to Hatches (right).

Although there are issues with the relevance and viability of some of these services and facilities given changes to population and changes to needs the principle of providing services in locations that are easily accessible by walking/cycling is still sound notwithstanding the issue of whether there is sufficient people in that area to sustain such services.

Green Wedge Pattern

The Green Wedges are widely valued across the town and provide opportunities for both formal and information recreation and leisure. They also provide an important structural function in separating residential areas and as movement corridors for the town. Although there are some localised issues surrounding the quality and use of some spaces in the 21st century they continue to be important in defining the character of Harlow.

The Council has undertaken the Harlow Open Space and Green Infrastructure Study which concluded that the green wedges provide a significant open space resource and provide wider green infrastructure functions. The principal Green Wedge network is shown below:

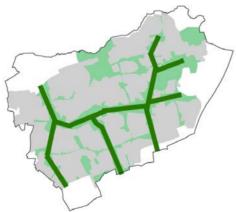


Figure 59: Principle Green Wedges in Harlow

The Council has also undertaken a Green Wedge Review to look at specific areas of Harlow's Green Wedges. The findings show that there are some areas where localised realignment of existing green wedge boundaries could be made without undermining the principle of the town's green wedge network.

Together with the residential neighbourhoods the Green Wedges are an intrinsic feature of Harlow and continue to be relevant for the long term form of Harlow. As such the principle of Green Wedges will be retained and will continue to make up the future urban form of Harlow, together with the separate residential neighbourhoods.

The Council has considered two high level options for the long term approach to urban form of Harlow. These are briefly summarised below:

Option 1: Deleting Green Wedges

The Council considered fundamentally changing the existing urban form of Harlow by infilling the Green Wedges (other than those required to meet expressed local open space needs). This would require the deletion of considerable quantities of green wedge across the town and the provision of additional housing and local services and would undermine the planned neighbourhood structure of Harlow. This approach is illustrated below:



Figure 60: What deleting Green Wedges might look for Harlow

This option was rejected on these grounds and over concerns about the existing road network within Harlow to accommodate such as focused approach to housing provision.

Option 2: Retaining the status quo

The Council also considered maintaining the existing boundaries of residential neighbourhoods and green wedges. This would retain the status quo of both green wedges and neighbourhoods across the area. However, given the level of growth required in the district, localised issues with the green wedges and the need to regenerate some neighbourhood areas the Council considered that this option would require more land in the Green Belt and would fail to take the opportunity to address some of the 'performance' and regeneration issues which the Local Plan is seeking to address.

This includes the need for neighbourhood renewal and improvements to the public realm and improvement in the relationship between private and public space across Harlow. As such this option was rejected.

As set out in the principle the council considers that separate neighbourhoods and green wedges are intrinsic features of Harlow and continue to be both relevant in planning terms and

valued by the community. Therefore the principle of the separate neighbourhoods and Green Wedges will be retained and will shape decisions about how and where development is accommodated. However, a small number of existing open spaces could be utilised to facilitate local regeneration objectives such as neighbourhood renewal/revitalisation and the regeneration of hatches and neighbourhood centres.

1. Sequencing Development in Harlow

Given the amount of development required to meet Harlow's development needs and other policy requirements it is recognised that it will not be possible to accommodate all future development within the existing built up area of Harlow. Faced with this an approach for accommodating the development required in a sustainable way needs to be secured. To achieve this a sequential approach towards the delivery of development will be required. An overview of the approach is set out below; this will be developed further as the Local Plan developed.

- The Council considers that brownfield or previously developed sites should be the
 preferred location for accommodating new development in the district as this usually of
 less environmental importance, are generally accessible and have good access to range
 of services and facilities.
- 2) Once opportunities for development on previously developed sites have been maximised the Council will seek to provide some development on a selected number of open spaces within the existing urban envelope of Harlow. This will be on the basis of the quality and value of the existing site and/or the potential for that site to contribute to other Local Plan objectives such as housing (particularly affordable) and regeneration.
- 3) Finally, the Council will provide additional development in the green belt around Harlow. This will be undertaken through a Green Belt review to be undertaken subsequently. Given the amount of development required in the Harlow area and the importance of maintaining the neighbourhood and green wedge structure of Harlow there is the need for significant development in the green belt around Harlow, despite efforts to maximise opportunities to accommodate development in the existing urban envelope.

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Appendix 2

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Core Developmen t Principles	Retain neigh str																									
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Sieve 1: Exclusionary Criteria	Local site	
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Land North Gilden Way	Terminus House and Car Park	Education Centre Hodings Road	Purford Green School	Former Passmore s School	East of the Downs School	Playing field south of Gilden Way	Former Scout Hut Elderfield	Manor Hatch	Playing Field and land east of Radburn Close south of Clifton Hatch	South of Hawthorn s west of Riddings Lane
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Land and garages between Bushey Croft and Rushes Mead	Garage blocks adjacent to Nicholls	Elm Hatch and Public House	Stewards Farm	Land between Barn Mead and Five Acres	Kingsmoo r House and gardens	Pollard Hatch plus garages and adjacent land	Katherine s Hatch	Service bays rear of The Stow	Garages east of 99-102 Greenhills
en en	98		39	40	44	45	46	48	52

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Slacksbur y Hatch and associate d garages d garages Garage blocks between 1 and 36 Arkwright s Staple Tye Mews, Staple Tye Depot, and The Gateway Nursery Lister Hatch area and garages Rectory Field Playing Field Playing Field Open Space to the south of Space to the south of Berecroft and adjacent playgroun d
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Land and Buildings at Wych Elm incorpora ting bus garage and fire station	Prentice Place	Playgroun d adjacent to Brenthall Towers	Land Adjacent to Katherine s School	Fishers Hatch	Colt Hatch communit y centre and adjacent land	Land between Second Ave and St. Andrews Meadow	Northbro oks playing fields	Playing field west of Deer Park
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Land northwest of Kingsland	groun and een hons ear	Playgroun d west of 93-100 Jocelyns	ards e ent		e ng	_	3 fall	la ords	υ	Coppice Hatch and garages	rs 1
Land northwesi of Kingsland	Playgroun d & land between Little Pynchons and Pear Tree Mead	Playgroun d west of 93-100 Jocelyns	Sherards House and adjacent land	Phase 2 New Hall	Ram Gorse Playing field	Phase 3 New Hall East	Phase 3 New Hall West	1 & 1a Walfords Close	Westgate House and MS carpark	Coppice Hatch an	Pypers Hatch
241	245	251	266	276	278	281	282	284	287	301	314

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Garage block south east of Fesants Croft	Garage block south of 84-97 Barn Mead	Land east of 144- 154 Fennells	Land associate d with Hestor House and Hester Mews	Maunds Hatch and Hall	Sumners Hatch	Lutheran Church	Aylets Field; The Briars; Copshall Close; - Known as Priority Estates
327	336	343	347	352	361	367	374