

Appendix C: Detailed Appraisal of Spatial Options

1. Population and housing

Overview

- 1.1.1 The spatial options will accommodate between approximately 6,500 and 12,000 dwellings within the District. Allocating a large number of dwellings within close proximity to existing urban areas and the Leicester Urban Area is likely to have positive outcomes as it would promote compact settlement patterns and reduce urban sprawl. This is a similar pattern of growth to that promoted in the current Plan, and is reflected by committed development. Development in such locations is likely to lead to positive effects on the population and community by bringing closer where people live and work within a suitable location, whilst also enhancing the offer of services, facilities, improvements of public realm and access to green space. At the higher scales of growth there are opportunities to support improvements to transport infrastructure and promote walkable communities. However, without such enhancements, there could be increased pressure on existing infrastructure and services.

Spatial Options Analysis

Scenario 1

- 1.1.2 **Option 1a** seeks to meet the housing needs across the District through a reliance on existing committed development. Only small pockets of growth in the extended PUA, medium villages and smaller villages are proposed. In terms of housing delivery, there are sufficient site options to meet needs and to provide a buffer to ensure delivery. The additional growth in the extended PUA ought to be well located in relation to demand for housing in urban areas, and the sites would be smaller scale and possible to bring forward simultaneously. In the short term, this is positive in terms of housing development. However, the range of existing sites across the district is limited, and there is less flexibility should delivery rates at committed sites not come forward as expected.
- 1.1.3 This option, with the lower scale of growth, does not allow for additional opportunities to expand communities or allow for additional strategic sites which could deliver large communities and have potential to improve connectivity, infrastructure, social cohesion and housing communities.

- 1.1.4 There will be small scale growth spread across Thurlaston, Elmesthorpe, Sharnford and Kilby. This scale of growth would be very small though at each settlement and in combination.
- 1.1.5 The overall effects are dependent upon the range and number of additional sites allocated to meet needs. Without flexibility built in, there is potential for minor negative effects, as there would be limited flexibility and choice in terms of the location and size of existing committed sites. However, building in flexibility would mean that more sites were identified in the supply to ensure that needs are more likely to be met. This would be a **minor positive effect**.
- 1.1.6 On a more strategic level, this option does little to address unmet needs from Leicester.

Scenario 2

- 1.1.7 All the options under scenario 2 raise the level of growth to 9000 dwellings, which would provide greater ability to meet local housing needs and a proportion of unmet needs from Leicester City.
- 1.1.8 **Options 2a, 2b and 2c** involve varying levels of expansion to existing urban settlements, but mostly adjacent to the main urban areas near to the PUA such as Narborough, Enderby, Whetstone, Blaby, Countesthorpe and surrounding Medium Villages (Sapcote, Stoney Stanton, Littlethorpe, Croft, Huncote, Cosby). Compared to Option 2a, lower growth is positioned in the PUA in Option 2b whilst Option 2c places more of the growth in smaller villages with potential development locations (i.e. Elmesthorpe, Sharnford, Thurlaston, Kilby).
- 1.1.9 Each of the options is positive in relation to overall levels of growth, but the distribution of housing land would determine where these benefits were felt. **Option 2a** provides a spread of development across the district that ought to allow for a range of choice to the market. It also provides a proportion in the immediate PUA, which ought to be well linked to Leicester. Therefore a **significant positive effect** is predicted.
- 1.1.10 **Option 2c** offers a similar spread of development to Option 2b, but rather than growth being focused in the PUA, there is a greater focus on the medium and smaller villages. This too should offer a wide range of choice and flexibility, but some areas may not be as well-connected to Leicester. Nevertheless, a **significant positive effect** is predicted from a housing and population perspective.
- 1.1.11 **Option 2b** places most of the additional growth in the extended PUA, but less in the PUA, and a limited amount in other villages. Whilst the overall level of growth is positive, and would be well connected to Leicester, the spread of development is limited to a small number of locations.

- 1.1.12 Therefore, there is an element of uncertainty related to **significant positive effects** being generated (i.e. would the choice of housing locations help to meet needs for a range of communities?).
- 1.1.13 **Options 2d and 2e** introduce strategic site options which will accommodate the bulk of additional growth. As such, there would be more limited development in the extended PUA settlements, medium villages and smaller villages (particularly for option 2e).
- 1.1.14 Strategic sites could offer benefits such as infrastructure improvements to the existing local communities. The scale of development would also support substantial affordable housing, a range of housing typologies and supporting local services and facilities. However, the large nature of the strategic sites could mean that delivery takes place over a longer time period. Depending upon the precise location of the strategic sites involved, some growth could be well located in relation to Leicester (for example strategic sites at Blaby and Whetstone Pastures), whilst others are slightly more disconnected (at Elmesthorpe and Stoney Stanton).

Option 2e places all additional growth in a single strategic site, and therefore does not take full advantage of opportunities to expand existing settlements. An over-reliance on one strategic site could also be detrimental in terms of short term delivery of housing and providing flexibility and choice. As such, only **minor positive effects** are predicted.

Option 2d still includes growth in other settlements across the district, and could possibly include more than one strategic site. This lessens the reliance on one large strategic site. Therefore, a potential **significant positive effect** is predicted.

Scenario 3

- 1.1.15 Each of the options at this scale of growth provide a substantial uplift on growth compared to the needs identified for Blaby District. In this respect, all of the options are likely to ensure that local housing needs are met in full, as well as catering for unmet needs from the City of Leicester. The distribution of development will also influence the nature of effects and where the benefits are most likely to be felt.
- 1.1.16 **Option 3a** proposes the largest amount of growth for the PUA. Existing committed sites such as the Sustainable Urban Extension (SUE) in Lubbesthorpe make up a substantial part of this growth. However, additional growth would accommodate up to 2637 additional dwellings in the PUA. Their location would be close to Fosse Shopping Park, employment and business parks, existing residential areas and open green space which is good for people's health and wellbeing (and therefore attractive for the housing market).

- 1.1.17 Growth in this location and the extended PUA should also have strong links to Leicester City itself, thereby ensuring a proportion of needs from Leicester are met close to where they are arising.
- 1.1.18 The Extended PUA Settlements would also be the focus of much growth, which would provide further choice along the urban fringes of Leicester. Taken together, the intensity of growth in this location ought to bring about major significant positive effects in relation to housing and population.
- 1.1.19 Development is also involved at the medium villages and smaller villages, which expands housing choice in these settlements and helps to support population retention in these areas.
- 1.1.20 Overall, **significant positive effects** are predicted for population and housing.
- 1.1.21 **Option 3b** involves less additional growth at the PUA, but expanded growth at the extended PUA. This approach is similar to options 1a and 2b in terms of housing provision given that it promotes the majority of growth along the periphery of the Leicester urban area but the scale of growth is higher. Therefore, similar positive effects are likely to arise in relation to meeting needs where they arise and at settlements with good accessibility.
- 1.1.22 Some additional growth is proposed at the medium villages, which ensures there is still a choice of smaller sites across a range of settlements across the district. However, no additional growth is proposed in the small villages, which could be restrictive in those locations in terms of population retention and the vitality of settlements.
- 1.1.23 Whilst the overall effects are likely to be **significantly positive** in relation to housing, the benefits would be spread less evenly under this option.
- 1.1.24 **Option 3c** still involves a large amount of growth at the extended PUA, and adds growth to the large committed developments in the PUA itself. This will help to address needs in the urban areas, which is a positive approach. However, this option also disperses some of the additional growth away from PUA, seeking to involve the Medium Villages and Small Villages more substantially. From a centre hierarchal perspective this makes sense to follow the existing urban settlement patterns. It also rebalances the housing market across the district, given that the vast majority of existing commitments are focused in the PUA. Another benefit of this approach is that it provides a wider choice of locations for growth, which will support existing communities in a range of settlements that may wish to remain living in that area. It also helps to encourage a boost in short term supply as the number of site opportunities that could commence simultaneously would likely be higher. As a result, this option is predicted to have **significant positive effects** in terms of housing and population.

- 1.1.25 **Options 3d and 3e** focus additional growth at strategic sites, with Option 3e almost entirely relying upon a strategic site to deliver all additional growth.
- 1.1.26 In terms of locational effects, these two options are similar to Option 2d/2e however at a higher scale of approximately 3,000 dwellings more.
- 1.1.27 Increasing this scale of growth will have significant positive effects in terms of the delivery of housing needs for Blaby District and Leicester. Strategic sites of such a scale ought to support new communities with high quality housing and a range of facilities, and this is positive in terms of creating sustainable communities. This could also have wider reaching benefits for nearby settlements. The relationship between new communities and Leicester City would depend upon the exact location of growth and the infrastructure improvements that are created. The links would likely be less strong than existing settlements in the PUA and extended PUA though.
- 1.1.28 A drawback of these two approaches is the limited growth afforded to other settlements. Whilst option 3d does include growth for certain settlements, option 3e would not support populations within any other settlements, and therefore, the choice of housing and locations to live would be more limited. For some smaller settlements this could lead to negative effects on the population and vitality of services in the longer term.
- 1.1.29 A reliance on one or two large strategic sites could also be problematic in terms of ensuring delivery in the short and medium term. There will be infrastructure requirements, and a phased approach to growth could limit the number of development parcels that can come forward. Given that the existing committed developments already consist of large SUEs, such a focused approach might not bring about significant positive effects (at least not in the short term).
- 1.1.30 Overall, a **significant positive effect** is predicted, as the scale of growth being planned would exceed local needs and help to support the wider City targets. However, there are uncertainties related to delivery, and some areas may suffer from a lack of further growth.

Summary

- 1.1.31 There is sufficient land supply to meet local housing needs for any of the options. However, it would likely be necessary to allocate more housing than the overall housing need figure to ensure that there is flexibility to meet the targets proposed under each option. The effects for option 1 are less positive when compared to the higher growth options because the option does not provide the opportunity to contribute to the unmet needs of Leicester.

- 1.1.32 For the higher growth options, this provides a degree of flexibility in terms of meeting local needs (and also a proportion of Leicester's unmet needs), which should ensure that significant positive effects are achieved for Blaby District. The distribution of growth is important though, and those options that present a more balanced dispersal of growth are likely to be more beneficial to a wider range of populations, whilst offering greater choice and flexibility in terms of the locations for new homes.
- 1.1.33 The options that rely solely on strategic sites carry a degree of uncertainty, given that this limits flexibility in location and there could be short term delivery issues.
- 1.1.34 It should be noted that the higher growth options (particularly scenario 3) would also produce positive effects for neighbouring authorities, particularly Leicester, by helping meet a greater proportion of housing needs in the wider Leicester and Leicestershire Housing Market Area (HMA).

Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
+	++	++	++	++	++ ?	++	++	++	++	++ ?

2. Health and Wellbeing

Overview

- 2.1.1 Blaby is one of the 20% least deprived Local Authority areas within England. Accordingly, levels of health are generally good. However, there are still health issues in specific locations and for particular groups. For example, there are small pockets of higher deprivation in Glen Parva, Braunstone, Sapcote, Whetstone and Blaby (IMD, 2019).
- 2.1.2 In making predictions about the potential effects of each option, assumptions are made about the potential effects on healthcare provision. It is presumed that relatively small amounts of growth could be accommodated at existing health care facilities such as existing general practice services, or that improvements could be secured through contributions. However, this will depend upon current capacity, planning from healthcare commissioners, and the extent of development carried out across the district and in specific locations. Where levels of growth are more substantial, it is possible that pressures on health care infrastructure will arise unless new facilities can be funded. This could be through pooling of contributions, or on larger strategic sites through securing entirely new facilities.
- 2.1.3 There is a network of green infrastructure across the district and where these are accessible to communities it is presumed that it would be beneficial for people's health and wellbeing. Currently across the District there are no significant accessibility shortfalls from parks and gardens and informal open space, however the quality of some facilities require improvements in most locations. Development contributions could offer the potential to secure such enhancements.
- 2.1.4 There is a need to consider the health and well-being impacts that development could have upon residents. This includes the benefits growth can bring in terms of improving health and wellbeing facilities, upkeeping public green spaces to a high standard and considering active transport.
- 2.1.5 Site allocations will need to meet the requirement of providing adequate play, open space and green infrastructure where possible, and to also retain in situ or replace facilities where these are located within site options.

Spatial Options Analysis

Scenario 1

- 2.1.6 **Option 1a** has **minor positive effects** for health and wellbeing as the additional growth on top of committed development is not significant.

- 2.1.7 Most of this is concentrated in the extended PUA, and would not be of the scale to support new school and health facilities.
- 2.1.8 However, improvements to existing facilities would be presumed. The level of growth would not contribute to significant improvements to existing health and wellbeing facilities and infrastructure, but the growth is positioned in relatively accessible locations with access to play, open space and green infrastructure. There could be some loss of greenfield land, which could cause localised amenity concerns. However, such land would not necessarily be publicly accessible, and development could possibly lead to some minor improvements. There would also be potential to avoid and mitigate effects.

Scenario 2

- 2.1.9 **Option 2a** provides relatively small amounts of additional growth across the PUA, with greater amounts distributed to the extended PUA and medium villages. Limited additional growth is also involved in the smaller villages.
- 2.1.10 Several site options within the PUA and Extended PUA have relatively good access to services and facilities. The scale of growth involved would likely require upgrades to school and health facilities (or perhaps new / satellite facilities), which should be possible to implement through development contributions depending on the capacity of facilities and the space available to expand. This is predicted to have minor positive effects. The areas that are most deprived within the District are those bordering City of Leicester and Sapcote parish. Development in these locations could be beneficial for health in terms of the provision of affordable homes, the improvement of the public realm, and upgrades to healthcare, schools and recreational facilities. Without upgrades to healthcare services, there could be negative implications on existing facilities (in terms of longer waiting times etc). However, with planned upgrades and possibly new facilities in the longer term the effects ought to be positive by concentrating investment into areas of need.
- 2.1.11 At the medium villages, the amount of growth involved at each settlement would be less likely to support new facilities, but it is presumed would contribute towards improvements as required. This will depend upon the current capacity of facilities and their ability to physically expand if necessary. At this stage, minor positive effects are anticipated.
- 2.1.12 The level of growth at small villages is very small and likely to have neutral effects in terms of access to schools and health care because only a small amount of development would be located in less accessible locations. There may be some knock on implications for the larger settlements though (which would need to accommodate additional demand for facilities).

- 2.1.13 In terms of recreation, the majority of site options across the district are located on the urban fringes. There would be a loss of greenfield land, and this could affect amenity and mental health / wellbeing for nearby communities that value these green spaces. These are minor negative effects for all locations. Whilst there would be a loss of greenfield land, much of this is not public open space or used for recreation. Development of larger site options may provide opportunities to enhance open space provision for new communities and existing residents. Contributions could also be made towards the improvement of existing facilities. These are minor positive effects.
- 2.1.14 Overall, this option is predicted to have mixed effects in terms of health and wellbeing. On the one hand, **significant positive effects** are predicted as development will bring affordable housing and investment in local school, healthcare, community facilities and open space. Also, the distribution proposed would be unlikely to put undue pressure in any particular location. On the other hand, temporary **minor negative effects** are recorded to reflect the loss of amenity and disturbance that would be caused by construction of new homes on greenfield land on the urban fringes. However, these issues ought to be possible to minimise and mitigate, so these effects are uncertain to an extent.
- 2.1.15 **Option 2b** will not place additional growth within the PUA but rather spread it more extensively across the Extended PUA. Some growth is still involved at the Medium Villages but not at the Smaller Villages.
- 2.1.16 This approach will put more pressure on individual settlements in the extended PUA. The scale of growth involved is such that existing school and healthcare facilities may not be able to accommodate growth without new facilities being provided. A coordinated and planned approach with health and education commissioning groups would help to ensure that new facilities could be secured in each location (given the wider catchment areas they serve and the fact that existing facilities are located here), which ought to be a significant positive effect with regards in these locations (and could also benefit wider communities).
- 2.1.17 With regards to the medium villages, the scale of additional growth is relatively modest at each settlement and would be likely to have neutral effects with respect to health care and education facilities.
- 2.1.18 In terms of recreation, the level of growth involved in the extended PUA would likely involve the loss of substantial greenfield land. Some sites are already within proximity of accessible natural greenspace, whilst the larger peripheral sites are not within ideal walking distance. However, much of this is not public open space or used for recreation.

- 2.1.19 Development of larger site options will provide opportunities to create new open space, green infrastructure and community facilities and this ought to provide the potential for positive effects. A few potential sites actually consist of public open space, but it ought to be possible to accommodate the scale of growth involved without needing to lose these assets.
- 2.1.20 In terms of amenity, there are a number of site options located adjacent to existing residential areas that could have negative effects during construction, and may not be welcomed by existing residents. However, these effects are not considered to be significant in the longer term, as new accessible green space should be accessible to surrounding communities. Other site options are located close to existing industrial estates and A roads, and residential development here may be affected by amenity issues such as noise, road traffic and other forms of pollution. For example, this is mainly an issue for sites close to Enderby and Glenfield. At the scale of growth presumed in each of the extended PUA settlements, some development could be expected in these locations. The scale of the site options should allow for mitigation, and so only minor negative effects are predicted.
- 2.1.21 Overall, this option is predicted to have a **significant positive effect** in terms of health and wellbeing. This is related to the focus of growth in the extended PUA, which should offer economies of scale in terms of supporting new and improving new facilities. **Minor negative effects** are also predicted in relation to amenity and wellbeing concerns associated with a loss of green space. However, mitigation and avoidance ought to be possible, but this is uncertain.
- 2.1.22 **Option 2c** also involves further growth in the extended PUA. Whilst at a slightly lower level than that for Option 2b, the effects in terms of access to facilities and recreation are likely to be similar in terms of bringing positive investment. Minor negative effects are also likely to occur in relation to amenity.
- 2.1.23 However, Option 2c places more growth in the medium villages and smaller villages. For the medium villages, access to existing open space is good, and the site options are not formal open space. There is therefore potential for enhancement to occur in this respect. Development of some site options located adjacent to existing residential areas could cause amenity concerns for existing residents living nearby, which are minor negative effects. The majority of potential site options are not constrained by surrounding amenity constraints, and so new development will not affect the health and wellbeing of new residents.

- 2.1.24 In terms of access to local services and facilities such as schools and healthcare, the scale of growth involved (more than 200 dwellings per settlement) could potentially put pressure on existing services, but this is unlikely to be of a level to support entirely new health care facilities or schools in each location. Therefore, there may be a reliance on such facilities elsewhere for some members of the community.
- 2.1.25 Indeed, some medium villages, such as Croft and Cosby, do not have GP practices. In terms of economies of scale, it may be better that the demand for such services from several nearby settlements are met in one place. This would be a matter for health and education bodies to consider alongside planners. As a result of this, some minor negative effects are anticipated.
- 2.1.26 This issue is more pronounced in the smaller settlements, some of which do not have any immediate healthcare facilities or secondary schools. As a result, new communities and existing people living in these areas may experience more difficulties accessing local health and education facilities. These are minor negative effects.
- 2.1.27 Overall, **significant positive effects** on health and wellbeing are still anticipated as a large amount of growth would be located in accessible locations such as the extended PUA. There would also be potential to enhance open space in many settlements across the district, and access to natural green space ought to be good. **Minor negative effects** are also recorded, as some communities could experience amenity issues, whilst a higher proportion of development would also be placed in locations that do not have local access to healthcare and education facilities.
- 2.1.28 **Options 2d/2e** place a significant proportion of additional development at the strategic sites. Currently all of the strategic site options comprise of mostly agricultural land and are not formally used for open space or recreation. Given the scale of the sites, it is probable that large areas of new open space could be created for new communities, and provided the scale and quality is sufficient this could also benefit communities from nearby existing settlements. In terms of recreation and open space (and the links to wellbeing), significant positive effects are therefore possible. There may also be potential to enhance linkages at some of the strategic site options which are adjacent to existing wildlife sites and open space.
- 2.1.29 In terms of access to local services and facilities, this would be entirely dependent upon whether the strategic site options provide on-site facilities. If this is not the case, the new communities would not be well serviced by, for example healthcare and education, locally. With Option 2d, the exact overall scale of growth and number of strategic sites would influence whether new primary schools, local centre, secondary school and GP would be supported and when. For Option 2e, one location for growth would be more likely, and this would provide critical mass for a greater range of new on site facilities.

- 2.1.30 The potential for significant positive effects in this respect is therefore more certain for Option 2e.
- 2.1.31 With regards to amenity, the strategic site options are somewhat isolated from existing communities and are in locations where amenity concerns should be possible to avoid and mitigate. Therefore, neutral effects are predicted in this respect for both Options 2d and 2e.
- 2.1.32 Option 2d also involves additional growth in the extended PUA and medium villages, at a scale that would be likely to have minor effects in terms of access to local services and facilities. The more dispersed approach compared to Option 2e does spread the benefits of development wider though.
- 2.1.33 Overall, option 2d is predicted to have uncertain **significant positive effects**. New communities ought to be developed with good access to some local services and facilities, and the remainder of growth across the district would be dispersed so as not to overwhelm any one location and to spread the benefits of growth. However, it is uncertain whether new healthcare and secondary education would be supported by the smaller strategic site options. Negative effects on health and wellbeing ought to be possible to avoid for this option in terms of amenity.
- 2.1.34 Overall, Option 2e is predicted to have **significant positive effects** as it should allow for a new community to be built that is self-sufficient in terms of local services and facilities. A green infrastructure led approach which ensures access to green space, recreation, maintains natural features and introduces areas of biodiversity habitat enhancement, should also help to avoid or minimise amenity issues for both new and existing communities. This approach would focus the benefits of development in just one part of the district.

Scenario 3

- 2.1.35 **Option 3a** will place new homes within the PUA, which should be positive in terms of active travel, and access to a range of existing education and health services. However, this is uncertain because the capacity of existing services and facilities is not known. There is also a range of recreational and open space grounds within the PUA that are over 1ha and accessible. The site options should provide the opportunity to introduce new open space and community facilities in areas of need. However, some of the site options that would be required at this scale of growth are somewhat detached from the existing urban areas, and therefore access may not be as good in these areas (without a coordinated approach to growth). At the scale of growth involved, there may also be a need to build on sites that are existing open space. This is a potentially significant negative effect, but new development ought to provide enhancements that offset this to an extent.

- 2.1.36 Therefore, only minor negative effects are recorded. Growth in this area will need to be well related to large committed development such as the Lubbesthorpe SUE (to make sure new facilities and transport routes between sites are linked together). The effects in the PUA are therefore somewhat mixed.
- 2.1.37 Given the higher overall level of growth involved for the options under scenario 3, there would also be considerable growth in other locations across the district.
- 2.1.38 This includes growth in the extended PUA, which ought to bring positive effects in terms of local services and facilities, open space and recreation, but could cause amenity concerns in some locations.
- 2.1.39 Growth in the medium villages could have mixed effects too. On the one hand, the levels of growth involved provide opportunities to enhance local services and facilities and affordable housing, but on the other could put some pressure on existing facilities and have amenity impacts. The effects in this respect are similar to Option 2c, which involves similar levels of growth in the medium villages, and some growth in the smaller villages.
- 2.1.40 Overall, **significant positive effects** are predicted as a large amount of growth will be distributed across the district and help to bring investment in local services and facilities and affordable homes. However, some growth is likely to be in locations that do not have ideal access to local services, could result in the loss of existing open space and there may also be short term effects in terms of amenity. This is a **minor negative effect**.
- 2.1.41 **Option 3b** involves additional growth in both the PUA and the extended PUA. As for option 3a, this could have mixed effects. On the one hand development is likely to be located in locations with good access to local services, and with potential for enhancement to open space, green infrastructure and community facilities. The lower level of growth in the PUA could mean that it is easier to avoid the development of site options that contain existing open space. The scale of growth involved in the extended PUA is the largest for any of the options. This puts greater pressure on these settlements in terms of local services and a loss of open space. However, it could create the economies of scale to support entirely new local services facilities in certain locations. Some of the site options may involve amenity concerns for existing and new communities, and hence minor negative effects are predicted.
- 2.1.42 At the medium villages, the amount of growth involved at each settlement would be less likely to support new facilities, but it is presumed would contribute towards improvements as required. This will depend upon the current capacity of facilities and their ability to physically expand if necessary. At this stage, minor positive effects are anticipated.

- 2.1.43 Overall, **significant positive effects** are predicted, mainly reflecting the benefits of growth in the extended PUA. **Minor negative effects** are also predicted due to possible amenity issues and short term impacts on the capacity of local services (should improvements not be secured in a timely manner to support large amounts of growth across the area).
- 2.1.44 **For Option 3c** significant positive effects are predicted associated with growth in the PUA and extended PUA. Similar to the other options involving growth in these areas, there could also be some minor negative effects.
- 2.1.45 This option involves the highest amount of growth at the medium villages and smaller villages. For the smaller villages in particular, this is likely to result in more housing being located in locations that are not well serviced by health care and other local services. The levels of growth involved in any one settlement may not be sufficient to support new facilities, although the prospect of creating hubs that serve several settlements might be a mitigating factor. In terms of recreation and open space, many of the smaller settlements have access to local open space, but are more distant from strategic open space sites. These areas are also less likely to be favourable for active and sustainable travel given their relative distance from jobs and services. These issues are less prevalent for the medium villages, but still noted.
- 2.1.46 Overall, this option is predicted to have **significant positive effects** in the PUA, but may also generate **significant negative effects** in relation to the other settlements across the district. This is dependent upon the sites involved, mitigation and enhancement and how new facilities are planned to deal with dispersed growth. As such the effects are uncertain.
- 2.1.47 For options 3d and 3e, even greater amounts of growth are directed towards strategic sites. The scale of growth required would mean that more than one of the strategic site options would be needed under option 3d. The maximum scale of growth for some of the sites may limit on site facilities being secured for healthcare and other local services supporting wide geographies. However, the larger strategic site options with substantial capacity (Whetstone Pastures and Stoney Stanton) would have better potential to accommodate higher levels of growth (and thereby bring more investment in services). For Option 3e, the scale of growth required would mean that two of the larger strategic site options would be required to deliver sufficient homes, both of which would support a range of local services and facilities (though full build out would not be likely in the plan period). For both options, the potential for **significant positive effects** therefore exist in terms of creating new sustainable communities.

Summary

2.1.48 All of the options are predicted to have positive effects as they would bring with them investment in affordable housing and supporting local services and facilities, open space and community facilities. For the higher scales of growth (scenario 2 and 3) effects are predicted to be significantly positive, though there is a question mark over Option 2d (it is uncertain the extent to which new infrastructure could be secured at the level of growth involved). Negative effects could potentially occur too, given that growth could lead to amenity concerns for some communities.

2.1.49 Distributing a greater amount of growth to the medium and smaller villages could also place new homes in locations that have poorer access to health care and other local facilities, which accounts for options 2c and 3c performing slightly worse than the other distributions.

	Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
Health: Facilities and services	+	++	++	++	++?	++	++	++	++	++	++
Health: Amenity and accessibility	0	?	?	-	0	0	-	-	--	0	0

3. Biodiversity and Geodiversity

Overview

- 3.1.1 There is a relatively small number/area of nationally and locally designated wildlife sites within the District and surrounding areas. There are two Local Nature Reserves (LNR) within Elmhurst and Glen Parva and several Sites of Special Scientific Interest (SSSI), identified for their biodiversity and geodiversity value, scattered across the district at Narborough, Huncote, Croft, Enderby and Aston Flamville. Two of the SSSIs (Croft & Huncote Quarry and Enderby Warren Quarry) are designated primarily for geodiversity reasons.
- 3.1.2 There are a range of Local Wildlife Sites and Regionally Important Geological sites (RIGS) that hold value for wildlife, geodiversity or both.
- 3.1.3 In addition, there are numerous areas that are categorised as priority habitat such as deciduous woodland and grasslands.
- 3.1.4 The majority of existing development commitments are located within the PUA. This will lead to changes in the current ecosystems in this location, which consist of watercourses such as the River Soar and Sence, Rothley Brook, pockets of deciduous woodland and a Local Nature Reserve to the west of Glen Parva.
- 3.1.5 Additional growth in the PUA will therefore need to be considered in the context of such changes, and what implications additional growth in this location could have. The same principle applies for other committed development.
- 3.1.6 It is also important to acknowledge the role that local authorities will have to play in terms of contributing to a net gain in biodiversity. New development is likely to play a crucial role in this respect, as not only could it lead to development in sensitive areas, but will be required to achieve improvements whether this be through compensation and / or enhancement.

Spatial Options Analysis

Scenario 1

- 3.1.7 **Option 1a** involves minimal additional growth beyond the baseline position of commitments. It would be distributed across several of the settlements across the PUA, extended PUA, Medium Villages and Small Villages. The settlements involved contain several site options, of which the majority do not fall within areas of sensitivity. Therefore, given the fairly low additional numbers involved, **neutral effects** are predicted in relation to biodiversity and geodiversity. Should net gain be achieved, then a positive effect could be achieved through development, but this is not certain at this stage.

Scenario 2

- 3.1.8 **Option 2a** will increase dwellings across the PUA (approx. 650 dwellings or potentially more to allow for flexibility in meeting this higher target). The sites involved would be mostly agricultural in nature with no designated assets likely to be affected. In combination with growth that is already committed, there will be further urbanisation in this location, which could affect connectivity between habitats of local value. It is expected that mitigation and enhancement measures would need to be in place, which should ensure that effects are neutral in this location.
- 3.1.9 More substantial growth is proposed across the extended PUA. Though there are SSSIs in these locations (Narborough Bogs and Enderby Warren Quarry), the site options would be in locations that are less sensitive from a biodiversity / geodiversity perspective and unlikely to have significant effects upon the SSSIs. Combined with existing growth in this location and also when joining up with the PUA development, the total area of greenfield land would decrease, which could potentially be a minor negative effect. However, development ought to offer the opportunity to improve the ecological value of sites across this area by introducing new habitat areas.
- 3.1.10 Though direct effects are unlikely (as described above), the PUA includes several Local Wildlife Sites (LWS) in Kirby Muxloe, Glen Parva and surrounding parishes. Demand for access to these areas will likely increase with focused development and knock on effects occur (for example recreational pressures). This is an uncertain minor negative effect.
- 3.1.11 There is further development proposed across other settlements within the District, with the majority at the medium villages. There are SSSI sites located near to Croft and Huncote, whilst at Stoney Stanton there are several RIGs and local wildlife sites. However, despite the scale of growth, the number of potential site options involved should offer flexibility to avoid the most sensitive locations and / or to implement mitigating features. As a result, only an uncertain minor negative effect is predicted in this respect.
- 3.1.12 The level of growth involved in the small villages is not sufficient to cause any effects with regards to biodiversity and geodiversity, so neutral effects are predicted in this respect.
- 3.1.13 Overall, Option 2a is predicted to have **uncertain minor negative effects**. It is unlikely that significant negative effects will arise, and for most locations of growth, sensitive areas would be avoided. However, there could be some indirect effects on ecological systems as a result of cumulative growth across the PUA and extended PUA. Development at Huncote / Croft could also have effects on nearby assets, though avoidance / mitigation ought to be possible.

- 3.1.14 **Option 2b** is likely to have similar effects upon biodiversity and geodiversity as for Option 2a when considering the total quantum of growth in the PUA and Extended PUA together. Though more of the growth would be shifted towards the Extended PUA settlements, the main effects would likely be cumulative and indirect (such as pressure on existing wildlife sites). There are SSSIs in the extended PUA, and local wildlife sites, but the scale of growth and location of sites ought to mean that effects are avoidable. This is an uncertain minor negative effect.
- 3.1.15 The effects upon medium villages are likely to be similar, but the lower scale of growth involved provides further flexibility in terms of avoidance and mitigation. Therefore, neutral effects are predicted.
- 3.1.16 No growth is involved in the smaller villages, and so neutral effects are likely for these locations too.
- 3.1.17 Overall, the effects are recorded as **uncertain minor negative effects**; mainly related to the potential for cumulative pressures on natural habitats.
- 3.1.18 **Option 2c** is also likely to have similar effects on biodiversity and geodiversity however this scale of growth for the PUA and Extended PUA is lower than for Options 2a and 2b. Pressures in this location are therefore likely to be lower.
- 3.1.19 More growth is directed to the Medium Villages such as Croft and Huncote within close proximity to SSSIs and so the potential for negative effects for the Medium Villages is therefore higher for both biodiversity and geodiversity. This option also involves a greater amount of growth in the smaller villages, which tend to be more tranquil. Whilst not formally identified as important for wildlife, it is likely that increased urbanisation in these locations could have minor negative effects. Cumulatively, this amounts to minor negative effects for the smaller villages. As for other development across the district, mitigation and enhancement ought to be possible, and the dispersed nature of growth means that pressures in any particular location would be lower. Consequently, the overall effects for Option 2c from a district perspective are **uncertain minor negative effects**.
- 3.1.20 **Option 2d** involves much less growth across the PUA / extended PUA, and so effects in this location are predicted to be neutral. The effects associated with medium villages and smaller villages would also be more limited.
- 3.1.21 **Option 2e** involves only growth at a single strategic site, and so effects elsewhere would be neutral.
- 3.1.22 The strategic sites in **Option 2d/2e** display different characteristics with regards to biodiversity and geodiversity. Therefore the exact effects will depend upon the locations involved and the nature of the development schemes.

- 3.1.23 The strategic sites are very large and are partly arable, farming land such as the Whetstone Pastures and Blaby locations. These areas do not contain designated sites, nor are there any nearby. Therefore, the potential for significant effects is likely to be low provided on site mitigation and enhancement is secured. The scale of the sites should also allow for enhancement to be achieved and good potential for biodiversity net gain.
- 3.1.24 The site at Elmesthorpe is more sensitive in respect of its location adjacent to Local Nature Reserve, and it also within fairly close proximity to a SSSI (Burbage Common and Woods). Development here could therefore present the potential for significant negative effects.
- 3.1.25 The site at Stoney Stanton does not overlap with any designated sites, and there is limited overlap with priority habitats. However, there are a variety of habitats such as hedgerows and trees that could be affected by development. The scale of development and the site ought to present the potential for mitigation and enhancement.
- 3.1.26 **Option 2d** involves approximately 3150 dwellings at the strategic sites. This could be accommodated in a number of ways. If spread across the different site options, the effects could largely be avoided as the schemes could be low density and avoid areas of greatest sensitivity but this approach might not be effective in terms of other objectives. An **uncertain effect** is predicted at this stage.
- 3.1.27 Overall, an **uncertain minor negative** effect is predicted for this option as it could lead to negative effects and depending upon the location of strategic sites that are allocated, could put pressure on designated sites.
- 3.1.28 **Option 2e** involves 4950 dwellings at strategic sites, which due to their size would more likely be accommodated at one or a combination of the larger strategic sites at Stoney Stanton and Whetstone Pastures. These locations contain arable land and some local wildlife features, so there is potential for negative effects. However, sensitive areas such as designated sites ought to be possible to avoid, and the scale of growth ought to allow for enhancements to be made a strategic level. At this stage the effects are considered to be **neutral / uncertain**.

Scenario 3

- 3.1.29 **Option 3a/ 3b** involves the highest amount of growth for the PUA. The location of growth would most likely be on agricultural land, which has some value for wildlife (despite a lack of designated status). The scale of growth involved will lead to increased urbanisation, and the main issues are potentially related to fragmentation and cumulative pressure on agricultural land, semi natural greenspace and local wildlife sites.

- 3.1.30 Conversely, well designed development could help to incorporate biodiversity net gain across the PUA, and with a strategic approach, links between areas could be made. At this stage though, a precautionary approach is taken and so minor negative effects are predicted.
- 3.1.31 The amount of growth in the extended PUA would also be fairly substantial. Though direct effects upon wildlife are likely to be limited due to the location of site opportunities, the cumulative pressure on natural systems could create minor negative effects (for example pressure on the SSSIs at Narborough and Enderby). Again, enhancement could be a possibility, but this would need to be planned at a strategic level. Overall, the increase in development across the PUA and extended PUA would increase the extent of the urban area adjacent to Leicester, which could have minor negative effects on the objective of biodiversity and geodiversity.
- 3.1.32 Option 3a also involves growth in the medium villages. As described above, some of the locations are more sensitive than others. Therefore, higher scales of growth could potentially lead to significant negative effects in certain locations. The ecological value of most of the sites ought to be possible to increase, given that they are largely arable. A strategic approach to enhancement could also lead to improved connectivity of habitats between settlements. At this stage, a precautionary approach is taken, and so minor negative effects are predicted overall.
- 3.1.33 The scale of growth scattered across the smaller villages is unlikely to give rise to notable effects, and so neutral effects are predicted.
- 3.1.34 Overall, Option 3a avoids sensitive locations, but the cumulative pressure of development at the PUA / extended PUA could lead to negative effects. Furthermore, negative effects at medium villages near to SSSIs could occur. From a district perspective, a **minor negative effect** is predicted.
- 3.1.35 Option 3b involves less growth at the PUA, but shifts this primarily to the extended PUA settlements. The effects are therefore likely to be similar to option 3a in terms of cumulative pressures on the SSSIs, the local wildlife sites and ecosystems at the periphery of Leicester. The shift towards the extended PUA is perhaps marginally more problematic given that SSSIs and Local Wildlife Sites existing in this location. Overall, the effects in for the PUA and Extended PUA in combination are predicted to be minor negatives.
- 3.1.36 The scale of growth at the medium villages is slightly less, which ought to give more flexibility to avoid the sensitive locations. No development is proposed for the smaller villages, and so effects here are neutral.
- 3.1.37 The overall picture for Option 3b is a **minor negative effect**.
- 3.1.38 **Option 3c** pushes more growth away from the PUA and extended PUA, which reduces pressures in these areas.

- 3.1.39 The higher scale of growth in the medium villages could potentially give rise to significant negative effects should this involve development adjacent to or within influencing distances of SSSIs (such as at Croft). However, mitigation and enhancement ought to be possible, so the likelihood of this occurring is not certain.
- 3.1.40 This approach also involves a greater loss of arable land around the smaller villages. Whilst this is unlikely to affect designated assets, there are local features and some priority habitats that could be negatively impacted. This is a potential minor negative effect.
- 3.1.41 The overall picture for Option 3c is also a **minor negative effect**. Whilst, the negative effects would be spread across the district, the potential for disturbance to the SSSI at Croft Huncote could be greater, and there would still be an overall loss of greenfield land at this higher scale of growth. This brings negative effects for both biodiversity and geodiversity.
- 3.1.42 **Option 3d/3e** position most growth towards the strategic sites, and at a higher level when compared to 2d/2e.
- 3.1.43 When considering all of the strategic site options, the potential for negative effects exists in several locations. In particular, the location near Elmesthorpe borders priority habitats and designated sites including the Burbage Common & Woods LNR and Burbage Woods and Aston Firs SSSI. The effects could potentially be mitigated / avoided with lower capacity schemes and / or mitigation and enhancement measures. However, an uncertain **significant negative effect** is recorded. Development at the Blaby site would add to existing growth adjacent to Leicester, and could potentially put recreational pressures on nearby SSSIs and Local Wildlife Sites.
- 3.1.44 Overall, an uncertain negative effect is predicted in relation to the strategic sites for Option 3d. However, this option ought to avoid negative effects in other locations throughout the district (depending upon the location of growth in the medium villages). The picture from a district wide perspective is therefore recorded as a **minor negative effect**.
- 3.1.45 Option 3e places virtually all of the additional growth to the strategic sites. Therefore, effects elsewhere in the district are likely to be neutral.
- 3.1.46 At the scale of growth involved for this option both the Stoney Stanton and Whetstone Pastures site options would need to be brought forward as neither is of sufficient size alone. The sites are not sensitive in terms of designated sites, but the scale of growth involved means a lot of greenfield land would be lost. The strategic nature of the sites ought to allow for enhancement to be incorporated. At this stage, an **uncertain minor negative effect** is predicted from a district perspective.

Summary

- 3.1.47 The distribution of development is considered unlikely to cause significant negative effects at lower levels of growth (i.e. for scenarios 1 and 2), as there would be flexibility to avoid the small number of sites that are more sensitive in terms of designated sites. The flexibility is somewhat lower at the higher growth scenario 3, but significant effects are still unlikely from a district wide perspective.
- 3.1.48 Whilst the effects are minor negative overall for each option under scenario 3, the location of effects differs depending upon the spatial approach and ultimately the specific sites identified for development. This is also the case for scenario 2 options, but there is greater likelihood that negative effects could be mitigated regardless of distribution (hence the uncertainties recorded).
- 3.1.49 For all options, mitigation and enhancement is likely to be possible, and this could in fact lead to positive effects. However, without the benefit of scheme details, a 'policy / mitigation off' approach is taken at this stage. It is acknowledged that higher levels of growth could conversely lead to greater opportunities for net gain, as this should be a requirement for all new development. The larger nature of sites should also allow for areas to be set aside for habitat creation.
- 3.1.50 In terms of opportunities, a strategic approach to green infrastructure provision could help to strengthen links between built up areas and settlements. This approach should be explored as the preferred strategy emerges.

Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
0	?	?	?	?	0?	-	-	-	-	?

4. Cultural Heritage

Overview

- 4.1.1 Across Blaby there are a broad distribution of approximately 200 listed buildings, scheduled monuments and conservation areas which are of importance and contribute to the Districts cultural heritage. There are also a range of locally important assets that contribute to community identity. Development has the potential to affect these heritage assets either directly or indirectly.
- 4.1.2 The nature of effects could be negative by changing the character of an area, or can offer opportunities to enhance assets, either through regeneration of a specific asset or through improvements to an asset's setting and wider environment.
- 4.1.3 Whilst development has the potential to impact on the historic environment and cultural heritage, it should be noted that existing historic environment designations and local plan policies will offer a degree of protection to cultural heritage assets and their settings. The assessment should therefore be undertaken in this context.
- 4.1.4 Public realm facilities such as design, layout and car parking spaces should be considered when thinking about what aspects from development can affect the built historic environment.

Spatial Options Analysis

Scenario 1

- 4.1.5 **Option 1a** will most likely have **neutral effects** on the historic environment as limited additional growth is proposed for all of the settlement areas and parishes. At the scale of growth involved, there is a great deal of flexibility to accommodate the housing target on site options that are less sensitive (i.e. they do not contain heritage assets and are unlikely to affect the setting of any such assets).

Scenario 2

- 4.1.6 **Option 2a** involves a modest amount of additional growth at the PUA. Depending upon the sites involved, the effects upon heritage could range from neutral to significantly negative. For example, there are sensitivities at Kirby Muxloe, but a range of other site options that could accommodate modest levels of growth without generating significant effects. Given the flexibility involved, the effects are predicted to be neutral, but there is a degree of uncertainty.

- 4.1.7 At the extended PUA, there is also modest growth across a range of settlements. There are several sites where effects are likely to be neutral. However, some sites are in gateway locations to settlements and could potentially affect the character of the urban fringes (which correlate with Conservation Areas in some settlements such as Narborough and Enderby). There are sufficient site options of low sensitivity that ought to be able to accommodate the level of growth involved without generating significant effects. Therefore, neutral effects are likely across this area too.
- 4.1.8 Development is also proposed at the medium villages, which are of varying sensitivity. At some site option locations, listed heritage assets are adjacent (for example a Listed Church Building in Croft), whilst in others they are at gateway locations to the settlements (for example at Stoney Stanton, Littlethorpe, Cosby, Sapcote). Site options are adjacent to conservation areas in some instances too, such as at Cosby and Croft.
- 4.1.9 The scale of growth should offer some flexibility to avoid the more sensitive sites, but negative effects could potentially occur. As a result uncertain minor negative effects are predicted.
- 4.1.10 The scale of growth at the smaller villages is low, but even small scale growth could have impacts on cultural heritage in such locations. Given the number of site options, there is flexibility to avoid negative effects, and so uncertain minor negative effects are predicted.
- 4.1.11 In terms of archaeology, there are a number of site options that require further investigation into the significance of the history and heritage assets. These locations include Croft, Countesthorpe, Enderby, Huncote, Kilby and Kirby Muxloe.
- 4.1.12 Overall the effects upon heritage in any particular location ought to be minor or neutral. The cumulative effects are also unlikely to give rise to significant negative effects. Therefore, at a district level, the overall effects are predicted to be **uncertain minor negative effects**.
- 4.1.13 **Option 2b** proposes limited additional growth for the PUA and so avoids effects there, but increases development at the extended PUA settlements. As described above, there are a range of site options that could be developed across these areas, of differing sensitivity. Given the higher scale of growth involved though, the flexibility to avoid negative effects would be lower. Therefore minor negative effects are predicted for the extended PUA.
- 4.1.14 Growth in the medium villages would be slightly lower than for option 2a, which would provide more flexibility to avoid the most sensitive locations. However, on the presumption that growth would be spread across the settlements, this still presents the potential for negative effects if certain sites are involved.

- 4.1.15 In the main though, the site options are more likely to affect the character of the settlement fringes rather than have direct impacts on heritage assets. Therefore, uncertain minor negative effects are predicted.
- 4.1.16 Overall, from a district perspective, this option is predicted to have **uncertain minor negative effects**. There is potential for minor negative effects at the extended PUA, but for most settlements in the district, it is considered less likely that negative effects will occur given the flexibility to avoid and mitigate (hence the uncertainties).
- 4.1.17 **Option 2c** is similar to 2b, but has less growth at the PUA and extended PUA. As a result, more growth is proposed for the medium villages and smaller villages in particular.
- 4.1.18 The effects in the extended PUA are likely to be similar to option 2b, but there is greater flexibility due to the lower level of growth. Therefore, an uncertain minor negative effect is predicted.
- 4.1.19 In terms of the medium villages, a higher scale of growth is more likely to mean that the form of settlements is altered, and this could affect cultural heritage (for example through development at gateway locations on the fringes of settlements, adjacent to Conservation Areas or closer to heritage assets). The larger scale of growth might also mean that sites closer to heritage assets are more likely to be involved (given the need to allocate a greater number of dwellings). As a result, there is more certainty that negative effects could occur. Minor negative effects are recorded accordingly.
- 4.1.20 The smaller villages exhibit a range of sensitivities, but a critical factor is the presence of listed buildings and the small scale nature of settlements. Therefore, even lower levels of growth could have implications for the historic environment. At the scale of growth involved there would be a need for considerable development at Thurlaston, Elmesthorpe, Kilby and Sharnford in relation to their current size. Though there are no identified sites at the other smaller villages, growth may also be necessary in those locations to reach the target involved for this option.
- 4.1.21 Kilby contains a number of listed buildings, and is relatively small scale. The potential for significant effects upon the setting of these assets and the character of the settlement therefore exist. Likewise, Elmesthorpe involves sites that contain or are near to listed buildings (For example Home Farmhouse Grade II listed building). Development could have significant effects through the loss of this asset or effects on setting. Even at this relatively modest scale of growth involved it may be difficult to avoid these effects.

- 4.1.22 Other smaller villages display sensitivities too, but known site options are less likely to have significant effects upon heritage given their proximity to assets. Overall, the potential for significant negative effects exists at a number of the smaller villages. At the scale of growth involved it might be difficult to mitigate and avoid such effects and so an uncertain significant negative effect is predicted.
- 4.1.23 From a district perspective, option 2c is predicted to have a **minor negative effect**. Though some locations would be protected / less pressured, it is possible that effects could occur in locations within the extended PUA and the medium villages. Though there is a degree of uncertainty, the effects at the smaller villages could potentially be significant. Therefore, it is more likely that the overall effects for the district will be negative.
- 4.1.24 **Option 2d / 2e** will involve a significant proportion of growth at strategic sites. Each strategic site option has its own characteristics and development poses potential negative effects in terms of the historic environment. Characteristics include natural features such as ponds, watercourses, hedgerows and evidence of human activity with field patterns and farm buildings. Whetstones Pastures contains a Grade 2 Listed Building and there are some aspects of archaeology from the roman and medieval times.
- 4.1.25 The other three strategic site options do not contain designated heritage assets, nor are they directly adjacent to any. However, there are built structures on the sites such as farm buildings and walls.
- 4.1.26 For option 2d, one approach is to spread growth across the strategic site options and so could potentially be accommodated without generating significant negative effects. However, this approach might not be the most feasible from other perspectives. Nevertheless, an approach that makes use of multiple strategic sites ought to offer some degree of flexibility to avoid and mitigate the most sensitive areas. Though Whetstone Pastures involves a listed building, a lower scale of growth could give greater flexibility to avoid demolition and to implement a more sensitive lower density design. Development of a lower scale at Stoney Stanton could be accommodated without generating significant effects, as too should be the case at Blaby and Elmhurst. However, impacts upon natural features and historic landscapes could occur and this will be more significant where fewer strategic site options are taken forward for development and land take / densities increases in any one particular area. Overall, minor negative effects are predicted at this stage, but there is uncertainty related to the exact sites and extent of development involved at each.
- 4.1.27 Option 2d also involves growth at the extended PUA and medium villages, but at a scale that ought to be possible to avoid significant effects. There still remain some sensitive locations, and so uncertain minor negative effects are predicted.

- 4.1.28 From a district perspective, Option 2d is predicted to have **uncertain minor negative effects**, reflecting the issues identified above.
- 4.1.29 **Option 2e**, focuses all the additional development at a single new settlement. The predicted effects will depend on the location of the growth. If all the growth is focused at the strategic site option at Stoney Stanton, it ought to be possible to limit effects, but a degree of harm could possibly occur given the scale of growth. However, a proportion or a larger amount of growth at the Whetstone Pastures strategic site option could give rise to significant negative effects
- 4.1.30 Conversely, for option 2e, pressure would be relieved from the settlements across the district, which is beneficial. However, despite this, the overall effects for the district are predicted to be **minor negative effects** at this stage (reflecting the issues that could occur at a large new settlement).

Scenario 3

- 4.1.31 Option 3a allocates additional growth in the PUA. At the scale involved, it could potentially involve site options that have cultural heritage value. For example, Kirby Muxloe is particularly sensitive to development. There is a scheduled monument and Grade 1 listed building and also potentially below-ground archaeological features. Growth at Glenfield could also have implications for the setting of heritage assets, including a scheduled monument and numerous listed buildings. An expansion of growth at Leicester Forest East could have implications for the setting of listed farm buildings, which are already likely to experience a change to their character due to committed development.
- 4.1.32 The overall implications of high growth in the PUA could therefore be a significant negative effect depending on the location of the growth.
- 4.1.33 Due to the overall increase of growth for the options under scenario 3, there would still be a need for growth across the extended PUA settlements. This could lead to minor negative effects. Likewise, growth in the medium villages and smaller villages could also give rise to negative effects.
- 4.1.34 Overall, a **significant negative effect** is predicted in relation to option 3a. Significant effects are more likely to occur in specific locations at the PUA, and though the effects are of a more minor nature elsewhere, there would be cumulatively an adverse effect on heritage across several settlements in the district.
- 4.1.35 **Option 3b** concentrates additional growth across the Extended PUA. This takes some pressure from sensitive site options in the PUA, but the potential for significant effects in the PUA still exists depending upon location and scheme details. At this scale of growth a greater element of uncertainty is present. Therefore, uncertain significant negative effects are predicted.

- 4.1.36 The much higher scale of growth in the Extended PUA is likely to have mixed effects. On one hand, there are site options with low sensitivity that could accommodate some growth. However, the scale of growth means there is less flexibility to avoid more sensitive locations such as close to Conservation Areas. Large sites might also be required in gateway locations to settlements. Overall, this option therefore presents minor negative effects in these locations.
- 4.1.37 Growth in the medium villages would still be required, at a level that could generate minor negative effects.
- 4.1.38 In combination, potentially **significant negative effects** could occur from a district perspective. There is a degree of uncertainty though as discussed above.
- 4.1.39 **Option 3c** disperses growth more widely, and so the effects in the PUA ought to be avoidable. However, the potential for minor negative effects in the extended PUA remains.
- 4.1.40 The level of growth required in the medium villages and smaller villages could make it difficult to avoid sensitive locations and in some locations could lead to significant negative effects.
- 4.1.41 Overall, an uncertain **significant negative effect** is predicted for Option 3c largely reflecting the potential issues at the medium and small villages.
- 4.1.42 **Option 3d** would involve greater growth at the strategic sites, but several of the strategic site option locations are less sensitive. The effects are therefore minor negative.
- 4.1.43 Given the high overall scale of growth for options under scenario 3, there would also be a need to accommodate additional growth in the extended PUA and the medium villages. The level of growth involved though should allow for flexibility to avoid significant effects. Therefore, only uncertain minor negative effects are predicted for these locations.
- 4.1.44 Overall, this option is predicted to have **minor negative effects**. This relates to the potential loss of historic character in the countryside associated with the strategic site options. The potential for impacts on heritage assets at Whetstone Pastures is also a factor. Though effects elsewhere in the district are likely to be neutral or minor, in combination they contribute to a minor negative effect overall.
- 4.1.45 Option 3e by directing much of the additional growth to a new settlement, relieves pressure across the district, which is of benefit to several settlements. However the scale of growth required could lead to significant negative effects dependent upon the location of this growth.

- 4.1.46 Neither of the strategic site options are currently of sufficient scale and so more than one would be required to come forward, but not necessarily the full extent during the plan period. Therefore, the effects are likely to range between minor negative to significant. As a precaution, uncertain significant negative effects are predicted.

Summary

- 4.1.47 For scenario 1, the effects are predicted to be neutral, as it is unlikely development would need to take place in sensitive locations. The scale of growth involved at different settlements would also be relatively low and therefore effects to heritage assets, overall character or built form would not be notable.
- 4.1.48 For scenario 2, it should still be possible to avoid significant negative effects regardless of the overall distribution strategy. However, there are some heritage assets that would be more likely to be affected. This gives potential for minor negative effects. For option 2c, the smaller size of the medium villages and small villages coupled with increased growth means that effects may be more difficult to avoid/mitigate. The effects at strategic sites are dependent upon the exact location and form of development.
- 4.1.49 For scenario 3, the flexibility to avoid sensitive areas reduces, and therefore potential significant negative effects could occur for all of the options apart from 3d (which would still only involve the strategic sites, rather than expanded development in other locations).

Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
0	?	?	-	?	-	--	--?	--?	-	--?

5. Minerals

Overview

- 5.1.1 The District mainly contains resources of sand and gravel but also of igneous rock, with broad areas being identified for safeguarding in the Leicestershire Minerals and Waste Local Plan. Though extensive areas of the district are identified as potentially containing minerals, this does not preclude appropriate development in those locations. A test would be applied to determine whether resources would be commercially extractable, whether they could be extracted prior to development, and a range of other exemptions apply. Therefore, it is unlikely that the presence of a minerals safeguarding area is a major constraint to most development opportunities. This is particularly likely in locations that are within or adjacent to built-up settlements, and so would be inappropriate for large scale mineral extraction anyway.
- 5.1.2 The only active minerals site in Blaby is Croft Quarry, which produces igneous rock and has permission for extraction over the plan period.

Spatial Options Analysis

Scenario 1

- 5.1.3 At the scale of growth involved for **Option 1**, the extent of additional development required could be accommodated in areas that do not fall within mineral safeguarded areas. Even if development was proposed in such areas, the extent of effects would be minimal. Consequently, **neutral effects** are predicted.

Scenario 2

- 5.1.4 Each of the options at this scale of growth will require a greater release of land for housing development. There are locations across the whole settlement hierarchy that overlap with minerals safeguarding areas. However, the distribution of growth ought to allow for areas to be avoided for certain options.
- 5.1.5 For **Option 2a**, some additional growth in the PUA is involved, but there is limited overlap with minerals resources likely to occur. In the extended PUA, Whetstone and Blaby sites could overlap with minerals resources. However, effects would be anticipated to be minor. For the majority of medium villages, there is overlap at Croft, Cosby, Littlethorpe and Sapcote. The scale and nature of sites involved though would not be anticipated to cause significant effects with regards to mineral resources, and there is uncertainty whether the areas involved would be suitable for extraction anyway. As a result, **uncertain minor negative effects** are predicted.

- 5.1.6 **Option 2b** involves a greater amount of growth in the extended PUA, and less in the medium villages (compared to 2a). This gives some greater flexibility in the medium villages, and reduces the potential for effects. In the extended PUA, at this scale of growth, there is likely to be some overlap with minerals safeguarded areas. However, the nature of effects would unlikely be significant, and there is uncertainty whether areas involved would be suitable for extraction. As a result, **uncertain minor negative effects** are predicted.
- 5.1.7 Option 2c disperses growth so that the potential for overlap in particular locations is lower, and it ought to be possible to avoid areas of importance if necessary. There would still be likely to be small amounts of overlap in the medium and smaller villages, but effects are likely to be minor and uncertain because the scale of growth is low. As a result, **uncertain minor negative effects** are predicted.
- 5.1.8 Option 2d involves additional growth at strategic sites. Depending on which strategic site options are involved, the effects could be neutral (for those where there is no overlap) or negative (the site at Blaby overlaps fully with minerals safeguarding areas). At this stage, **uncertain minor negative effects** are predicted.
- 5.1.9 Option 2e involves one single strategic site, with both the larger strategic site options at Stoney Stanton and Whetstone Pastures not overlapping with mineral safeguarding areas. Therefore **neutral effects** are predicted.

Scenario 3

- 5.1.10 Each option at this scale of growth involves more development, and this generally means that there is greater likelihood that sites would overlap with mineral resources. However, distribution plays a part.
- 5.1.11 For Option 3a, a large amount of additional growth is proposed in the PUA, and this is in locations that broadly avoid mineral resources. Additional growth across the extended PUA and medium villages could still overlap with resources, but the effects are similar to option 2c, which are **uncertain minor negative effects**.
- 5.1.12 Option 3b involves more growth in the extended PUA compared to any other options, and this makes it more likely that there could be overlap with areas containing mineral resources. As such **minor negative effects** are predicted.
- 5.1.13 Option 3c involves higher levels of growth in the medium villages, where much of the land involved overlaps with mineral resources. The additional growth in the extended PUA and smaller villages is also relatively high and has potential to affect mineral resources. As such **minor negative effects** are predicted.

- 5.1.14 Option 3d would involve similar risks as option 2d with regards to the strategic site options. However, the higher scale of growth required might mean that the site at Blaby is more likely to be involved and which overlaps with minerals safeguarding areas. This option would also involve growth elsewhere in the district to meet the higher overall housing target, with some potential overlaps with mineral safeguarded areas. As such **minor negative effects** are predicted.
- 5.1.15 Option 3e also involves placing additional growth at strategic sites. Three of the four strategic site options including the larger sites are generally unaffected by minerals. Therefore, **neutral effects** are still predicted despite the higher overall level of growth involved.

Summary

- 5.1.16 For option 1, the scale of growth is such that mineral resources would be unlikely to be affected. As the level of growth increases under scenario 2, the potential for development to overlap with mineral resource areas increases for Options 2b, 2c and 2d, but not so for Option 2a and 2e. For scenario 3, the level of growth is higher still, and therefore the potential for overlap with mineral resources is higher. The exception is option 3e, as the larger strategic site options do not overlap with mineral resources.
- 5.1.17 The effects are not likely to be significant as no specific minerals extraction sites are affected, and there would remain significant areas of mineral resources. It is also unlikely that many of the sites would be suitable for commercial minerals extraction, and if that were the case, there may still be potential to extract these prior to development.

Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
0	?	?	?	?	0	?	-	-	-	0

6. Waste

Overview

- 6.1.1 There are legislative and policy drivers to reduce the amount of waste sent to landfill and to treat waste as a resource in a 'circular economy'.
- 6.1.2 Planning for waste has several components. Important aspects are the location of disposal and management facilities; which are dealt with through the Leicestershire Minerals and Waste Local Plan. Other elements that are important from a Local Plan perspective are the location of development so as to ensure effective waste collection routes, specific design policies that seek to ensure effective management and collection of waste from households and businesses and to ensure the re-use and recycling of waste during construction. These latter elements are where the Local Plan has a greater influence. It is also important that waste facilities and infrastructure are safeguarded from land use changes that could have adverse effects.

Scenario 1

- 6.1.3 The level of additional growth proposed is relatively limited, and therefore the amount of waste generated from construction activities and new homes would not be expected to be significant. The location of new development at the periphery of existing settlements is unlikely to be problematic from a waste collection perspective. As a result, **neutral effects** are predicted.

Scenario 2

- 6.1.4 At a higher scale of growth, there will be an increase in waste generated from new developments (during construction and operation). Plan policies ought to ensure that waste can be collected and managed sufficiently, but the overall level of waste generated in the district is likely to be higher than would be the case compared to scenario 1. As a result, **minor negative effects** are predicted for each option. The distribution of development is unlikely to have an effect on the ability to collect and manage waste effectively (though a dispersed approach might be less likely to require entirely new collection rounds to be established to service new homes).

Scenario 3

- 6.1.5 At a higher level of growth, the effects are likely to be more pronounced in terms of an overall increase in waste being generated in Blaby. However, this would likely lead to reductions in waste generation in Leicester, given that a large amount of unmet needs from the City would be accommodated in Blaby. Overall, the effects are predicted to be **minor negative**, as the overall trends for the district in relation to waste generation and recycling are unlikely to be significantly affected.

Summary

- 6.1.6 The effects relating to waste are correlated to the amount of overall growth, with scenario 1 likely to have neutral effects, and the options under scenario 2 and 3 likely to have minor negative effects due to their increased level of construction and household waste generation.

Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
0	-	-	-	-	-	-	-	-	-	-

7. Soil and Landscape

Overview

Landscape

- 7.1.1 Within Blaby District there are several Local Character Areas which form the District's landscape. Though much of the district falls within the same broad landscape character areas, there are differences in natural features, building layout and design that provide distinction and a sense of place for each settlement.
- 7.1.2 It has been identified that across Blaby there are limited brownfield opportunities for growth, and that the consequences may mean loss of countryside and impacts on landscape and settlement pattern. Land contamination can also be an issue however opportunities to remediate sites could come from development.
- 7.1.3 The Blaby Landscape and Settlement Character Assessment 2020 suggests that in terms of landscape sensitivity, much of the district is of low moderate or moderate in the context of 2 – 3 storey residential housing and transport infrastructure. However the 'Soar Meadows' LCA is considered to be moderate – high sensitivity and forms part of Sharnford and Sapcote. More of the district is considered highly sensitive when it comes to commercial development, particularly large scale schemes.
- 7.1.4 The report found that landscape sensitivity is greater at the Smaller Villages such as Elmesthorpe, Aston Flamville, Wigston Parva, Sharnford, Cosby, parts of Countesthorpe and Kilby. Options that include growth around these particular areas may therefore be more likely to generate negative effects.
- 7.1.5 Future development is noted as a key pressure/ force of change to the Districts landscape and settlement character.

Agricultural land

- 7.1.6 With the exception of a small pocket of Grade 2 land, the agricultural land in the district is classified as Grade 3 according to the post 1988 land survey. Additional data outlines which of the Grade 3 land is most likely to be best and most versatile land. Locations identified as being more likely to contain BMV are pockets between Croft and Huncote, between Croft and Thurlaston, and running from Cosby towards Whetstone and Blaby. The remainder of Grade 3 land in the Borough is considered fairly likely to be BMV, but is not officially classified as such.

Spatial Options Analysis

Scenario 1

- 7.1.7 In the absence of additional growth, there will still be relatively large amounts of growth at the PUA, through the Lubbesthorpe site and along the settlement edge of the Leicester Urban Area. The effects associated with such growth are not attributable to the Local Plan review and any associated development. However, it will change the context within which new development sits.
- 7.1.8 **Option 1a** will most likely have uncertain or neutral effects on the landscape and soil as it involves a very small level of additional growth across the district, or at any particular location. No additional growth is proposed for the PUA, so effects here are neutral. Whilst there is some growth in the extended PUA, it is fairly limited and could therefore be directed towards the areas of lesser sensitivity.
- 7.1.9 Growth in the medium villages would be very small, and therefore no effects are predicted in terms of landscape or soil.
- 7.1.10 There is a small amount of growth to be split between the smaller villages (less than 10 dwellings if split equally). These settlements are mostly of moderate sensitivity to housing growth, but Sharnford is part of the 'Soar Meadows' LCA which was considered to be of high sensitivity in terms of housing development. Whilst there are greater sensitivities in these locations in terms of landscape, the scale of growth is such that it ought to be possible to avoid and mitigate effects. Therefore, neutral effects are predicted with regards to landscape. Though some soil resources would likely be lost, this would be Grade 3, and in areas that are less certain to be best and most versatile. The loss would also be lower than 3ha in total. Therefore neutral effects are predicted.
- 7.1.11 Overall, this option is predicted to have **neutral effects** with regards to both landscape and soil.

Scenario 2

- 7.1.12 **Option 2a** places the majority of additional development in urban areas close to Leicester (PUA and Extended PUA). Much of this growth is likely to be located on site options located within the Rothley Brook Fringe LCA, Thurlaston Rolling Farmland, Blaby, Countesthorpe and Whetstone Fringe LCA and the Lubbesthorpe Agricultural Parkland LCA. There are several site options falling in areas of low-moderate sensitivity to housing development. At the scale involved, it should therefore be possible to avoid significant negative effects in this location in terms of landscape (neutral effects).

- 7.1.13 Much of the land is classified as Grade 3, with moderate potential for it to be best and most versatile. It is inevitable that some of this land would be lost permanently, which is a minor negative effect.
- 7.1.14 For the medium villages, there are risks associated with developing in the fringes between parishes. The landscape is of moderate sensitivity surrounding Croft, Cosby, Littlethorpe and Huncote. Therefore, growth here has potential to have minor negative effects. These locations are also more sensitive from an agricultural land perspective, as the Grade 3 land has been identified as being most likely to be best and most versatile.
- 7.1.15 Though some growth is proposed in the smaller villages, it is not of a scale thought likely to lead to negative effects in terms of landscape or soil resources.
- 7.1.16 Overall, this option is predicted to have a **minor negative effect** on both landscape and soil resources. The spread of growth is such that significant effects are unlikely to occur in any one location, or cumulatively. Some areas of moderate sensitivity could be affected, but there remains some flexibility in terms of site options to avoid such areas and the overall dispersal of growth means that cumulative effects are not anticipated to be notable.
- 7.1.17 **Option 2b** focusses additional growth on the Extended PUA to a greater extent. Most of the site options fall within areas of lesser landscape sensitivity. However, the greater amount of overall growth could lead to cumulative effects. The Blaby, Countesthorpe, and Whetstone Fringe LCA in particular has a role in separating Blaby, Countesthorpe, Cosby and Whetstone. Placing large amounts of growth within the Extended PUA has the potential to negatively affect the overall openness of the landscape. This is a minor negative effect. A considerable amount of agricultural land would also be lost, though this would not be in areas most likely to be best and most versatile land. The effects are therefore minor negative in respect of soil resources too.
- 7.1.18 For the medium villages, the scale of growth is lower than 2a, but there is still potential for some negative effects on landscape character and soil presuming that growth is distributed between the settlements. The lower scale of growth should allow for some avoidance of the most sensitive areas, and so the landscape effects are uncertain minor negatives. In terms of agricultural land, regardless of location, Grade 3 land will be lost. This is a minor negative effect. However, it may be slightly easier to avoid areas of BMV under this option compared to 2a.
- 7.1.19 Neutral effects are likely at the smaller villages given the relatively low levels of growth involved in any one location.

- 7.1.20 Overall, this option is predicted to have **minor negative effects** in terms of landscape and soil resources. Though the pressure on medium and small villages is lower, it creates greater cumulative negative effects in the extended PUA, particularly for landscape character.
- 7.1.21 **Option 2c** disperses the additional growth further, with greater concentrations in the medium villages and smaller villages. The character surrounding many of these settlements is more sensitive (with the exception of Sapcote and Stoney Stanton). For the smaller villages in particular, their scale also makes them more sensitive to larger developments. At the levels of growth proposed, minor negative effects are likely to occur for most settlements, and in some locations such as Sharnford, the effects could potentially be significant. In terms of agricultural land, most locations would be Grade 3, with moderate potential for this to be best and most versatile land.
- 7.1.22 Similar to option 2b, the effects at the PUA would also be minor negative in respect of landscape and agricultural land.
- 7.1.23 Overall, this option is predicted to have an uncertain **significant negative effect** in terms of landscape. The cumulative effect of multiple settlements suffering from negative landscape effects is the main issue, and growth in certain settlements in particular could be significantly negative in those locations alone.
- 7.1.24 A **minor negative effect** is predicted overall with regards to agricultural land.
- 7.1.25 **Options 2d** will concentrate additional development mostly within the strategic sites. The strategic site options are within Elvesthorpe Floodplain LCA, Stoney Stanton Rolling Farmland LCA, Cosby and Whetstone Rolling Farmland LCA and Blaby, Countesthorpe and Whetstone Fringe LCA.
- 7.1.26 The strategic site options at Blaby and Stoney Stanton fall mostly within areas of lower sensitivity, but their large scale combined with proposed growth in the extended PUA and medium villages could still lead to some negative effects.
- 7.1.27 The strategic site options at Elvesthorpe and Whetstone Pastures fall within areas of moderate landscape sensitivity. Their large scale could lead to more prominent effects upon landscape (particularly if the development at Whetstone Pastures leads to partial coalescence with nearby urban areas such as Countesthorpe).
- 7.1.28 Elvesthorpe Floodplain LCA is a traditional floodplain however it has become fragmented due to transport infrastructure such as large arterial roads. Cosby and Whetstone Rolling Farmland LCA is a rural working agricultural landscape with a mix of arable and pastoral farmland.

- 7.1.29 Development in these areas may lead to declines in the existing rural character. There may be opportunities to develop these areas so that they are in alignment with the current character, this is particularly so at lower scales of growth under this option. Therefore, the effects are predicted to be minor negative at this stage with regards to landscape.
- 7.1.30 None of the strategic site options are within areas thought to be most likely to contain BMV. However, the scale of agricultural land affected is large. Therefore, minor negative effects are still predicted.
- 7.1.31 The lower level of growth in the medium villages ought to allow for the more sensitive landscapes and agricultural land to be avoided to a greater extent, and so only minor negative effects are predicted in this respect too, for both landscape and soil.
- 7.1.32 Overall, **minor negative effects** for the district are predicted for both soil and landscape for Option 2d.
- 7.1.33 **Option 2e** focuses all growth at a new settlement, which reduces pressure on other parts of the district.
- 7.1.34 The scale of growth that would be required would mean that impacts upon landscape at these locations would most likely be significant. Where growth was split between the strategic site options, it ought to be possible to avoid significant effects at Stoney Stanton, but the effects at Whetstone Pastures might be significantly negative, given that it is a more sensitive location. Placing all the growth at Stoney Stanton could too have **significant negative effects** in this location, despite the lower sensitivity, as it could dramatically reduce open countryside between Elvesthorpe, Stoney Stanton and Sapcote. Though the M69 currently separates these settlements, there would be a much reduced amount of greenfield land and an overall increase in built form between the two areas. A green infrastructure led approach with significant buffers and green corridors could help to mitigate such effects.
- 7.1.35 Overall, a **significant negative effect** is predicted in relation to landscape, but there are uncertainties as the exact location and configuration of growth is unknown. A **minor negative effect** is predicted in relation to soil from a district wide perspective.

Scenario 3

- 7.1.36 **Option 3a** will place additional growth within the PUA in areas of mostly moderate sensitivity. When considered alongside existing committed development, the urban area of Leicester City will expand further, having a negative effect on the rural character of parts of Blaby District. Rothley Brook Fringe LCA adjoins the PUA settlement area and urban expansion there could lead to coalescence between built up areas. Potential significant negative effects could occur.

- 7.1.37 The soils affected would most likely be Grade 3, with moderate potential to be best and most versatile land. This is a minor negative effect.
- 7.1.38 Due to the overall increase in growth across the district, this option would also require additional growth in the extended PUA settlements, which (as discussed above), could bring about minor negative effects for landscape and soils.
- 7.1.39 Growth at the medium villages would also be fairly high, and for some locations negative effects could occur. As a result, minor negative effects are predicted in this respect also for soils and landscape (with some areas likely to be BMV).
- 7.1.40 The smaller villages would see much lower levels of growth, which should in the main be possible to avoid negative effects. However, more sensitive locations, exist that could be affected even at small scales of growth, such as Sharnford.
- 7.1.41 Overall, this option is likely to result in negative effects in multiple locations across the district. In the PUA, this could be significant, depending upon the nature of schemes and how they interact with one another. Cumulatively, a **significant negative effect** is predicted in terms of landscape.
- 7.1.42 The higher scale of growth means that a greater amount of agricultural land would be affected compared to scenarios 1 and 2. However, it is not clear whether much of this is likely to be BMV. Though the district does not contribute to the best quality land in the region, a loss of this magnitude could still be considered significant if the land is indeed BMV, and in the context of growing more food closer to end markets. Therefore, uncertain **significant negative effects** are predicted for all options in scenario 3 with regards to soil.
- 7.1.43 **Option 3b** focusses more additional growth on the Extended PUA, whilst still adding growth to the PUA beyond existing commitments.
- 7.1.44 Within the PUA the Thurlaston Rolling Farmland LCA and Rothley Brook Fringe LCA will be affected, and these are of moderate and low-moderate sensitivity respectively. The Thurlaston Rolling Farmland LCA contains farmland and has a strong sense of rural character. The scale of growth, for the PUA, is lower than option 3a and so the effects are less likely to be significant. At the extended PUA, the scale of growth would be higher and could lead to cumulative effects in terms of the loss of greenfield land. Though complete coalescence could most likely be avoided, the potential for significant negative effects is noted in terms of landscape character.
- 7.1.45 Option 3b would also be likely to have minor negative effects at the medium villages for the same reasons previously discussed. No effects would be generated at the smaller villages though.

- 7.1.46 Overall, this option is likely to lead to a large reduction in greenfield land throughout the settlements on the fringes of Leicester.
- 7.1.47 Cumulatively, this could lead to significant negative effects in terms of changing the open feel between the urban areas.
- 7.1.48 Conversely, the effects in the rest of the district would likely be minor or neutral. Nevertheless, uncertain **significant negative effects** are predicted.
- 7.1.49 **Option 3c** has similar effects to Option 3b, but the potential for significant negative effects across the PUA and extended PUA are somewhat reduced. On the flip side, increased growth at the medium villages could lead to negative effects in locations that are sensitive such as Huncote and Croft. This option would also see the greatest amount of growth directed to the smaller villages, which increases the likelihood that the scale of development at these locations would be higher and the flexibility in terms of site options to avoid sensitive locations lower. As a result, significant negative effects would be likely to occur, particularly in areas of higher sensitivity such as Sharnford.
- 7.1.50 Overall, option 3c is predicted to have **significant negative effects**. Whilst the cumulative effects in the PUA / extended PUA could potentially be mitigated and therefore be 'less than significant', the scale of growth is still high, and so uncertainty remains. It is also much more likely that significant negative effects would occur elsewhere in the district both at individual locations and cumulatively.
- 7.1.51 **Option 3d** is unlikely to have notable effects in the PUA or the smaller villages as additional growth is limited. The level of additional growth in the extended PUA settlements is also much lower, but the strategic site option at Blaby could potentially have cumulative negative effects if adjacent development is also involved. The relatively small overall scale of additional growth in the Extended PUA provides some flexibility to help ensure this is avoided though. Therefore, only minor negative effects are predicted in these locations.
- 7.1.52 As per option 2d, the strategic site options at Elmesthorpe and Whetstone Pastures contain more sensitive landscape parcels. Therefore, growth here is likely to lead to negative effects on areas with a rural character. The overall scale of growth is higher for option 3d, and so land take would either be greater or densities higher, both of which could be detrimental to character. The potential for significant negative effects is therefore slightly higher. The strategic site option at Stoney Stanton could accommodate some growth whilst still retaining open space, and so the effects would not be considered to be as problematic at this scale of growth. However, this would require growth at the other strategic sites to ensure housing needs and accompanying infrastructure is secured.

- 7.1.53 Overall, option 3d is predicted to have uncertain **significant negative effects**.
- 7.1.54 Whilst the pressures on the PUA and extended PUA are lesser, it still remains to an extent, and is impacted upon by the strategic site option at Blaby. Two of the strategic site options are also located in more sensitive locations, and there would still remain some minor negative effects in medium villages. The cumulative effects could be significant, but there is some flexibility in terms of site options and so uncertainty related to the precise locations involved.
- 7.1.55 **Option 3e** almost exclusively places all the additional growth at a new settlement. The potential location for this is one (or perhaps both) of the two larger strategic site options at Stoney Stanton and Whetstone Pastures. On the one hand, this is beneficial, because it protects the PUA and extended PUA from further urbanisation, whilst also protecting many settlements across the district from new development. However, given the scale of growth involved and the current size of the larger strategic site options means that both would need to be developed. Depending upon how much growth was involved at both locations, it is possible that **significant negative effects** could occur given the potential for loss of greenfield land and rural character.

Summary

- 7.1.56 Given that scenario 1 involves very little additional growth, the picture is likely to be neutral for both soil and landscape.

Landscape

- 7.1.57 The critical factor in terms of effects is related to overall levels of growth, with all of the higher growth options under scenario 3 being more likely to generate significant negative effects.
- 7.1.58 Distribution plays some part, particularly under scenario 2, with options 2c and 2e potentially being more detrimental to landscape character when considered against options 2a, 2b and 2d, which involve the same level of growth. It is important to note the uncertainties in the predictions, particularly for significant negative effects. This demonstrates that there is some potential for negative effects to be avoided and mitigated for most of the options, and the choice of sites and mitigation measures employed will play an important role.

Soil

7.1.59 Virtually all of the sites involved for each option would contain agricultural land. This is mostly classed as Grade 3, with varying degrees of certainty that this would be best and most versatile land (Grade 3a) or not. In the main, the growth options avoid the area's most likely to be BMV.

7.1.60 However, it would be advisable to avoid locations where quality appears more likely to be high such as to the east of Huncote and north of Cosby. Other than this, there is little to differentiate the options in this respect, other than the overall level of agricultural land likely to be lost. In this respect, options under scenario 2 are minor negative and those for scenario 3 are potentially significantly negative.

	Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
Landscape	0	-	-	-- ?	-	-- ?	-- ?	-- ?	--	-- ?	-- ?
Soil	0	-	-	-	-	-	-- ?	-- ?	-- ?	-- ?	-- ?

8. Environmental Protection

Overview

- 8.1.1 The protection and enhancement of water and air quality are key objectives in numerous policy documents from national to the local level. New development can have effects upon these resources that need to be managed. This means that the planning system has an important role to play in environmental protection goals.
- 8.1.2 Effects on poor water and air quality can also lead to other factors being affected such as health and wellbeing and biodiversity.

Water

- 8.1.3 Water quality measured within the district according to the 2016 Overall Water Framework Directive (WFD) Waterbody Status was either Moderate or Poor for watercourses. There is therefore a need to ensure further deterioration is avoided and improvements are made.

Air

- 8.1.4 There are 5 Air Quality Management Areas (AQMA) in the district, all of which are located within the PUA or Extended PUA mostly associated with major traffic routes into Leicester and / or along motorways and junctions. The fifth AQMA is at a busy junction at Enderby. Many of the arterial routes in Leicester City itself are also within AQMA.
- 8.1.5 There are two elements to growth that can be influential in terms of the impacts of air quality. One is whether new development is placed in areas of poor air quality (i.e. within or near to AQMA and areas of concern). The other is the potential generation of traffic from new development and how likely this will lead to increased trips along routes that are already affected by high levels of air pollutants. A further element is the potential to use public transport and the likelihood of walking and cycling. Air quality modelling is required to predict an accurate picture of impacts. However, it is possible to make broad assumptions at this strategic level.
- 8.1.6 Generally speaking, large increases in development with access to busy traffic routes into Leicester are likely to worsen air quality, particularly if local services, jobs and public transport are lacking. Development at further distances will be away from areas of air pollution, but might still contribute if accessibility in those areas are poor and traffic is drawn to the City.
- 8.1.7 A complicating factor is the potential for mitigation, as certain measures could help to relieve pressure in areas of poor air quality. Without specific knowledge or detail of such factors, negative effects would be presumed.

- 8.1.8 Ideally, development should be placed in locations that are not exposed regularly to poorer air quality, have good accessibility and are supportive of clean air initiatives.

Spatial Options Analysis

Scenario 1

- 8.1.9 **Option 1a** will likely have limited implications for water and air quality as there is little additional growth proposed. The only areas where additional growth is proposed are the Extended PUA and Small Villages.
- 8.1.10 At the scale of growth involved, the demand on transport infrastructure is unlikely to be significantly different to the baseline situation, even though its location in the Extended PUA would be somewhat sensitive in terms of air quality.
- 8.1.11 In terms of water pollution, the key issues are related to pressure on wastewater and drainage networks. At the scale involved, it ought to be possible to manage growth with existing infrastructure, and any upgrades could be planned for accordingly. Impacts during construction could also cause pollution incidents, but it is presumed these would be managed through existing legal and policy requirements. Cumulative effects are unlikely to be notable at this scale of growth.
- 8.1.12 The small villages are of minimal concern in terms of air quality as the AQMA areas are well away from potential site options. However, travel behaviours may be a concern as smaller villages are not within adequate proximity to jobs, healthcare services or public transport, and therefore will need to travel to reach these locations. The scale of growth involved would generate few trips though, and not at a level that is likely to affect air quality in the PUA / Extended PUA and Leicester City itself.
- 8.1.13 Overall, a **neutral effect** is predicted, with regards to both air quality and water quality.

Scenario 2

- 8.1.14 **Option 2a** focuses additional growth in the PUA and the Extended PUA. Given that there are several AQMAs located in locations where sites proposed for additional growth exist, there is likely to be some negative effects that come with this scale of growth in these locations. This could be due to some developments being close to areas of poor air quality, but more likely will be due to cumulative effects of growth and levels of traffic.
- 8.1.15 Employment growth is also planned in both PUA and Extended PUA with substantial development located at the Lubbethorpe SUE and surrounding areas.

- 8.1.16 This will add to traffic in the areas, but also helps to ensure that housing and employment growth are fairly well related, which has the opposite effect in terms of generating shorter trips and encouraging modal shift. This development is already committed, but could have cumulative effects when considered alongside additional growth in the PUA.
- 8.1.17 The overall effect is likely to be a minor negative effect in terms of air quality.
- 8.1.18 For water pollution, the level of growth in the urbanised areas is relatively low and ought to be possible to accommodate without significant effects on water quality. There will be a need to consider cumulative effects associated with committed development and any additional growth. Nevertheless, neutral effects are anticipated.
- 8.1.19 Additional growth at the Medium Villages is unlikely to place new housing in areas experiencing poor air quality. However, the likelihood of car travel remains high, despite these areas being serviced by public transport although to a variable frequency. The distance to key employment opportunities in the PUA, Extended PUA and Leicester itself could also make it attractive for car travel from the Medium Villages, adding to existing congestion issues (and associated air quality problems). At the scale of growth involved, uncertain minor negative effects are predicted with regards to air quality. In terms of water pollution, the dispersed nature of development should mean that waste water management infrastructure can accommodate growth in a planned and phased manner without periods of overwhelming the systems in the short term.
- 8.1.20 The scale of growth in the smaller villages is very small, and despite poorer connectivity, the increase in car trips would not be likely to be notable. Therefore neutral effects are predicted in terms of air quality. With regards to water quality, the small scale dispersed nature of development should also mean that impacts are avoidable during construction and also that wastewater infrastructure can accommodate development.
- 8.1.21 Overall, minor negative effects are predicted in terms of air quality. This relates to a focus of growth in the extended PUA, which contains several areas of concern in relation to air quality. Although growth elsewhere is away from areas of concern, it could add to traffic and air quality issues due to travel to those areas. There are potential mitigating factors, but **uncertain minor negative effects** are predicted at this stage.
- 8.1.22 The effects upon water quality are predicted to be **neutral** overall. At the scale of growth involved it ought to be possible to accommodate growth and plan for additional development in a timely manner.
- 8.1.23 **Option 2b** focusses additional growth to the Extended PUA to a greater extent, and also includes growth at the Medium Villages.

- 8.1.24 This helps to reduce pressure on some locations suffering from poor air quality such as the M1 corridor near Leicester Forest East. However, it places development in areas within the extended PUA at greater risk of poor air quality, and also in contributing towards increased traffic along local roads suffering from poor air quality (such as Enderby, Narborough and Whetstone). As a result a minor negative effect is predicted.
- 8.1.25 The effects at the medium villages is likely to have similar effects to option 2a with regards to both water quality and air quality; given the scale of growth is similar. Therefore, uncertain minor negative effects are predicted.
- 8.1.26 Neutral effects are predicted with regards to the Smaller Villages given that no growth is involved.
- 8.1.27 Overall, a **minor negative effect** is predicted for option 2b with regards to air quality. A **neutral effect** is predicted for water pollution.
- 8.1.28 For **Option 2c**, there is still a notable amount of additional growth in the extended PUA, which could generate minor negative effects in terms of air quality (in terms of new development being in locations in close proximity to areas of air quality concern, and also in terms of increased traffic in areas of concern). Whilst the rest of the growth is located in locations with generally good air quality (the Smaller Villages and Medium Villages), the dispersed nature of development means that car travel might be more likely for a higher proportion of new homes. This too could contribute to poor air quality where it involve trips into the extended PUA, the PUA and Leicester. Overall, this amounts to a **minor negative effect** with regards to air quality for the district.
- 8.1.29 With regards to water quality, the dispersed nature of growth ought to help ensure that no particular area is overwhelmed; which are **neutral effects**. However, an increase in pressure in smaller villages could mean that local upgrades are required. This brings some element of uncertainty.
- 8.1.30 The strategic site options, particularly those at Elmesthorpe and Stoney Stanton, in **Option 2d/2e** are generally not within close proximity to existing urban areas within the District where there are air quality concerns. Development of these strategic site options would therefore be unlikely to place new communities in areas of poor air quality. However, a very large scale of growth in one location could generate increased car trips along already busy routes. Without supporting infrastructure to relieve pressure on such routes, negative effects could occur in locations that are already affected by air pollution. This would be dependent upon the sites involved, but the strategic site options at Blaby and Whetstone Pastures may result in increased traffic that affects areas of concern for air quality.

- 8.1.31 For option 2d, the effects will depend mostly on the location and the number of strategic site options involved and so the potential to dilute the impacts. This results in **minor negative effects**. However, for Option 2e, placing all growth in one location could potentially generate significant effects. With supporting infrastructure, there could be improvements by diverting traffic from busy roads. However, at this stage a potential **significant negative effect** is predicted for Option 2e.
- 8.1.32 Although there is some growth involved in the extended PUA and Medium villages with Option 2d, it is relatively low and is dispersed, so significant effects in terms of air quality are unlikely to arise.
- 8.1.33 With regards to water quality, development at strategic sites could have mixed effects. On the one hand, the large concentrated nature of development will mean that new infrastructure is required to support drainage and waste water. If not delivered in a timely manner, water management systems could be under pressure temporarily (leading to **minor negative effects**). Likewise, the large scale of growth in a limited number of locations could increase the potential for polluting and disturbing activities to watercourses. However, on the flip side, large sites generally provide better opportunities to mimic natural drainage patterns and to phase growth accordingly. Where there is a wholesale change of use from certain farming practices (which generate nitrates in run-off), there could also be longer term benefits to the water quality of connected watercourses (which are **minor positive effects**). However, these impacts are dependent upon the strategic site options chosen, the layout and design of development and the phasing. As a result, the effects regarding development are uncertain with regards to water quality for options 2d and 2e.

Scenario 3

- 8.1.34 Regardless of distribution, the scale of growth outlined in **Options 3a – 3d** is likely to lead to a greater magnitude of impacts in terms of water and air quality. This is because the overall level of growth for the district is higher (and in particular locations), giving greater likelihood of car trips and pressure on water catchments and treatment networks. Distribution does play a role in determining whether the effects are more or less likely to be significant.
- 8.1.35 **Option 3a** places a large amount of additional growth in the PUA, and this could be in locations close to areas that are already under pressure and suffer poor air quality. In combination with the development already committed in the PUA, there is potential for this to generate a significant increase in traffic along key routes.

- 8.1.36 This is offset to an extent by the generally good access to services, public transport and employment in these areas. However, negative effects are likely without a radical change in travel behaviours.
- 8.1.37 This option also places additional growth into the extended PUA, which too involves areas that suffer from poor air quality. In combination with the growth in the PUA, this could generate significant negative effects in terms of an increase in traffic through currently affected areas.
- 8.1.38 Growth at the medium villages and smaller villages would also be in areas of less sensitivity, but would also be likely to contribute minor negative effects because trips from these areas could still contribute to air pollution along major routes.
- 8.1.39 Together, this creates the potential for **significant negative effects** with regards to air quality for Option 3a.
- 8.1.40 In terms of water quality, the scale of growth involved would put greater pressure on drainage and wastewater infrastructure in the Plan Period (though would take some pressure away from Leicester City). Unless carefully planned and phased, this could lead to **minor negative effects**.
- 8.1.41 For **option 3b** similar effects are predicted as per option 3a for air quality. However, the pressures would shift to the extended PUA more-so than the PUA. In combination though, **significant negative effects** could arise.
- 8.1.42 The situation is similar to option 3a with regards to water quality, with **minor negative effects** predicted for the same reasons.
- 8.1.43 **Option 3c** involves less growth overall in the PUA and Extended PUA when compared to options 3a and 3b. The pressures are therefore likely to be of a lower scale, and less growth would be placed in these sensitive locations. As a result, there is more uncertainty as to whether significant negative effects would arise.
- 8.1.44 Development at the Medium Villages and Smaller Villages would be in less sensitive locations in terms of air quality, which is positive in that respect. However, trips from these areas could still contribute to air pollution along major routes. The overall picture for the district could therefore still result in **significant negative effects**. However, the dispersed nature of development could mean that pressures are less focused, particularly in and around the PUA and Extended PUA. Therefore, a degree of uncertainty exists.
- 8.1.45 In terms of water quality, **minor negative effects** are predicted. Though dispersal ought to reduce pressures in any one location, the scale of growth involved at smaller settlements is relatively high, and there may be implications in certain locations as well as cumulatively across the district.

- 8.1.46 For **option 3d**, growth would need to be spread across more than one strategic site option given the number of dwellings involved. As per option 2d, this could bring negative effects as development would be likely to generate significant traffic. For the sites at Blaby and Whetstone Pastures, this would be near to areas that have poor air quality, and additional car trips could exacerbate the issues. Without infrastructure investment, there are uncertain **significant negative effects** that could arise in terms of air quality.
- 8.1.47 For **Option 3e**, placing all growth in one or two strategic sites could potentially generate significant effects due to the scale of growth involved. As per option 2e, the effects would be highly dependent upon the design, layout and supporting infrastructure involved. On one hand, the greater level of growth could exacerbate the number of trips and pressures on local road networks. However, the greater scale of growth could lend itself to more viable local services, onsite employment and perhaps strategic infrastructure improvements (such as link roads that divert traffic, new public transport links). With such measures in place, the implications in terms of air quality could be less negative, or even positive. At this stage a precautionary / 'mitigation-off' approach is taken and so uncertain **significant negative effects** are predicted.
- 8.1.48 With regards to water pollution, the effects for options 3d and 3e are mixed and uncertain, for the same reasons discussed above for options 2d and 2e.

Summary

- 8.1.49 For Option 1, the scale of additional growth involved is limited, and so neutral effects are predicted.
- 8.1.50 With regards to air quality, Scenario 2 increases growth, and so negative effects arise. Option 2e is considered more likely to lead to significant negative effects, as it places a large amount of growth in new settlements, and without supporting infrastructure this could lead to a reliance in car travel.
- 8.1.51 For scenario 3, the potential for significant effects with regards to air quality increases in-line with the higher levels of development overall. As a result, significant negative effects are recorded regardless of distribution.
- 8.1.52 With regards to water, the additional pressures on water drainage and treatment networks should be possible to manage without significant negative effects arising. For scenario 3 though, the increased growth presents potential for minor negative effects occurring.

	Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
Air	0	?	-	-	-	--?	--	--	--	--	--?
Water: Nitrates	0	0	0	0	?	?	0	0	0	?	?
Water: Networks	0	0	0	0	?	?	-	-	-	?	?

9. Climate Change

Overview

Flood Risk

- 9.1.1 Parts of Blaby District are within Flood Zone 2 and 3 and areas that are susceptible to fluvial flooding. There is an extensive flood plain of River Soar, River Sence, Whetstone Brook and Rothley Brook that covers settlements such as Croft, Narborough, Littlethorpe, Sharnford, Glen Parva, Blaby and Whetstone and there is potential for fluvial flood risks within these localities. This includes significant historic flood events along the River Soar in Narborough, Littlethorpe and Sharnford (in November 2012). Other locations also at risk from surface water flooding, generally but not always related to river flooding. Recent events at Stoney Stanton (2020). It is understood that a sequential approach will be applied in order to avoid allocating sites for development in the areas of highest flood risk. Housing that is proposed for flood prone areas of Zones 2 and 3 should be informed by appropriate and relevant flood risk modelling through a site specific flood risk assessment before being considered for development.
- 9.1.2 The severity and regularity of climate change events such as flooding and other natural hazards will be likely increase in the longer term. New development in the District must be planned for in a way that supports and prioritise peoples' safety and security. Therefore placing housing and additional growth outside of flood risk areas would be the most desired outcome in respect of flooding.
- 9.1.3 All parishes in the District contain some flooding risk with the exception of Leicester Forest East. Kirby Muxloe and Elmesthorpe have only minor flooding areas. Several promoted site options in Glenfield, Cosby, Littlethorpe and Narborough may have flooding issues. There are other large pockets of flooding around Blaby and Glen Parva. These two areas are part of the Extended PUA where development is restricted to some extent due to flooding.

Climate Change Mitigation

- 9.1.4 Previous trends have shown that overall CO2 emissions within Blaby have decreased. However new infrastructure, housing and employment growth are likely to influence the emission of greenhouse gases. There are a range of sources of greenhouse gas emissions, some of which the Local Plan Review has less potential to influence (for example, consumer behaviours and business practices). However, Planning has an important role to play in terms of reducing the environmental footprint of the built environment and transport in particular.

- 9.1.5 It is worth noting that emissions from transport sources have reduced slower than from domestic and industrial/commercial and it will be important to ensure that the Local Plan considers these issues.
- 9.1.6 The Local Plan has a role to plan in addressing low carbon developments, but this ought to be possible to achieve through site specific or thematic policies that deal with such matters. It should be acknowledged that national standards set the context and tone for what can be achieved.

Spatial Options Analysis

Scenario 1

- 9.1.7 **Option 1a** only involves limited additional growth above committed development. The bulk of the additional development would be placed in the Extended PUA and medium villages.
- 9.1.8 There are some locations such as Whetstone and Narborough where development opportunities are overlapped partially by flood zones 2 and 3. However, the small scale of growth would allow for such areas to be avoided and mitigation put into place. Therefore, neutral effects would be expected.
- 9.1.9 In the Medium Villages, Huncote, Littlethorpe, Cosby and Croft contain areas that are either partially in or adjoining flood risk zones. However, at the scale of growth involved it ought to be possible to avoid and / or mitigate negative effects. Therefore, a neutral effect is predicted.
- 9.1.10 Overall, **neutral effects** are predicted for this option in terms of flooding.
- 9.1.11 From a mitigation perspective, the level of growth involved is relatively low, and this ought to limit further use of resources to build new developments and supporting infrastructure. The current patterns of travel would be unlikely to be drastically affected either, so effects in terms of greenhouse gas emissions would likely be **neutral** for option 1a. Positive effects are not recorded, because there are limited opportunities to make proactive changes to the built environment through planned new development.

Scenario 2

- 9.1.12 **Option 2a** potentially places a modest amount of additional growth in the PUA in locations with site options that would not be directly affected by flood risk. Though some surrounding areas are affected by flooding, the scale of growth involved and the nature of development sites would be unlikely to increase flood risk elsewhere provided that mitigation is applied in line with local plan policies. Therefore, neutral effects are predicted.

- 9.1.13 At the extended PUA, the scale of growth involved and the locations of the site options would allow flexibility to avoid sensitive areas and to implement mitigation such as natural SUDs. Therefore, the risk of flooding on new developments and downstream is considered to be neutral.
- 9.1.14 There are several settlements within the Medium Villages which are affected by flooding. However, there are a range of site options that mean new development would be unlikely to occur within the flood zones. The scale of growth should still provide some flexibility, but there are some sites that are partially overlapped where risks and mitigation would need to be explored. In light of this, uncertain minor negative effects are predicted.
- 9.1.15 In light of the above, the overall picture for the district is predicted to be **neutral**. The vast majority of development could be accommodated on land that is not at major risk of flooding. Though some locations give rise to potential negative effects, these would be minor and could probably be avoided.
- 9.1.16 With regards to climate change mitigation, the approach places most of the new development in areas that are relatively well connected in terms of services and public transport. Therefore, this should help to ensure that growth does not lead to a per capita increase in traffic emissions. This constitutes a **minor positive effect**, as in a more dispersed approach which might otherwise happen without a new plan in place could lead to longer and more frequent car trips. At the scale of growth involved at individual developments, it is unlikely that district energy schemes would be appropriate, therefore, neutral effects are predicted in this respect. The locations involved (close to existing settlements in urban areas) are also not likely to be particularly suitable for large scale wind, so sterilisation of opportunities is unlikely. The Local Plan has a role to plan in addressing low carbon developments, but this ought to be possible to achieve through site specific or thematic policies that deal with such matters. It should be acknowledged that national standards set the context and tone for what can be achieved though.
- 9.1.17 **Option 2b** involves increased growth for the extended PUA. Whilst most of the sites options promoted are not at risk of flooding, there would be greater cumulative loss of greenfield land close to areas that do suffer from flooding. This could potentially have negative implications in terms of flood risk elsewhere. However, the nature of the sites involved should allow for mitigation to be implemented. Therefore, uncertain minor negative effects are likely.
- 9.1.18 For this option, the slightly lower level of growth involved at the medium villages means the pressure for development of sites affected by flood risk in these locations is also likely to be low.

- 9.1.19 In light of the above, the overall picture for the district is predicted to be **neutral effects** in terms of flood risk. The vast majority of development could be accommodated on land that is not at major risk of flooding. Though some locations give rise to potential negative effects, these would be minor and could be avoided and / or mitigated.
- 9.1.20 From a climate change mitigation perspective, the effects are similar to 2a (**minor positive effects**), given that much of the growth is focused at the extended PUA in accessible locations and with potential to achieve higher quality design in new developments.
- 9.1.21 **Option 2c** involves a slightly lower level of growth at the extended PUA settlements, and so uncertain minor negative effects are predicted with regards to flood risk.
- 9.1.22 Increased dispersal to the medium and smaller villages is unlikely to lead to significant effects as the sites identified as potential development locations are predominately within flood zone 1. There are some overlaps in villages such as Croft, Huncote, Littlethorpe, Cosby and Elmesthorpe. However, it ought to be possible to avoid areas of flooding, and to mitigate the risk of flooding elsewhere. The cumulative impacts are therefore uncertain minor negative effects.
- 9.1.23 At a district level, the combined effects for flood risk are **uncertain minor negative effects**.
- 9.1.24 In terms of climate change mitigation, this approach draws more development into locations that are more reliant on car usage such as the medium and smaller villages. Therefore, a **minor negative effect** is predicted in relation to greenhouse gas emissions from a transportation perspective. Growth ought to provide opportunities to provide low carbon development, which could lead to improvements in other aspects such as the built environment. However, the extent to which the Plan influences this is uncertain at this stage.
- 9.1.25 For **options 2d/2e**, the strategic site options are affected to varying degrees by flood risk. Whetstone Pastures is intersected by a watercourse, and there is associated flood risk. The same is the case for the location at Elmesthorpe. The sites at Blaby and Stoney Stanton are not intersected by watercourses, but are adjacent.
- 9.1.26 For **option 2d**, each of the strategic site options would be affected by flood risk, but the scale of development and the relatively small proportion of land at risk of flooding (for Whetstone Pastures and Elmesthorpe) ought to allow these areas of flood risk to be avoided and measures could be implemented to ensure flood risk does not increase elsewhere or on site. Given that some risks are involved, an uncertain minor negative effect is predicted.

- 9.1.27 However, the strategic site options could provide potential for comprehensive green infrastructure that brings multiple benefits including flood risk mitigation.
- 9.1.28 For option 2d, growth at the extended PUA and medium villages would be much lower, and so neutral effects would be anticipated in that respect for flood risk.
- 9.1.29 From a district-wide perspective, for option 2d the effects are predicted to be **neutral for flood risk**, but there is an element of uncertainty relating to the strategic site options and whether or not effects can be avoided and mitigated.
- 9.1.30 In respect of climate change mitigation, **Option 2d** directs large amounts of growth to strategic sites. The strategic site options are currently poorly serviced by existing public transport and local services. Whilst such sites would include some improvements to infrastructure, development of the smaller strategic sites at Blaby and Elmhurst, would not necessarily be of a scale that radically alters the propensity for car travel. This is a potential negative effect in terms of carbon emissions. The larger strategic sites at Stoney Stanton and Whetstone Pastures could provide the infrastructure to support public transport, but there would still likely be an element of car travel.
- 9.1.31 Conversely, a large strategic site development could offer opportunities for district energy schemes, but only if there is sufficient demand from a range of sources. This is unlikely with residential only schemes. Overall, a **minor negative effect** is predicted, as this approach places growth in locations that do not benefit from existing infrastructure, and could lead to increased car trips. Though there is potential to secure low carbon design and construction, it is unknown the extent to which this would be achieved at this stage, so a precautionary approach is taken. This will be an important factor that the Local Plan Review considers though.
- 9.1.32 **Option 2e** places all growth at a single new settlement. Potential strategic site options include either the Stoney Stanton location or split between Whetstone Pastures and Stoney Stanton. The Stoney Stanton site is virtually all flood zone 1, and so development would be unlikely to be at significant risk of flooding. However, with a development of such scale, the potential for effects on surface water run-off and flooding elsewhere needs to be considered. A large scale scheme ought to be able to incorporate comprehensive SUDs, and to mimic natural drainage patterns. However, this is dependent upon good masterplanning and scheme design. Though there are areas of flood risk at the Whetstone Pastures location, it is likely that these would be avoided and buffered. However, the same issues with regards to wider changes in hydrology would also apply.

- 9.1.33 Given that areas of flood risk exist on site, the risk here may also be slightly greater compared to the Stoney Stanton location. Therefore, uncertain minor negative effects are predicted at this early stage.
- 9.1.34 From a climate change mitigation perspective, placing all the growth at one or two of the strategic sites brings **uncertain effects** without knowing scheme details and importantly the accompanying infrastructure. The larger scale of the developments involved for Option 2e, should mean that more comprehensive infrastructure could be funded such as health facilities, a secondary school and expanded public transport hubs. This could help to create sustainable communities that reduce emissions through walking, cycling and reduced car travel. Conversely, the locations involved are currently isolated, and could encourage more car travel, which would not help to reduce emissions if the improvements above are not included. The open nature of the sites in the countryside could also make them suitable for renewable energy generation schemes such as solar farms. Development for housing would likely sterilise these opportunities permanently. Conversely, a development of high standards of energy and water efficiency, which incorporate renewable energy technology, green infrastructure and natural carbon sequestration, could lead to positive effects regarding climate change. At this early stage, it is difficult to accurately predict the effects without scheme details, particularly as growth could be split between the two larger strategic site options, or be located at just the strategic site option at Stoney Stanton. The design, layout and details will also play a huge part in determining how successful a scheme would be in achieving zero / low carbon status.

Scenario 3

- 9.1.35 An overall increase in dwellings is involved for each option under this scenario. This is likely to increase overall greenhouse gas emissions for Blaby District. However, this could be accommodating some unmet needs from the City in accessible locations, which might be favourable from a regional perspective. With regards to the baseline position in Blaby though, a large increase in housing development would likely lead to greater emissions from construction, occupation and travel unless significant changes are made towards reducing carbon emissions in the design and construction of developments.
- 9.1.36 In terms of flood risk, a general increase in areas of urban hard standing could be expected to lead to negative effects in terms of wider flood management. However, this could be tempered by mitigation and enhancement measures.
- 9.1.37 **Option 3a** places the largest amount of additional growth within the PUA compared to any other option. The vast majority of the promoted site options for development fall within flood zone 1.

- 9.1.38 However, some site options at locations in Glenfield and Kirby Muxloe are adjacent to watercourses and accompanying flood zones. With buffer zones and SUDs in place, the likelihood of development in these areas being at risk of flooding is considered to be low. However, the overall increase in urbanisation in this area (combined with growth in the expanded PUA settlements) could lead to risks downstream. Again, this is dependent upon scheme details, and it ought to be possible to secure SUDs that mimic natural drainage given the greenfield nature of the sites. Therefore, uncertain minor negative effects are predicted for flood risk.
- 9.1.39 Increased growth is directed to the medium and smaller villages. It is unlikely to lead to significant effects as the site options are predominately within flood zone 1. There are some overlaps in villages such as Croft, Huncote, Littlethorpe, Cosby and Elmesthorpe. However, given the range of site options, it ought to be possible to avoid areas of flooding, and to mitigate the risk of flooding elsewhere. The cumulative impacts are therefore uncertain minor negative effects.
- 9.1.40 From a district perspective, the majority of site options for new development would be in areas that are not at risk of flooding and would not increase flood risk elsewhere. However, there are some exceptions within the mentioned areas where negative effects could arise. With poorly implemented drainage strategies, the overall increase in hard standing across the urban areas could also lead to flood issues. Consequently, an **uncertain minor negative effect** is predicted overall for option 3a for flood risk. It is expected that the requirement for SUDs and a move towards environmental net gain will make negative effects less likely.
- 9.1.41 In terms of climate change mitigation, the effects are mixed. On one hand, the focus on the PUA means that the locations identified for growth are likely to encourage shorter trips, and enable access by public transport. However, an overall increase in emissions is likely due to the higher scale of growth involved unless there is a radical move towards zero carbon design and construction. Therefore, **neutral effects** are predicted overall when considering Blaby District in isolation. (Leicester might benefit from less emissions due to a proportion of its unmet housing need being met in Blaby for example).
- 9.1.42 **Option 3b** shifts growth to the expanded PUA rather than the PUA itself. As per option 3a, new development would be unlikely to be in areas at risk of immediate flooding. However, the same issues arise in terms of the overall increase of urban areas across the edge of Leicester (which is an area that contains areas at risk of flooding). As a result, an uncertain minor negative effect is predicted.
- 9.1.43 The situation is similar for the medium villages, where an uncertain minor negative effect is predicted too.

- 9.1.44 At a district scale, these flood risk issues translate the same and the cumulative effects are likely to be minor. There is uncertainty as mitigation and enhancement could occur. Overall, **uncertain minor negative effects** are predicted for flood risk.
- 9.1.45 In terms of climate change mitigation, the effects are mixed. On one hand, the focus on the PUA and Extended PUA means that locations identified for growth are likely to encourage shorter trips, and enable access by public transport. However, an overall increase in emissions is likely due to the higher scale of growth involved unless there is a move towards zero carbon design and construction. Therefore, **neutral effects** are predicted overall when considering Blaby District.
- 9.1.46 **Option 3c** eases pressure on the Leicester urban fringes somewhat, but growth in the expanded PUA could still lead to uncertain minor negative effects in terms of flood risk.
- 9.1.47 The increased growth in the medium villages and smaller villages will increase the likelihood that development in these locations overlaps with or is in close proximity to flood risk areas. Whilst new development is not likely to be directly in flood zones 2 or 3, an increase in densities and the number of sites required could make it more difficult to incorporate SUDs that mimic natural systems. As a result the cumulative effect could be a minor negative effect. In combination with growth across the district, a **minor negative effect** is predicted overall for option 3c with regards to flooding.
- 9.1.48 With regards to climate change mitigation, this approach would place a larger amount of development in Medium and Smaller villages with (broadly) poorer accessibility compared to those in the PUA and extended PUA villages. This could therefore lead to increases in emissions than might otherwise be the case. Coupled with the overall higher level of growth for scenario 3, this is a potential / uncertain **significant negative effect**.
- 9.1.49 **Option 3d/3e** have similar effects to both Options 2d/2e in that new development at strategic site options would likely be in Flood Zone 1 with scope to buffer areas of flood risk where they occur (For the Whetstone Pastures location for example). However, the density or extent of growth would be greater, and so the potential to implement a greater area of green infrastructure and SUDs might be lower where the site area is the same. Option 3d would also involve modest growth at the PUA, which ought to be possible to manage, but modest growth at the medium villages may result in some minor negative effects. Overall, the effects for Option 3d are unlikely to be significant. **Uncertain minor negative effects** are predicted.
- 9.1.50 For **option 3e**, the effects are still somewhat unknown.

- 9.1.51 To accommodate the level of growth it would be necessary for both large strategic sites to be involved, and this increases the potential for negative effects slightly as there may be less space to avoid areas of flooding and implement natural drainage systems. An **uncertain minor negative effect** is predicted though, as per option 2e.
- 9.1.52 With regards to climate change emissions, both Options 3d and 3e are difficult to accurately predict without scheme details. The locations could be somewhat isolated, and coupled with the scale of growth in Blaby District, potential **significant negative effects** are possible unless suitable infrastructure and facilities are incorporated into the development scheme and there is a radical move towards zero carbon design and construction.

Summary

- 9.1.53 At a low level of growth (Scenario 1), neutral effects are predicted, as the baseline situation is unlikely to change.
- 9.1.54 For scenario 2, though there are some promoted site options that are located in areas that are adjacent to flood zones, there is sufficient flexibility to avoid significant effects for all of the distribution options. Option 2c and 2e are highlighted as having potential minor negative effects, because there are several site options that are overlapped by flood zones.
- 9.1.55 As the scale of growth increases (Scenario 3), the magnitude of effects could raise, but this would be related to an increase in urbanisation potentially affecting natural drainage patterns, rather than new development being in areas directly at risk of flooding.
- 9.1.56 In terms of climate change mitigation, the options that place growth in the more accessible locations are most favourable in terms of transport emissions. However, at the highest scales of growth, this is offset somewhat by the increase in emissions that more development would bring (during construction and throughout their life). The effects are difficult to predict for options 3d and 3e, as they involve strategic sites, but scheme details and the exact locations of growth are not defined. Without infrastructure upgrades negative effects are likely, as car travel would be probable. However, the larger strategic site options could be more self-sufficient, create compact communities with walkable neighbourhoods and access to services and new public transport routes. The scale of growth required to support such features is often very large and there are thresholds for different types of infrastructure.
- 9.1.57 In terms of zero carbon development, standards are governed mainly through national standards, but local policies can also have a role to play in terms of promoting high quality design and site specific features.

	Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
Flooding	0	0	0	?	0?	?	?	?	-	?	?
Mitigation	0	+	+	-	-	--?	0	0	--?	--?	--?

10. Economy and employment

Overview

- 10.1.1 Currently within Blaby, the local economy is relatively healthy and people are economically active. The retail landscape is changing and the industries are experiencing changes in trends that are strongly influenced by technology. The role of the town centre is significantly changing due to these trends. The current economic downturn and implications of COVID19 and Brexit could lead to changes in the economic conditions within the district and surrounding areas too. However, at this stage it is too early to predict the effects of these.
- 10.1.2 This District's main economic strengths are in the retail, finance, professional, scientific and technical services industries. There are also strengths in the energy and public admin and defence sectors.
- 10.1.3 The majority of existing and planned key employment sites are located within the PUA and Extended PUA.
- 10.1.4 The neighbouring City of Leicester contains areas that are within the top 10% most deprived in England (for example the Wards of Braunstone Park and Rowley Fields, Eyres Monsell and Elston Fields), and so development within Blaby could have effects on such areas in terms of housing provision and employment. Nearby communities, located outside the District, may also benefit from access to services within Blaby, so improvements (or a decline) in services could have wider consequences.
- 10.1.5 Growth should be placed in areas where work is accessible to a wide range of communities, ideally by sustainable modes of transport.

Spatial Options Analysis

Scenario 1

- 10.1.6 **Option 1a** promotes limited additional housing growth on top of committed developments.
- 10.1.7 Most of the additional growth is located in the Extended PUA and this ought to be positive with regards to providing homes with good access to employment opportunities. This includes existing employment sites and economic activity in the extended PUA itself, and also accessible in Leicester.
- 10.1.8 Directing new homes to the Extended PUA will also provide accommodation for economically active communities, and bring increased spending into local economies in these locations (during construction for example). These are minor positive effects.

10.1.9 Additional growth in the rest of the district would be limited, and therefore the potential to support local spending in a range of settlements would be low.

10.1.10 Overall, Option 1a is likely to have **minor positive effects** on the economic environment as it would neither contribute significantly, nor hinder the progression of the District's economy. It does bring some additional investment into the extended PUA, and these are locations that are well related to employment opportunities.

Scenario 2

10.1.11 Each of the options at this higher scale of growth is likely to bring increased benefits for the economy in Blaby. This relates to direct investment and spending on new homes, as well as creating accommodation to support employment growth in the district and surrounding areas.

10.1.12 The distribution of growth has some bearing on the nature and extent of the effects.

10.1.13 **Option 2a** distributes most of the additional growth in areas that are well related to employment opportunities and retail centres. This is likely to have some benefits as it supplies future housing in areas where there is demand and appetite to expand in jobs and employment (PUA and Extended PUA). It also locates homes where there are better opportunities to walk, cycle or use public transport to access jobs, leisure and retail.

10.1.14 Other areas involving additional growth such as the Medium Villages and Smaller Villages may not have the appetite to significantly change or be able to accommodate larger employment opportunities, and so the relationship between housing and employment locations would be weaker. At the scale of growth involved in these settlements, the amount of increased local spending and investment would be limited, but could bring minor benefits for settlements where growth occurs.

10.1.15 Overall, a **significant positive effect** is predicted for Option 2a. This is due to higher levels of growth being delivered across the district, helping to meet demand for housing (which in turn supports a workforce, increases local spending in Blaby itself and could attract additional investment). Given that the locations involved are well related to existing and planned employment opportunities, the benefits ought to be significant.

10.1.16 Option 2b is predicted to have similar effects to Option 2a (**Significant positive effects**). Much of the growth is located in the Extended PUA, which as discussed above, ought to bring benefits in terms of employment and economic growth. There is still some growth in the medium villages, of a slightly lower scale, and so effects here would still be minor.

- 10.1.17 Option 2b gives a much greater focus on locating development in the Extended PUA (Blaby, Countesthorpe, Enderby, Narborough and Whetstone). Several key economic sites are within these localities such as industrial/business parks at Cambridge Road, Rose Business Park, Enderby Road and Grange Business Park, Blaby Industrial Estate, Carlton Park, Coventry Road Industrial Estate and various others closer to the PUA. There is a large employment allocation at Enderby and also some smaller employment commitment sites within Enderby and Narborough parishes. Concentrating housing in these settlements may create opportunities to expand existing active travel and transport infrastructure and could also improve deprivation along the Blaby Leicester boundary.
- 10.1.18 **Option 2c** still involves additional growth in the extended PUA, but shifts further additional growth to the medium and smaller villages. In one respect, increased development in the smaller villages is positive as it helps to improve the vitality of local centres and create demand for services and infrastructure. However, several of these locations are not ideally located with regards to employment opportunities that are accessible by sustainable modes.
- 10.1.19 Overall, **significant positive effects** are predicted. Whilst a lesser proportion of new development would be in locations that are well located for jobs and services, this option spreads the benefits of development across the district, ensuring that there are some local economic boosts to the smaller settlements.
- 10.1.20 **Option 2d** directs the majority of additional growth at strategic sites. There are a number of strategic site options (of at least 1000 dwellings) that could be involved to accommodate the 3150 dwellings involved for this scenario. It is likely that two or more of the site options would be involved. These would include supporting local services and infrastructure. The location of the strategic sites would be important in terms of how well located they are for employment opportunities.
- 10.1.21 The strategic site options at Elmesthorpe and Stoney Stanton are quite a distance away from existing local employment. However, it may well be possible to incorporate new employment into such strategic sites (which could be significantly positive). The strategic site options at Whetstone Pastures and Blaby could perhaps be better related to existing employment opportunities given their proximity to economic growth locations in the PUA, Extended PUA and Leicester City. However, without infrastructure improvements, this might lead to a reliance on commuting by car. Dispersing development to several of the strategic site options will mean that the scale is unlikely to support significant infrastructure upgrades or to support new economic growth hubs.

- 10.1.22 As the strategic site options are mostly in more isolated locations, this could create pressure on existing infrastructure, and does less to support existing settlements. This is a minor negative effect.
- 10.1.23 This option also involves some growth in the extended PUA and Medium villages. This ought to bring minor positive effects for these locations.
- 10.1.24 Overall there is some uncertainty about whether a reliance on several smaller strategic sites would deliver economic value to the District. The scale of growth involved is positive, and ought to provide positive effects with regards to workforce accommodation and increased local spending (at least during construction). Whether the long term effects would be **significantly positive** are uncertain though. There are also **uncertain minor negative effects**.
- 10.1.25 **Option 2e** only involves strategic sites to accommodate the additional growth. Given the scale of development required, this would either need to be at either one or two of the larger strategic site options (at Stoney Stanton and Whetstone Pastures).
- 10.1.26 The much larger scale of growth involved in each location is likely to be more conducive to sustainable self-sufficient settlements. Therefore, new local centres, services and infrastructure upgrades should be more feasible. This brings an economic boost. There could also be potential for mixed use development with elements of employment and retail at these larger developments. In this respect, the development of large new settlements could have potentially significant positive effects. However, there is uncertainty about whether such employment opportunities would be generated, and whether new settlements would create a culture of commuting (particularly at the Stoney Stanton site, which is somewhat distant from the majority of the existing economic activity in the district and surrounding authorities).
- 10.1.27 This option brings no additional growth to any existing settlements in the District, which means that they are unlikely to benefit from a local boost in economic activity. Limiting development choice to one or two very large sites could also mean that the positive effects associated with housing growth are not assured, and may not be realised until the later periods of the Plan period.
- 10.1.28 Overall, this option is predicted to have uncertain **significant positive effects**, alongside **minor negative effects**.

Scenario 3

- 10.1.29 Each option under this scenario involves further growth still when compared to scenarios 1 and 2.

- 10.1.30 Broadly speaking, this brings with it increased spending in terms of construction, increased local council tax, investment in infrastructure, and local spending. It also creates accommodation for working people, which is attractive to employers and prospective investors. Depending upon the distribution and concentration of growth, this scale of growth could put pressure on services and infrastructure and increase traffic congestion, making it less attractive and efficient for businesses to operate.
- 10.1.31 **Option 3a** focuses the additional growth on the PUA, and to a lesser extent, the Extended PUA. The majority of existing key economic activity and employment locations fall within these settlement areas, and thus housing growth here is suitable in terms of matching employment opportunities and accommodation. Given the much larger amount of housing in this area, it might be more likely that the housing supports those with employment further afield (particularly in Leicester City). However, access to those jobs and economic centres ought to be good given the proximity of public transport. The heavy focus on the PUA could have cumulative effects / synergies when considered alongside the large amounts of committed development. For example, housing near to planned SUEs ought to benefit from the local services, and potentially employment being provided in association with those sites.
- 10.1.32 The large amount of development in the PUA / Extended PUA would likely put some pressure on infrastructure in these locations though, and this could make the area less attractive (for example, higher traffic congestion). This is a potential minor negative effect in terms of attracting further economic activity. However, the dominant effects would be significantly positive.
- 10.1.33 This option still involves some growth at the medium villages and smaller villages (to a lesser extent), which would be less well located in relation to job opportunities (compared to the PUA / extended PUA). However, the scale of growth involved in the medium villages ought to bring some minor positive effects in terms of supporting the vitality of those local communities and centres.
- 10.1.34 Overall there are **significant positive effects** for this option. **Uncertain minor negative effects** are also recorded to reflect the potential for economic disruption should densification in the PUA / Extended PUA put pressure on infrastructure that has negative implications for business activities (such as more traffic).
- 10.1.35 **Option 3b** is a hierarchal approach focussing the additional growth on the PUA, Extended PUA and the Medium Villages. The effects are likely to be similar to option 3a in terms of the focus of growth close to Leicester where the bulk of employment opportunities and economic activity occurs.

- 10.1.36 The shift towards the extended PUA (rather than the PUA) still encompasses areas of economic activity and opportunity such as Blaby, Enderby and Narborough, and employment locations on the edge of settlements (for example, Fosse Park, Meridian Business Park and Grove Park). As a result, significant positive effects are predicted.
- 10.1.37 The potential for minor negative effects is also an issue should there be undue pressure on infrastructure, or should the increase in accommodation increase competition for local jobs.
- 10.1.38 The distribution of homes to the Medium Villages is predicted to have minor positive effects, for the same reasons discussed under option 3a.
- 10.1.39 Overall, option 3b is predicted to have a **significant positive effect**, alongside **uncertain minor negative effects**.
- 10.1.40 **Option 3c** still involves substantial amounts of additional growth across the extended PUA. This brings the same benefits as described for options 3a and 3b. Though this is to a lesser extent, significant positive effects are still likely to occur.
- 10.1.41 This option involves the highest level of growth in the medium villages and smaller villages, which are generally less well connected (compared to the PUA and extended PUA). However, at the scale involved, it could help to support local spending and boost the economies of a wider range of settlements across the district. This approach could be more likely to lead to longer commuting distances, but the changing face of employment due to COVID19, could make this less of an issue. If new homes are built that provide adequate home-work space.
- 10.1.42 Overall, a **significant positive effect** is predicted for option 3c. Though the scale of growth in the extended PUA is lower than for options 3a and 3b, there may still be additional pressures on infrastructure that cause disruption for certain businesses and economic activity. This is an **uncertain minor negative effect**.
- 10.1.43 The nature of the effects for **Option 3d** are predicted to be the same as for Option 2d, but to a slightly greater extent. There is still a focus on one or more strategic site options, and though the amount of growth is slightly higher, the effects are unlikely to be notably different. The growth in the extended PUA and Medium Villages would be slightly higher too, but the effects in those locations are still likely to only be minor positives.
- 10.1.44 Therefore, overall, **significant positive effects** are predicted, but there is uncertainty. There is also potential for some **minor negative effects**.

- 10.1.45 **Option 3e** is likely to have similar effects to Option 2e, but it would require both of the larger strategic site options to come forward to meet the higher level of growth involved. The nature of effects remain the same at each site, and so significant positive effects could occur, related to construction, provision of accommodation and potentially new services, and other uses on site such as local employment and retail. The infrastructure requirements still remain a potential issue at both sites, and there is also still a reliance on two strategic sites to meet the needs of Blaby and unmet needs from Leicester. There is some risk involved, and therefore uncertainty about whether significant effects would be generated throughout the plan period.
- 10.1.46 This option brings no additional growth to any existing settlements in the District, which means that they are unlikely to benefit from a local boost in economic activity. Limiting development choice to one or two strategic sites could also mean that the positive effects associated with housing growth are not assured, and may not be realised until the later periods of the Plan period.
- 10.1.47 Overall, this option is predicted to have uncertain **significant positive effects**, alongside **minor negative effects**.

Summary

- 10.1.48 Broadly speaking, the scenarios involving higher levels of growth are more positive when compared to the lower growth scenarios. This is primarily related to the benefits that increased house building brings in terms of; accommodating a workforce, providing jobs during construction, attracting investment in new services, and potentially improvements to infrastructure. Each option has benefits, regardless of distribution. However, those options that locate growth in the PUA and Extended PUA are considered to be more suitable with regards to matching new housing with areas involving an economic growth and activity. This should help to attract investment into areas that need it, as well as supporting sustainable modes of travel and shorter commuting distances to access jobs.
- 10.1.49 Those options that involve some growth in the Medium Villages and Small Villages are also likely to bring benefits with regards to boosting the local economy in those locations.
- 10.1.50 The options that involve strategic development sites could also bring about significant positive effects, but this is more reliant upon supporting infrastructure being delivered to ensure benefits arise. Such an approach also means that the benefits of economic growth would be spread less evenly across the district, and there would be a greater reliance on a lower number of large sites.

10.1.51 At the higher scales of growth involved (Scenario 2 and Scenario 3 in particular), there are some potential minor negative effects. These could arise if concentrated growth puts pressure on existing infrastructure and / or leads to disruption to some businesses.

	Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
Economy: Growth potential	+	++	++	++	++?	++?	++	++	++	++?	++?
Economy: Pressures	0	0	0	0	?	-	?	?	?	-	-

11. Accessibility

Overview

- 11.1.1 It is important to ensure that additional growth is located in areas that are served by infrastructure that meets the needs of the local population, supports sustainable modes of travel and reduces carbon emissions.
- 11.1.2 The district is served by public transport and strategic road networks that connect settlements within the district and to the wider region. The public transport network includes Narborough Train Station and regular bus services to Leicester from Glenfield, Leicester Forest East, Braunstone, Glen Parva, Blaby, Countesthorpe, Whetstone, Narborough and Enderby.
- 11.1.3 In comparison to regional and national averages, people in Blaby are driving to work more often, and significantly less people travel via train than the national averages.
- 11.1.4 It is probable that additional new development will add congestion to roads unless there are transport strategies to alleviate the pressures growth may bring. Parking of vehicles may also be an area of concern when supplying new housing.
- 11.1.5 Most of the committed development sites are close to major roads and the rail station in Narborough (though this does not attract significant local journeys due to its relatively infrequent services to Leicester, and car parking facilities are limited). However, local scale public transport is an issue as bus services are infrequent and need to be strengthened in several settlements.
- 11.1.6 Many Medium Villages and Smaller Villages have access to hourly serviced bus routes. However, some of these settlements only have access to services that run every two or three hours.

Spatial options analysis

Scenario 1

- 11.1.7 **Option 1a** involves only a small amount of additional growth across the district. This is mostly directed to the Extended PUA, with only very small additional growth likely to be involved at the Medium Villages and Small Villages.
- 11.1.8 This scale of additional growth involved is relatively low, and is in locations that have generally good access to public transport, jobs and a range of services. This is positive, but unlikely to lead to significant positive effects, as further investment in strategic transport infrastructure (roads and public transport) is unlikely to be involved.

- 11.1.9 Though additional development adds pressure to the existing network, it ought to be possible manage growth without having negative effects in terms of traffic congestion. Therefore, **neutral effects** are predicted.

Scenario 2

- 11.1.10 Each of the options under this scenario will bring more growth to the district. Broadly speaking, this is likely to lead to an increased number of car trips, which could lead to greater congestion on local road networks. However, the nature and extent of the effects is dependent upon how development is distributed. The scale and nature of growth could also bring opportunities with regards to infrastructure improvements, and / or the creation of new facilities.
- 11.1.11 **Option 2a** places additional growth mainly within the PUA, Expanded PUA and Medium Villages with a small amount of growth in the smaller villages.
- 11.1.12 Access to public transport and road networks is relatively good in the PUA and Expanded PUA settlements, and therefore, development should be in locations that support sustainable modes of travel. In this respect, minor positive effects are likely. However, some site options on the urban periphery are not within close proximity to buses or public transport and could be more likely to involve car travel to reach employment and other services (albeit the length of trips might be relatively short). This could put some pressure on road networks in these locations. At the scale of growth involved only minor negative effects would be predicted in this regard.
- 11.1.13 Sites within Medium Villages (Cosby, Croft, Littlethorpe, Sapcote and Stoney Stanton) are less well served by high frequency bus/rail services and also are not as well served by a range of locally accessible local services. Growth in these locations therefore has potential to have minor negative effects overall with regards to encouraging sustainable modes of transport.
- 11.1.14 Overall, this option is predicted to have **mixed effects**. On the one hand, it places a large proportion of the additional growth in the extended PUA, which generally is well served by public transport and local services. These are **minor positive effects**. However, other locations for growth could lead to increased car trips, and congestion on existing routes, which are **minor negative effects**.
- 11.1.15 **Option 2b** focuses the majority of additional growth within the Extended PUA, with the remainder at Medium Villages. This is a minor positive effect in terms of locating growth in broadly accessible locations. The focused scale of growth in the Extended PUA and Medium Villages is more likely to lead to increased traffic congestion on key routes in these areas (and other key destinations) though.

- 11.1.16 It is presumed that junction improvements and other traffic measures would need to be secured to support such growth, and so significant negative effects ought to be possible to avoid. As a result only minor negative effects are predicted.
- 11.1.17 Growth at the medium villages would be of a lesser scale for this option, and so the effects here are predicted to be neutral.
- 11.1.18 There are opportunities to improve public transport connections between the Extended PUA, Medium Villages, key business parks, the wider District and region, but these would most likely be bus-related, rather than rail.
- 11.1.19 Overall, this option is predicted to have **mixed effects**. With regards to accessibility, much of the growth is focused in the Extended PUA, which are **minor positive effects**. However, growth in this area could create pressure on local road networks in the area and more widely particularly where public transport is not improved, which are **minor negative effects**.
- 11.1.20 A higher proportion of the additional development in Option 2c is located in the Smaller Villages and Medium Villages. Access to local facilities and frequent public transport is more limited in these locations, and the scale of growth would be insufficient to support entirely new facilities. As such, this pattern of growth may be more likely to lead to an increase in car trips, which is a minor negative effect. In these villages, it would be important to introduce schemes to improve local walking and cycling networks and bus services.
- 11.1.21 Option 2c also still involves an element of additional growth in the extended PUA, which brings minor positive effects.
- 11.1.22 Overall, Option 2c is predicted to have **minor negative effects** as a proportion of growth will be located in areas that currently offer fewer opportunities to walk, cycle or use public transport to access the full range of local services and employment opportunities.
- 11.1.23 However, growth in the Extended PUA should bring better opportunities for sustainable travel, which overall are **minor positive effects**.
- 11.1.24 The larger strategic site options at Stoney Stanton and Whetstone Pastures involved for **Option 2d** may trigger new and improved transport connections. However, this is less likely for the smaller strategic site options at Blaby and Elmesthorpe. The strategic site options are currently in relatively remote areas that present connectivity challenges in terms of sustainable travel. It is likely that some local facilities would be secured, which would support walking and cycling and reduced car trips, which are **minor positive effects**. However, depending on the scale of the strategic site options, access to healthcare, secondary schools, jobs and other higher order services may be located at nearby settlements.

11.1.25 Without access to new public transport services, this could potentially lead to increased car travel and pressure on road networks. These are uncertain significant negative effects.

11.1.26 For **Option 2e**, additional growth would be focused at one or two of the larger strategic site options at Whetstone Pastures and/or Stoney Stanton (which have greater capacity for larger scale schemes). These larger site options would be more likely to generate the need for and economies of scale to support a wider range of local services, which could help to create sustainable, walkable communities. New and improved local services and public transport could also help existing communities in nearby settlements, which could be a **significant positive effect**. However, the increased growth in these locations could lead to pressure on road junctions, and there would be a need to connect new public transport routes to the strategic sites to ensure that significant increases in car travel are not encouraged. Development of such a large scale would need to be supported by the appropriate infrastructure upgrades, or uncertain significant negative effects could occur with regards to traffic congestion.

Scenario 3

11.1.27 **Option 3a** will place most additional growth in the PUA and Extended PUA where transport connectivity is relatively good by public transport and roads (though congestion is an issue at peak times).

11.1.28 Placing growth in these localities could have significant positive effects as new communities ought to have good connections to the City of Leicester, including through frequent public transport (provided that peripheral locations are linked to existing or new bus routes). There are also a range of employment, businesses, recreational facilities, health care provisions and other important amenities within close proximity.

11.1.29 Access to local services and facilities on foot will depend upon the exact locations involved, as well as the form of development and whether new facilities are supported.

11.1.30 Conversely, placing a large amount of growth at the urban fringes of Leicester could lead to increased traffic congestion on orbital routes and arterial routes within the area. Several development locations would be in close proximity to major road networks and could therefore exacerbate traffic congestion in these areas. Without substantial investment in infrastructure and / or a significant modal shift, this could lead to significant negative effects in terms of traffic congestion.

11.1.31 This option also places additional growth at the medium villages, some of which would be likely to encourage longer trips, more than likely by car, to access employment and services.

- 11.1.32 Overall, an uncertain **significant positive effect** is predicted, as the option provides the potential for growth to be delivered in broadly sustainable locations where the distance to travel to access services should be relatively short. There is also good access to a range of jobs and services. However, focusing substantial growth in these locations could have **significant negative effects** in terms of traffic congestion on the road network. This highlights the importance of enhanced public transport, walking and cycling infrastructure if high levels of growth are to be placed in the PUA and extended PUA.
- 11.1.33 **Option 3b** also places the majority of additional development in close proximity to the Leicester Urban Area, but with a focus on the extended PUA rather than the PUA itself. The settlements involved in this location have broadly good access to services and employment, and in the case of Narborough is served by a train station (though services and potential for improvements are limited). Therefore, the potential for new development to support sustainable modes of travel and shorter car trips exists; which is an uncertain **significant positive effect** (i.e. it is dependent upon public transport being made accessible to new developments and encouraging the use of alternative modes of travel). Conversely, a large amount of development in this location could lead to increased traffic locally as well as attracting vehicular movement on the M1 and the M69 (given the close proximity of Junction 21). This is an uncertain **significant negative effect**.
- 11.1.34 **Option 3c** is less likely to generate localised traffic pressures on particular settlements as growth is dispersed more evenly across the district. In this respect, only minor negative effects are predicted. However, a greater focus on Medium and Smaller Villages will mean that a higher proportion of additional new development is in locations that have poorer access to frequent public transport and is not within proximity of certain local services.
- 11.1.35 A proportion of additional growth would still be located in extended PUA, which brings some significant positive effects to this part of the district (in terms of supporting more sustainable travel). However, the scale of growth in the extended PUA also presents some potential for traffic congestion in an already busy location.
- 11.1.36 Overall, **mixed effects** are predicted, with uncertain **significant positive effects** being identified and uncertain **significant negative effects**.
- 11.1.37 **Options 3d/3e** have similar effects to Options 2d/2e in that there could be **significant negative** and **significant positive effects** depending upon supporting infrastructure and on site facilities being secured.

Summary

11.1.38 With the exception of Option 1, which only involves limited additional growth, there is the potential for each option to have mixed effects in terms of accessibility and transport.

11.1.39 For scenario 2, the effects are minor for options 2a – 2c. Growth in the PUA and extended PUA ought to promote the use of sustainable modes of travel and good links between employment, new homes and local services. However, it could create local traffic congestion issues. Where growth is concentrated in the Medium Villages, such congestion issues are likely, because access to local services and employment is poorer.

11.1.40 For the strategic site options, the potential for significant effects exists given the higher concentration of growth in specific locations. Again this could be either positive or negative, depending upon the nature of development and supporting infrastructure provided will improve access to local services, employment and public transport.

11.1.41 At a higher level of growth under scenario 3 the effects are exacerbated, which creates greater potential for significant effects (both positive and negative) regardless of distribution.

11.1.42 It is clear that regardless of the strategy, there is a need to ensure that new development is supported by public transport improvements, enhancements to local services, and enhancement of local transport networks. For the strategic site options, there may also be a need for strategic road infrastructure, without which, significant effects may be more likely to occur.

	Option 1	Option 2a	Option 2b	Option 2c	Option 2d	Option 2e	Option 3a	Option 3b	Option 3c	Option 3d	Option 3e
Accessibility Sustainable travel	0	+	+	+	+	++?	++?	++?	++?	++?	++?
Accessibility Congestion	0	-	-	-	--?	--?	--?	--?	--?	--?	--?